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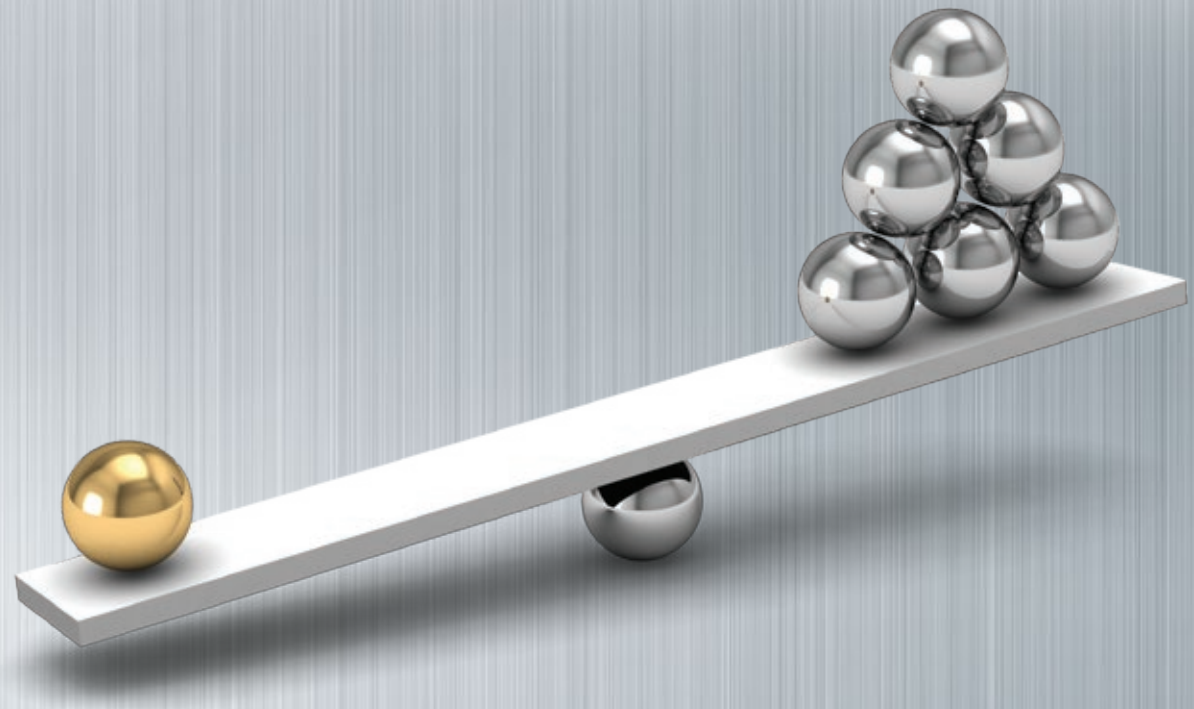

BANKWEST CURTIN ECONOMICS CENTRE

SHARING THE BOOM

The distribution of income and wealth in WA

Focus on Western Australia Report Series, No.1
February 2014

About the Centre

The Bankwest Curtin Economics Centre is an independent economic and social research organisation located within the Curtin Business School at Curtin University. The centre was established in 2012 through the generous support from Bankwest (a division of the Commonwealth Bank of Australia), with a core mission to examine the key economic and social policy issues that contribute to the sustainability of Western Australia and the wellbeing of WA households.

The Bankwest Curtin Economics Centre is the first research organisation of its kind in Western Australia, and draws great strength and credibility from its partnership with Bankwest, Curtin University and the Western Australian government.

The centre brings a unique philosophy to research on the major economic issues facing the state. By bringing together experts from the research, policy and business communities at all stages of the process – from framing and conceptualising research questions, through the conduct of research, to the communication and implementation of research findings – we ensure that our research is relevant, fit for purpose, and makes a genuine difference to the lives of Australians, both in WA and nationally.

The centre is able to capitalise on Curtin University's reputation for excellence in economic modelling, forecasting, public policy research, trade and industrial economics and spatial sciences. Centre researchers have specific expertise in economic forecasting, quantitative modelling, micro-data analysis and economic and social policy evaluation. The centre also derives great value from its close association with experts from the corporate, business, public and not-for-profit sectors.

Foreword

Along with its relaxed lifestyle and beautiful beaches, Western Australia is arguably most recognised for the riches to be found under its red earth and clear blue oceans. International demand for iron ore, and the strength of China as a major trading partner, has transformed the state's economic fortunes over the past two decades. But we know less than we should about the impact the resource boom has had on the economic circumstances of typical Western Australian families across the length and breadth of the state.

This first report in the Bankwest Curtin Economics Centre's 'Focus on Western Australia Report Series' on *Sharing the Boom* explores the distribution of income and wealth over the course of the latest resource boom, and questions the extent to which the wealth of WA has been enjoyed by all who live here.

Has there actually been an economic boom? Or is WA rather in a period of strong but sustainable growth, as some commentators argue? Economic indicators point to a boom stretching back to the start of the millennium, but one in transition as the state's productive capacity is 'put to work'.

There is no doubting the significant benefits flowing to the state from the resource boom. Strong and resilient international trade ensured that WA was protected from the most damaging effects of economic downturn that weakened most of the world's economies. Average weekly earnings in WA have risen to 20 per cent above the national average, and total household net wealth has increased by a spectacular $268 billion – all in no more than a decade. And opportunities for high salaries have crossed traditional educational boundaries, with 'tradies' able to hold down lucrative careers in the West alongside scientists, engineers and senior executives.

However, the strength of the WA economy presents a series of challenges, too. Incomes growth across the boom period has created a greater gap between the richer and less well-off households in the state, both in terms of income and wealth. Prices in WA ran consistently ahead of those for the rest of Australia for much of the heart of the resource boom, especially for those in regional WA, and not just in the housing market.

Has the boom been shared? On the whole – yes. Most households in WA have seen a rise in incomes and household wealth relative to the rest of Australia. Has it been shared equally? Formally, no – while there have been real gains for many WA households, the report shows not all have been able to share in the benefits of the boom to the same degree as higher earners, financially at least.

As we reflect on the success story of Western Australia, it therefore seems appropriate also to consider how best to support those groups who have fallen behind relative to the rest of the state – the further the distance, the harder it is to catch up.

We hope you find the centre's first 'Focus on Western Australia' report informative and illuminating.

Professor Alan Duncan
Director, Bankwest Curtin Economics Centre
Curtin Business School, Curtin University

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Introduction

Gross Domestic Product (GDP) in Western Australia grew by 5.1 per cent between 2012 and 2013, well above the national average of 2.6 per cent during the same period, and remained strong during the global economic downturn. Unemployment rates have remained consistently low across the state, wages high and the housing market has swelled, along with the traffic on Perth's major roads.

Western Australia's economy had historically been built 'off the sheep's back', as was the case for the rest of the country, with a heavy reliance on the primary sector. Since colonisation, the state's major commodity has switched from agriculture to mining, to agriculture and back to mining again, with very little industry diversification, yet with numerous flow-on effects to other sectors. WA's rich mineral deposits have seen several resource booms light up the economy, with populations swelling, and capital investment and infrastructure expanding.

The first such boom took place way back in the 1890s, with the Kalgoorlie-Boulder Gold Rush taking the state by storm, increasing its own population more than tenfold from 2,000 to 30,000 residents in less than 10 years. The second resource boom was realised in the 1960s when the Commonwealth Government lifted the iron ore export embargo that had been operating since 1938 (WA Treasury 2004). This move opened up markets, particularly to Japan, and saw foreign investment flow into the state. Income per capita more than doubled in the following 10 years, after being stagnant in the decade leading up to the change.

The third resource boom has been motoring along for the past two decades, picking up speed in the past 10 years. This period has been characterised by activity in a more diverse resource portfolio, with iron ore, petroleum, gold, alumina, LNG and nickel among the state's main export commodities. Worldwide demand, particularly from China, has fed the resource industry and has seen the state's population increase by almost 30 per cent in the last 10 years, as people from both within and outside Australia come to WA seeking their fortune.

This first report in the Bankwest Curtin Economics Centre's 'Focus on Western Australia Report Series' explores the distribution of income and wealth over the course of the latest resource boom, and questions the extent to which the wealth of WA has been enjoyed by all who live here. Using the latest data available, we investigate which Western Australian households have experienced the greatest improvement in their economic circumstances, and those that may have been left behind. We also look at whether particular households that have prospered are unlikely to do so in other environments; which regions throughout the state are more affluent; and how much and what type of wealth Western Australian households hold on average, compared with the rest of Australia.

Western Australia has recently enjoyed a period of abnormally high growth, primarily stemming from the mining boom, with iron ore supply and demand culminating in a match made in GDP heaven.

When is a boom a boom?

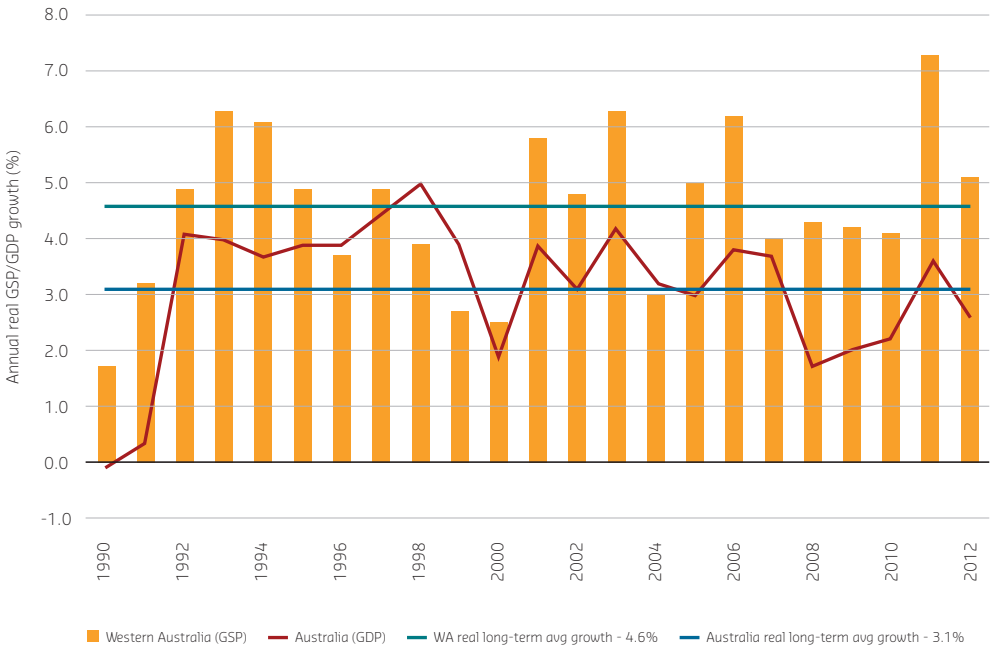
When is a boom a boom?

There has been debate as to whether or not WA has experienced a boom over the past decade, with arguments put forward around cost of living increases potentially outweighing any gains. Given this, it is important that we understand to what extent the state has been in a boom period.

Generally, an economic boom is considered to be a period during which real GDP growth remains substantially above long-term trend, and beyond that expected during the upswing of a 'normal' business cycle. Such periods will typically be characterised by aggregate demand that rises far more than expected on a balanced growth path; a tightening labour market; an economy that is running close to capacity; and upward pressure on real wages. An economic boom may be fuelled by rising commodity or resource prices driven by strong international demand – in Australia's case, coming especially from emerging economies and China in particular.

The story of strong economic growth in WA is well known. Over the past 20 years, the annual growth in Gross State Product (GSP) has averaged 4.6 per cent, whereas for Australia real GDP growth has averaged by 3.1 per cent annually (Figure 1). Over the past decade (2003–2013) real GDP growth in WA has averaged 4.9 per cent annually, well over the long-term trend of 4.6 per cent. Nationally, real growth across the same period was 3.0 per cent, slightly lower than Australia's long-term average. Put another way, six out of the past 10 years were well above long-term real GSP in WA.

Figure 1 Annual real Gross State Product and Gross Domestic Product growth, 1990–2012

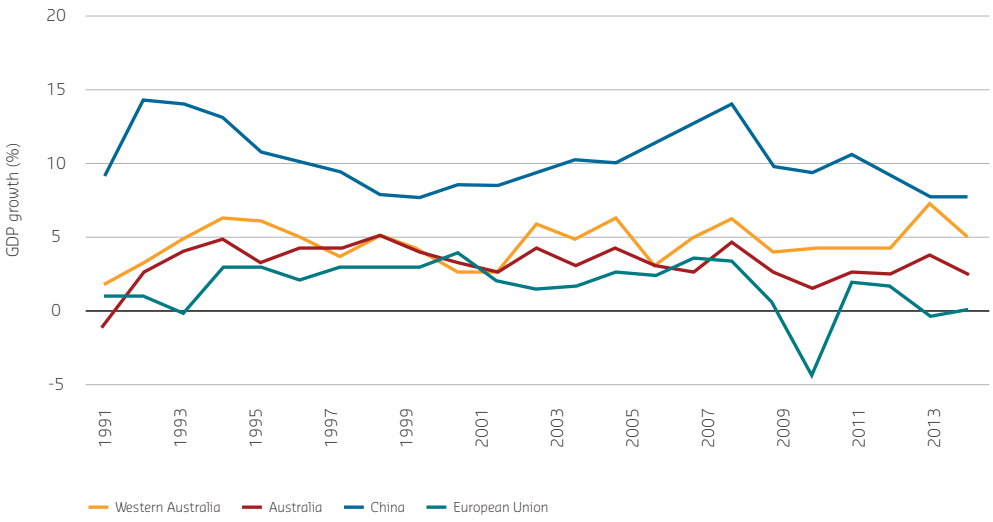


Note: GDP and GSP are derived from chain volume measures. See Glossary for definitions.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 5220.0

Comparing WA's economic trajectory with other world markets, the state's GSP growth rate since 2000 has remained well above both Australia and the European Union (Figure 2). Taking the European Union average growth rate across the last two decades (1.8 per cent per year) as a reference, WA has exceeded this benchmark for at least the last two decades.

WA has derived much of its economic strength from high export demand and close trading relationships with regional partners, especially the emerging economies. China has maintained an exceptional rate of GDP growth since the start of the 1990s (Figure 2), and a comparison of growth trends between China and WA reveals some strong similarities and co-movements, with accelerating economic growth in China since the start of the millennium matched by an upswing in WA GSP growth. This shows the state's dependence on China's economic development over most of the last two decades, and highlights the importance of resources demand in driving domestic GSP growth.

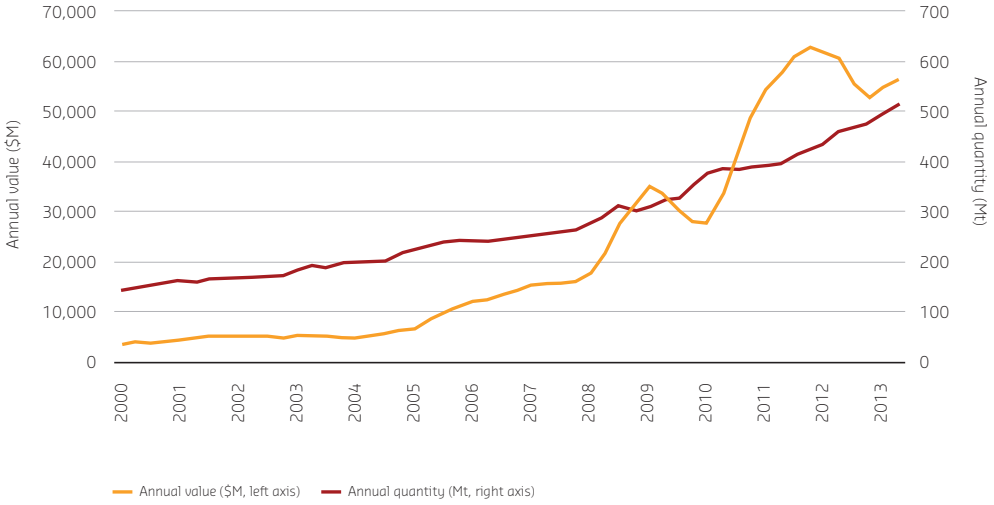
Figure 2 Real Gross Domestic Product growth, world comparison, 1991–2013



Note: GDP and GSP is derived from chain volume measures
Source: BANKWEST CURTIN ECONOMICS CENTRE | International Monetary Fund

Looking to iron ore prices and output (Figure 3), we see a consistent increase in production levels from under 145 Megatonnes (Mt) annually at the start of the millennium to 513Mt in mid-2013 – an increase of more than 250 per cent in little over a decade. High resources demand has injected real heat into the WA economy, with the value of iron ore production increasing exponentially since the mid-2000s through sharply rising commodity prices, reaching a high of $62 billion (December 2011) before easing marginally to $56 billion on latest figures (June 2013).

Figure 3 Iron ore: Annual production values and quantities, 2000–2013



Note: Quantities and values expressed as annual figures (and current prices), updated quarterly.
Source: BANKWEST CURTIN ECONOMICS CENTRE | Government of Western Australia: Department of Mines and Petroleum

Economic boom periods are often associated with tightening labour markets, with increasing labour force participation, decreasing unemployment and rising real wage rates. Figure 4 demonstrates this pattern for WA over much of the past 20 years, with unemployment falling at a consistent rate between 1992 and 2009, rising during the global financial crisis (GFC) but decreasing thereafter. Australia's unemployment rate, while following a similar pattern, has almost always been above WA's rate.

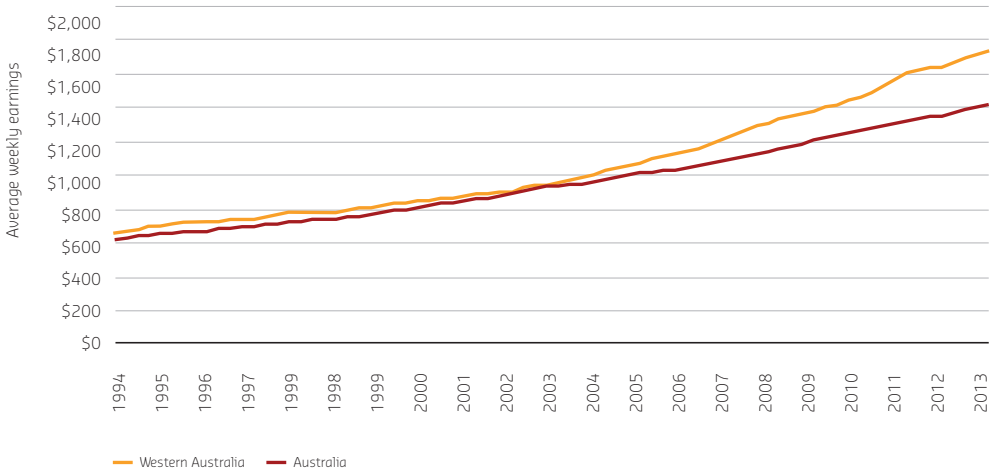
Figure 4 Unemployment and labour force participation, 1991–2013

Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6202.0

Wages growth has been significant in Western Australia, with average weekly earnings now running more than 20 per cent above the national average.

Wage growth has also been significant in Western Australia, with average weekly ordinary time earnings now running more than 20 per cent above the national average – a gap that has grown only since 2003 (Figure 5).

Figure 5 Trends in average weekly earnings between 1994 and 2013: WA and Australia



Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6302.0

Taken together, these factors are consistent with an economic boom, or are at the very least characteristically unusual. An analysis of the major economic indicators does suggest that the 'boom' period of high, sustained and resource demand-driven growth in WA dating from the early 2000s (hence the 'millennium boom' phrase coined by some commentators).

The latest economic data does support the view that the WA economy has passed the peak of the construction phase of the commodities boom (characterised by growth in productive capacity, high employment and real wage growth) and is moving to a production phase in which the state's productive capacity is 'put to work' in driving resource volume and export growth. Early signs of this transition can be seen in reduced capital investment growth, lower participation and rising unemployment (Figure 4). What this implies for the state's economic growth trajectory, and what impact the transition will have on future workforce and skills requirements, will be the subject of a future 'Focus on Western Australia' report.

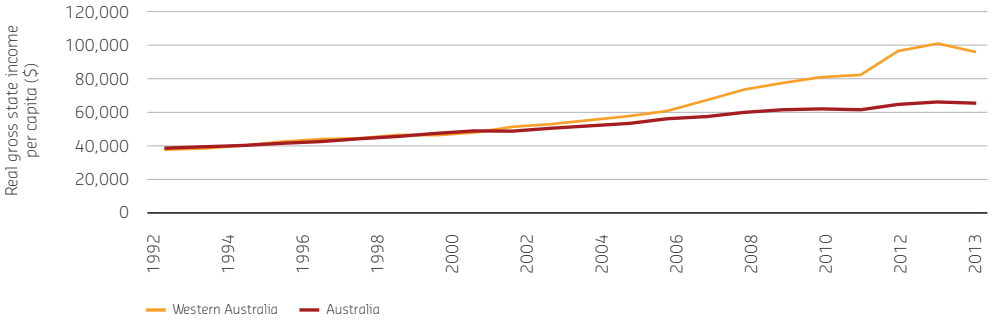
Income trends in the West

Income trends in the West

Per capita gross state income for Western Australia has grown to 50 per cent above the national average in little over a decade.

Western Australia has experienced a level of growth that has accelerated well ahead of the national average over the course of the resource boom. Per capita gross state income for WA is currently averaging $98,000, having grown to around 50 per cent above national per capita gross income in little over a decade (Figure 6).

Figure 6 Real per capita Gross State Income: WA and Australia, 1992 to 2013

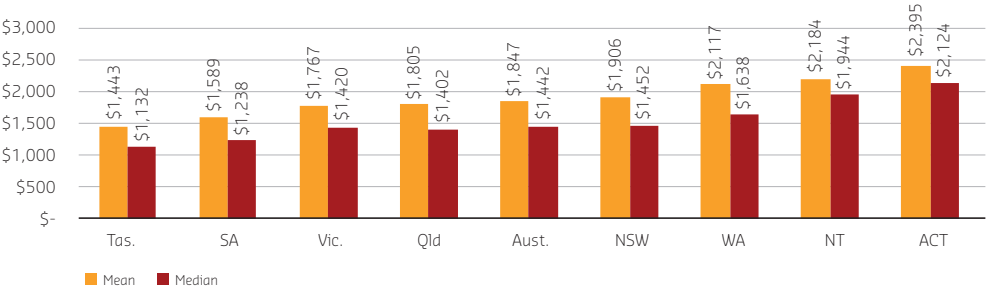


Note: Per capita Gross State Income figures derived using chain value measure, in 2011–12 prices. See Glossary for a definition of Gross State Income.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 5220.0

This *Sharing the Boom* report provides a series of research findings that shed new light on the distribution of income and wealth in the state. How evenly have the benefits of the boom been shared across sections of WA's society? Have we seen a 'trickle down' effect in which the state's bounty has been shared by all, or have only a few gained? How does the growth and distribution of income in WA compare with the rest of Australia?

Western Australians have the third-highest average incomes across Australia's states and territories, behind only the ACT and Northern Territory. In 2011–12, the average gross household income for WA families was $2,117. This compares starkly with Tasmania and neighbouring South Australia which have, respectively, $680 and $530 less in average gross household income each week.

Figure 7 Average gross household income by state and territory, 2011–12



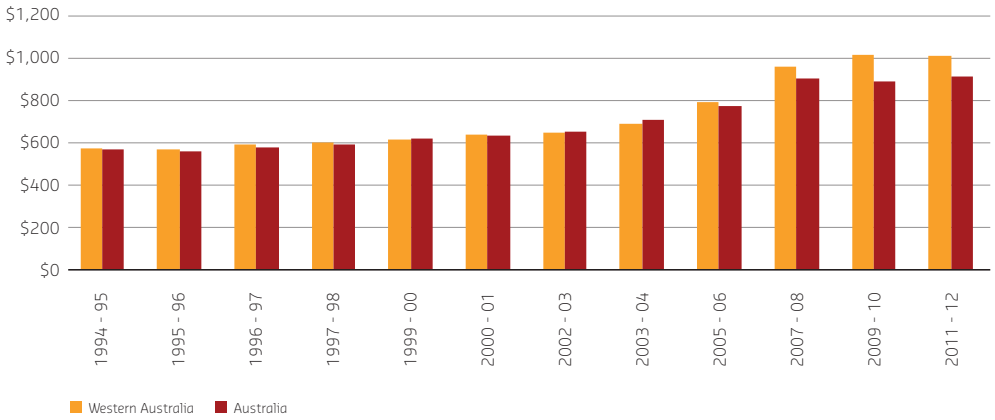
Note: All dollars in 2011–12 values.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6523.0

One drawback of using averages for comparisons is the potential for the measure to be affected by high individual incomes. To control for this possibility, we also compare incomes for the median (or 'typical') family across states and territories. The same trends emerge, with gross income for the median household in WA, at $1,638, being $500 in excess of that for the median Tasmanian family.

Even accounting for taxes and controlling for household size by 'equivalising' income across family type, WA incomes have remained much higher than the national average. Household equivalised disposable income in WA tracked the national average in Australia pretty closely until 2003–04 (Figure 8). However, from this point forward, the average equivalised income available to WA households outpaced the average Australian household by a progressively greater margin of up to nine per cent by the start of the current decade.

Western Australians have the third-highest mean and median gross household income, behind only the ACT and NT.

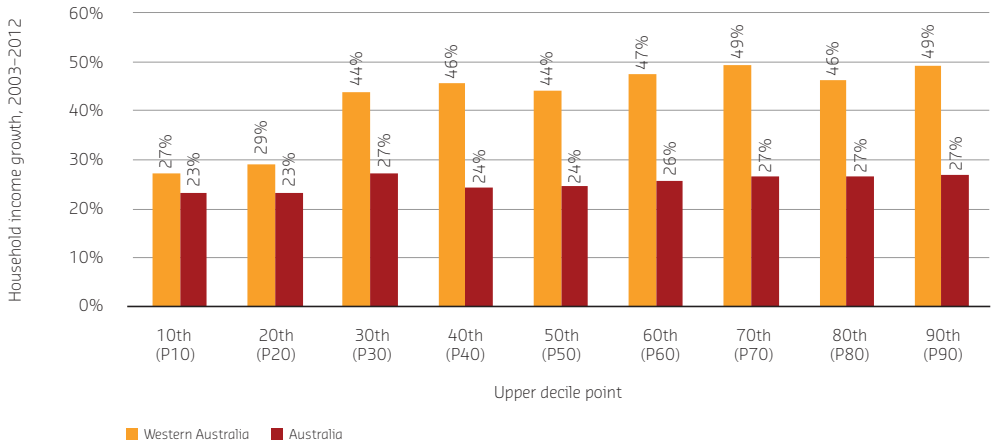
Figure 8 Household equivalised disposable income, 1994–95 to 2011–12



Note: See Glossary for a definition of equivalised disposable income
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6523.0

Our findings clearly show that WA households have experienced significant incomes growth since the early 2000s, not just in absolute terms but relative to the national trend. But how evenly has this growth been distributed over the range of high- and low-income families, and to what extent have income in the state remained ahead of prices over the course of the boom?

Figure 9 Real growth in household gross income between 2003–04 and 2011–12 by decile: WA and Australia



Note: Data are expressed in 2011–12 dollars.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6523.0

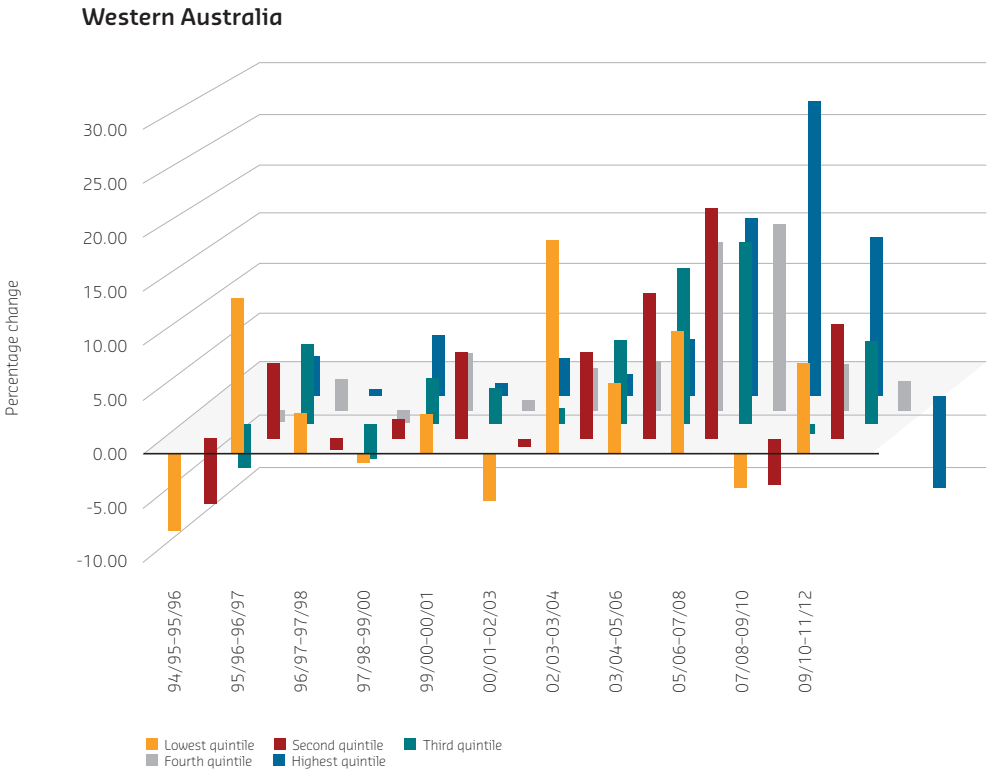
Western Australian incomes have outpaced the national average by a margin of 9 per cent over the past five years.

Between 2003–04 and 2011–12, all household income deciles[1] in Western Australia increased by considerably more than was experienced nationally (Figure 9). The exceptions were those households in the first two deciles (those with the lowest incomes) who experienced increases of 27 per cent and 29 per cent respectively over the period. This compares with a national increase of 23 per cent for the two bottom deciles.

Eight out of the ten income deciles in Western Australia have experienced real growth rates of between 44 and 49 per cent in household gross income between 2003-04 and 2011-12. This compares to national growth which remained relatively flat across deciles over the boom period, at rates of between 23 and 27 per cent. While the majority of WA households grew well ahead of the national average, households in the bottom two deciles have kept pace with national rather than WA incomes growth.

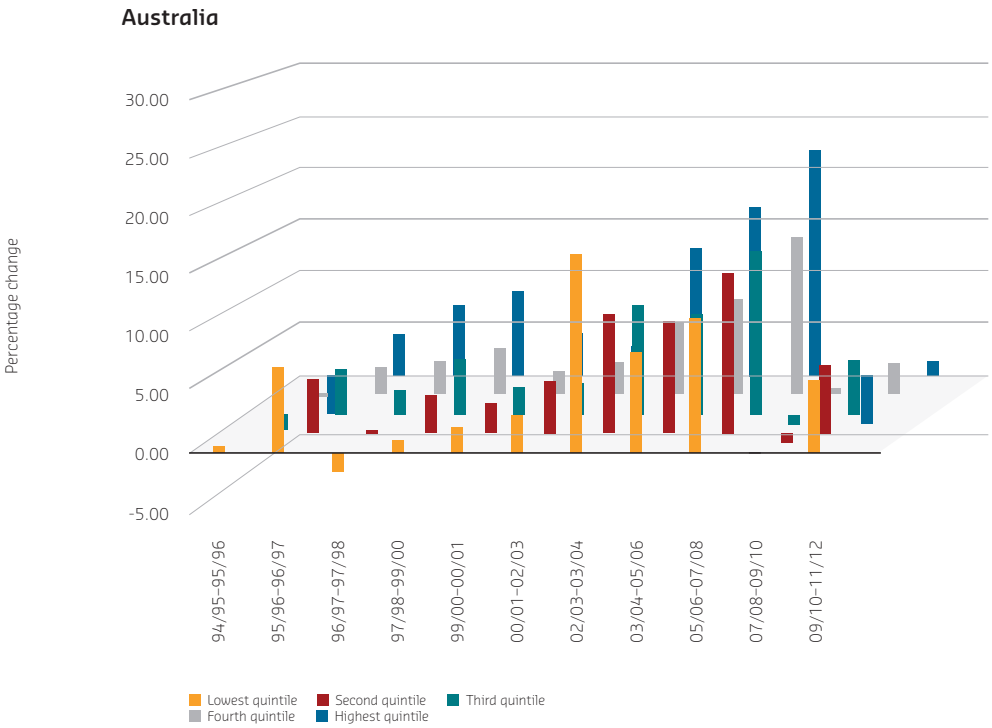
The lowest income quintile[2] in WA has endured a bumpy ride over the past 15 years, with changes in mean equivalised household disposable income fluctuating from considerable decreases between periods to substantial increases (Figure 10). These patterns differ somewhat to trends across the whole of Australia. However, the period from 2003–04 to 2007–08 (just prior to the GFC) saw similar growth trends in the lowest income quintile for Western Australians and Australians, albeit a little higher for Western Australians.

Figure 10 Percentage change in mean income across income quintiles, 1994–95 to 2011–12



Note: All dollars in 2011–12 values. Income is equivalised disposable. See Glossary for a definition of equivalised disposable income.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6523.0

[1] Deciles are created by ranking all households by their total income, then dividing the distribution into 10 equal parts.
[2] Similarly, quintiles are created by ranking all households by total income, then dividing the distribution into five equal parts.



Note: All dollars in 2011–12 values. Income is equivalised disposable. See Glossary for a definition of equivalised disposable income.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6523.0

The benefits of the mining boom and the WA economy heating up in the mid-2000s are demonstrated clearly, with all average income within each income grouping increasing by between six and 27 per cent (Figure 10). From 2005–06 to 2007–08 average income in the highest income quintile increased by 27 per cent in WA, compared with 22 per cent for the whole of Australia. This pattern continued for WA in the highest and second-highest income quintile, with gains in these groups between 2007–08 and 2009–10, despite the nation losing ground and the lower income quintiles in WA experiencing negative growth. The effect of the downturn, however, has since seen average income in the highest income quintile fall, decreasing by 10 per cent – from $2,214 in 2009–10 to $2,027 in 2011–12 (constant dollars).

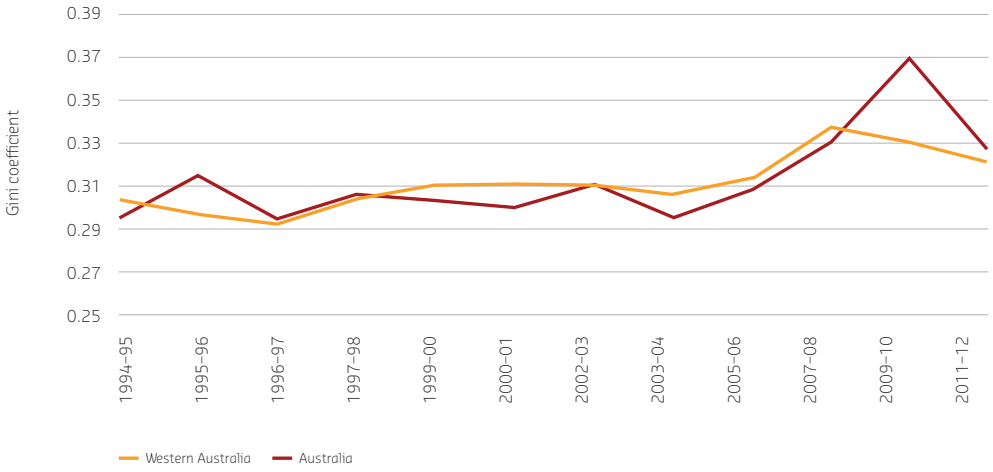
How unequal is income in WA?

Inequality, especially that which has been generated by unfair or prejudicial circumstances, is generally considered by many societies to be an unwanted outcome, but particularly in Australia, which prides itself on being the land of the 'fair go', defined by egalitarianism rather than by social class. However, where there exists an income distribution, there will always be those who have more and those who have less. The division between the two, and how 'fair' or 'unfair' that division is deemed to be, has led to policies that even out what many regard to be unwanted social, economic and political outcomes; progressive taxes and transfer payments being two such examples.

A standard and widely accepted measure of inequality is the 'Gini coefficient', which calculates the dispersion of income within a population. The Gini statistic is a single summary indicator of the degree of inequality, with a range between zero and one. Values closer to zero indicate less inequality (with an extreme of zero representing a situation where all incomes are identical), and values closer to one represent a situation of greater inequality (with a value of one representing the hypothetical situation where all income is held by a single person or household).

Using the Gini index as a measure of income inequality (Figure 11), we can see that WA tracked the inequality trend in Australia relatively closely up to around 2007–08 However, the gap between the richest and poorest households in Western Australia has risen consistently since then to its peak in 2009–10, and at a significantly greater rate than for the rest of Australia. Indeed, the rate of income inequality continued to rise in WA over a two-year period (from 2007–08 to 2009–10) that saw systematic falls in inequality for the rest of Australia. This reflects the patterns observed previously in Figure 10, where the two richest quintiles in WA enjoyed high income growth between 2007–08 and 2009–10, at a time when the average incomes of the lowest three quintiles fell relative to earlier periods.

Figure 11 Income inequality in WA and Australia, 1994–95 to 2011–12



Note: Gini coefficients are calculated for the distribution of household equivalised disposable income for both WA and Australia.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6523.0

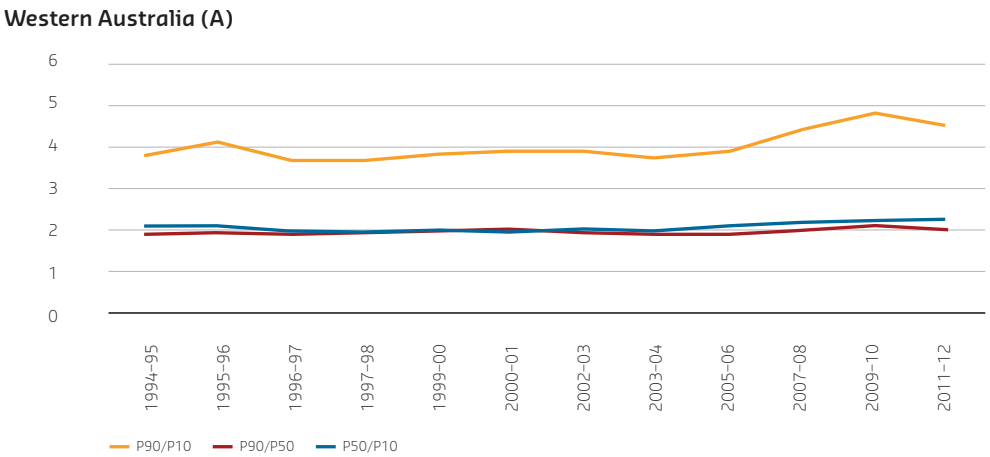
There is some indication that the trend towards rising income inequality in WA over the course of the boom is being reversed. In what appears to be something of a 'delayed hit' for the state's highest earners, there has been a fairly steep reduction in the incomes of the top quintile (nearly 10 per cent of equivalised disposable income between 2009–10 and 2011–12) at a time when other incomes have been rising. This goes some way to explaining why the rate of income inequality in WA is returning to match the level for the rest of Australia in 2011–12.

To understand more about how income has been shared by Western Australians over the course of the boom, we turn to a series of comparisons of relative incomes at various parts of the distribution. This allows us to better determine the causes of inequality within WA and how this compares with national trends over time. Specifically, we compare the incomes of households in the richest 10 per cent (or P90) of the distribution, the median household (P50, representing the middle of the income distribution), and the poorest 10 per cent (P10) of households.

A number of comparisons are provided in Figure 12, the P90/P10, P90/P50 and P50/P10 ratios, with the last two measures analysed using a more condensed scale to illustrate the deviations (graphs C and D). The P90/P10 compares the incomes of those in the bottom 10 per cent of the income distribution with those at the top – a simple interpretation would be the richest compared with the poorest. Such ratios may be interpreted as an income multiple – a P90/P10 ratio of four indicates that the richest 10 per cent of households have incomes (at least) four times that of the poorest 10 per cent.

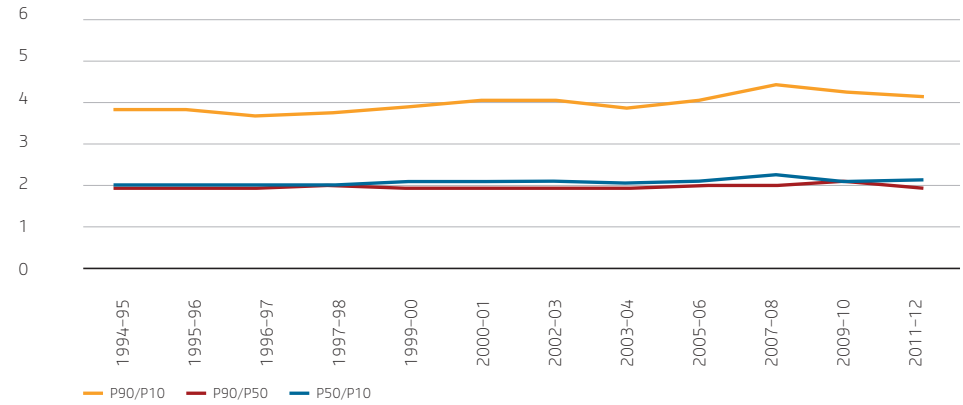
Overall income inequality in Western Australia has escalated at a faster rate than for the rest of Australia over the course of the boom.

Figure 12 Relative income comparisons, 1994–95 to 2011–12

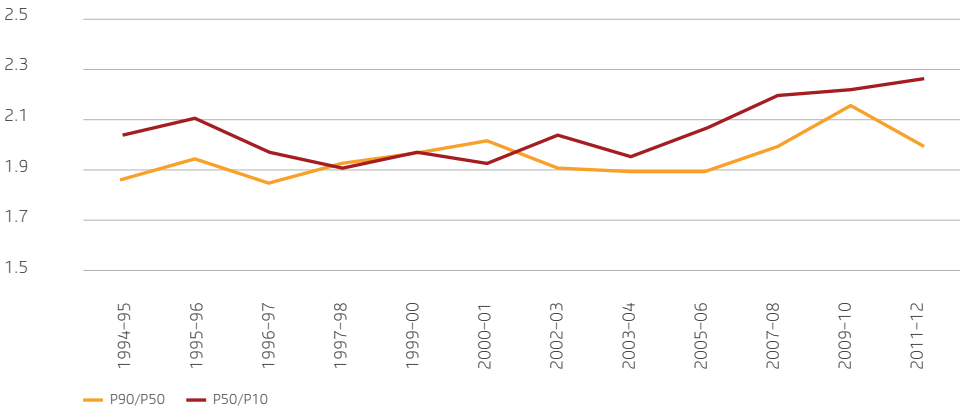


Note: All ratios are calculated using household equivalised disposable income. See Glossary for a definition.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6523.0

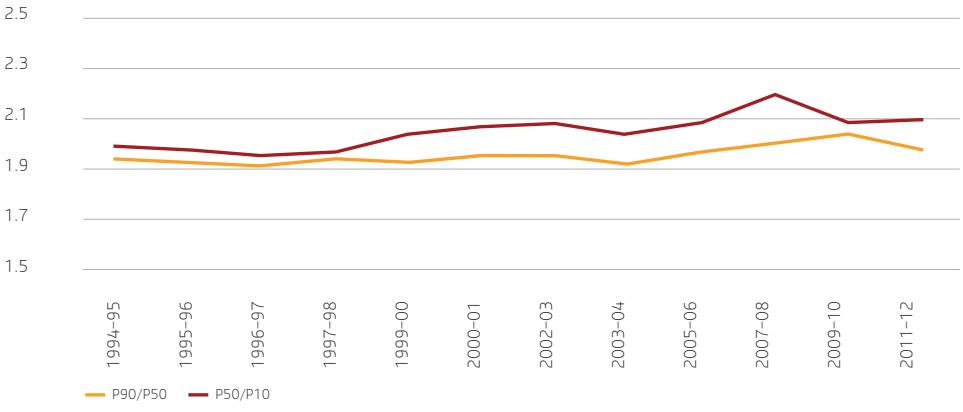
Australia (B)



Western Australia (C)



Australia (D)



Note: All ratios are calculated using household equivalised disposable income. See Glossary for a definition.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat No. 6523.0

The P90/P10 indices for WA (Figure 12, graph A) show a relatively stable pattern of inequality for around a decade up to 2003–04, with the richest 10 per cent of households having around 3.8 times the level of income of the poorest 10 per cent of households. This compares with a figure of 3.9 times nationally. The income gap in Western Australia widened considerably from 2003–04, climbing to a peak of 4.8 in 2009–10 before falling slightly to 4.5 in 2011–12. Compared with WA, the P90/P10 ratio for Australia rose more modestly to 4.3 in 2007–08 (Figure 12, graph B) before falling back to a multiple of 4.1 in the most recent measure. On Australian Bureau of Statistics (ABS) figures, inequality has been higher in WA than in Australia since 2007–08 when assessed on this P90/P10 measure after a period stretching back nearly two decades, during which inequality in WA had been lower than the national rate.

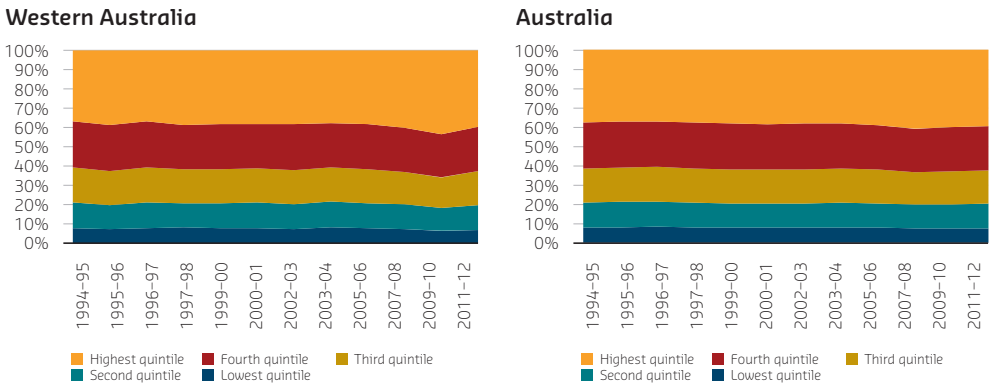
Low income households are falling behind all others at a faster rate in WA than for the rest of Australia.

Was rising inequality over the latter part of the boom caused just by rising incomes at the top of the distribution in Western Australia? Or have the poorest households in WA been getting poorer (at least relative to a 'typical' income household)?

Our findings (Figure 12, graph C) show that the poorest 10 per cent of households in WA have failed to keep pace not only with the richest households, but also with those 'typical' households on middle incomes. The scale of this relative drop is quite significant: in 2003–04 the poorest 10 per cent of households in WA received around 51 per cent of those on middle incomes; this figure falls to 44 per cent by 2011–12. Indeed, further comparisons show that the bottom 10 per cent of households in WA have fallen consistently behind all higher deciles over the latter part of the boom, and at a faster rate than that of Australia.[3] This begs the question – is it tougher to be a low-income household in WA relative to the rest of Australia?

A further way to judge the level of inequality within a region is to examine changes in the share of income attributable to each quintile over time (Figure 13). The richest 20 per cent of households in Australia command an unequal share of income, holding almost 40 per cent of all income in Australia. This pattern is also observed for WA, with similarities shown throughout all income quintiles, with the exception of the period between 2009–10 and 2011–12. During this time, the income shares of the top three quintiles increased relative to those in the lower quintiles. This pattern was relatively short-lived, however, and has since reverted towards the longer-term trend.

Figure 13 Income share by income quintile, 1994–95 to 2011–12



Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS Cat no. 6523.0

[3] It is important to note that these findings do not necessarily mean that the incomes of households in the bottom quintile have fallen in *absolute* terms, but rather that household incomes in this bracket have not grown at similar rates to others (ie. a *relative* measure).

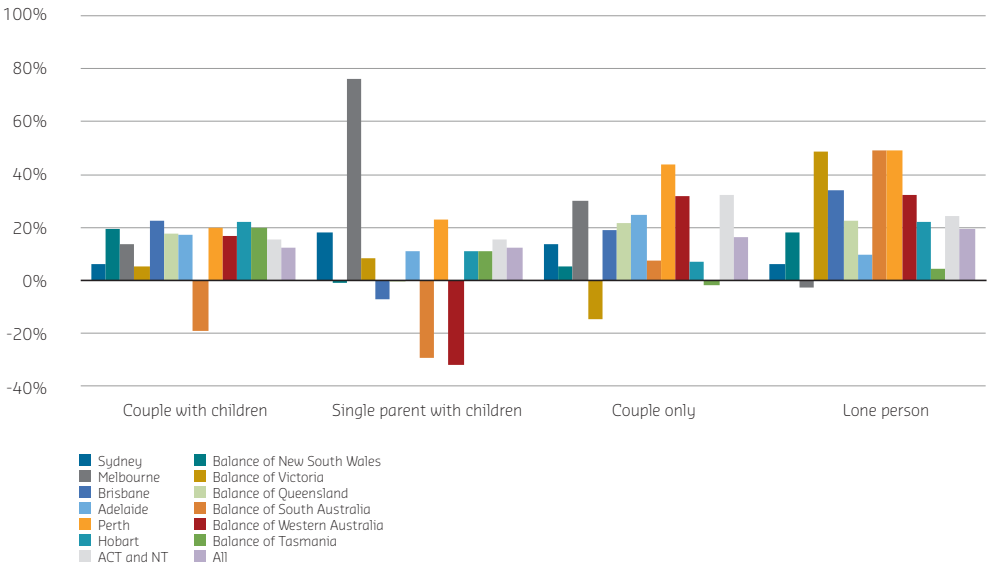
Wages and salaries

The majority of the rise in household incomes in WA over the past six years has stemmed from wages growth. This is evidenced by the increase in wages and salaries as a proportion of total household income across the majority of household types between 2005–06 and 2011–12 (Appendix, Table A1). For Perth, all family types have seen their wages and salaries increase as a proportion of total household income, with most household types ranked third in movements over time (and all above the national average). The biggest increase has been for lone person households, for whom around 45 per cent of total household income in 2005–06 was sourced from wages and salaries. This has increased to 54 per cent in just six years.

Most households have seen an increase in the incomes they enjoy from wages and salaries as a proportion of total income, with some noticeable exceptions (Figure 14). The growth in household labour income is particularly evident in the capital cities, with Perth ranked first, second and third in terms of increases in wages and salaries as a proportion of total household income. The biggest increase in the state has been for lone persons and couple only households, with household employee income increasing by 49 and 44 per cent respectively. These findings are likely to be linked to population movements, with more labour-competitive households migrating to Perth to reap the rewards of the boom.

A similar story of growth in household labour income is evident for the balance of WA. However, single parent households in the regions have not fared as well, decreasing their household employee income by almost one-third. These results could be driven by a number of factors, including fewer labour market opportunities for single parents than existed six years ago. Childcare services and access to transport could play a role in explaining these findings, but further investigation is needed to draw any firm conclusions.

Figure 14 Growth in household employee (wages and salary) income by household type, 2005–06 to 2011–12



Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12.

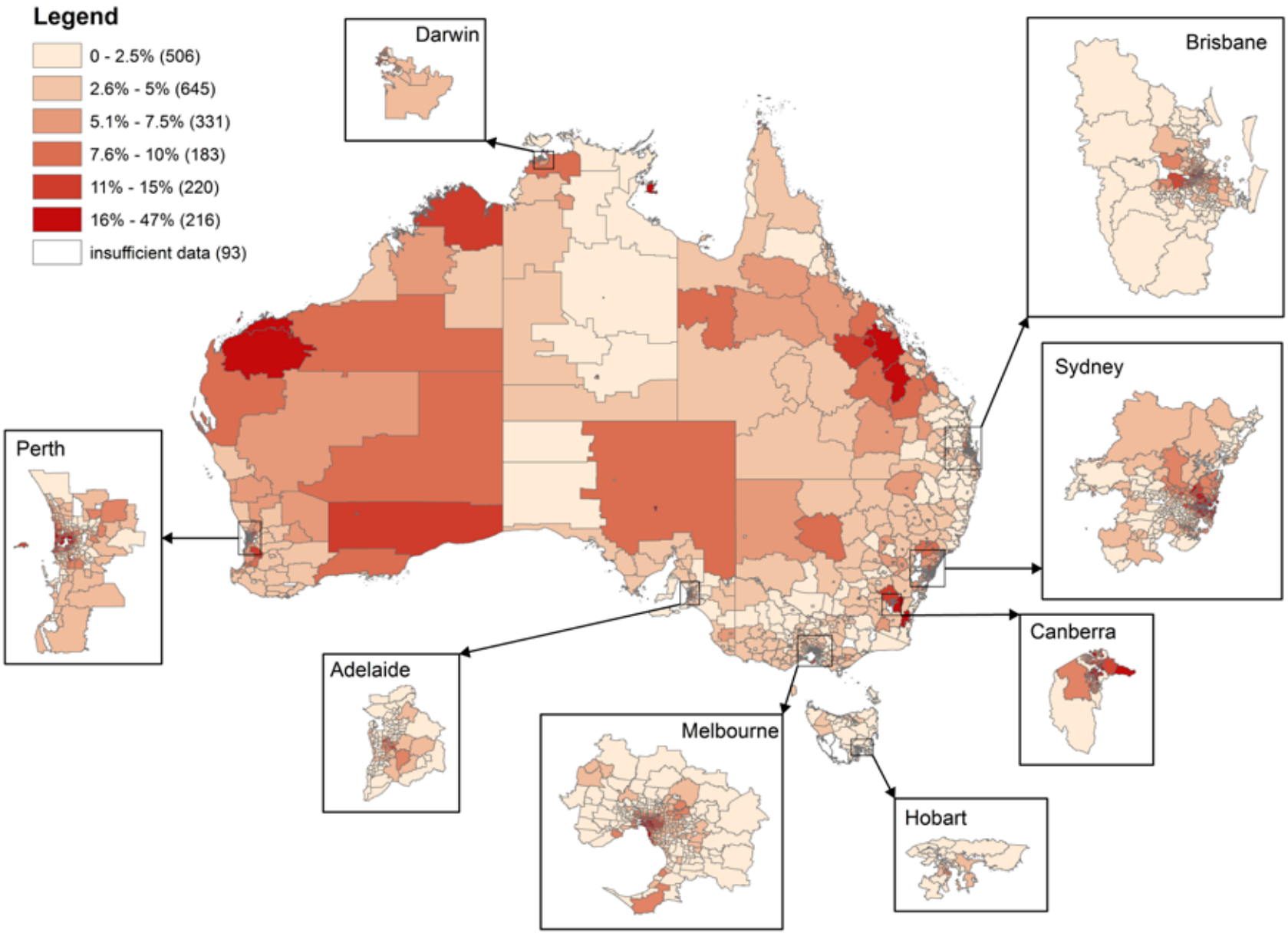
The spatial distribution of income

While aggregate figures are an important component of any analysis, they can often hide geographic nuances and areas that are more or less affluent. The spatial distribution of individuals that have more than $2,000 per week in income is shown in Figure 15. Regional areas throughout WA have high proportions of individuals with weekly incomes above $2,000 per week, ranging from 20 to 56 per cent of the population. A number of regional mining areas in Queensland also stand out, with more than one-fifth of the population having personal income above $2,000 per week. Among capital cities, Perth and Canberra stand out, with the majority of areas having reasonably high proportions of individuals with high incomes.

In contrast, areas with high proportions of individuals with income less than $300 per week are more likely to be in the Northern Territory, the top end of Queensland and WA and spread throughout NSW (Figure 16). Many of these areas are sparsely populated and represent Indigenous communities. In the capitals, a number of suburbs stand out as areas with high to very high populations with very low incomes.

The scope of this report has not captured how Indigenous Western Australians may have been impacted by the boom, for good reasons. Properly addressing such an issue would need to draw in complexities at many other levels, including taking more detailed account of geographical dispersion. Evidence presented here on relative income comparisons and outcomes for low-income households, in which Indigenous people are disproportionately found, suggests that relative socio-economic disadvantage for this group may well have widened. As measured by the ABS 2011 Census, the labour force participation rate of 46.3 per cent for Indigenous Western Australians in 2011 was actually lower than the 48.8 per cent recorded two decades earlier. Although the Indigenous unemployment rate dropped substantially to 17.8 per cent in 2011, this marked a deterioration in relative terms to four times higher than the rate for non-Indigenous Western Australians. Even in regional and remote areas which saw large increases in mining activity there is evidence that few of the labour market benefits have flowed through to local Aboriginal populations (Dockery 2013). By and large it would appear opportunities have been missed to harness the benefits of the boom in reducing socio-economic disadvantage for Indigenous peoples within WA.

Figure 15 Proportions of people with incomes above $2,000 per week, by SA2 (2011–12)



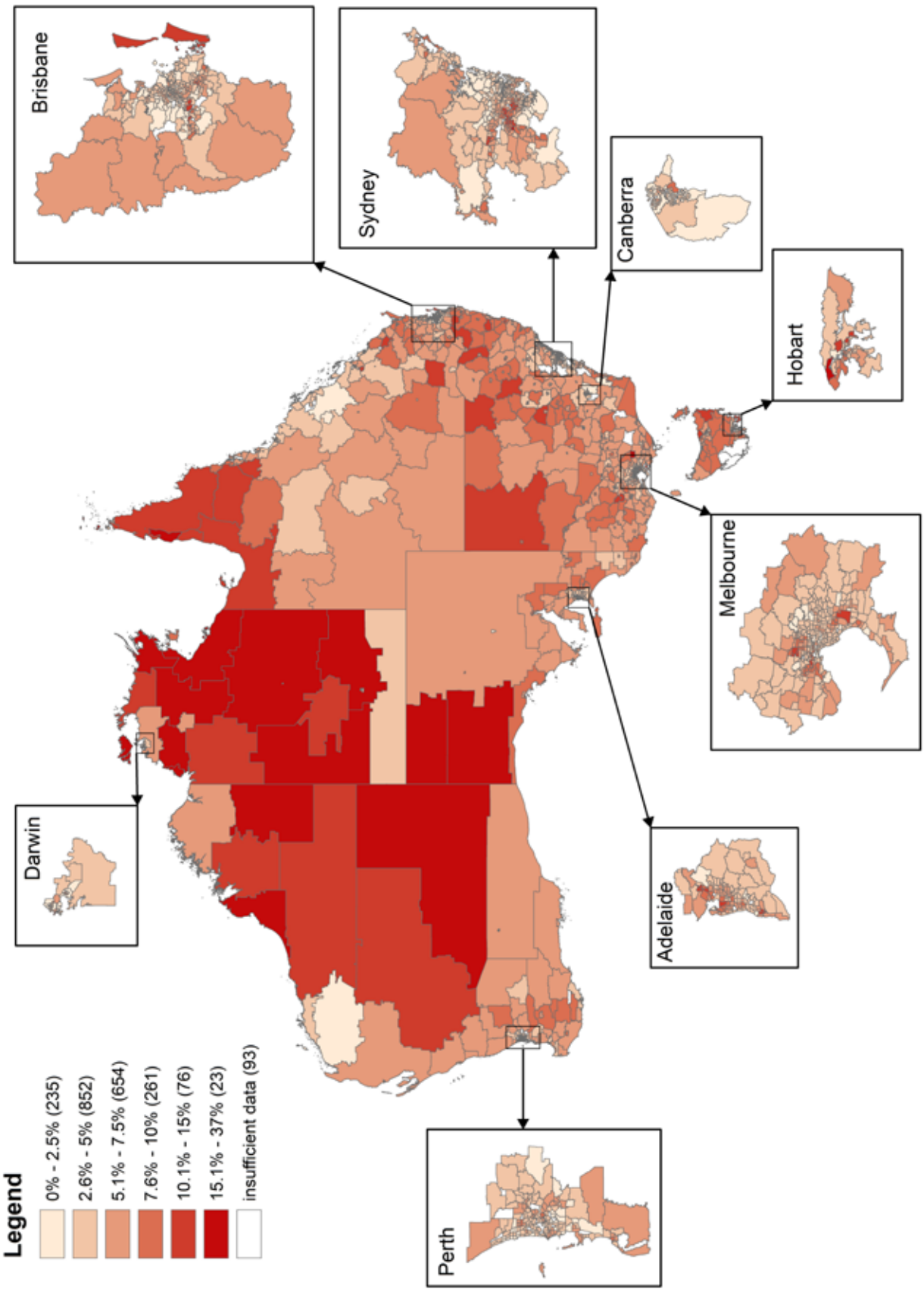
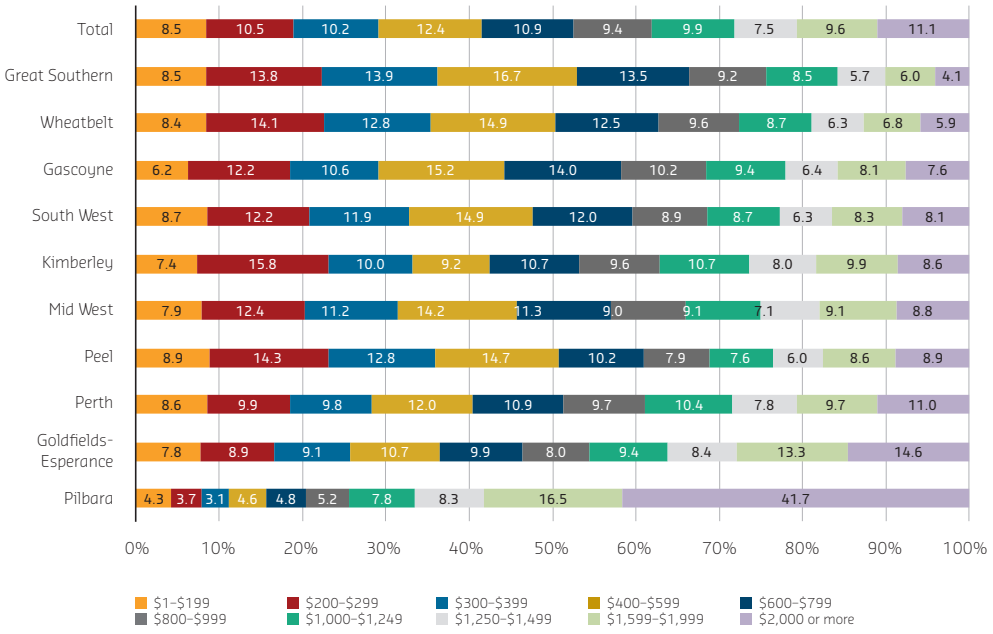


Figure 16 Proportions of people with incomes below $300 per week, by SA2 (2011-12)

More than 40 per cent of individuals in the Pilbara have weekly incomes above $2,000.

Across WA, the income distribution in the state's major areas differs considerably. The Pilbara stands out as an anomaly, dominated by the mining sector and very high incomes, with very few individuals on incomes lower than $800 per week (Figure 17). Looking at those areas outside the Pilbara, most have similar proportions of individuals with very low incomes (below $200 per week). Gascoyne is the exception to this rule, with only 6.2 per cent of individuals in this lowest bracket.

Figure 17 Income distribution of areas throughout Western Australia – per week, 2011



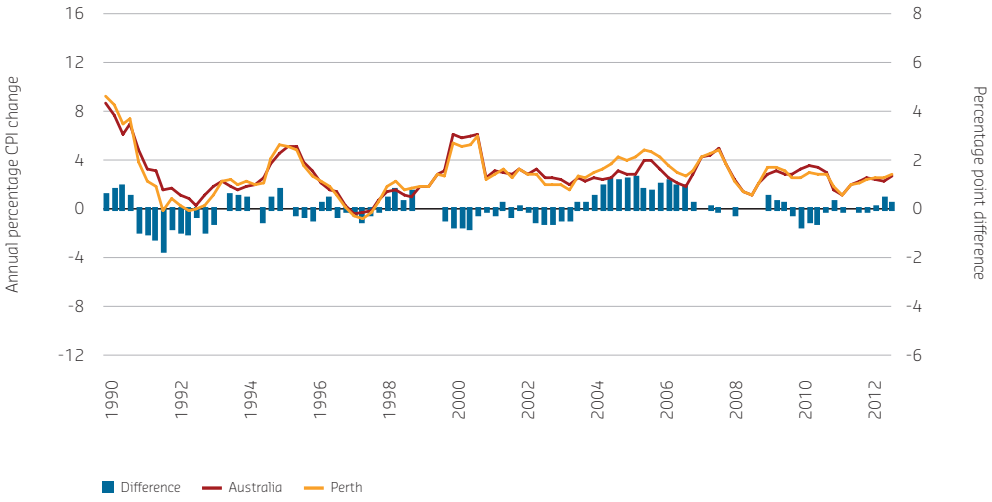
Note: Income is in gross weekly income
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2011 CENSUS

Just over 20 per cent of individuals in Perth have a gross weekly income of $1,500 or more, and just under a third of people earn $400 or less. The Goldfields–Esperance has the second-highest proportion of those earning more than $2,000 each week, at nearly 15 per cent of the resident population, and over one-quarter of individuals with incomes above $1,500 per week. This again reflects the powerful influence of the mining sector.

Prices and the cost of living in WA

It's clear that the growth in household incomes in Western Australia has outpaced that of the rest of Australia on average, but can one really 'share in the boom' if income gains are effectively cancelled out by rising costs of living? This section looks at whether the income gains enjoyed over the course of the boom are likely to have been eroded in WA to a greater degree than in other states and territories. How do cost of living increases compare between Perth and the rest of Australia? The high costs of housing in WA are well known, but are there other high costs that have limited the benefits of the boom? Have some regions of Western Australia suffered more than others from cost increases?

Figure 18 Annual percentage change in overall CPI for Perth and Australia, 1990–91 to 2011–12

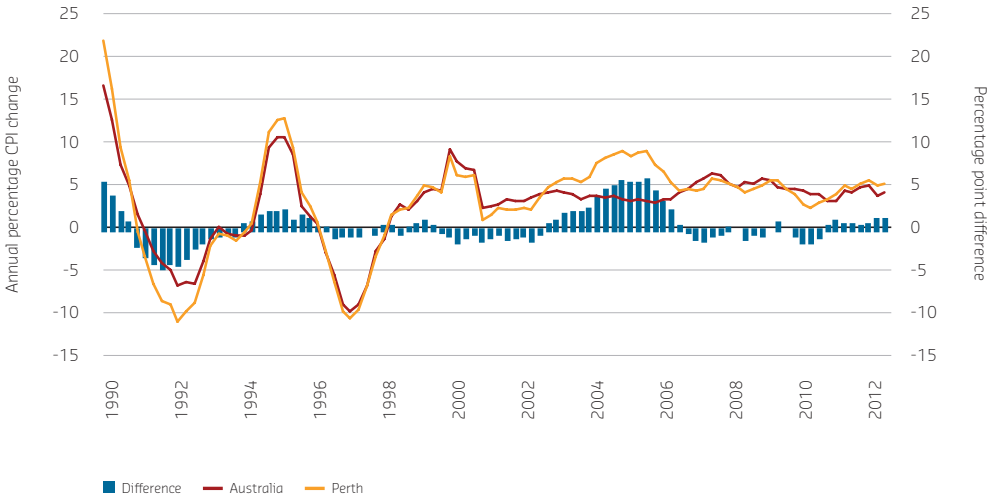


Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2011 CENSUS

Overall price increases in Perth as measured by the Consumer Price Index (CPI) ran consistently ahead of those for Australia for much of the heart of the resource boom (Figure 18), regularly reaching an annual rate of increase of five percentage points over the period between 2005–06 and 2007–08 (more than one percentage point ahead of national consumer price inflation in Australia).

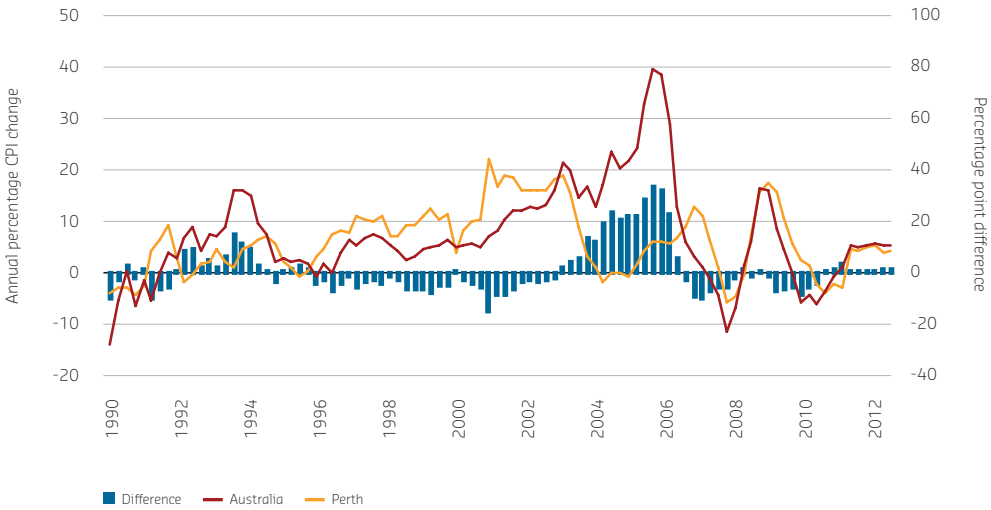
It will be no surprise to many in Perth that house prices, and housing costs more generally, generated the greatest single barrier to accessing the benefits of the boom. Overall housing costs increased in WA at a rate consistently above the national average for an extended period from 2003–04 (Figure 19), commonly by an extra five percentage points more than in the rest of Australia annually. The rate of change in established house prices in Perth has been particularly extreme over the period (Figure 20), with annual percentage changes well in excess of 20 per cent not uncommon.

Figure 19 Annual percentage change in housing cost CPI for Perth and Australia, 1990–2013



Note: Housing costs comprise: rents, new dwelling purchases, maintenance and utilities
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2011 CENSUS

Figure 20 Percentage change in established house price, Perth and capital cities, 1990–2013

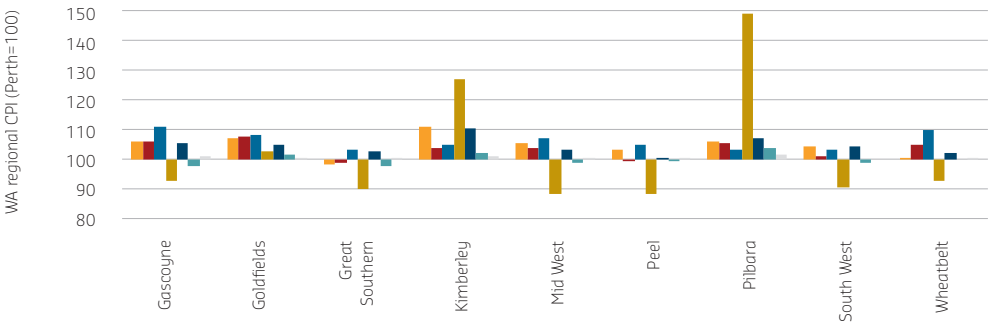


Source: BANKWEST CURTIN ECONOMICS CENTRE | Costello, Fraser and MacDonald (2013)

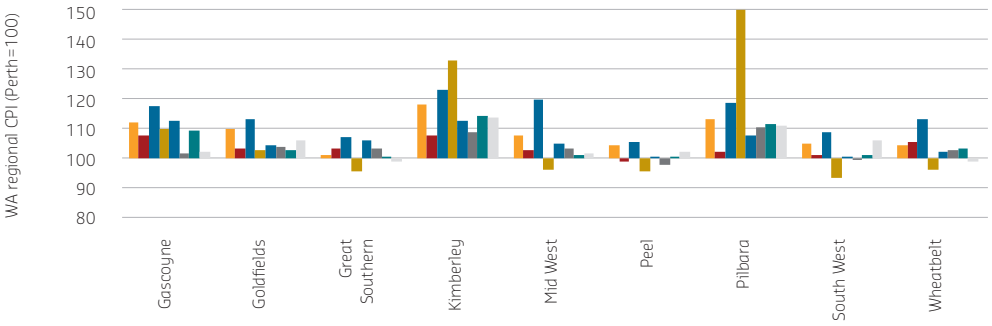
The 'heat' in the property market in WA has clearly impacted on house prices and housing costs, potentially limiting the standard of living gains that households might otherwise have expected over the course of the resource boom. But has there been a similar pattern with other commodity prices? We have seen how prices in Perth have increased relative to other capital cities, but what about prices in WA's regions?

Figure 21 WA regional CPI changes relative to Perth, 2007–2013

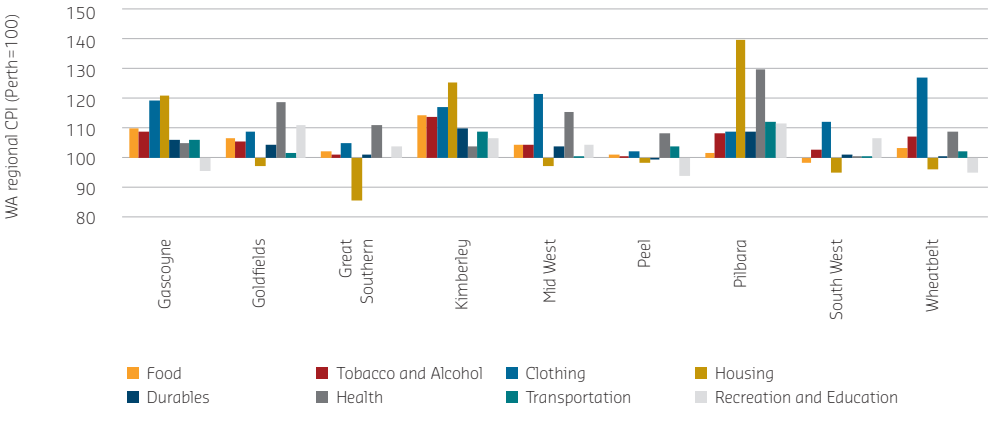
Box C: 2007



Box B: 2011



Box A: 2013



Source: BANKWEST CURTIN ECONOMICS CENTRE | WA DEPARTMENT OF REGIONAL DEVELOPMENT 2007–2013

A dollar now goes less far in the Pilbara, Kimberley and Gascoyne than in Perth, compared with a decade ago.

Figure 21 presents a series of consumer prices indices relative to Perth (which has been indexed at 100 in each chart) for each of the major regions in WA at three points in time – for 2007, 2011 and 2013. What is clear from this comparison is that people living in regional Western Australia have seen commodity prices in their localities rise more steeply compared with Perth over the course of the boom. The rate of housing inflation in the Pilbara has been running at least 50 per cent higher than in Perth over the last six years, and in the Kimberley by between a quarter and a third more than the state's capital.

However, it's striking how much prices in the regions have risen for a broader range of commodity groups relative to Perth – especially in the Pilbara, Kimberley and Gascoyne. Clothing, food and health-related goods feature among those commodity groups that have exhibited the greatest prices rises in the regions, with other costs – education, recreation, tobacco and alcohol – showing more selective rates of high inflation in certain localities. The extent to which WA regional price inflation is driven by the resource boom is open to question. Whatever the cause, it's clear that a dollar of income now goes less far in the Pilbara, Kimberley and Gascoyne than in Perth, compared with a decade ago.

These findings have serious implications for households on very low incomes living in these regions. For example, while more than 40 per cent of individuals in the Pilbara have weekly incomes over $2,000, there are also close to 16 per cent who have weekly incomes of less than $600. These households may constitute only a small proportion of the population as a whole, but they are nevertheless likely to find it difficult making ends meet while living in such areas.

Wealth in WA: who holds what?

Wealth in WA: who holds what?

The majority of Australian households hold some form of wealth, either in the form of home ownership, other dwellings, business assets, superannuation, shares or other forms of financial assets. Many households also hold liabilities, most commonly in the form of mortgages and other loans, so that the gross value of these assets needs to be balanced against liabilities to provide a reasonable measure of net wealth. Examining net worth (defined as assets minus liabilities) in 2003–04 and 2011–12, we find that Perth households with positive wealth balances rank sixth across the nation, holding just over $460,000 in net assets on a median measure[4], a ranking that has remained unchanged over the last decade (Table 1). Median net wealth in the balance of Western Australia ranked tenth overall in 2003–04, but has increased to rank eighth in 2011–12 compared with all capital cities and state and territory balances – indeed, regional WA now ranks first when compared with the balances of other states and territories.

Table 1 **Median net worth by capital city and balance of state: 2003–04 and 2011–12**

	Median net worth in 2011 $s		Increase from 2003–04 to 2011–12		Rankings by state/ territory and region		
City or state/territory region	2003–04	2011–12	$ change	% change	2003–04	2011–12	% change
Hobart	318,400	473,800	+155,400	+49%	9	4	2
ACT and NT	409,100	560,200	+151,100	+37%	3	2	4
Adelaide	332,700	471,900	+139,200	+42%	8	5	3
Perth	339,400	464,300	+124,900	+37%	6	6	5
Balance of Tasmania	254,000	378,700	+124,700	+49%	13	11	1
Melbourne	445,800	565,900	+120,100	+27%	2	1	10
Brisbane	339,800	451,400	+111,700	+33%	5	7	6
Balance of Western Australia	318,100	422,000	+103,900	+33%	10	8	7
Balance of Queensland	302,400	95,200	+92,800	+31%	11	10	8
Balance of South Australia	280,800	362,000	+81,200	+29%	12	12	9
Balance of New South Wales	371,400	417,100	+45,600	+12%	4	9	11
Balance of Victoria	336,200	357,600	+21,400	+6%	7	13	12
Sydney	561,700	534,500	-27,200	-5%	1	3	13
AUSTRALIA	387,000	461,200	+74,200	+19%			

Note: All dollars in 2011–12. Values are for those with positive net worth. See Glossary for a definition of net worth.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2003–04 and 2011–12 ABS SURVEY OF INCOME AND HOUSING

Median net worth has increased by 37 per cent for Perth residents over the last decade, and by one-third for those living in the balance of the state. Among other states and territories, Hobart and the balance of Tasmania have experienced the biggest gains, with median net worth growing by almost 50 per cent. Sydneysiders have registered a decrease in net worth over time, by five per cent, with median net worth falling by $27,200 in the last decade. This contentious finding is driven largely by self-reported property values and the housing bubble that was growing in the early 2000s. This story is unpacked further below, when we examine home value. All other

[4] The median is preferable to the mean when looking at measures that vary broadly across the population, like asset values. See the Glossary of terms for further details.

states and territories and their capitals have experienced positive growth in asset value, with Adelaide, the ACT and NT not far behind Tasmania (both in Hobart and the balance of the state). Notwithstanding Sydney's result, the balance of New South Wales (NSW) and Victoria registered the second and third lowest gains – 12 and six per cent respectively.

The translation of income to traditional assets such as a family home are not as obvious as one might expect it to be in Western Australia, which raises questions about the efficiency of the housing market to meet demand, but may also reflect the younger age composition of Perth residents. In 2011–12, 66.4 per cent of Perth households held a home asset, which is just under the national average and three percentage points lower than in 2003–04 (Table 2). Residents of Adelaide and Melbourne were more likely to have a home asset (around 70 per cent of households) when compared with those in Perth. A noticeable shift over time is that almost all capital cities have seen a decrease in households holding wealth in the form of a family home, with Hobart experiencing the largest decrease.

Table 2 Household ownership of wealth by asset class: capital cities: 2003–04 and 2011–12

	Sydney		Melbourne		Brisbane		Adelaide		Perth		Hobart		Australia	
Households have:	2003–04	2011–12	2003–04	2011–12	2003–04	2011–12	2003–04	2011–12	2003–04	2011–12	2003–04	2011–12	2003–04	2011–12
	%		%		%		%		%		%		%	
Home asset	67.4	63.7	75.4	70.5	65.0	64.6	71.3	72.1	69.7	66.4	73.2	66.0	70.2	67.5
Super assets	76.3	81.3	74.0	83.6	73.9	85.1	73.8	78.5	76.0	83.0	72.7	80.1	72.9	79.7
Shares	37.3	31.1	31.2	27.3	27.6	22.6	26.2	23.0	30.6	23.6	22.2	29.9	30.8	25.5
Other property	18.4	19.9	18.4	19.3	13.8	18.0	14.8	17.1	16.3	21.2	15.4	17.2	16.0	17.8
Business asset	5.2	6.3	4.1	5.4	2.9	5.0	3.3	4.3	4.5	4.2	3.3	1.8	4.0	4.8

Note: ACT and NT are not included due to unavailability in the 2003–04 Basic CURF
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2003–04 and 2011–12 SURVEY OF INCOME AND HOUSING

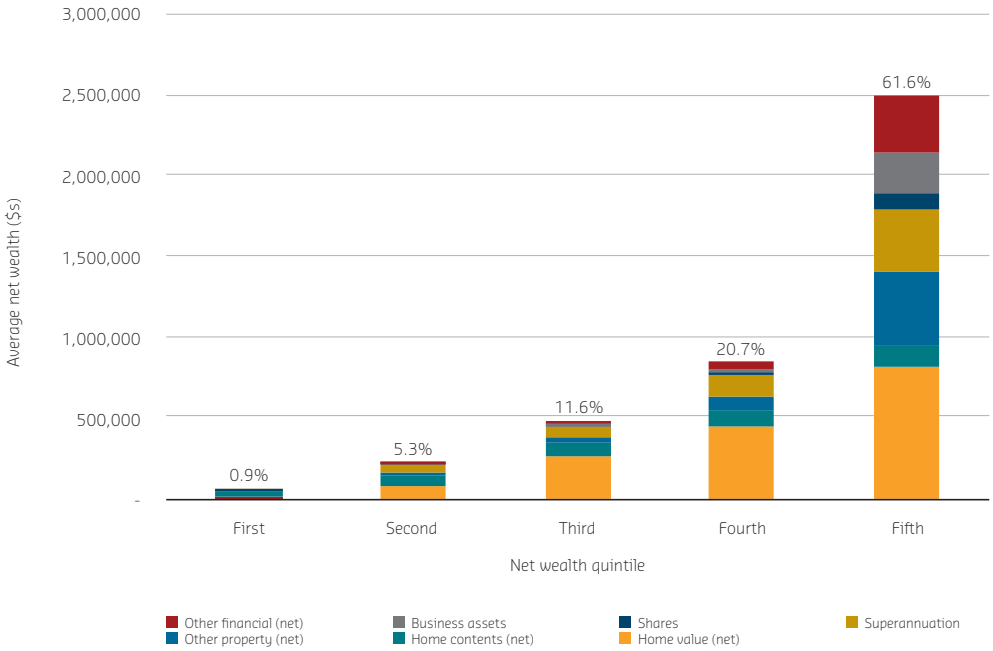
Ownership of superannuation assets for Perth households currently surpasses the national average (83 compared with 79.7 per cent), but remains lower than Brisbane and Melbourne. Over time, households holding superannuation have increased considerably for all capital cities in a relatively short time period, no doubt reflecting the impact of the superannuation guarantee. Share ownership has decreased over the past 10 years in almost all capital cities (with the exception of Hobart) and an increase in ownership of other property assets is evident. The GFC is the likely trigger of these patterns, as people look towards perceived more stable investments.

The wealthiest 40 per cent of households in WA hold around 82 per cent of the state's total household net wealth.

The distribution of wealth in WA

Turning to the question of how wealth is distributed in Western Australia, we have sought to assess the degree to which the net gains over the course of the boom have been concentrated among the wealthiest households.[5] On a broad-based (and conservative) measure, our findings indicate that the average net household wealth of the top wealth quintile in the state comes to just under $2.5 million per household in 2011–12 dollars (Figure 22), a rise of just over 70 per cent in real terms since 2003–04.

Figure 22 Average household net wealth in WA: by wealth quintile, 2011–12



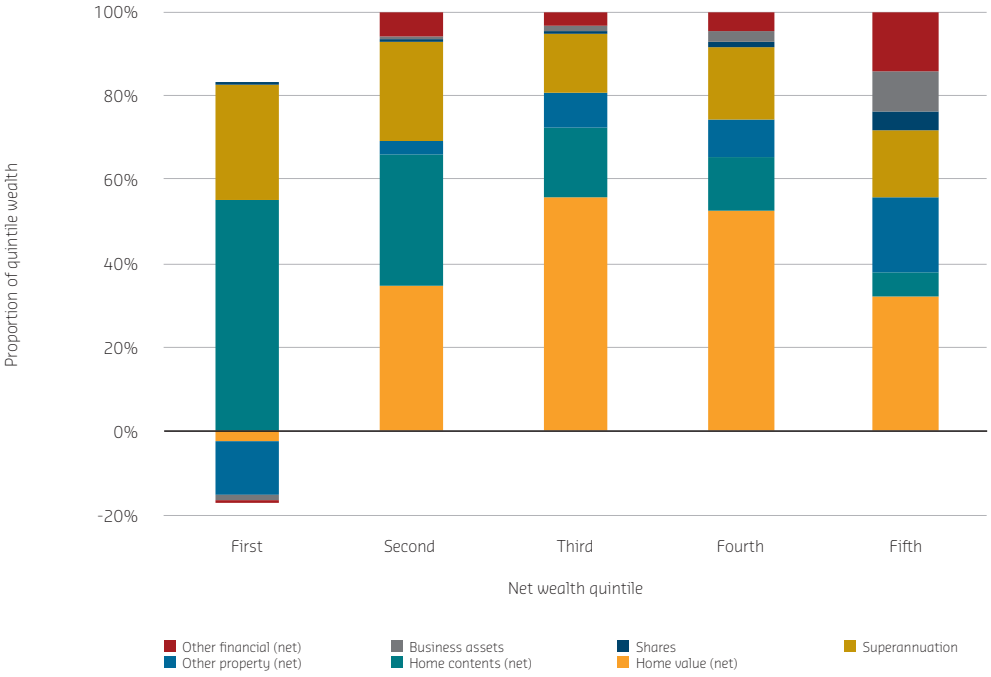
Note: Label percentages represent the proportion of total net wealth held by each wealth quintile
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2011–12 SURVEY OF INCOME AND HOUSING

Noting our earlier caveats, we find that the top wealth quintile in WA holds at least 61.6 per cent of the total household net wealth in the state. This is around 1.7 percentage points ahead of the proportion of net wealth held by the top quintile in Australia, which we estimate to be around 59.9 per cent. The fourth quintile in WA holds just under 21 per cent of the state's total net wealth (on 2011–12 data), matching closely the comparable national figure. Taken together, the wealthiest 40 per cent of households in WA hold around 82 per cent of total household net wealth.

[5] It is important to recognise that an accurate measurement of net wealth is problematic, with comparisons over time using sample surveys often driven by data at the extreme (positive) end of the wealth distribution. Equally, it is highly unlikely that an ABS sample will have captured the very wealthiest in the state, a number of whom are worth tens of billions on their own.

So how has the extra household wealth created over the course of the resource boom been shared in WA? On conservative estimates, aggregate household net wealth in the state increased by at least $268 billion between 2003–04 and 2011–12 when valued in 2011–12 dollars. We find the wealthiest 20 per cent of households in WA to have gained just over 65 per cent of this extra wealth during the boom period – a proportion that served to widen slightly the wealth gap in WA. The national position has been very similar, with the top quintile in Australia gaining around 64 per cent of the increase in real household net wealth since 2003–04.

Figure 23 Components of household net wealth in WA: percentage of total net wealth by wealth quintile, 2011



Note: Label percentages represent the proportion of total net wealth held by each wealth quintile
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2011–12 SURVEY OF INCOME AND HOUSING

Some interesting patterns emerge when we look in more detail at wealth components across the distribution in WA. Figure 23 shows the percentage composition of total household net wealth for each wealth quintile, and indicates that home contents and superannuation are the two most significant forms of asset holdings for the lowest quintile. The net value of home ownership is marginally negative for this first quintile (where liabilities just outweigh the gross value of home assets on average). So too are assets from other property negative on average for the lowest quintile. Home value rises as a percentage of total net asset holdings up to the third quintile, reaching around 55 per cent of total net wealth, before falling as a proportion for the two wealthiest quintiles. One interesting feature of this breakdown is the extent of the rise in net value of other property as wealth increases – up to 10 per cent of total wealth holdings for the third and fourth quintiles, and nearly 20 per cent for the wealthiest quintile.

Asset values and components of wealth

Breaking down wealth further by the most common and generally highest value asset classes – home ownership, other property, superannuation and shares – reveals some important findings driving the accumulation of net worth in areas throughout Australia.

Home value

In 2003–04 and 2011–12, survey respondents were asked, *"What is your estimate of the sale price of this dwelling if you sold it tomorrow?"* This question provides a proxy of the value of homes throughout Australia. Perth currently ranks third in median self-reported home value, second only to Sydney and the ACT/NT (Table 3). However, looking at changes over time, both Perth and the balance of Western Australia have had the largest relative increase – with estimated home values rising by 62 and 76 per cent respectively. NSW has seen relatively little change over time in self-reported home value, with median Sydney home values falling by five per cent between 2003–04 and 2011–12, suggesting that the proverbial bubble has burst in this over-heated market. Whether bubbles exist in other markets around the country remain to be confirmed, with the centre's next 'Focus on Western Australia' report likely to provide answers.

Table 3 **Median self-reported home value by capital city and balance of state: 2003–04 and 2011–12**

	Median self-reported home value in 2011 $'s		Increase from 2003–04 to 2011–12		Rankings by state/ territory and region		
City or state/ territory region	2003–04	2011–12	$ change	% change	2003–04	2011–12	% change
Perth	315,400	510,000	+194,600	+62%	6	3	2
Balance of Western Australia	227,100	400,000	+172,900	+76%	11	7	1
Hobart	252,300	400,000	+147,700	+59%	9	7	3
Adelaide	302,800	435,000	+132,200	+44%	7	6	7
Balance of Queensland	265,000	390,500	+125,600	+47%	8	9	6
Melbourne	378,500	500,000	+121,500	+32%	3	4	8
ACT and NT	429,000	550,000	+121,000	+28%	2	2	9
Balance of Tasmania	189,300	300,000	+110,700	+58%	13	11	4
Balance of South Australia	201,900	300,000	+98,100	+49%	12	11	5
Brisbane	378,500	460,000	+81,500	+22%	3	5	11
Balance of Victoria	239,700	300,000	+60,300	+25%	10	11	10
Balance of New South Wales	353,300	375,000	+21,700	+6%	5	10	12
Sydney	630,800	600,000	-30,800	-5%	1	1	13
AUSTRALIA	378,500	450,000	+71,500	+19%			

Note: All dollars in 2011–12. Values are for those who hold the asset.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2003–04 and 2011–12 ABS SURVEY OF INCOME AND HOUSING

Other property

Earlier we highlighted how investment and rental property assets other than the main residence featured prominently in the asset portfolios of the wealthiest households in Western Australia. Table 4 provides a more detailed breakdown of the the median value of other property in Perth and regional WA compared with the rest of Australia. Our analysis clearly shows that the value of other property holdings has increased substantially for WA households over the course of the boom. The median value of other property assets in Perth increased from $290,000 to $450,000 in real terms between 2003–04 and 2011–12, a rise of 55 per cent. When added to evidence from Table 2 of a rise in ownership of property assets, this could indicate a pattern (both in Perth and regional WA) where property is being held as an investment rather than sold when households relocate.

Households in regional WA with other property assets saw similar real increases, with the median value rising by $160,000 over the course of the boom, to $400,000 in 2011–12 prices. These increases for Perth and the balance of WA are exceeded only by Hobart in absolute dollar terms. Investment and rental property assets in Sydney remain the most valuable across all states and territories, at a median net worth for 2011–12 of around $0.5 million. It is worth noting how little such assets in Sydney have appreciated in real value over this period, a feature linked as much to the huge rises in property prices in Sydney in the early 2000s as to current property market values.

Table 4 Median value of other property by capital city and balance of state: 2003–04 and 2011–12

	Median value, other property in 2011 $s		Increase from 2003–04 to 2011–12		Rankings by state/ territory and region		
City or state/ territory region	2003–04	2011–12	$ change	% change	2003–04	2011 –12	% change
Hobart	182,900	400,000	+217,100	+119%	12	5	1
Balance of Western Australia	239,700	400,000	+160,300	+67%	10	5	3
Perth	290,200	450,000	+159,800	+55%	6	4	4
Brisbane	315,400	460,000	+144,600	+46%	3	2	6
Balance of Queensland	252,300	380,000	+127,700	+51%	7	8	5
Balance of Tasmania	126,200	250,000	+123,800	+98%	13	13	2
ACT and NT	340,700	452,700	+112,000	+33%	2	3	8
Adelaide	252,300	360,000	+107,700	+43%	7	9	7
Melbourne	309,100	400,000	+90,900	+29%	5	5	9
Balance of South Australia	220,800	275,000	+54,200	+25%	11	12	10
Balance of Victoria	252,300	290,000	+37,700	+15%	7	11	11
Balance of New South Wales	315,400	350,000	+34,600	+11%	3	10	12
Sydney	479,400	500,000	+20,600	+4%	1	1	13
AUSTRALIA	**315,400**	**410,000**	**+94,600**	**+30%**			

Note: Other property constitutes other residential property excluding the current dwelling of residence. All dollars in 2011–12. Values are for those who hold the asset.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2003–04 and 2011–12 ABS SURVEY OF INCOME AND HOUSING

Superannuation assets

Despite having the third-highest incomes in Australia and incomes outpacing the national average over the last five years, Perth households remain ranked sixth in median household superannuation assets. Perth households with positive superannuation balances have a median value of $76,000 in super, compared with $108,000 for those in the ACT and NT (primarily Canberra and Darwin) and $90,000 for Hobart households (Table 5). The higher values in the ACT, NT and Hobart are likely to reflect generous public sector schemes, including defined benefits.

Over time, Perth's ranking in median household superannuation balances has increased from tenth to sixth place among Australia's capitals and state and territory balances, and households have experienced a gain of 76 per cent in superannuation assets. The balance of NSW, Adelaide and the balance of Queensland and Tasmania have had gains up to 104 per cent in superannuation assets over the last decade. These patterns are likely to reflect a number of factors, including the movement of retiree households to these areas, particularly coastal Queensland and NSW.

Table 5 Median household superannuation balances by capital city and balance of state: 2003–04 and 2011–12

	Median superannuation balances in 2011 $s		Increase from 2003–04 to 2011–12		Rankings by state/territory and region		
City or state/ territory region	2003–04	2011–12	$ change	% change	2003–04	2011–12	% change
Adelaide	44,500	88,300	+43,900	+99%	8	3	2
Melbourne	48,400	88,000	+39,600	+82%	4	4	5
Balance of New South Wales	37,500	76,400	+38,900	+104%	11	5	1
ACT and NT	71,200	108,000	+36,800	+52%	1	1	9
Perth	43,100	76,000	+32,900	+76%	10	6	6
Hobart	58,000	90,000	+32,000	+55%	2	2	8
Balance of Tasmania	35,200	65,000	+29,800	+85%	13	9	3
Balance of Queensland	35,400	65,000	+29,600	+84%	12	9	4
Brisbane	46,200	72,300	+26,100	+56%	7	8	7
Sydney	52,900	75,000	+22,100	+42%	3	7	10
Balance of Victoria	47,900	65,000	+17,100	+36%	5	9	12
Balance of Western Australia	44,300	60,500	+16,200	+37%	9	12	11
Balance of South Australia	46,800	60,000	+13,200	+28%	6	13	13
AUSTRALIA	**46,200**	**75,200**	**+29,000**	**+63%**			

Note: All dollars in 2011–12. Values are for those who hold the asset.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2003–04 and 2011–12 ABS SURVEY OF INCOME AND HOUSING

Shares

The spread of values for shareholdings is particularly wide, and any breakdown by either mean or median values is likely to be less reliable than for other asset classes. For this reason, Table 6 reports the proportion of households with shareholdings rather than the median value of shares.

Share ownership has fallen in WA since the start of the boom, as it has in Australia generally, a fact that has much to do with the heavy impact of the GFC. Fewer than one in four households in WA owned shares in 2011–12, a drop of seven percentage points since 2003–04 among Perth households and 10 percentage points in regional WA. The reduction in share ownership has been a national trend, not specific to WA. Taken together with earlier evidence, there is some support for the conjecture that WA households have moved away from share ownership towards investment property over the period. The average share balance among Perth households was $113,400 in 2011–12, a real increase of 60 per cent since 2003–04. The comparable average balance was $47,700 for regional WA. However, these increases are evidently concentrated on a relatively small proportion of households with high portfolio balances and should not be taken as a general trend among all WA share owners.

Sydney has the highest proportion of share owners across Australia, with 31.7 per cent of households in 2011–12 owning shares in some form. However, this rate has dropped by nearly seven percentage points since 2003–04. Hobart is the only city that has bucked the trend. Around 31 per cent of households in Tasmania's capital now own shares, a rise of 8.6 percentage points since 2003–04.

Table 6 Proportion of households with shareholdings: by capital city and balance of state: 2003–04 and 2011–12

	Proportion with shares (%)		Increase from 2003–04 to 2011–12	Rankings by state/ territory and region		
City or state/ territory region	2003–04	2011–12	ppt change	2003–04	2011–12	ppt change
Sydney	38.5%	31.7%	-6.8%	2	1	9
Hobart	22.4%	31.0%	+8.6%	12	2	1
ACT and NT	39.6%	28.7%	-10.9%	1	3	13
Melbourne	31.6%	27.4%	-4.2%	5	4	5
Balance of New South Wales	34.9%	26.8%	-8.1%	3	5	11
Perth	30.9%	24.0%	-6.9%	6	6	10
Balance of Victoria	28.9%	23.9%	-5.0%	7	7	6
Brisbane	27.6%	23.9%	-3.7%	8	8	4
Adelaide	26.4%	23.5%	-2.9%	10	9	3
Balance of Western Australia	33.1%	23.0%	-10.0%	4	10	12
Balance of South Australia	27.4%	20.9%	-6.5%	9	11	8
Balance of Queensland	24.8%	19.2%	-5.7%	11	12	7
Balance of Tasmania	18.5%	18.4%	-0.0%	13	13	2
AUSTRALIA	31.5%	25.8%	-5.7%			

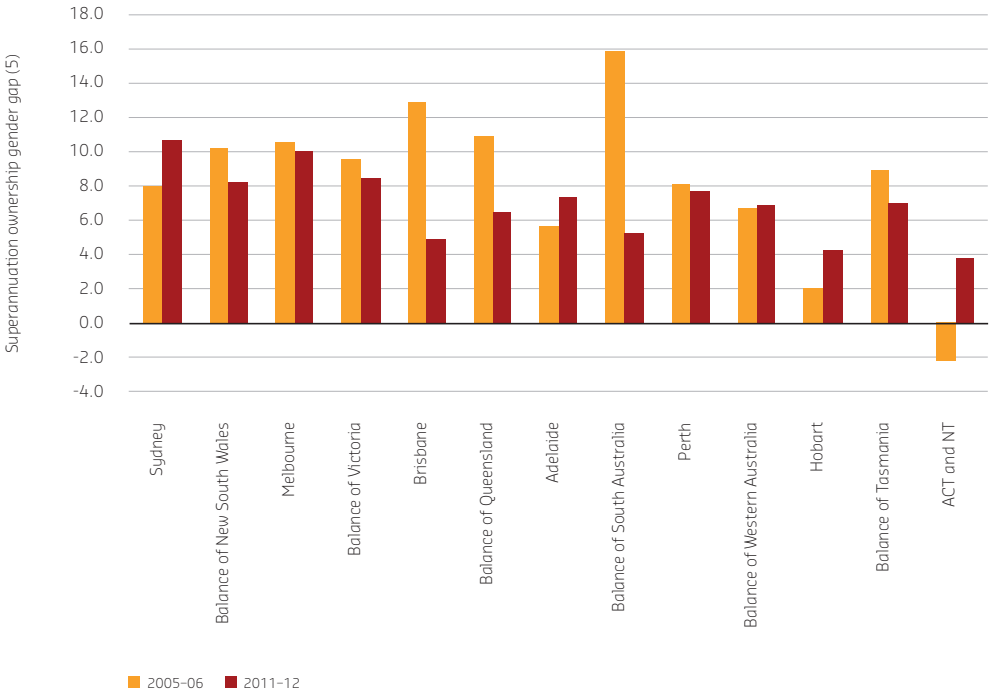
Note: Table ordered by percentage of households in 2011–12 with shareholdings.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2003–04 and 2011–12 ABS SURVEY OF INCOME AND HOUSING

Are there gender differences in super balances?

As superannuation is accumulated at an individual level (yet often shared at a household level) and reflects the level of wages and salary as well as current and future financial wellbeing, it is important to understand super accumulation for individual groups. Women are more likely to earn less over their lifetime than men, often in less well remunerated or more highly casualised occupations. Figure 24 shows the gap in superannuation ownership between men and women across capital cities and the balance of Australian states in 2005–06 and 2011–12. The good news is that the gender gap in superannuation ownership across this period has closed throughout the majority of states and territories, with the exception of Sydney, Adelaide and the ACT/NT (which started out with a gap in favour of women). Brisbane and the state balances of Queensland and South Australia have seen the biggest improvements, with the gender gap in the balance of South Australia decreasing from 16 to 5.2 per cent.

Sydney currently fares the worst, with a gap of more than 10 percentage points between men and women in superannuation ownership – up two percentage points since 2005–05. Perth is ranked fifth, with an ownership gap just under eight percentage points, and has seen little movement in the period. The balance of Western Australia is ranked eighth – with around a seven percentage point gap.

Figure 24 Gender gap – superannuation ownership by capital city and balance of state, 2005–06 and 2011–12



Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 and 2011–12

As well as a gender gap in superannuation ownership, the gap in superannuation balances between men and women is considerably higher in some areas than others throughout Australia. We find a mixed pattern of gender superannuation gaps between men and women in regional areas across Australia (Table 7). The balance of Western Australia has the second-highest median gap of $25,000 in 2011–12, whereas the gender gaps in regional NSW (at $15,127) and regional South Australia (at $13,800) are among the lowest.

Median superannuation balances in Perth are more even than in the rest of Western Australia, with WA men holding $18,598 more in superannuation than women. However, one concern worth highlighting is the trend in the state's capital: over the eight years to 2011–12, the gender superannuation gap in Perth has deteriorated the most across all major cities and regional areas of Australia – with the gap in median balances between men and women widening by $7,620, or 69 per cent in real terms. Conversely, the gap in median balances in Hobart, South Australia, Tasmania and the balance of NSW has reduced over the same period.

The gender gap in superannuation balances has widened in Perth more than in any other state over the last decade.

Table 7 Median gender superannuation gap by capital city and balance of state: 2005–06 and 2011–12

	Median gender superannuation gap in 2011 $s		Increase from 2005–06 to 2011–12		Rankings by state/ territory and region		
City or state/ territory region	2005–06	2011–12	$ change	% change	2005–06	2011–12	% change
Hobart	31,919	28,000	-3,919	-12%	1	1	11
Balance of Western Australia	18,683	25,000	+6,317	+34%	8	2	3
ACT and NT	20,453	23,000	+2,547	+12%	4	3	6
Balance of Victoria	20,403	22,511	+2,108	+10%	5	4	7
Balance of Queensland	14,955	22,000	+7,045	+47%	10	5	2
Melbourne	15,601	20,460	+4,859	+31%	9	6	4
Balance of Tasmania	20,825	20,000	-825	-4%	3	7	9
Adelaide	20,831	19,645	-1,186	-6%	2	8	10
Perth	10,978	18,598	+7,620	+69%	13	9	1
Sydney	14,875	17,042	+2,167	+15%	11	10	5
Balance of New South Wales	19,457	15,127	-4,330	-22%	7	11	12
Brisbane	14,280	14,149	-131	-1%	12	12	8
Balance of South Australia	20,174	13,800	-6,374	-32%	6	13	13
AUSTRALIA							

Note: All dollars in 2011–12. Values are for those with positive superannuation values
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12

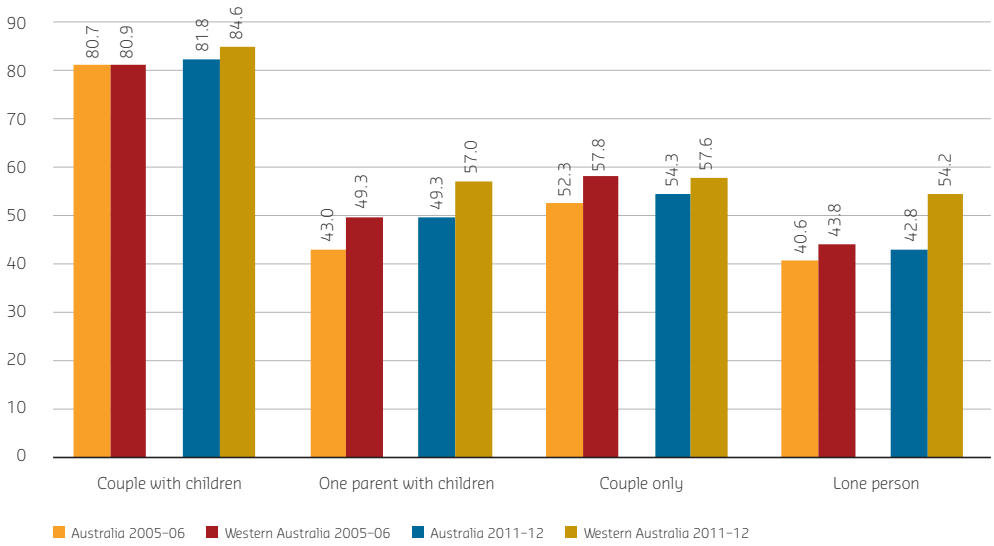
Who's rich and who's not?

Who's rich and who's not?

In this section we take a closer look at the characteristics of high and low income households in Western Australia and Australia, assessing how their profile has changed over the course of the resource boom. Here, we compare low- and high-income households in 2005–06 and 2011–12. These two periods in time have been selected because they provide the most accurate comparison of incomes from the ABS Survey of Income and Housing[6]. As an introduction to the analysis, we examine the principal source of income for households in WA and in the rest of Australia, and how this has changed over time.

The majority of households have experienced an increase in their reliance on wages and salaries between 2005–06 and 2011–12 within both WA and the rest of Australia (Figure 25). Couple households with children are more likely than any other household type to have wages as their principal source of income. In 2005–06, the proportion of couple-with-children households in Australia and WA relying on wages was almost identical – around 80 per cent. This proportion increased for both WA and the rest of Australia between 2005–06 and 2011–12; however, the proportion in WA increased further to almost 85 per cent.

Figure 25 Wages as principal source of household income, 2005–06 and 2011–12



Note: Group houses have been excluded from the analysis
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12

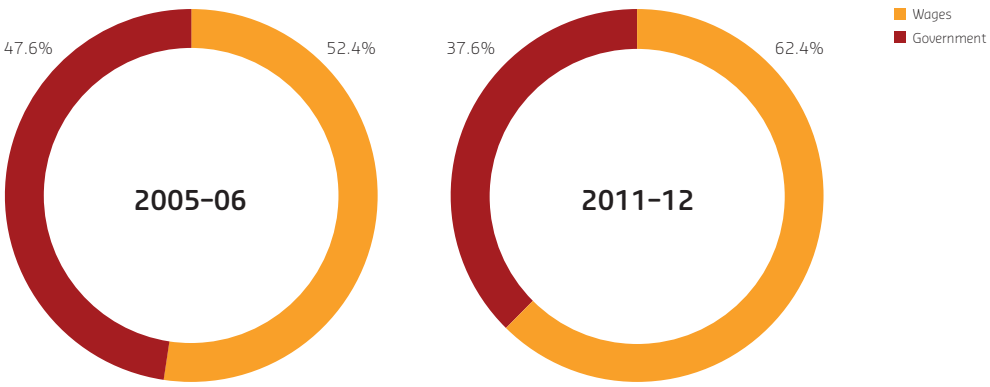
6 Changes were made to the way in which income was captured and treated in the Survey of Income and Housing between 2003–04 and 2005–06. The 2011–12 SIH provides variables which are comparable with the 2005–06 basis.

Within WA, single households generally, and single parent households in particular, are more likely to source their main income from wages and salaries in 2011–12 than in 2005–06. This has led to less reliance on government benefits and allowances – whereas 48 per cent of WA single parents relied on government support in 2005–06 as their main source of income, this figure declined considerably to 37.6 per cent in the six years to 2011–12 (Figure 26).

The shift in single parent households relying more on wages and salaries than on government benefits and allowances is a pattern that has been observed nationally, and is likely a consequence of a number of factors, including the Welfare to Work policy reform introduced in July 2006. However, the reduction in the proportion of WA single parent households that are reliant on government benefits is also likely to reflect the strong economic growth experienced by the state in comparison to the rest of Australia, with higher wages potentially incentivising greater workforce participation and attracting those who are highly marketable to WA.

Just over one-third of WA single parents are dependant on government benefits and allowances – a decrease from 45 per cent eight years earlier.

Figure 26 Principal source of household income, single parents WA, 2005–06 and 2011–12



Note: Other and business income for WA single parent households have very small sample sizes (less than 10) and have been removed from the analysis
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12

Table 8 Change in equivalised disposable income by household type and state: 2005–06 and 2011–12

		Household equivalised income (heinc) in 2011 $s		Increase from 2005–06 to 2011–12		Rankings within household type		
Household type	State/territory	2005–06	2011–12	$ change	% change	2005–06 heinc	2011–12 heinc	% change
Couples with children	Western Australia	857.22	986.67	+129.45	+15.1%	2	2	1
Couples with children	Tasmania	689.00	781.92	+92.92	+13.5%	7	7	4
Couples with children	South Australia	764.71	862.37	+97.66	+12.8%	6	5	3
Couples with children	Queensland	783.36	883.38	+100.02	+12.8%	5	4	2
Couples with children	ACT/NT	932.80	1,025.23	+92.43	+9.9%	1	1	5
Couples with children	Victoria	798.56	849.68	+51.12	+6.4%	4	6	6
Couples with children	New South Wales	856.14	896.75	+40.61	+4.7%	3	3	7
Couples with children	**AUSTRALIA**	**819.45**	**890.18**	**+70.73**	**+8.6%**			
Couple only	Western Australia	828.21	1,117.04	+288.83	+34.9%	5	2	1
Couple only	ACT/NT	1,027.19	1,310.48	+283.29	+27.6%	1	1	2
Couple only	New South Wales	841.63	1,006.59	+164.96	+19.6%	4	3	3
Couple only	Tasmania	748.06	842.27	+94.21	+12.6%	7	7	5
Couple only	Queensland	855.46	959.69	+104.23	+12.2%	2	4	4
Couple only	Victoria	854.25	943.60	+89.35	+10.5%	3	5	6
Couple only	South Australia	796.12	872.60	+76.48	+9.6%	6	6	7
	AUSTRALIA	**844.01**	**985.59**	**+141.58**	**+16.8%**			
Single parent	ACT/NT	543.25	672.77	+129.52	+23.8%	4	2	1
Single parent	Western Australia	551.03	678.06	+127.03	+23.1%	3	1	2
Single parent	Victoria	498.43	578.40	+79.97	+16.0%	7	6	3
Single parent	Tasmania	502.33	580.93	+78.60	+15.6%	6	5	4
Single parent	South Australia	538.20	592.63	+54.43	+10.1%	5	4	6
Single parent	New South Wales	570.83	625.63	+54.80	+9.6%	1	3	5
Single parent	Queensland	570.14	576.93	+6.79	+1.2%	2	7	7
Single parent	**AUSTRALIA**	**544.05**	**606.08**	**+62.03**	**+11.4%**			
Lone person	Western Australia	681.84	870.18	+188.34	+27.6%	2	2	1
Lone person	South Australia	581.89	721.43	+139.54	+24.0%	6	6	3
Lone person	Tasmania	532.42	645.78	+113.36	+21.3%	7	7	5
Lone person	ACT/NT	837.18	1,013.25	+176.07	+21.0%	1	1	2
Lone person	Queensland	659.58	783.28	+123.70	+18.8%	5	3	4
Lone person	New South Wales	668.83	769.93	+101.10	+15.1%	3	4	6
Lone person	Victoria	662.48	726.77	+64.29	+9.7%	4	5	7
	AUSTRALIA	658.25	769.75	+111.50	+16.9%			
	AUSTRALIA	**760.61**	**868.56**	**+107.95**	**+14.2%**			

Note: Income is household equivalised disposable income uprated to 2011–12 dollars using changes in the CPI. See Glossary for definition of equivalisation.
Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12.

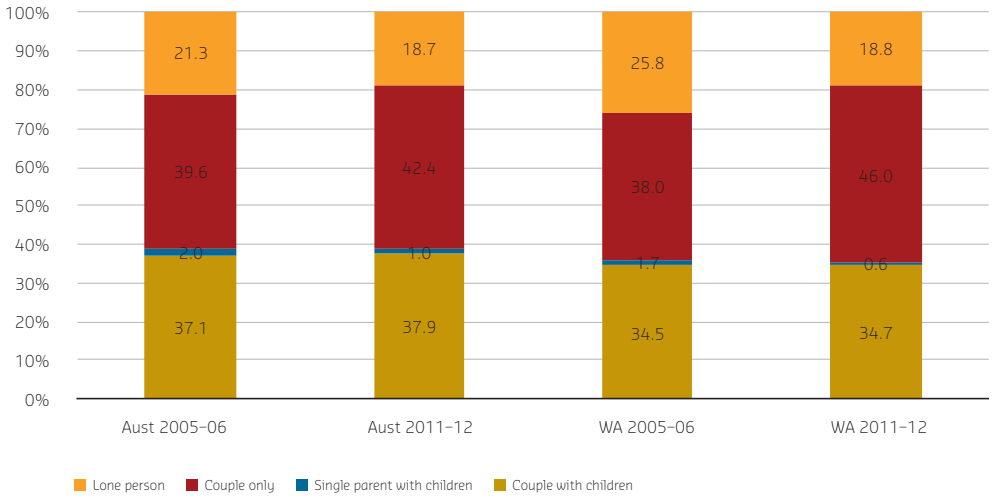
Particular patterns emerge for WA when we look at changes in disposable income over a six-year period for different household types across states and territories (Table 8). Across nearly all household types, WA is ranked first in terms of the greatest increase in average weekly incomes between 2005–06 and 2011–12. Couple-only households in WA experienced the largest average increase in weekly incomes in the six-year period – around 35 per cent – or $288 per week (in constant dollars). Lone person weekly income grew on average by 27.6 per cent, and couples with children saw an average increase in household disposable income of 15 per cent, gaining $130 extra each week. While single parents in the ACT/NT saw the largest gains in weekly income across the period, WA single parent households came a close second, with increases on average of 23 per cent.

High-income households

In this report we define high-income households as those in the top quintile of the income distribution – that is, the 20 per cent of households either in WA or the rest of Australia with the highest income. In 2011–12 these households had an average income of $1,963, per week in WA, and $1,705 throughout the rest of Australia; a difference of $258 per week.

Comparing household types in the top income quintile, couple-only households dominate in both WA and the rest of Australia, with these proportions increasing over time, particularly in WA (Figure 27). The share of couple-with-children households has remained relatively stable between 2005–06 and 2011–12, at around 38 per cent for Australia and just over one-third for WA. Lone-person households have decreased their presence in the highest income quintile in WA, from 25.8 to 18.8 per cent in the eight years to 2011–12.

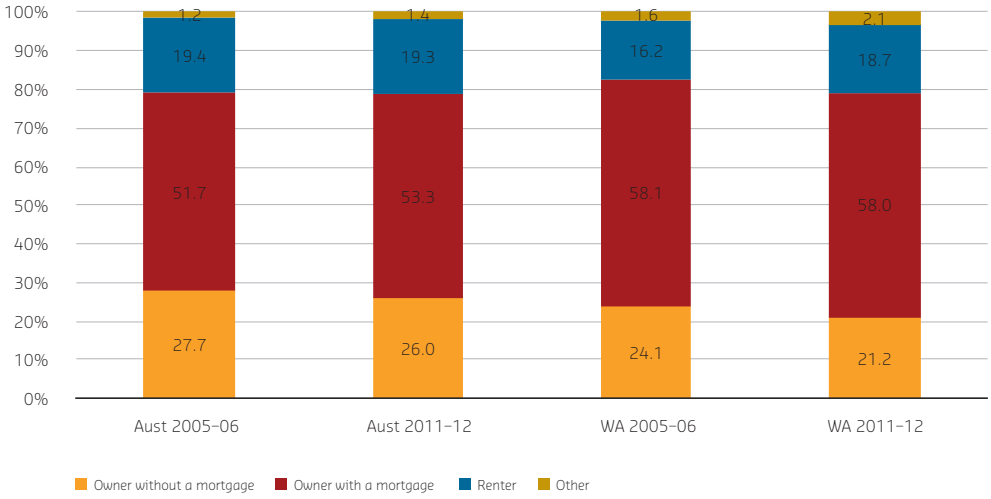
Figure 27 Household type, high-income households, 2005–06 and 2011–12



Note: Very few single parent households are in the sample of households in the top quintile and any statistics should be treated with caution.
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2011–12 ABS SURVEY OF INCOME AND HOUSING.

Given the higher incomes in WA relative to Australia, it might be expected that those living in WA would be more likely to be mortgage- and rent-free, or at the very least be more likely to be in a position of accumulating wealth in the form of purchasing a home. Figure 28 does not support this conjecture, with a higher proportion of high-income households in WA more likely to be owners with a mortgage (58 per cent) compared with high-income households in the rest of Australia (53 per cent). These patterns have remained stable between 2005–06 and 2011–12. Over time, similar proportions of renters are observed among high-income households in the rest of Australia. For WA, the proportion of renters in high-income households has increased slightly, whereas high-income households owning their home outright has decreased across the period. A difficult housing market in WA might provide one explanation for these patterns.

Figure 28 Tenure type, high-income households, 2005–06 and 2011–12

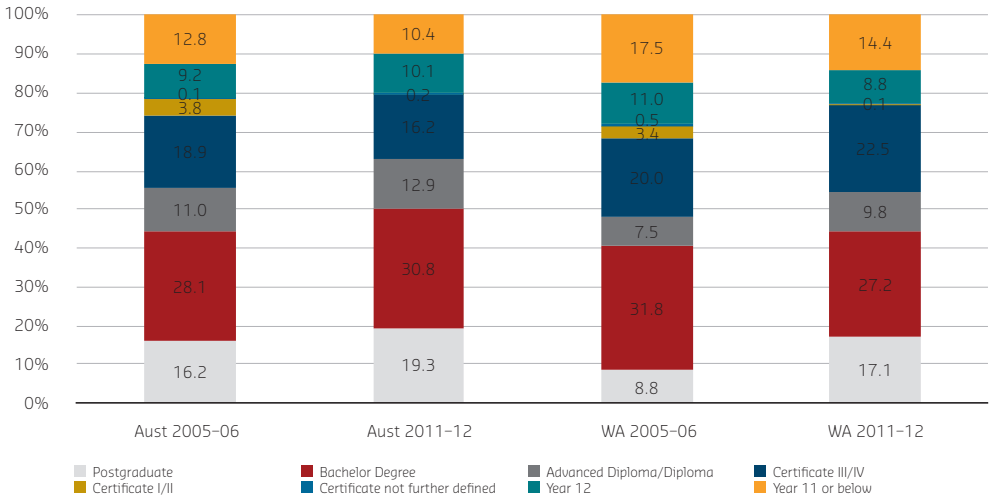


Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12.

Examining the characteristics of the household reference person of high-income households, different patterns appear between WA and the rest of Australia. Numerous economic studies have shown that the return to education generally increases as educational attainment increases, with those individuals holding a Bachelor degree or higher more likely to earn higher wages than those who do not (Cassells *et al* 2012). In WA, however, this assumption does not hold as rigidly as it does for the rest of Australia, with households headed by an individual holding a trade certificate having a larger and increasing presence in the highest household income quintile over time (Figure 29). More than one-fifth of high-income households in WA in 2011–12 were headed by a person holding a Certificate III/IV (trade) as their highest qualification, whereas only 16 per cent of high-income households in the rest of Australia have a household head with a trade-level education. A higher proportion of high-income WA households have a household head that obtained only Year 11 or below in their highest education (14.4 per cent), compared with 10.4 per cent nationally in 2011–12.

These findings suggest that not only do you not have to head to university to make it into the higher realms of the income distribution, but also that the return is likely to be greater, given that the cost of acquiring a trade certificate is almost always lower than that of any university degree.

Figure 29 Highest qualification of household reference person, 2005–06 and 2011–12



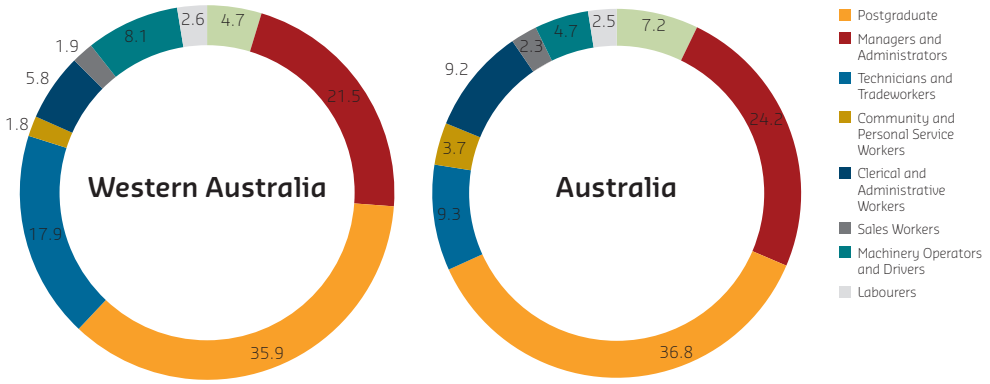
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12

The heads of high-income households in WA are twice as likely to be headed by a 'tradie' as those in the rest of Australia.

Those households who are headed by someone with a postgraduate degree have increased their position substantially within the high-income housing group – doubling in WA from 8.8 to 17.1 per cent. These patterns are likely to reflect the demand for highly skilled postgraduates, particularly in the mining sector, with engineers dominating highly paid positions.

The same educational patterns are also reflected in the occupational status of the household reference person in high-income households – those employed as technicians and trade workers are almost twice as likely to be in the top of the income distribution in WA than the national average (Figure 30). Managers and administrators are less represented in high-income households in WA, whereas machinery operators and drivers are more prevalent.

Figure 30 Occupational status of head of high-income household, 2011–12



Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS 2011–12 ABS SURVEY OF INCOME AND HOUSING

The prevalence of male-dominated occupations and trades in WA's top income households is mirrored in the gender distribution of household heads (Table 9). Across Australia almost one-third of high-income households are headed by a woman, whereas in WA, it is only around one-fifth. Between 2005–06 and 2011–12 there has been little change in the patterns of high-income households in WA when it comes to the gender of the head of the household. For the rest of Australia, however, there has been a substantial increase in the proportion of women heading high-income households over the six years – from just over one-quarter to just under one-third. This compares starkly with low-income households, as shown in the next section.

Table 9 Gender of household reference person, high-income households: 2005–06 and 2011–12

	Western Australia			Australia		
	2005–06	2011–12	Change	2005–06	2011–12	Change
Male	78.7	78.9	+0.2	73.6	68.4	-5.2
Female	21.3	21.1	-0.2	26.5	31.7	+5.2

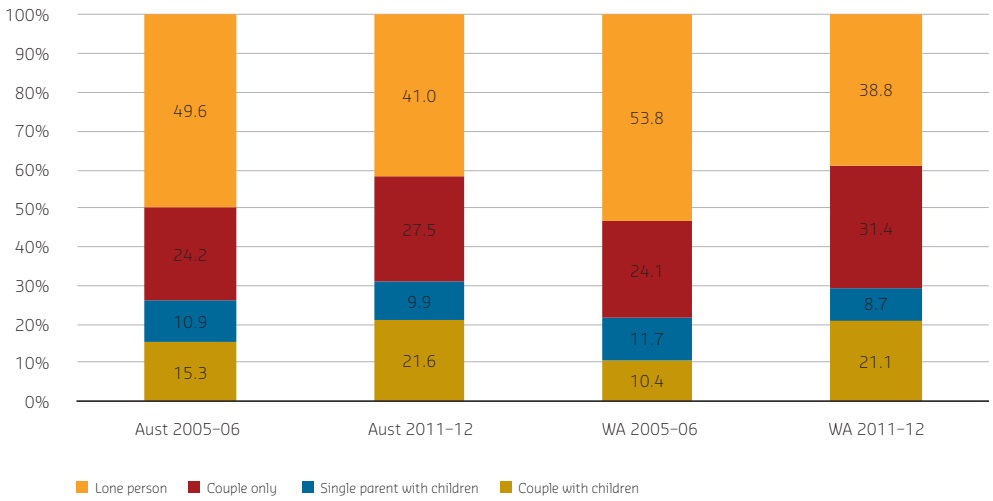
Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS SURVEY OF INCOME AND HOUSING, 2005–06 AND 2011–12

Low-income households

Surveying low-income households in WA and comparing these with the rest of Australia, less noticeable differences are observed; however, changes over time have been significant. Both couples with children and couple-only households now make up a higher proportion of low-income households in WA and in the rest of Australia, compared with six years earlier. Single-parent households have slightly reduced their presence in the bottom quintile, now making up under 10 per cent of low-income households.

Single-person households are much less likely to fall within the lowest quintile of households in 2011–12 than they were in 2005–06 (Figure 31). This change is likely to reflect to some extent the introduction of a more generous pension supplement by the Australian Government in September 2009. Single-person households still dominate low-income groups for both WA and the rest of Australia, signifying the large number of older Australians (generally female) living alone on very low incomes.

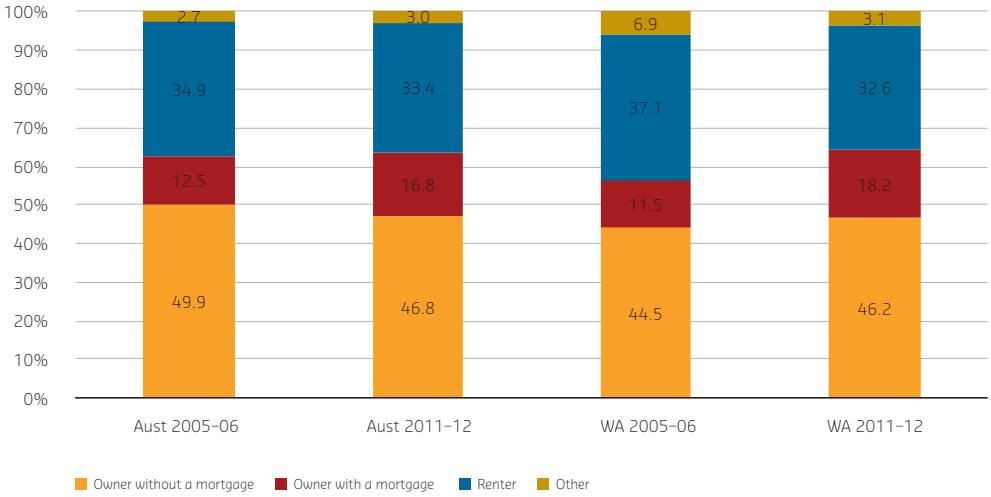
Figure 31 Household type, low-income households, 2005–06 and 2011–12



Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12.

These older Australians are also represented in the figure below, with many of them holding large assets (home owners), yet receiving very low weekly disposable income (Figure 32). Owners with a mortgage have increased their presence in the bottom quintile of equivalised disposable income, in both WA and the rest of Australia.

Figure 32 Tenure type, low-income households 2005–06 and 2011–12



Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING 2005–06 AND 2011–12.

More than 50 per cent of low-income households in both Western Australia and the rest of Australia are headed by a woman (Table 10). This has shifted slightly, with a more even balance observed in 2011–12, especially in WA.

Table 10 Gender of household reference person, low-income households: 2005–06 and 2011–12

	Western Australia			Australia		
	2005–06	2011–12	Change	2005–06	2011–12	Change
Male	44.5	47.9	+3.4	42.2	45.4	+3.2
Female	55.5	52.1	-3.4	57.8	54.6	-3.2

Source: BANKWEST CURTIN ECONOMICS CENTRE | AUSTRALIAN BUREAU OF STATISTICS ABS SURVEY OF INCOME AND HOUSING, 2005–06 AND 2011–12.

Conclusion

and discussion

Conclusion and discussion

The resource boom in Western Australia and its impact on both the state and national economy has dominated political and economic discourse over recent years. Has WA really experienced a boom? The overwhelming evidence points to the affirmative, with the peak period in the mid-2000s bearing witness to a tightening labour market; GSP and wages rising; large income gains across the majority of households; and prices (especially housing and in regional areas) shooting up rapidly.

WA stayed strong during the course of an economic downturn that weakened most of the world's economies. Western Australia was momentarily held back, with delayed impacts from the GFC seeing the trajectory of income growth across the distribution falter in recent years. Those on high incomes had the largest fall, from a grand height to begin with – where income growth between 2005–06 and 2007–08 increased by 27 per cent in WA, compared with 22 per cent for the whole of Australia.

Over the last six years, WA incomes have outpaced national averages, even when accounting for taxes and household size. In terms of absolute values, WA ranks third in both median and mean incomes, second only to the ACT and NT.

However, income growth across the boom period has seen income inequality increase significantly, as the richer households sprint away from the rest of the distribution. The boom may be benefiting many households, with rising employment participation, decreasing unemployment and generally higher incomes, but the poorest households in WA are being left behind. This does not necessarily imply that the boom is not being shared, but rather it is being shared too unequally.

Low-income households are falling behind all others at a faster rate in WA than Australia, which raises concerns about those living in these households and the decreasing standard of living that they are likely to be experiencing relative to the rest of WA's population. This is particularly the case for those living in areas where prices have been rising exponentially.

Across the state, the impact of the boom in one region stands out – the Pilbara, with very few individuals having weekly incomes lower than $800 per week, and more than 40 per cent on incomes of more than $2,000 per week. But, prices in this region have been rising at a pace that many households would find difficult to keep up with.

Our findings also show that income does not necessarily translate into wealth in the form of home ownership, with those on high incomes in WA less likely to own their home outright compared with the rest of Australia. The proportion of households holding a home asset has also decreased over the last decade, suggesting that housing affordability and accessibility is likely an issue for Western Australians, or that they are spending their high incomes on other items.

Boom periods can bring about sudden and unexpected changes to regions that often go against the grain of traditional economic and social theories. This is reflected in the profile of high-income households in WA, where those with lower educational attainment are much more likely to appear at the top of the income distribution in WA than the rest of Australia. These findings suggest that not only do you not have to head to university to make it into the higher realms of the income distribution, but also that the return is likely to be greater, given that the cost of acquiring a trade certificate is almost always lower than that of any university degree.

To answer the questions set out at the beginning of this report – has the boom been shared? On the whole – yes. Most households in WA have seen a rise in relative incomes and household wealth. Has it been shared equally? Formally, no – but the degree to which this becomes problematic is a question of relativities. Western Australians have been and continue to live in a golden age – largely resistant to the economic and labour market downturns experienced in other states and territories. However, the lack of industry diversity does leave the state exposed and dependant on China's consumption economy – a reality all too familiar in business and policy rhetoric.

It is also imperative not to forget those groups who have fallen behind relative to the rest of the state, as the further the distance, the harder it is to catch up. This has particular implications for children growing up in households on limited incomes, since we know that persistent financial hardship reinforces the intergenerational effects of disadvantage. Neither must we forget those who are often not included in any income survey – the homeless, of which there are more than 13,000 in the state. Certain groups have also not fared as well as others, including Indigenous Australians who have seen no real gain in labour force participation or improvements in employment over time.

Glossary

Glossary

Equivalised income

Equivalising income is a method of standardising household income to take account of household size and compositional differences.

Disposable income

Total income, monetary and in-kind, less income tax, the Medicare levy and the Medicare levy surcharge.

Gini coefficient

The Gini coefficient is a single statistic between zero and one and is a summary indicator of the degree of inequality, with values closer to 0 representing less inequality, and values closer to one representing greater inequality.

Household Reference Person

The reference person for each household is chosen by applying, to all household members aged 15 years and over, the selection criteria below, in the order listed, until a single appropriate reference person is identified: (1) the person with the highest tenure when ranked as follows: owner without a mortgage, owner with a mortgage, renter, other tenure; (2) one of the partners in a registered or de facto marriage, with dependent children; (3) one of the partners in a registered or de facto marriage, without dependent children; (4) a lone parent with dependent children; (5) the person with the highest income; (6) the eldest person.

Net worth

Net worth is the value of a household's assets less the value of its liabilities. Net worth may be negative when household liabilities exceed household assets.

Gross Domestic Product (GDP)

Gross Domestic Product (GDP) is an economic indicator of the value of a country's total output, calculated as the sum of the following measures: consumption expenditures; business investment; government spending; and net exports (defined as exports minus imports).

Gross State Product (GSP)

Gross State Product (GSP) is a measure of the economic output of a state, province or region, and serves as the counterpart to gross domestic product for a country. Conceptually, GSP is measured on the same basis as GDP, although there are practical difficulties in measuring 'import' and 'export' flows across state boundaries, and attributing state-specific income accruing from factors of production in national and multinational firms.

Real GDP/GSP

Real GDP (GSP) is GDP (GSP) at market prices (ie. adjusting for price changes) so that measures can be compared over time. The Australian Bureau of Statistics measures real GDP (GSP) using *chain volume* estimates. Such estimates are derived by revaluing current price, income-based estimates of GDP (GSP), using deflators which are calculated from the expenditure components of the state series concerned.

Gross State Income

Gross State Income (GSI) is an alternative measure to GSP of the real purchasing power of income generated by the state. Volume estimates of GSP measure the volume of goods and services produced in each state. If the terms of trade for a state change significantly (ie. the prices for a state's exports and imports change at different rates) then GSP will not accurately reflect the change in real purchasing power of the income generated within a state. Gross State Income includes an adjustment for terms-of-trade effects.

Appendix

Appendix

Table A1 *Wages and salaries as a proportion of household income by family type: 2005–06 and 2011–12*

	Couples with children				Single parents			
Capital city/ Balance of state	2005–06	2011–12	ppt change	Rank	2005–06	2011–12	ppt change	Rank
Sydney	75%	76%	+1%	10	41%	48%	+7%	3
Balance of New South Wales	70%	76%	+6%	2	35%	34%	-1%	10
Melbourne	75%	78%	+3%	7	32%	43%	+11%	1
Balance of Victoria	70%	70%	+0%	12	30%	39%	+9%	2
Brisbane	76%	80%	+4%	3	43%	39%	-4%	11
Balance of Queensland	69%	72%	+3%	7	38%	38%	+0%	8
Adelaide	75%	77%	+2%	9	41%	48%	+7%	3
Balance of South Australia	71%	67%	-4%	13	39%	39%	+0%	8
Perth	74%	78%	+4%	3	46%	53%	+7%	3
Balance of Western Australia	72%	79%	+7%	1	46%	32%	-14%	13
Hobart	70%	74%	+4%	3	52%	46%	-6%	12
Balance of Tasmania	65%	69%	+4%	6	27%	33%	+6%	6
ACT and NT	83%	84%	+1%	10	54%	56%	+2%	7
All	**73%**	**76%**	**+3%**		**39%**	**43%**	**+4%**	

	Couple-only household				Lone person			
Capital city/ Balance of state	2005–06	2011–12	ppt change	Rank	2005–06	2011–12	ppt change	Rank
Sydney	53%	55%	+2%	5	46%	45%	-1%	10
Balance of New South Wales	43%	43%	+0%	9	33%	36%	+3%	8
Melbourne	52%	57%	+5%	3	46%	43%	-3%	12
Balance of Victoria	43%	43%	+0%	9	26%	38%	+12%	1
Brisbane	51%	58%	+7%	1	42%	47%	+5%	5
Balance of Queensland	47%	48%	+1%	8	37%	43%	+6%	4
Adelaide	43%	49%	+6%	2	38%	35%	-3%	12
Balance of South Australia	45%	45%	+0%	9	26%	37%	+11%	2
Perth	58%	60%	+2%	5	45%	54%	+9%	3
Balance of Western Australia	48%	51%	+3%	4	40%	44%	+4%	6
Hobart	54%	47%	-7%	13	34%	37%	+3%	8
Balance of Tasmania	43%	41%	-2%	12	34%	32%	-2%	11
ACT and NT	61%	63%	+2%	5	58%	61%	+3%	7
All	**50%**	**51%**	**+1%**		**40%**	**43%**	**+3%**	

References

Australian Bureau of Statistics (ABS 1995), Australian Survey of Income and Housing, 2003–04 and 2011–12, Cat. no. 6503.0, Australian Bureau of Statistics, Canberra.

Australian Bureau of Statistics (ABS 2011a), Australian Census of Population and Housing, 2011, Basic Community Profile, Cat. no. 2001.0, Australian Bureau of Statistics, Canberra.

Australian Bureau of Statistics (ABS 2011b), Australian National Accounts: State Accounts, 2012–13, Cat. no. 5220.0, Australian Bureau of Statistics, Canberra.

Australian Bureau of Statistics (ABS 2013a), Household Income and Income Distribution, Australia, 2011–12, July 2013, Cat. no. 6523.0, Australian Bureau of Statistics, Canberra.

Australian Bureau of Statistics (ABS 2013b), Average Weekly Earnings, Australia, November 2013, Cat. no. 6302.0, Australian Bureau of Statistics, Canberra.

Australian Bureau of Statistics (ABS 2014), Labour Force, Australia, January 2014, Cat. no. 6202.0, Australian Bureau of Statistics, Canberra.

Cassells, R., Duncan, A., Abello, A., D'Souza, G., Nepal, B. (2012), 'Smart Australians: Education and Innovation in Australia'. AMP.NATSEM Income and Wealth Report Issue 32.

Costello, G., Fraser, P. and MacDonald, G. (2013), 'The Impact of Monetary Policy on Australian Capital City House Prices: The Case of Australia'. Paper presented to the 26th Australasian Finance and Banking Conference, Sydney, December 2013.

Dockery, A.M. (2013), 'The WA mining boom and Indigenous labour market outcomes'. 41st Australian Conference of Economists, Murdoch University, Perth, July 2013.

Government of Western Australia Department of Mines and Petroleum (2013), WA Major Commodity Resources Data File.
Available at http://www.dmp.wa.gov.au/documents/statistics_release/ironore1213.xlsx.

Government of Western Australia Department of Regional Development and Lands (2007), WA Regional Price Index 2007.
Available at http://www.drd.wa.gov.au/publications/Documents/Regional_Price_Index_2007.pdf.

Government of Western Australia Department of Regional Development and Lands (2011), WA Regional Price Index 2011.
Available at http://www.drd.wa.gov.au/publications/Documents/Regional_Price_Index_2011.pdf.

Government of Western Australia Department of Regional Development (2013), WA Regional Price Index 2013.
Available at http://www.drd.wa.gov.au/publications/Documents/Regional_Price_Index_2013.pdf.

Government of Western Australia Treasury (2004), 'An economic history of Western Australia since colonial settlement', 175th Anniversary of Colonial Settlement 1829–2004 research paper, December 2004.

International Monetary Fund (IMF, 2013), World Economic Outlook (WEO) database. October 2013.
Available at http://www.imf.org/external/pubs/ft/weo/2013/02/weodata/index.aspx.

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