

**Submission to the Senate Community Affairs References Committee inquiry
into the extent of income inequality in Australia**

Rebecca Cassells[†], Mike Dockery* and Alan Duncan[‡]

Bankwest Curtin Economics Centre¹, Curtin Business School

7 November 2014

1. Introduction

- 1.1. The purpose of this submission is to provide the Committee with a summary of the findings from recent research conducted by the Bankwest Curtin Economics Centre (BCEC), Curtin University on topics related to the Committee's terms of reference.
- 1.2. Two major reports released by the Centre during 2014 are of direct relevance to the Committee inquiry.
- 1.3. The first, on *Sharing The Boom: the distribution of income and wealth in WA*, was published in February 2014. The report compares economic outcomes for Western Australian households on a range of income and wealth measures with the rest of Australia over the past decade, and analyses the impact the resource boom has had on West Australians.
- 1.4. The second, *Falling Through the Cracks: poverty and disadvantage in Australia*, was published in October 2014, and looked at the circumstances of those at the lowest end of the income distribution, particularly those households in 'severe' poverty.
- 1.5. Further research published by the Centre in 2014 provides analysis that is relevant to the Committee's deliberations. The BCEC report on *Workforce and Skills: WA labour markets in transition* examines current employment trends and future scenarios as one of the main drivers of income inequality. The BCEC report on *Housing Affordability: the real costs of housing in WA* examines the costs of property and rental accommodation in WA, and the degree to which a lack of affordable housing impacts on the economic and social wellbeing of low income households in the state.

[†] Rebecca Cassells is Adjunct Associate Professor, Bankwest Curtin Economics Centre.

^{*} Mike Dockery is Principal Research Fellow at the Bankwest Curtin Economics Centre and Principal Research Leader, Population Mobility & Labour Markets program at the Cooperative Research Centre for Remote Economic Participation.

[‡] Alan Duncan is Director and Bankwest Professor of Economic Policy, Bankwest Curtin Economics Centre.

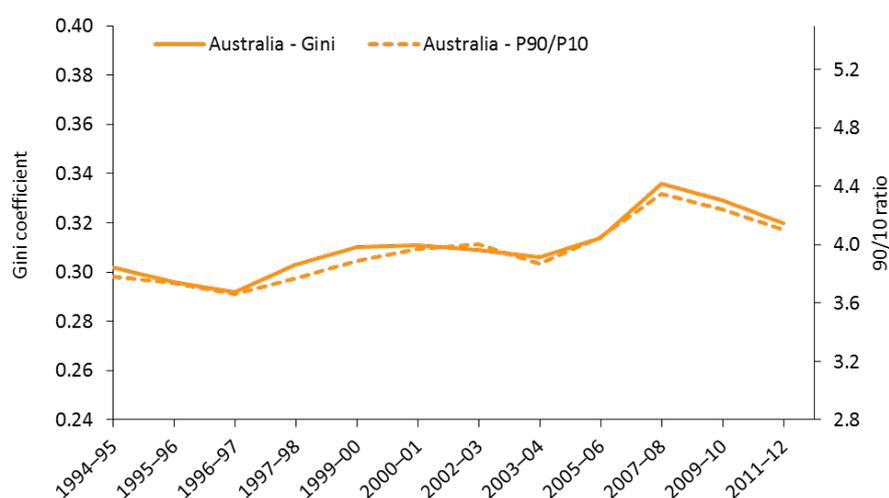
¹ The Bankwest Curtin Economics Centre (BCEC) is an independent economic and social research organisation located within Curtin Business School at Curtin University. The centre was established in 2012 through the generous support from Bankwest (a division of the Commonwealth Bank of Australia), with 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.

Correspondence: Email | bcec@curtin.edu.au. Web | <http://business.curtin.edu.au/bcec>.

2. Measuring income inequality

- 2.1. The Gini coefficient² is frequently used as a standard measure of income inequality in much of the empirical research on this issue. The Gini coefficient can be applied to any measure of income – gross or disposable, household or individual, per capita or equivalised – and distils the full distribution of income to a single index for the purpose of comparison either over time, across jurisdiction, by demographic group, or against some notional benchmark.
- 2.2. Despite its popularity, there are limitations to the Gini coefficient. The Gini is a single index measure of relative inequality constructed using data on the full distribution of income from the lowest to the highest income holders in society. The standard Gini doesn't highlight the properties of certain parts of the income distribution as effectively as other measures. Neither does the value of the Gini lend itself to interpretation in terms that are as easily understood as some other measures of inequality.
- 2.3. An alternative series of measures compare the incomes of households at different parts of the income distribution. For example, the *90/10 ratio* compares the incomes of those in the top 10 per cent of the income distribution (the 90th percentile) with those in the bottom 10 per cent (10th percentile). Such ratios may be readily interpreted as an income multiple - a 90/10 ratio of 4 indicates that the richest 10 per cent of households have incomes (at least) four times that of the poorest 10 per cent.
- 2.4. **Figure 1** shows a comparison of the Gini coefficient and the 90/10 ratio for Australia from 1994-05 to 2011-12. The similarity in patterns over time between the two measures is striking, with the incomes of the richest 10 per cent of households rising to at least 4.4 times the level for the poorest 10 per cent of households by 2007-08, before falling to around 4.1 on latest data for 2011-12.

Figure 1 Alternative measures of income inequality in Australia: 1994-95 to 2011-12



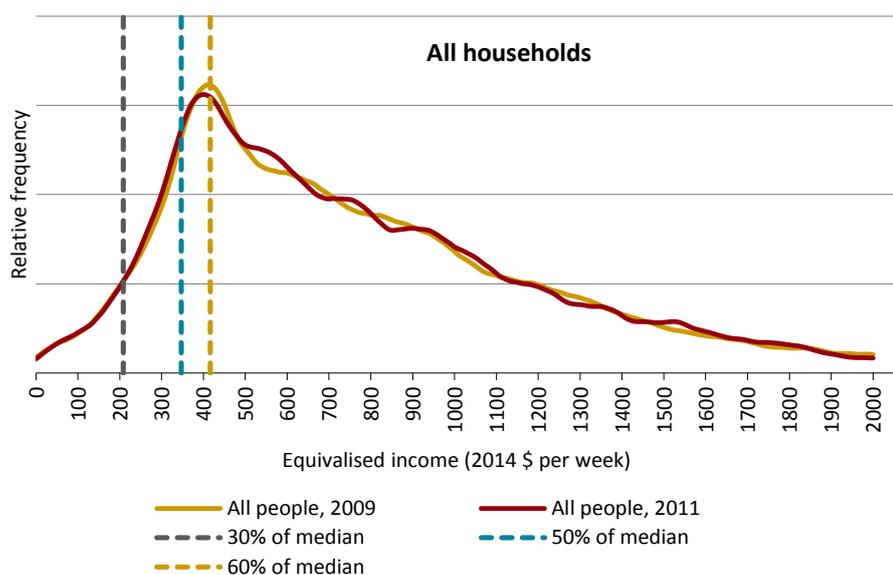
Notes: All rates are calculated using equivalised household disposable income.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors calculations from Australian Bureau of Statistics Cat. 6523.0

² A Gini coefficient of zero represents a situation of perfect equality in which all incomes are the same, whereas a Gini coefficient of one (or 100%) represents a hypothetical situation of the most extreme inequality in which all income in a population is held by a single person/households, with all others holding nothing.

- 2.5. A second advantage of income ratios is the ease with which such measures can be decomposed to bring more focus to different parts of the income distribution. For example, the 90/50 ratio provides a measure focused on the top half of the distribution by comparing the incomes of the top 10 per cent of households with median household incomes.
- 2.6. Ratio measures of income inequality are also more closely related to poverty measures (especially the 50/10 ratio which relates to the proportion of households below different fractions of median income (see **Figure 2**)

Figure 2 Distribution of equivalised household disposable income: 2009/10 and 2011/12



Notes: Nil and negative incomes are excluded from these estimated distributions. Data are re-based to 2014 prices. Housing costs included mortgage repayments, rent and property rates.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing unit record data.

3. Income inequality in Western Australia

- 3.1. WA stayed strong during the course of an economic downturn that weakened most of the world's economies. The resources boom has benefitted the majority of WA households, with rising employment opportunities and substantial increases in real incomes and household net wealth.
- 3.2. However, the Centre's research has shown that lower income households have failed to keep pace with the general growth in incomes for the rest of the population. There have been real gains among the lowest income households, but they haven't been able to share in the benefits of the resources boom to the same degree as higher earners, financially at least.
- 3.3. Relative income inequality has risen in WA at a greater rate than for the rest of Australia between 2003-04 and 2011-12. The gap between the richest and poorest households in WA rose consistently since the acceleration of the boom in 2003-04 to its peak in 2009-10. The incomes of the richest 10 per cent of households in WA rose to 4.8 times the incomes of the poorest 10 per cent of households in 2009-10 (see **Figure 3, Panel B**) before falling slightly to 4.5 in 2011-12. The figure was around 3.7 times in 2003-04.

- 3.4. Income inequality in Western Australia has risen at a significantly greater rate than for Australia overall. On national figures, the incomes of the richest 10 per cent of households in Australia were 3.9 those of the poorest 10 per cent in 2003-04 (**Figure 3, Panel B**), rising to 4.2 in 2009-10 and 4.1 in 2010-11.
- 3.5. One popular conception is that the rising inequality in WA has been caused by income rises at the top of the distribution. However, our findings indicate that lowest income households in WA (ie. the bottom 10 per cent) are losing ground to typical or 'middle income' West Australians too – analysis of incomes survey data shows that in 2003–04 the poorest ten per cent of households in WA received around 51 per cent of those on median incomes; this figure falls to 44 per cent by 2011–12 (see **Figure 3, Panel C**). This demonstrates that the lowest income households in WA have fallen behind the rest of the population – and not just behind those on high incomes.

Figure 3 Income inequality in WA and Australia: 1994/95 to 2011/12



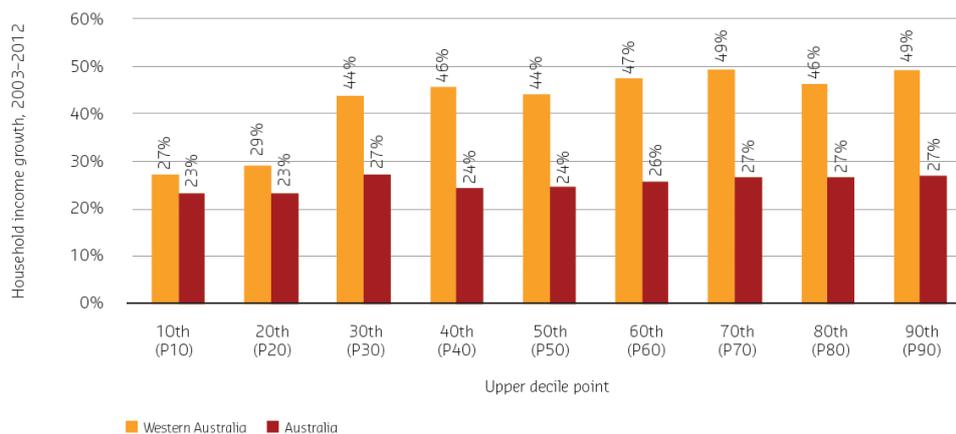
Notes: Nil and negative incomes are excluded from all calculations. Data are re-based to 2014 prices. Housing costs included mortgage repayments, rent and property rates.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing unit record data.

4. Income and earnings growth

- 4.1. Our findings clearly show that WA households have experienced significant incomes growth since the early 2000s across all income levels. For example, average per capita gross state income in WA has grown over the last ten years to around 50% above the national average, to around \$100,000 per person.
- 4.2. Compared to other states and territories, WA has the third-highest mean and median household income in Australia, behind only the ACT and NT with average gross household income of \$2,117 (15% higher than Australia) and median income of \$1,638 (14% higher than Australia)
- 4.3. Breaking the income distribution into deciles (ten equal parts), we see real household income growth at all levels for both WA and Australia, but relatively unevenly for WA. The top 80 per cent of WA households saw real increases of between 44 and 49 per cent for over the course of the boom, compared with 24 to 27 per cent nationally (**Figure 4**). The bottom 20 per cent of WA households have experienced real incomes growth, but more at the national rate for Australia – between 27 and 29 per cent, only slightly higher than the rates for Australia (at 23 per cent).

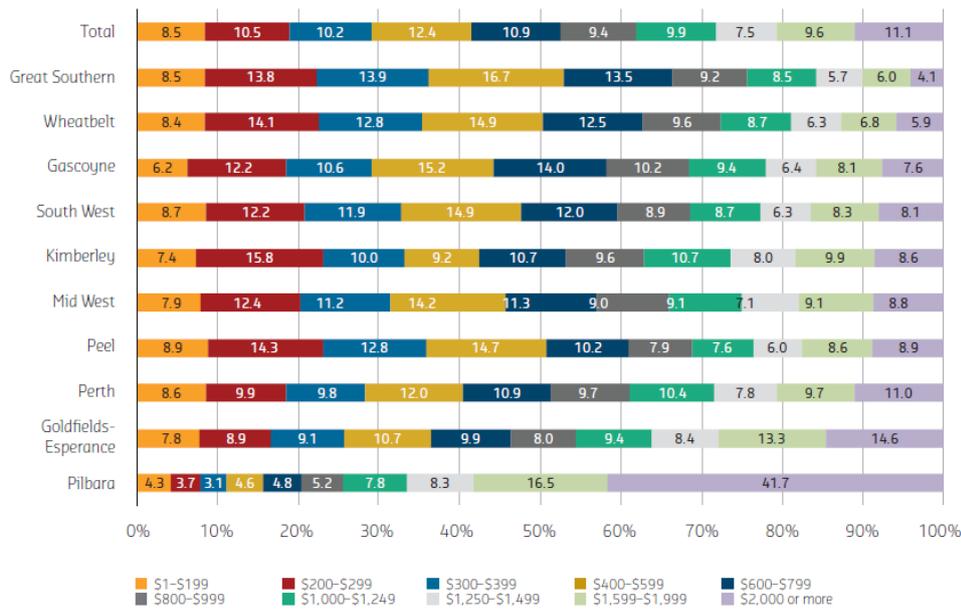
Figure 4 Real growth in household gross income between 2003 and 2012 by decile: WA and Australia



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

- 4.4. The Pilbara stands out in WA in terms of high income – over four in ten residents have an individual gross weekly income of over \$2,000 (**Figure 5**). This compares to an average of 11 per cent across WA, including the Perth metropolitan area. The Goldfields-Esperance region has the second highest proportion of those earning more than \$2,000 each week. This region also has over one quarter of individuals with incomes above \$1,500 per week.
- 4.5. At the same time, there are higher concentrations in regional WA where individuals have incomes below \$300 per week, mainly in sparsely populated areas and among Indigenous communities.

Figure 5 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

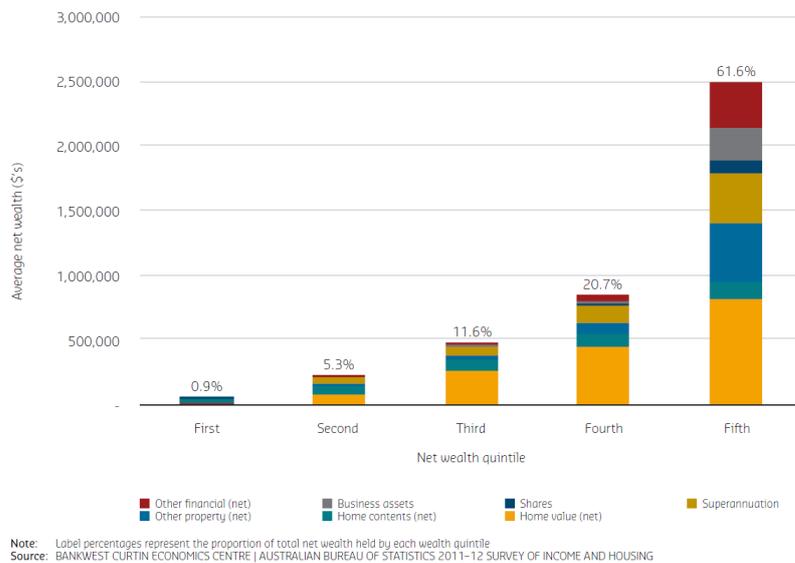
5. Wealth

- 5.1. WA households are among the wealthiest in the country, both in Perth and in regional WA. Median household net worth for Perth residents increased by 37 per cent in real terms to just over \$464,000 in 2011-12, which ranks them fourth across all states and territories in Australia.
- 5.2. Perth ranks third across the nation for mean household net worth, averaging just over \$800,000 per household. The average net worth for households living in non-metropolitan areas of WA outside the state’s capital reached \$715,000 in 2011-12 – ranking first among all state and territory regions in Australia.
- 5.3. Total household net wealth in WA has increased by more than 70 per cent in real terms since 2003, adding at least \$268 billion to the State’s total wealth stock.

Distribution of wealth

- 5.4. The wealthiest 20 per cent of households in WA own at least 62 per cent of the State’s total household net wealth assets compared with under 60 per cent in Australia (**Figure 6**), with the top 40 per cent holding over 82 per cent (80 per cent in Australia).

Figure 6 Average household net wealth in WA: by wealth quintile, 2011/12



- 5.5. On conservative estimates, aggregate household net wealth in the state increased by at least \$268bn between 2003-04 and 2011-12. 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, with 45 per cent of the extra net wealth going to the wealthiest 10 per cent of households. The national position has been very similar indeed, with the top quintile in Australia gaining around 64 per cent of the increase in real household net wealth since 2003 – 04.
- 5.6. This has led to a marginal rise in wealth inequality in Western Australia over the course of the resources boom.

Principal wealth holdings

- 5.7. An increasing proportion of households own property assets other than their main home (up from 16 per cent in 2003-04 to 21 per cent in 2011-12). The median value of household net wealth from other property rose \$160k in WA over the course of the boom – to \$450k for Perth households and \$400k for families in regional WA. This could indicate an increasing use of property for investment, or second home ownership, or that more families choose to retain rather than sell their properties when relocating.
- 5.8. Ownership of superannuation assets for Perth households currently surpasses the national average (83 per cent compared with 79.7 per cent), but is lower than Brisbane and Melbourne. Although the superannuation gap between men and women in WA is lower in absolute terms than for many other states/territories (\$18,600 in 2011-12), our research finds that the superannuation gap in WA has widened more over the course of the recent resources boom than for anywhere else in Australia (a \$7,600 increase in the super balance gap in Perth, \$6,300k in regional WA).
- 5.9. Share ownership has declined considerably in WA (31 per cent of households down to 24 per cent), as it has in the rest of Australia (31 per cent down to 26 per cent).

6. Drivers of income inequality

Employment

- 6.1. 'Tradie'-headed households are holding more wealth. In WA, household heads holding a trade certificate have a larger and increasing presence in the top 20 per cent of high income earning households over time. Around 18 per cent of high income households in WA are headed by those who are employed in the trade occupations, compared with only 9 per cent of high income households in the rest of Australia.
- 6.2. Over 22 per cent of the highest income households in WA in 2011-12 are headed by a person that holds a trade certification as their highest level of education, compared with only 16 per cent in the rest of Australia.
- 6.3. There are considerable gender gaps in employment in WA that contribute to income inequalities between men and women, although these have been narrowing over time. The weekly earnings of men and women in WA were \$1,778 and \$1,338 respectively in May 2014. The resultant gender earnings gap of 25% is the highest among all Australian states and territories.
- 6.4. Much of the earnings gap in WA can be explained by differences in the characteristics of men and women. In particular, gender differences in the years spent in paid employment explain up to 35% of the observed gender gap in WA, compared with 15% for Australia.

Indigenous disadvantage

- 6.5. Indigenous Australians have seen no real gain in labour force participation or improvements in employment over the last decade, and a comparison of relative incomes and outcomes for those low-income households in which Indigenous people are disproportionately found, suggests that relative socio-economic disadvantage for this group may well have widened.
- 6.6. Precise income measures for Indigenous people are relatively hard to determine with existing data. Bearing this limitation in mind, research nevertheless indicate that households in which at least one of the household members identifies as being of Aboriginal or Torres Strait Islander descent have median household incomes 20% lower than other households. This income gap increases to almost 40% when judged on personal income, because Indigenous households have a higher average number of occupants (3.3 as opposed to 2.6).
- 6.7. Although the Indigenous unemployment rate has dropped substantially (to 17.8% in 2011/12), this nevertheless represents a significant 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 flown through to local Aboriginal populations.
- 6.8. 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. The persistence, if not accentuation, of labour market disadvantage facing Indigenous West Australians is concerning given that the recent decades have provided almost the ideal circumstances under which to tackle these barriers.

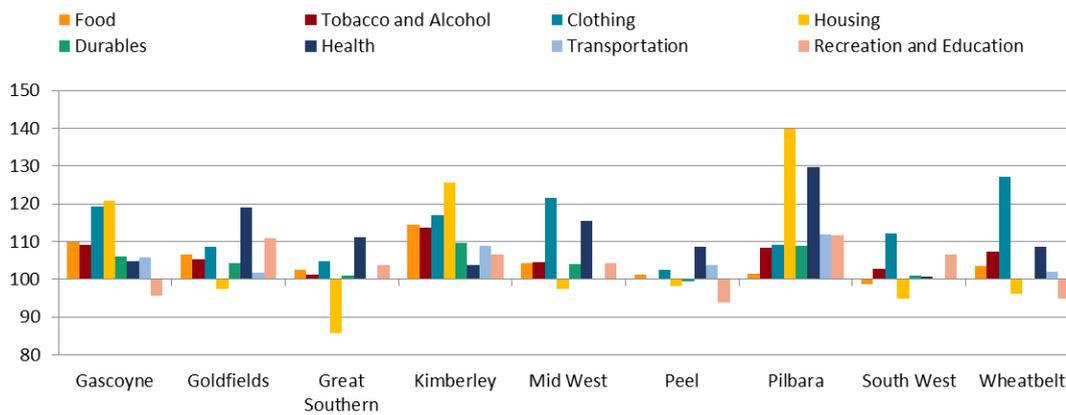
Housing costs

- 6.9. Figures show that high income households in WA are more likely to be mortgaged (58 per cent) rather than mortgage free, compared to high income households in rest of Australia (53 per cent). The proportion of renters in WA high income households has increased slightly, whereas outright home ownership among high income earners decreased across the boom period.
- 6.10. Housing costs in WA increased at a rate above the national average for an extended period from 2003-04, commonly by an extra five percentage points more than the rest of Australia annually.
- 6.11. Housing costs impose a proportionately greater financial burden on lower income households in WA. Local housing markets and the lack of availability of affordable housing options to those on lower incomes have an important bearing on income disadvantage, a feature that is highlighted in an the Centre's 2014 report on poverty and disadvantage in Australia.
- 6.12. Based on a standard measure of poverty, being the proportion of households below half the national median income, the overall poverty rate for renters in Australia was found to be more than twice that for mortgage holders (22.6% against 10.0%) and three times the rate for owners without mortgages (at 6.8%).

Regional inequalities in costs of living

- 6.13. A particular concern in WA relates to the negative consequences of strong economic growth for households on lower incomes. Economic growth, and growth in household income, has placed an upward pressure on house prices and living costs, to the extent that those on lower incomes may suffer greater financial hardship even though their incomes may have grown in 'real' terms when assessed against a representative CPI – either state or national.
- 6.14. Overall prices in WA – as measured by CPI – have been running consistently ahead of those for the rest of Australia for much of the last decade. This has created difficulties for the lowest income households, with local price rises eroding the value of disposable income.
- 6.15. Cost of living increases in regional WA have outstripped those in metropolitan Perth - by a considerable margin in some regions, and not just in relation to housing. Prices have risen particularly in Gascoyne, Pilbara and the Kimberley, and to a lesser extent (or for selected expenditure groups) in Goldfields, Wheatbelt and the Mid-West.
- 6.16. In the Pilbara, for example, housing is about 40 per cent more expensive than in Perth, health costs are 30 per cent higher, and other expenses such as food, transportation, tobacco and alcohol, durables, recreation, education and clothing are about 10 per cent more costly when compared to similar items in Perth (**Figure 7**).

Figure 7 WA regional CPI changes relative to Perth: 2013



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

- 6.17. These price rises have accentuated the financial disadvantage imposed on low income households in regional WA who haven't been able to keep pace with the incomes growth in the rest of the population, and for whom excessive price increases erode any real income gains. The risk is especially high among indigenous households, those in casual or insecure employment, and those working in industries currently in transition following the slowdown in the resources boom.
- 6.18. This emphasises the need for financial support to prevent those people on low income from falling further behind the rest of the population, and seeing their standard of living fall as a consequence.

Attachments

This submission draws heavily on the findings from two Bankwest Curtin Economics Centre reports (Attachments 1 and 2) released in 2014. Both reports are freely available on the Bankwest Curtin Economics Centre website, at <http://business.curtin.edu.au/bcec>.

1. Cassells, R., Duncan, A.S. and Gao, G. (2014), **Sharing the Boom: The distribution of income and wealth in Western Australia**, Bankwest Curtin Economics Centre, 'Focus on Western Australia' Report Series, Issue No.1, February 2014. ISBN 978-1-925083-10-1
2. Cassells, R., Dockery, A.M. and Duncan, A.S. (2014), **Falling through the cracks: Poverty and Disadvantage in Australia**, Bankwest Curtin Economics Centre, 'Focus on the States' Report Series, Issue No.1, October 2014. ISBN 978-1-925083-23-1