



BANKWEST CURTIN ECONOMICS CENTRE

# THE COSTS OF DOING BUSINESS IN WA

Pressures and barriers to industry performance

Focus on Western Australia Report Series, No. 4  
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## Foreword



The cost of doing business in Western Australia has long been a rhetoric heard and discussed throughout the state, with increased economic activity in recent times exacerbating the issue. The geography of the state, with its capital – Perth, one the most isolated cities on earth, together with the majority of its land area classified as ‘remote’ or ‘very remote’ can add to cost pressures, making business operations more challenging than might otherwise be the case.

*The Cost of Doing Business in Western Australia* is the fourth report in the BCEC’s ‘Focus on Western Australia’ series. It addresses an issue of central importance to Western Australia in maintaining its economic growth story – the costs of doing business in the State.

The question of whether the cost of doing business in Western Australia is more or less expensive compared to other states and territories and whether business input costs have been rising disproportionately over time, is largely a relative one. Much like the question of whether the cost of living has increased – it depends to a large extent on the means one has.

Excessively high business costs can hamper growth and productivity, making it difficult for existing and incumbent firms to realise their full potential. A number of WA business input costs have been increasing over time and are high compared to other Australian jurisdictions. However, WA business revenues have also been increasing at a faster rate than other states and territories.

Is the cost of doing business in Western Australia problematic? For some businesses and in certain regions and industries – yes. Small to medium businesses, those operating in remote or regional areas and those reliant on inputs that have seen the biggest price increases are among these. For other businesses, cost pressures are for the most part a product of increased demand, fuelled by strong industry-specific economic growth.

Continued microeconomic reform that focuses on taxation and industry specific issues will help to ease cost pressures for many business in the West, ensuring that the state builds on previous growth and has the ability to diversify and compete in a global market.

A handwritten signature in black ink, appearing to read 'Alan Duncan', written in a cursive style.

**Professor Alan Duncan**

Director, Bankwest Curtin Economics Centre  
Curtin Business School, Curtin University



## Executive summary

This fourth report in the Bankwest Curtin Economics Centre's *Focus on Western Australia* series addresses an issue of central importance to Western Australia in maintaining its economic growth story – the costs of doing business in the State.

The report examines the principal business cost components facing companies across different industry sectors in WA. Information included in the report has been sourced from a range of data bases, including numerous Australian Bureau of Statistics products, the Property Council of Australia, FuelWatch, specialised commercial sales price data sourced from Landgate and information from the Department of Regional Developments Regional Price Indices.

The report sheds light on the main barriers to business activities and performance cited by companies in different industry sectors - including labour shortages and labour costs, input costs, and burdens of regulation or compliance – and look at those barriers that particularly affect the activities, growth or survival of businesses in the State.

A regional analysis of businesses operating in WA and the differential cost pressures these areas are experiencing is also included in the report.

## Key findings

### WA Business Profile

- WA has almost 219,000 actively trading businesses. This constitutes around 10% of all Australian businesses.
- Like most states and territories, West Australian businesses are dominated by small business. Small businesses account for almost 97% of all actively trading businesses, the majority of which are non-employing (62.0%).
- One in four Western Australian businesses report annual turnover of less than \$50,000. Similar proportions report an annual turnover above half a million.
- WA has the highest proportion of companies with annual turnover exceeding \$2 million among all states and territories – 7.7 % of WA businesses reported
- Construction is one of the most important industries in WA on a combination of number of businesses, number of employees and value - it ranking first in business counts, third in the number of people employed in the sector and second in terms of the economic value it brings to the state.
- Construction and mining are more prominent in the West, with a greater proportion of active businesses in WA - 18.3% of the total number of businesses - compared to Australia.
- Businesses operating in the retail trade and accommodation and food services sectors are more likely to be employers than those in other sectors.
- The number of businesses with less than \$50,000 per year in annual turnover has been decreasing since 2007 for both WA and Australia.

## Key findings (continued)

- The number of businesses with a turnover of \$200k to \$2m increased rapidly for WA and nationally - from 63,981 to 74,889 (a 17% rise) between 2007 and 2014.
- The number of businesses with annual turnover of \$2 million or more has also increased rapidly in WA, from 12,326 to 16,971 entities - an increase of almost 30%.
- During the heart of the resources boom in 2006-07, more than 1 in 4 businesses reported a lack of skills in any location as a significant barrier - by 2012-13 this had reduced to 15.6%.
- Barriers to business activity and performance can vary considerably by industry.
- One in five businesses in the construction sector report outstanding accounts as a significant barrier to business activity and performance.

### Business Entries and Exits

- Patterns of business entries and exits in Western Australia have been similar to national trends over the past decade.
- The net business entry rate in WA exceeded the national rate prior to the GFC, peaking at 38,013 business entries and 28,482 business exits in 2006-07.
- Since 2006-07 business entries have fallen considerably - by 30% for WA between 2009-10 and 2012-13 and by 12% for Australia in the same period.
- This equated to a net fall of almost 11,000 WA businesses between 2009-10 and 2012-13. This pattern has recently reversed.
- Business survival rates in WA are similar to those at a national level - 61% of active businesses in June 2010 remained in operation to at least June 2014.

### Business Perceptions

- The most common issues reported by businesses as barriers to performance are a lack of access to additional funds, the cost of inputs, and the lack of labour skills.
- More than 4 out of 5 businesses in WA report wages as a key cost pressure for their operations.

### Labour Costs

- Labour costs shares run at an average of around 28% of total costs for all businesses in Australia, but vary widely across industry - from 14% for mining to 50% in administrative and support services.
- 9 in 10 businesses report labour costs as the key driver of cost pressures.
- Wages grew substantially faster in WA compared with Australia over the course of the resources boom, with annual wage inflation of 3% in 2003 rising to 6.3% by 2008.
- Annual wage inflation is currently running at around 4% for WA, compared with 3.5% nationally.
- The increase in nominal wages for mining in WA is highest across all industry sectors, increasing by 61.5% between 2003 and 2014.
- Wages in the utilities sector (electricity, gas, water and waste) have risen 57.7% since 2003, followed by the construction sector (up 56.2%).
- The utilities sector (electricity, gas, water and waste) paid an average of around \$98,643 per worker - a real increase of 8.3% on 2007-08 figures.

- Real labour costs per worker in WA mining have risen from \$145,400 to \$161,600 since 2007-08, an increase of 11.1%.
- WA has seen particularly large increases in real costs per employee since 2007-8 in public administration (up 44.1%, more than double the national sector increase) and construction (up 38.2%, also double the national increase).
- The ratio of total employee costs to company sales and service income represents the number of cents in employee costs for a dollar of company income.
- The WA wholesale trade industry has the lowest labour costs per dollar of company income - an average of 6.3 cents per dollar in 2013-14.
- In mining, labour costs run at around 10.2 cents per dollar of income, driven by a combination of highly productive capital and a strong, well-remunerated skills base.
- The labour cost per dollar of income earned by businesses is lower in WA compared to Australia in mining (by 16%), manufacturing (by 22%) and agriculture (by 13%), despite there being a higher average wage per employee in these sectors in WA compared to national rates.
- Payroll tax revenues in WA have increased as a proportion of total state tax revenue over the last decade, rising from 26.1% in 2005-06 to some 40.5% on latest projections for 2015-16.
- As at 1 July 2015, West Australian businesses are currently taxed at a single rate of 5.5% beyond a threshold of \$800,000 in total payroll costs net of exemptions.
- WA ranks highest in payroll tax costs for businesses with payrolls of between \$1.75m and \$7.5m, and equal highest up to \$9.4m.
- Payroll tax thresholds have not been updated in line with wage inflation in WA, leading to payroll tax “bracket creep”.
- This has effectively brought more small businesses into the payroll tax system over time.
- For the WA payroll tax system to have remained neutral over the last decade would have required the July 2015 threshold to be nearly \$1,100,000, 37.5% higher than the current threshold of \$800,000.
- The diminishing payroll tax threshold introduced in the 2015 state budget will increase WA payroll taxes by up to \$44,000.
- A business with a \$2m payroll will see payroll tax rise by \$7,881, from \$66,000 to \$73,881.

## Taxation Costs on Companies

- Australia’s 2.1 million businesses paid around \$70.5bn nationally in company tax in 2013-14, equivalent to an average of \$33,592 per business.
- Payroll tax revenues for WA will amount to \$3.74bn, equivalent to an average of \$17,142 for each registered business in the state.
- Businesses with a \$4m payroll will pay \$21,015 more in payroll tax under the new system – \$197,015 compared with \$176,000.

## Capital Composition and Growth

- Generally, costs associated with capital depreciation and capital formation (interest expenses) are around 20% of total expenditure among businesses.
- A large degree of variation exists throughout industries, with capital expenditure for the mining, electricity, gas and water and financial and insurance services relatively more dominant than in other industries.
- Capital expenditure components among Australian businesses has been changing over the last five years, away from plant, machinery and equipment towards dwelling, buildings and other structures.
- Plant, machinery and equipment constituted around 50% of capital expenditure in 2008-09, this has since fallen to 35% of expenditure.
- In 2013-14, the states most dominant industry – mining had the highest proportion of capital expenditure allocated to dwellings, buildings and other structures – around 70% of all capital spend.
- Fixed capital formation in the mining sector has increased by almost 700%, between 2005 and 2013.

## Barriers to Finance and Working Capital

- Small to medium enterprises are more likely to report lack of access to funds and inadequate working capital (outstanding accounts receivable) as a significant barrier to business activity than large businesses.
- Between 2007-08 and 2010-11, businesses have increased their reports of lack of access to additional funds and working capital as a significant barrier to business performance and activities.

- Almost 1 in 4 businesses in the mining and retail sector report lack of access to funds as a significant barrier to business performance.
- Businesses operating in the wholesale trade sector and manufacturing sector have the highest rates of reports of outstanding accounts receivable limiting cash flow – 22.6%.
- Around 1 in 5 businesses operating in the construction sector report issues with working capital as a significant barrier.

## Utilities

- Perth total utility prices (including gas, electricity and water) have remained consistently below the national average over the last decade.
- The price of electricity in Perth has increased almost doubled between 2008 and 2014.
- Electricity tariffs for medium size businesses increased by 29% between 2011 and 2012.
- The consumer price of gas in Perth was almost equal to Australia prior to the 2008 gas crisis. Since 2008 gas prices have increased considerably and continues to be volatile and above national levels.

## Occupancy and Housing

- Commercial rents for office and retail spaces, workshops and other places of business operations can be a substantial cost component for many businesses, particularly those operating in the retail industry.
- Average weekly rental returns for Perth CBD office space has almost doubled in the four years to 2012, increasing from \$250 to \$470 per square metre.

- Perth CBD office space rents were the highest among the five capitals in 2011 and 2012.
- Housing can be an important factor when attracting skilled workers to an area. It can also play a role in remuneration packages, inflating wages and increasing business costs.
- Housing prices have increased in WA at a rate consistently above the national average for an extended period from 2003-04.
- The rate of change in established house prices in Perth was especially high over the boom period with annual percentage changes well in excess of 20% not uncommon.
- In 2009-10, 18% of innovation-active businesses reported government regulation and compliance as a barrier to performance, whereas only 11% of non-innovation active businesses reported this issue.
- Small to medium enterprises are more likely to report regulation and compliance as a significant barrier to performance than big businesses.
- 17.9% of businesses operating in the mining sector reported government regulation being a significant barrier to business performance in 2012-13.

## WA Regions – business profile

### Transport

- Over the five year period from 2009, the number of Passenger vehicles and Light Commercial vehicles registered with diesel fuel increased by 103.6% and 65.4% respectively.
- Unleaded and diesel fuel prices have followed a similar pattern over time, increasing prior to the GFC before falling rapidly and increasing since.
- WA has the third highest diesel fuel price across all states and territories.
- NT and Tasmania have the highest price per litre of diesel and unleaded fuel.
- The profile of WA businesses at a state level can mask important regional patterns.
- The dominance of the Perth metropolitan area is clear, with three-quarters of all Western Australian businesses located in this region – 162,495 entities.
- Mining dominant areas, including Goldfields-Esperance, the Pilbara, Kimberley and Gascoyne have higher proportions of businesses employing more than 200 employees.
- The Gascoyne region has the lowest number of actively trading businesses – just under 1,000 entities.
- The Goldfields-Esperance region has the highest proportion of employing businesses – at 46%

### Red Tape and Regulations

- Government regulation and compliance was more likely to be cited as a barrier to performance as the economy grew rapidly. Since the global financial crisis this has decreased among all firms at similar rates, with other barriers more likely to become problematic.
- The Goldfields-Esperance, Kimberley and Pilbara regions all have greater proportions of businesses with annual turnover of \$2 million or more – 11% compared with the state average of 7%.

- The 2011 -12 to 2012-13 period stands out for Western Australian regions, with almost all experiencing a reduction in the number of actively trading businesses over the period.

### WA Regions – costs

- The expansive and remote geography of the state can make business operations more challenging than might otherwise be the case in areas throughout WA.
- Wages in the Pilbara have grown the fastest, increasing by 60 % in the ten years to 2013-14, from an average annual wage of \$58,000 to \$93,000.
- Annual wages for Perth and Peel have tracked closely together over the last ten years, with wages also increasing by 60 % in the last decade, from around \$40,000 to \$64,000.
- The Goldfields-Esperance region has seen substantial wage growth across the period, with employees averaging the second highest wages in the state – around \$69,000 each year.
- The Pilbara and Perth have recorded the highest sale price per square metre for retail space in the last two periods, averaging \$6,340 and \$5,920 per square metre, respectively.
- Increases in the price of commercial space in all property classifications is evident across all WA regions.
- Generally housing prices have remained lower than Perth throughout all years and most WA regions. Notable exceptions are the usual suspects – the Pilbara, Kimberley and more recently the Gascoyne regions.
- In 2011, housing costs in the Kimberley were double that of Perth, but have since dropped back to around 40 % higher than the state capital.
- Remote areas including the Kimberley, Pilbara and Gascoyne have experienced higher transport costs compared to Perth.
- Electricity tariffs in WA's regional areas have largely remained similar when compared to metropolitan WA. Recently, regional areas have experienced higher electricity prices (tariffs) than those in metro areas.
- Transport prices in the Pilbara have remained persistently higher than Perth – at around 12 %.
- All WA regions record higher average fuel prices per litre compared to Perth over the last fifteen years.
- The cost of a litre of diesel in the Kimberley is 17 cents higher than in Perth.

## Introduction

The cost of doing business in Western Australia has long been a rhetoric heard and discussed throughout the state and beyond. Excessively high business costs can hamper growth and productivity, making it difficult for existing and incumbent firms to realise their full potential.

Increased economic activity in recent times, has no doubt exacerbated the cost of business as an issue, especially as the race to capitalise on Western Australia's resources and to further develop the state intensified. The geography of the state, with its capital – Perth, one of the most isolated cities on earth, together with the majority of its land area classified as 'remote' or 'very remote' also adds to cost pressures.

This fourth **Bankwest Curtin Economics Centre (BCEC) *Focus on Western Australia*** report addresses an issue of central importance to Western Australia in maintaining its economic growth story – the cost of doing business in the State. The report examines the principal business cost components facing companies across different industry sectors in WA.

There are a number of key questions relating to the business cost burdens faced by West Australian companies. What are the key cost components for companies in WA, and how have these costs varied over time and across sectors? Are there specific cost factors that affect WA companies to a greater extent than in the rest of Australia? Are there regional differences in the costs of doing business in WA?

The report sheds light on the main barriers to business activities and performance cited by companies in different industry sectors – including skills shortages and labour costs, input costs, and burdens of regulation or compliance – and look at those barriers that particularly affect the activities, growth or survival of businesses in the State.

### Scope and limitations

A diversity of cost structures among Australian businesses exist, each with their own unique structure that reflects their type of business and how they conduct business. Some of these costs may be considered excessive, however often require contextualisation by the revenue a firm receives (Productivity Commission, 2014). We recognise that particular costs and aspects of conducting business for certain industries and sub-industries are likely to be more prominent than others. Notwithstanding this, there exists similarities in business cost structures and pressures that operate in industries throughout Western Australia. Costs that are common to most businesses include labour, capital, intermediate inputs such as transport and utilities; taxes and regulation and compliance. It is these cost components and pressures that we focus on in this report. A number of limitations exist around observing and measuring business costs, particularly at a state and regional level. Where data gaps exist, industry level information has been substituted, particularly for those industries that play a dominant role in Western Australia's economy.





WA

business profile

# WA business profile

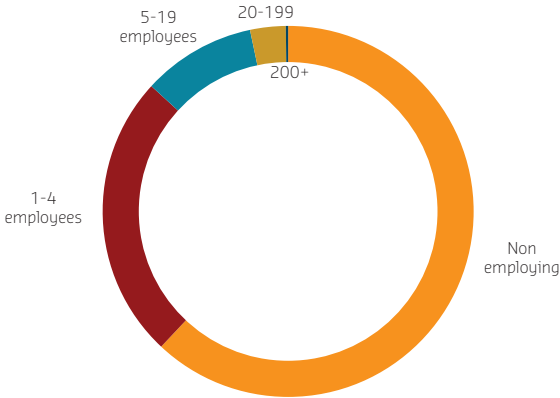
97% of actively trading businesses in Western Australia are small businesses.

In this section we explore the profile of Western Australian businesses and how these differ to businesses in other states and territories and nationally. Industry make-up and employment and turnover size are analysed. The relative health of Western Australian businesses, including business entries and exits and survival rates are also assessed. The cost structures of industries throughout Australia is also presented.

## Size

Like most states and territories, business counts in Western Australian are dominated by the small business sector. Small businesses account for almost 97 per cent of all actively trading businesses, the majority of which are non-employing (62.0%). Those employing 1-4 workers, 'micro-businesses' constitute almost one in five businesses in WA, followed by those classified as 'small' – around 10 per cent. Medium sized businesses that employ between 20 and 199 workers number 6,782 businesses (3.1 per cent) and large businesses employing 200 or more workers account for 0.2 per cent of all businesses (4,376 entities).

**Figure 1** Proportion of actively trading businesses in Western Australia by employment size, 2014



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014 .

Western Australia has around 2.5 million residents, which is slightly more than one-tenth of the Australian population. Proportionally to population size, the number of business in WA is about one-tenth of businesses nation-wide, numbering almost 219,000 entities with an Australian Business Number (Table 1). Compared to other states and territories, Western Australia's distribution of businesses by employment size is generally similar. The state has a higher proportion of businesses employing 20-199 workers (3.1%), compared to the national average of 2.5 per cent. The Northern Territory also has a higher proportion of medium size businesses –constituting 4.1 per cent of all businesses. WA has a smaller proportion of micro businesses (employing 1-4 workers) compared to the national average – 24.8 per cent compared to 27.2 per cent.

WA has almost 219,000 actively trading businesses. This constitutes around 10% of all Australian businesses.

**Table 1** Proportion of business by employment size, by state and territory, June 2014

Region	Non employing	1-4	5-19	20-199	200+	Total ('000)
Australia	60.7%	27.2%	9.5%	2.5%	0.2%	2100.1
NSW	58.7%	29.5%	9.3%	2.3%	0.2%	697.2
VIC	61.0%	27.4%	9.1%	2.3%	0.2%	545.9
QLD	61.4%	26.1%	9.8%	2.6%	0.2%	416.7
SA	65.0%	22.8%	9.7%	2.3%	0.1%	143.5
WA	62.0%	24.8%	9.9%	3.1%	0.2%	218.8
TAS	59.6%	25.5%	12.2%	2.6%	0.1%	36.9
NT	58.9%	23.6%	13.2%	4.1%	0.2%	14.3
ACT	57.2%	28.0%	11.5%	3.0%	0.2%	25.3

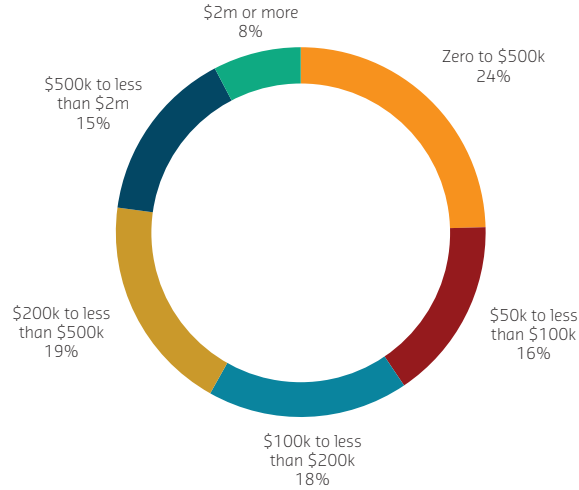
Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

Assessing business size through annual turnover, the dominance of non-employing entities is revealed with around 1 in 4 businesses having less than \$50,000 per year in turnover and 16 per cent between \$50,000 and \$100,000 (Figure 2). Around 20 per cent of businesses reported an annual turnover between \$200,000 - \$500,000 in 2014, and similar proportions reported \$100,000 to \$200,000. Around 23 per cent of businesses in Western Australia report an annual turnover above half a million dollars.

# Size

One in four Western Australian businesses report annual turnover of less than \$50,000.

**Figure 2** Proportion of actively trading businesses in Western Australia by employment size and turnover, 2014



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

Comparing annual turnover of Western Australia businesses to other states and territories, WA has relatively more companies with annual turnover above \$2m, and less small businesses with less than \$50k annual turnover (Table 2). In 2014 7.7 per cent of WA businesses reported annual turnover exceeding \$2 million, whereas the Australian average is 6.4 per cent. Tasmania and South Australia have the lowest proportion of companies with large annual turnover. The ACT has the second highest proportion of businesses with \$2m plus turnover – 6.9 per cent.

**Table 2** Proportion of business by annual turnover size by state and territory, June 2014

Region	Zero to \$50k	\$50k to less than \$100k	\$100k to less than \$200K	\$200k to less than \$500k	\$500k to less than \$2m	\$2m or more
Australia	26.7%	16.6%	17.7%	18.6%	14.0%	6.4%
NSW	26.7%	17.1%	17.5%	18.6%	13.6%	6.5%
VIC	27.2%	16.9%	17.8%	18.3%	13.6%	6.2%
QLD	26.5%	15.9%	17.9%	19.2%	14.5%	6.1%
SA	28.7%	16.7%	17.2%	17.6%	14.0%	5.7%
WA	24.6%	16.0%	17.6%	19.0%	15.2%	7.7%
TAS	27.8%	16.5%	16.9%	18.6%	14.5%	5.6%
NT	21.8%	14.9%	17.4%	19.1%	17.5%	9.3%
ACT	24.7%	14.5%	18.0%	19.7%	16.2%	6.9%

Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

## Industry

While the dominance of businesses within certain industries is important in terms of their absolute counts, it is also a useful exercise to understand the relative importance of these industries taking into account the extent to which they employ workers and their overall economic value to the state. Table 3 shows the rankings of industries by business counts, employment and economic value in Western Australia in 2014.

Construction is clearly one of the most important industries within the state, ranking first in business counts, third in the number of people employed in the sector and second in terms of its economic value that it brings to the state. Professional, scientific and technical services also ranks highly on all three metrics. On the other hand rental, hiring and real estate services, whilst ranked third in overall business counts, employs a smaller number of people in the state than other industries (ranking 16th out of 19). This sector is also ranked relative low in terms of the economic value it contributes to the state – 14th. The states persistent number one contributor to economic value – the mining sector ranks 14th in terms of absolute business counts, but 4th when taking into account the volume of workers it employs. Health care and social assistance is ranked first in terms of employment, sixth in its economic value and 8th in the number of active businesses. Agriculture, forestry and fishing has a high volume of business entities that falls within this sector (ranking 5th) yet is ranked second last in terms of economic value and 14th in the number of employees in the industry.

Construction ranks 1st in terms of business counts, 3rd in employment and 2nd in terms of the economic value that it brings to WA.

**Table 3** Ranking of WA industries by business counts, employment and economic value

Industry	Business counts	Number employed	Economic value	Business counts	Number employed	Economic value
	No.	No.	\$ (m)	Rank	Rank	Rank
Accommodation and food services	7,858	71,760	3,265	11	9	16
Administrative and support services	7,728	48,124	7,565	12	12	8
Agriculture, forestry and fishing	17,818	34,015	3,252	5	14	17
Arts and recreation services	2,235	22,556	971	16	17	19
Construction	40,080	130,499	31,303	1	3	2
Education and training	2,344	98,236	7,061	15	6	10
Electricity, gas, water and waste services	701	22,132	5,141	19	18	13
Financial and insurance services	18,591	32,848	7,463	4	15	9
Health care and social assistance	10,427	140,624	10,928	8	1	6
Information media and telecommunications	1,421	15,800	3,006	17	19	18
Manufacturing	8,977	91,546	12,099	10	7	4
Mining	2,999	114,600	70,867	14	4	1
Other services	9,437	53,739	3,309	9	11	15
Professional, scientific and technical Services	25,708	102,761	13,152	2	5	3
Public administration and safety	714	72,944	6,900	18	8	11
Rental, hiring and real estate services	23,181	23,272	4,246	3	16	14
Retail trade	13,096	136,622	8,483	7	2	7
Transport, postal and warehousing	13,837	64,003	11,586	6	10	5
Wholesale trade	6,730	41,806	6,077	13	13	12

Note: Industries are ANZSIC is 1-digit level. Economic value is measured as industry gross value added (IGVA).

Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014, ABS Cat No. 5220.0 Australian National Accounts: State Accounts and ABS Cat No. 6291.0.55.003: Labour Force, Australia, Detailed, Quarterly.

Businesses operating in the retail trade and accommodation and food services sectors are more likely to be employers than those in other sectors.

Compared to Australia, WA has a relatively similar business profile with respect to industries, however some differences exist (Figure 3). Construction is more prominent in the West, with a greater proportion of active businesses in WA compared to Australia (18.3 and 16.1 per cent respectively). As expected a higher proportion of businesses are engaged in mining in WA compared to the national profile – 1.4 per cent of all WA businesses, compare to 0.4 per cent of Australian businesses.

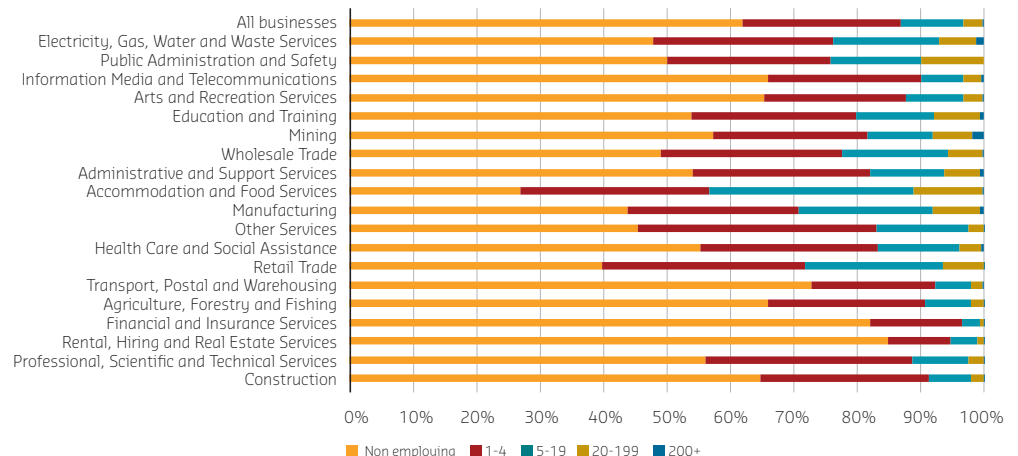
**Figure 3** Proportion of actively trading businesses by industry – Australia and Western Australia, 2014



Note: Industries are ANZSIC is 1-digit level.  
Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

As shown above, the majority of WA businesses are small, with most non-employing entities. However, a degree of variation exists by industry as shown in Figure 4. Businesses involved in rental, hiring and real estate services and the financial and insurance services are far more likely to be sole operators than businesses in any other sector – more than 80 per cent of these businesses are non-employing. The Professional, Scientific and Technical Services sector has the highest proportion of micro businesses – around 1 in 3 businesses in this industry. Businesses in Accommodation and Food Services industry had higher proportions of small and medium sized entities. As expected, mining businesses are more likely to be big employers than businesses in other sectors.

**Figure 4** Actively trading WA businesses by industry and number of employees, 2014



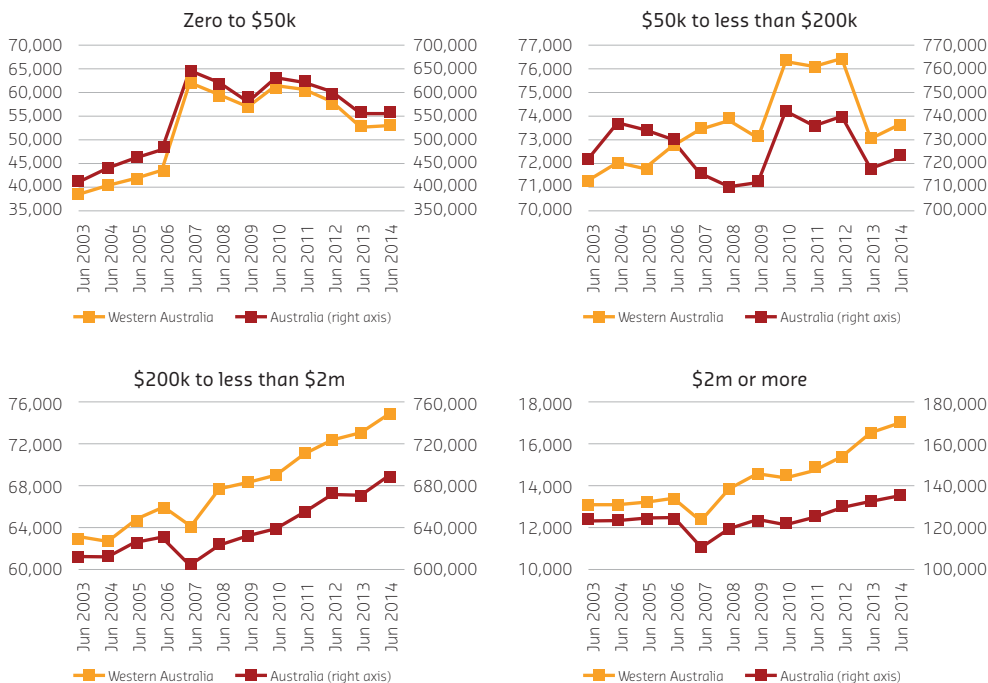
Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

## Changes over time

Over the last ten years, the profile of businesses operating in Western Australia has seen some changes, particularly during and after the Global Financial Crisis. Generally, the pattern of the number of active businesses in WA has followed national trends. The number of businesses with less than \$50,000 per year in annual turnover has been decreasing since 2007 for both WA and Australia (Figure 5). While these results can be driven by shifts in annual turnover, moving businesses into higher classifications, they are also likely to reflect (to some extent) the impact of the economic downturn. Businesses turning over between \$50 and \$200k annually have had a bumpy ride over the past decade. For WA, the number of these businesses has been on an upward trajectory since 2003, stagnating as the GFC took hold and declining since, with the last period showing an increase.

On the other hand, the number of businesses with turnover of between \$200k to \$2m increased rapidly for WA and nationally between 2007 and 2014. The number of WA businesses in this turnover bracket increased by 17 per cent (from 63,981 to 74,889) in this period. For Australia the increase was 14 per cent between 2007 and 2014. The number of businesses with annual turnover of \$2 million or more has also increased rapidly during this time for Western Australia, from 12,326 to 16,971 entities – an increase of almost 30 per cent.

**Figure 5** Growth of businesses by annual turnover, Western Australia and Australia, 2003 - 2014



Note: Dollars are in nominal values.

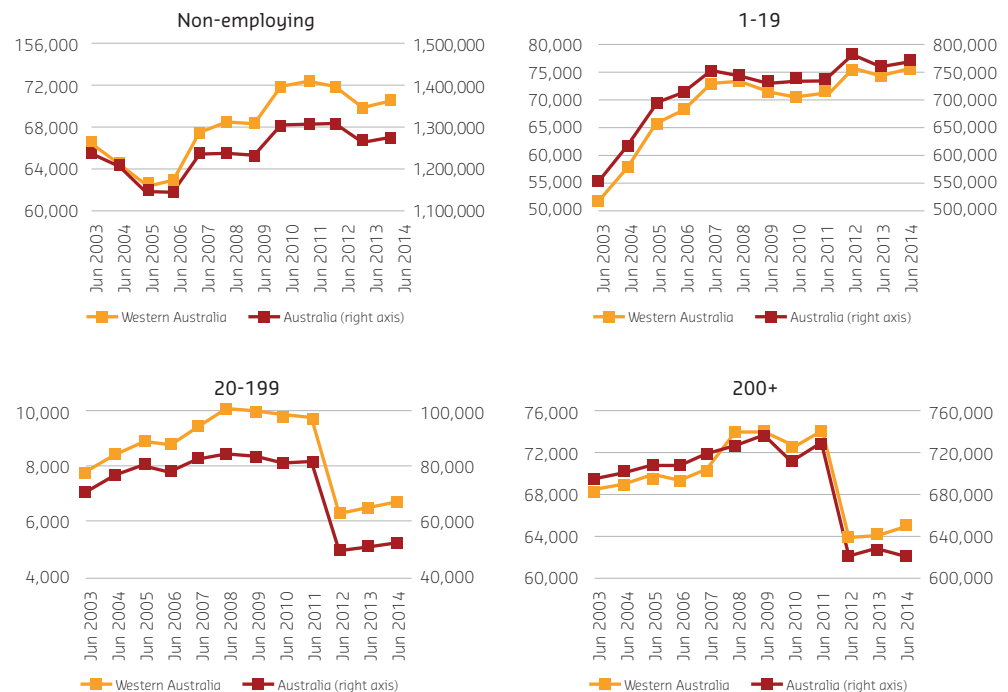
Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

Between June 2011 and June 2012, WA lost 261 businesses with more than 200 workers – this represents 40 per cent of the overall stock.

Growth in businesses by employment size for WA and Australia between 2003 and 2014 are shown in Figure 6. Increases in non-employing operators from 2005 to 2011 is evident, with a slackening between 2007 and 2009. The number of non-employing businesses decreased by 15,000 entities between 2011 and 2013, with a small resurgence in the most recent period. Strong growth in small businesses, employing 1-19 workers is evident in the period leading up to the GFC. Growth in the number of these small businesses in WA increased by 40 per cent from 2003 to 2007, adding an extra 21,432 businesses. Australia experienced similar growth rate – an increase of 37%. A slight dip for both WA and Australia between 2012 and 2013 was experienced, which has since picked up marginally.

The number of businesses employing 20-199 workers have been on the rise, but at a slower rate than that seen for the 1-19 group. A sharp drop in the number of these businesses with 20-199 employees for both WA and Australia is observed between 2011 and 2012, suggesting both business exists and downsizing behaviour as the economy slowed. A similar pattern can be seen for firms with 200 or more employees. During the period from June 2011 to June 2012, WA lost 261 businesses with more than 200 workers – a decrease of more than 40 per cent. Australia also saw a sharp decline of similar proportions.

**Figure 6** Growth of WA businesses by annual employment size, Western Australia and Australia, 2003 - 2014



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.



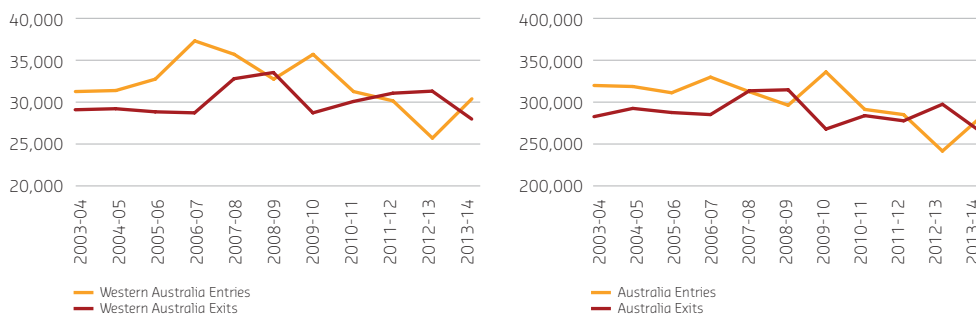
## Business entries and exits

Business exits are not necessarily always a sign of businesses failing. They may occur due to a change in a business structure – from a sole trader to a company for example, or the sale of a business (Treasury 2012). However, both business entries and exits can be an indicator of overall business health.

The pattern of business entries and exist in Western Australia has been similar to the national trend over the past decade (Figure 7). The rate of increase in business entries in Western Australia exceeded national growth prior to the GFC, as the economy heated up, peaking at 38,013 business entries and 28,482 business exits in 2006-07. The widest gap between the two metrics is observed at this period – with a net gain of 9,531 entities. A mostly downward trajectory in business entry rates has been observed since 2006-07 for both WA and Australia, with a slight resurgence in 2009-10. However, since this time business entries have fallen considerably – by 30 per cent for WA between 2009-10 and 2012-13 and 12 per cent for Australia in the same period. This equated to a net loss of almost 11,000 WA businesses between 2009-10 and 2012-13. In 2012-13, both WA and Australia saw more business entries fall below exits, indicating an overall net decline. Things have picked up since this time for both Australia and WA, with net business entries back in the black.

WA experienced a net loss of 11,000 businesses between 2009-10 and 2012-13.

**Figure 7 Business entries and exits, Western Australia and Australia, 2003 - 2014**



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

Business survival rates can also indicate relative business health, with similar caveats outlined above applying. Business survival rates over the last four years for state and territories are shown in Table 4. Overall 60.9 per cent of Western Australian businesses that were operating in June 2010 were also actively trading as of June 2014. This is similar to the national average of 61.7 per cent. Queensland and the Northern Territory had the lowest survival rate across the period, whereas Tasmania and Victoria recorded the highest business survival rates.

61 per cent of businesses operating at June 2010 were also operating at June 2014.

**Table 4 Business survival rates by state and territory, June 2010 – June 2014**

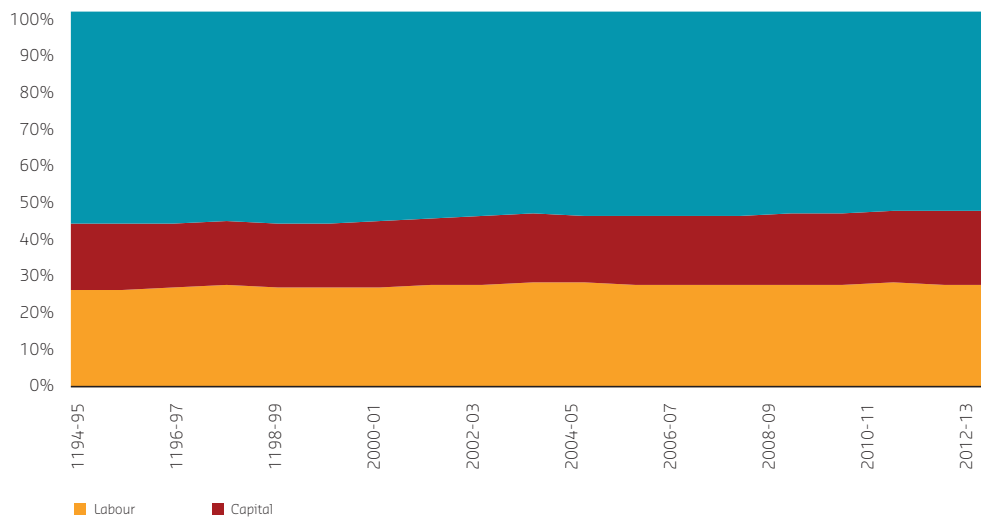
	Operating in June 2010		Survival rate			
	No.	%	June 2011	June 2012	June 2013	June 2014
New South Wales	704,763	86.4	86.4	76.8	68.4	61.7
Victoria	537,262	86.9	86.9	77.4	69.3	62.9
Queensland	433,409	85.7	85.7	75.3	66.4	59.4
South Australia	148,668	87.9	87.9	79	71.1	64.7
Western Australia	220,885	86.5	86.5	75.9	67.5	60.9
Tasmania	38,989	88.4	88.4	79.6	71.7	65
Northern Territory	14,199	85.7	85.7	75.6	66.9	59.9
Australian Capital Territory	25,212	85.3	85.3	75	65.9	58.9
Australia	2,124,650	86.5	86.5	76.7	68.3	61.7

Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

## Cost structure

Specific data that shows the cost structure of Western Australian businesses are not available, however, industry wide patterns are likely to be similar across state and territories. Figure 8 demonstrates the average cost share of industries in terms of labour, capital and intermediate inputs over the last decade. Around 20 per cent of total costs of businesses relates to capital, while firms allocate more than 55 per cent of their cost to buy goods or commodities required for the purpose of production. And labour costs capture one-quarter of total costs across industries.

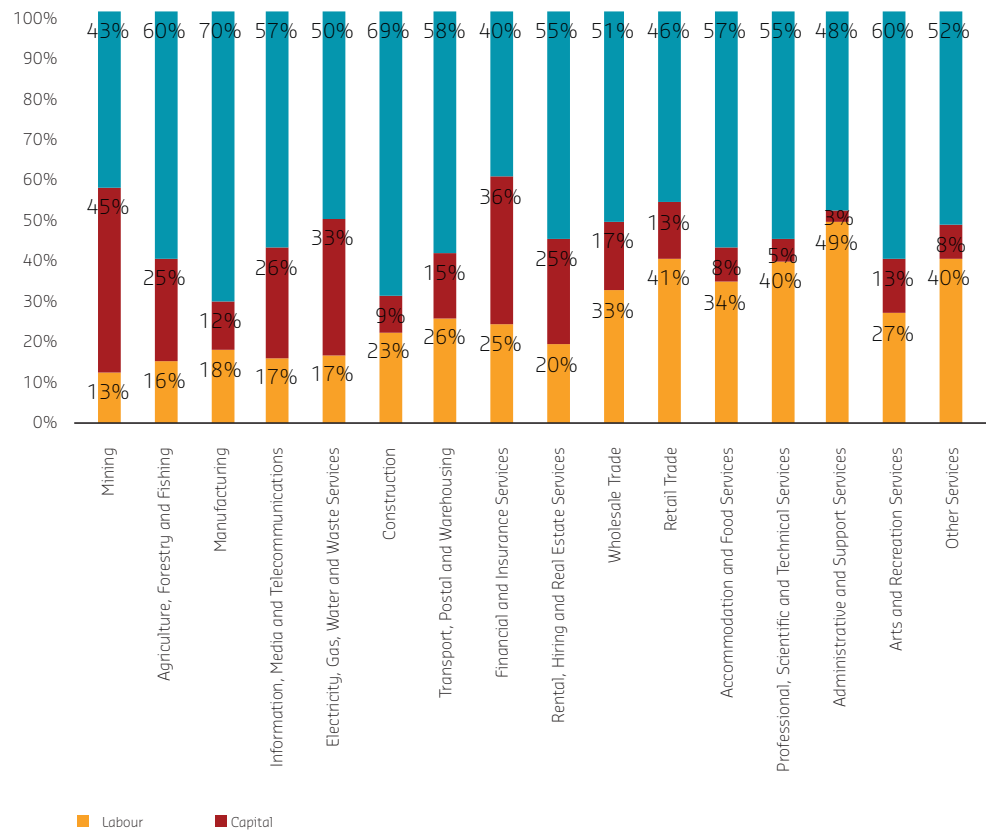
**Figure 8** Cost shares of labour, capital and intermediate inputs – average of all industries



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no.5260.0.55.002 Estimates of Industry Multifactor Productivity, Australia.

A degree of cost structure variation exists among industries as illustrated by Figure 9. Despite the variation among industries, the cost of intermediate inputs remains the most dominant component of cost shares, with the minimum share of 40 per cent in the financial and insurance services industry. The construction industry has the highest reliance on intermediate inputs, which constitutes 69 per cent of the cost structure for businesses in that sector. Labour costs are a significant expense for a number of firms – particular the retail trade and administrative and support services sectors - 41 and 49 per cent respectively. Mining, electricity, gas and water and financial and insurance services have higher proportions of capital in their cost structures compared to other industries.

**Figure 9 Cost shares of labour, capital and intermediate inputs by industry**



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no.5260.0.55.002 Estimates of Industry Multifactor Productivity, Australia.

# Business

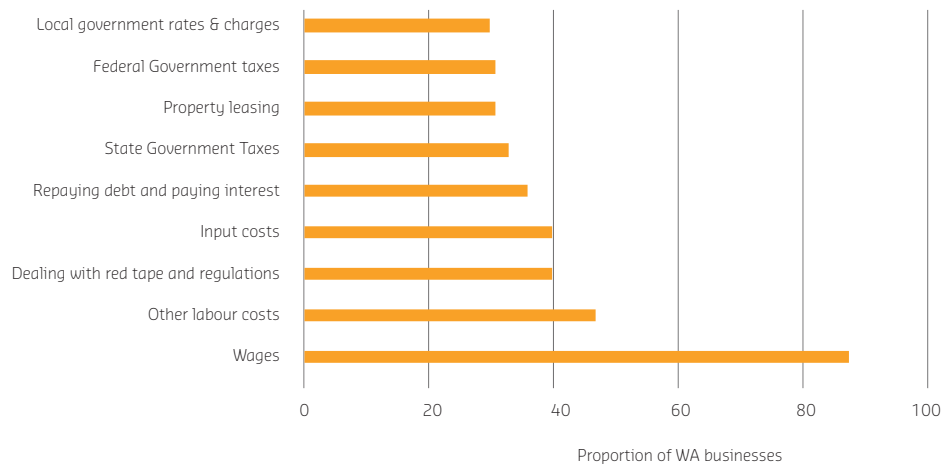
perceptions

More than 4 out of 5 businesses in WA report wages as a key cost pressure.

While cost structures of firms and industries can inform to some extent the areas of cost pressures, costs that comprise the greatest component of business operations may not always align with those that businesses cite as causing the most difficulty within their operations. In this section we explore business perceptions around what factors constitute the most significant barriers to performance and are considered key cost pressures by Western Australian businesses.

In 2011, the WA Chamber of Commerce and Industry surveyed West Australian businesses about their cost pressures (WA-CCI 2011). As is the case in a number of similar national surveys, wages are the single most reported cost pressure for West Australian businesses, with more than 4 out of 5 businesses reporting this pressure (Figure 10). Other labour costs was the second highest reported cost pressure, with almost half of all businesses reporting this as a cost pressure. Around 40 per cent of businesses cited dealing with red tape and regulations, together with input costs as concerns. Repaying debt and paying interest, dealing with state government taxes, property leasing, federal government taxes and local government rates and charges were also cited by around one in three businesses as a source of operating cost pressure.

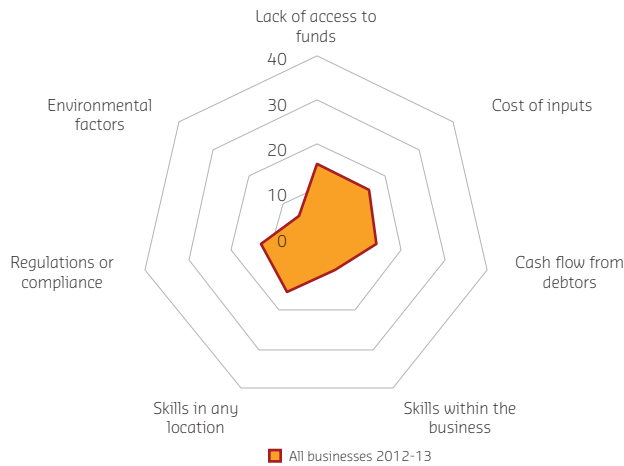
**Figure 10** Reported key drivers of cost pressures for WA businesses in 2011



Source: Western Australia Chamber of Commerce and Industry, The cost of doing business, CCI Advocacy, August 2011.

At a national level, a representative sample of Australian businesses have cited a number of barriers to general business activities or performance. The most common types of issues that businesses report are a lack of access to additional funds, the cost of inputs, and lack of skills in any location. Around 15 per cent of Australian businesses cite these as barriers to business performance. This is closely followed by cash flow issues with debtor and regulations or compliance – with 14 and 13.1 per cent of businesses respectively citing these as performance barriers. Around one in ten businesses cited significant issues with lack of skills within the business, and just over 5 per cent issues with environmental factors such as droughts. Further, more than half of all businesses surveyed reported having at least one barrier that significantly weakened their general business activities or performance.

**Figure 11** Barriers to general business activities or performance, 2012-13



**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.

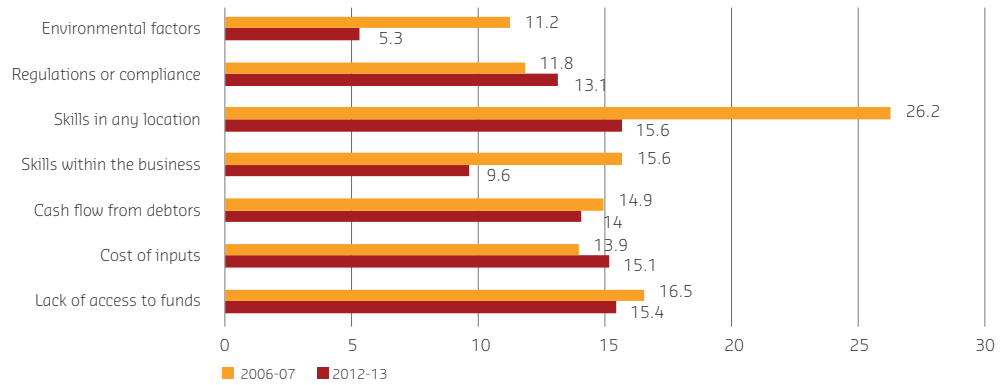
In 2006-07, a period when the economy was booming, more than 1 in 4 businesses reported lack of skills in any location as a significant barrier – by 2012-13 this had reduced to 15.6 per cent.

A number of reported significant barriers to business activities and performance have changed over the period between 2006-07 and 2012-13 (Figure 12). A similar reduction is observed for businesses reporting lack of skills within the business as a significant barrier to performance – from 15.6 per cent in 2006-07 to 9.6 per cent in 2012-13. Environmental factors as a significant barrier have also reduced substantially, halving between the two periods, from 11.2 per cent to 5.3 per cent. This is likely to reflect the impact of the Millennium drought, with 2006 one of the driest years on record throughout Australia. By 2012-13, the drought had broken in most areas across Australia.

Similar proportions of businesses reported significant barriers stemming from cash flow problems across the two periods. A slightly higher proportion of businesses reported barriers in performance due to regulations or compliance and costs of inputs in 2012-13 compared with 2006-07.

One in five businesses in the construction sector report outstanding accounts as a significant barrier to business activity and performance.

**Figure 12 Barriers to general business activities or performance, 2006-07 to 2012-13**



**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE| ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.

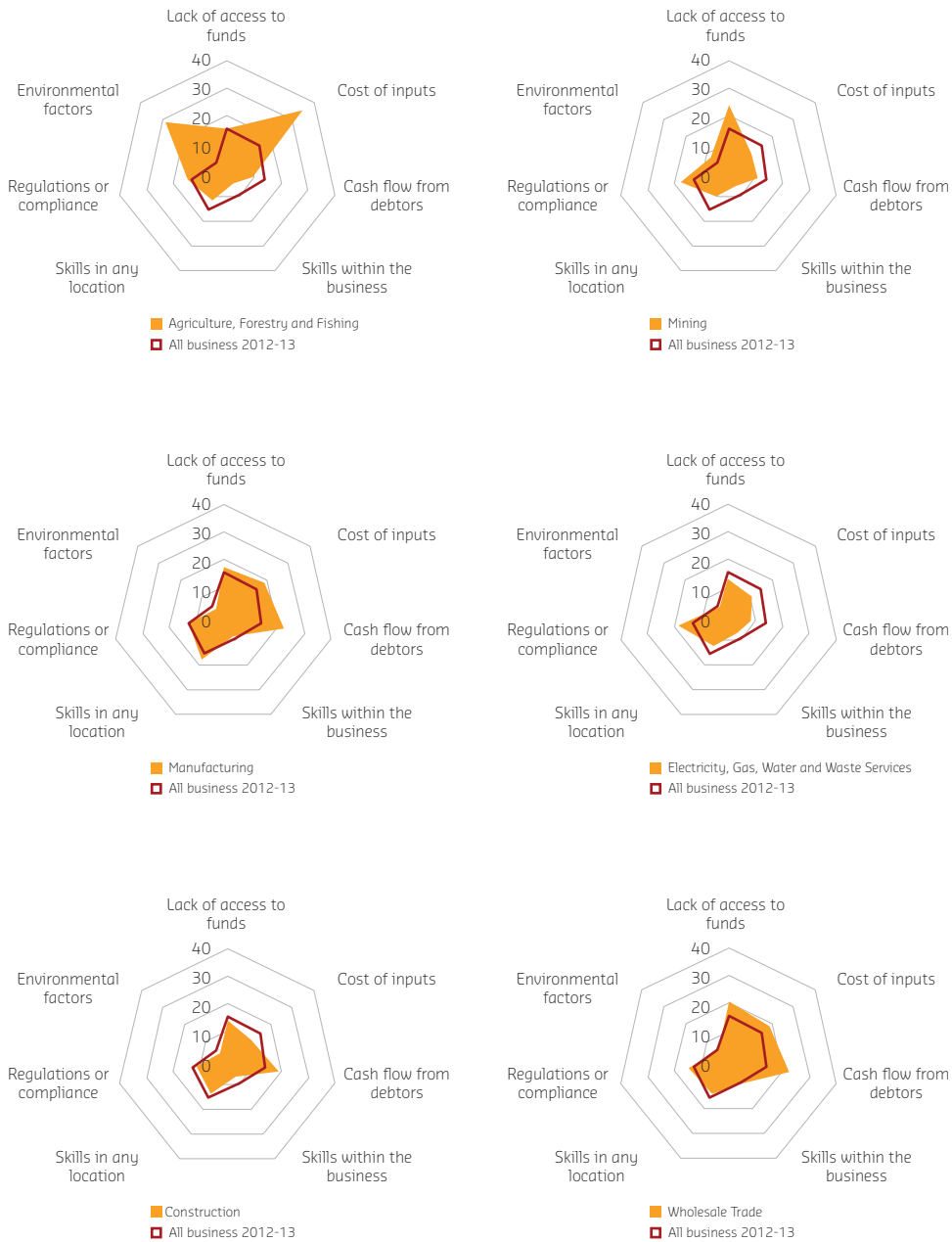
Reported barriers to business performance and activity can vary substantially by industry, as demonstrated in Figure 13. Businesses operating in Western Australia’s most prominent industry in terms of economic value to the state – mining, were more likely to report lack of access to funds and regulation and compliance as significant barriers to business activities and performance – 24 and 18 per cent respectively.

Businesses operating in the state’s second highest contributor to both economic output and employment – the construction sector, frequently cite ‘being paid’ or cash flows from debtors as the most significant barrier to activity and performance. Construction is also the sector with the largest number of businesses operating within Western Australia – numbering more than 40,000 entities, the majority of which are sole traders or small businesses.

The retail sector, which is the biggest employer in Western Australia, ranking seventh in terms of economic contribution to the state and numbering just over 13,000 businesses across the state, is more likely to experience difficulties with accessing funds, the costs of inputs and a lack of skills in any location.

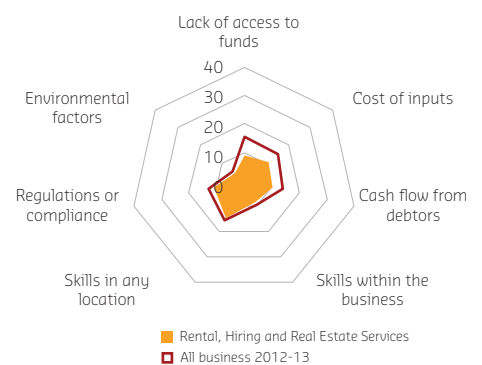
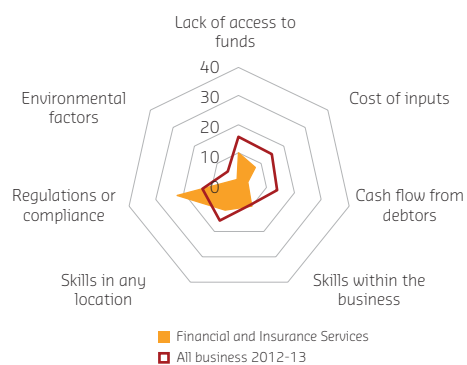
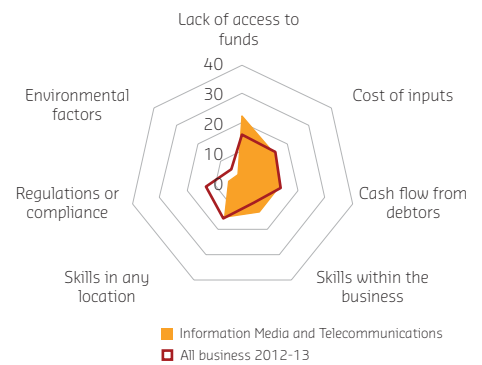
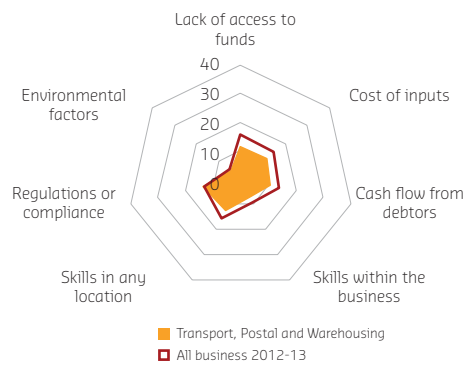
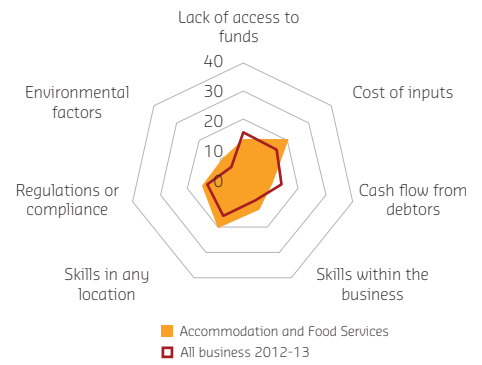
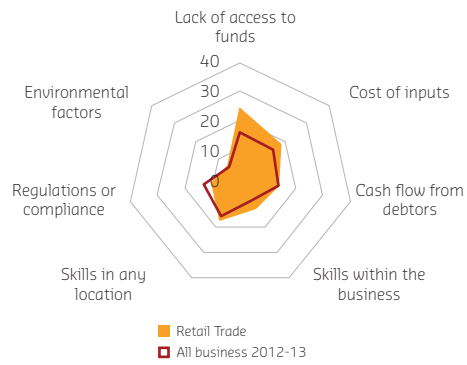


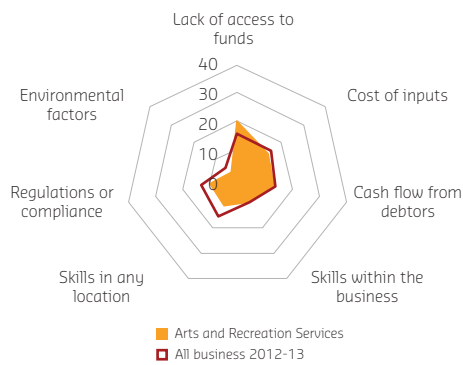
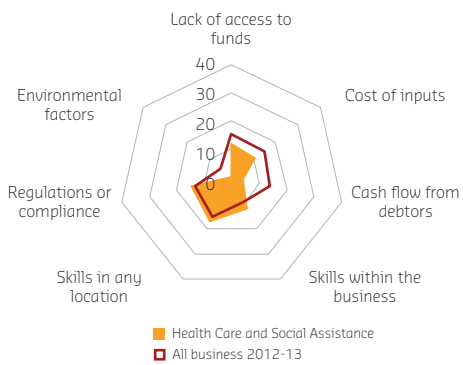
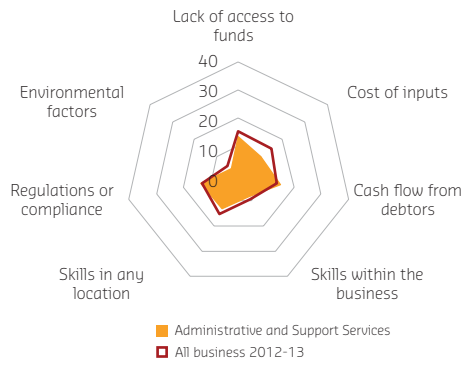
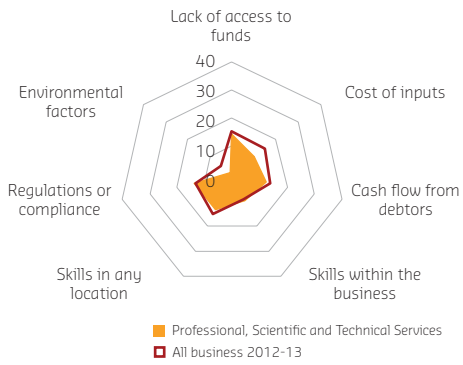
**Figure 13 Barriers to general business activities or performance, by industry, 2012-13**



**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE| ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.







# Labour costs

## Introduction

Labour is one of the most significant single business operating expenses for many businesses in Australia. Overall, employment costs represent around 25% of the total costs of running a business on average, but with wide variation across industry sectors. The analysis of cost structures in Figure 9 shows the contrast between labour cost shares, from 14% for mining to 50% for administrative and support services.

A recent CCI-WA survey reported that 88% of businesses highlighted wages as a key driver of cost pressures, with the second highest being 'other labour costs'. Yet employees are a driving force in economic growth and prosperity in the State, and the labour market should provide appropriate remuneration for worker skills and productivity. Increases in the real cost per employee in WA should not be attributed simply to labour becoming more expensive. In a well-functioning market, wage and salary awards should rise in line with the benefits to businesses from increased labour productivity. Productivity improvements and changes over time and across industries in the compositional mix of skills and seniority can provide a perfectly reasonable explanation for labour cost increases.

Acknowledging the contribution of labour to economic activity, and recognizing the need for at least some attempt at 'standardizing' labour cost measures for skills and experience, the ABS has constructed a Wage Price Index (WPI). The index seeks to quantify the costs of a standardized 'bundle' of labour (in the same way that cost of living measures standardize a consumption bundle). The WPI is released quarterly by the ABS, and presents wage cost measures broken down by industry, and by states and territories<sup>1</sup>.

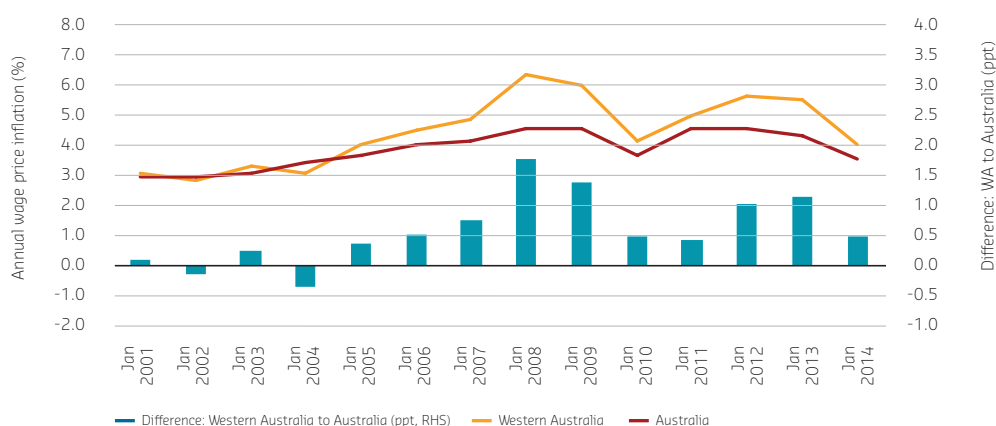
<sup>1</sup> See Table 2.

## Wage costs over time

Taking a broad view of the relative change in employment costs in WA compared with national trends, Figure 14 shows annual wage price inflation for WA and Australia from 2001 and 2014 using the WPI index<sup>2</sup>, as well as the percentage point difference in the two series (shown as bars and measured against the right hand scale).

These trends show a clear increase in employment costs in WA compared with Australia, from around 3 per cent annually at the start of the millennium (similar to national figures) to 6.3 per cent by 2008 (compared with 4.6 per cent for Australia overall). This represented a rate of wage inflation nearly 1.8 percentage points higher than the national average by the start of the GFC. Although wage costs rose more steeply in WA over the heat of the resources boom, the post-GFC decline for the state was also more severe – dropping fully 2.1 percentage points to 4.2 per cent by 2010, compared with 3.9 per cent nationally (down 0.9 percentage points since 2008). After further growth in wages over the first few years of the current decade, the latest available data on standardized wage (WPI) inflation shows a return to similar post-GFC levels – around 4 per cent for the state, compared with 3.5 per cent nationally.

**Figure 14 Annual wage price inflation for WA and Australia: 2001 to 2014**



**Note:** The wage price index controls for the “quality or quantity of work performed” to ensure that only pure price changes are reflected in the indexes. Percentage point differences in WPI inflation between WA and Australia are measured against the RHS scale.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors’ calculations using ABS Cat No. 6345.0 Wage Price Index, Australia.

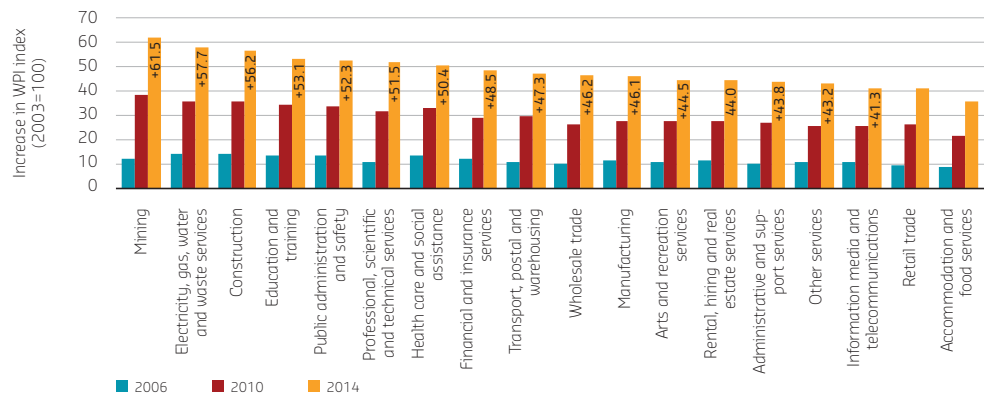
As noted earlier, wage inflation varies across sectors of the economy. To show this, Figure 15 compares the value of WPI across the main industry classification in Australia. WPI data are broken down either by industry, or by state/territory (but not by both together). Nevertheless, this breakdown is instructive to the degree that industry-specific wage inflation trends in WA compare with national patterns.

The increase in standardized wages for mining is highest across all industry sectors, increasing by 61.5 points between 2003 (indexed to 100) and 2014. Most of this increase occurred during the second half of the resources boom and before the GFC (2006–2009), a period where significant excess demand for labour in the sector placed strong upward pressure on wages.

Similar increases occurred in the electricity and gas sector (up 57.7 over the period) and construction (rising by 56.2 points). At the other end of the distribution, wages in the accommodation and food sectors increased least - by 35.8 points over the same period - with retail wages increasing by 41.1 points.

<sup>2</sup> The underlying WPI measure is available at Abs Cat. 6345.0 (Wage Price Index, Australia), and the index is standardized to 100 as at 2009. Hence, the measure is useful in a relative sense, but not as an absolute indicator of wage price costs at any point in time.

**Figure 15 Increase in wage price index (WPI) relative to June 2003: by industry sector**



**Note:** The wage price index controls for the “quality or quantity of work performed” to ensure that only pure price changes are reflected in the indexes. Industries are classified according to standard ANZSIC 2-digit disaggregations. Data are for Australia overall, with industries sorted in order of increase in wage price index between 2003 and 2014.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors’ calculations using ABS Cat No. 6345.0 Wage Price Index, Australia.

The Wage Price Index measure doesn’t allow for a differentiation of labour costs by state and industry combined. Instead, Table 5 compares average employee costs for WA and Australia using the ratio of total labour costs to headcount employment for each industry sector. The analysis compares 2007-8 with 2013-14, with costs uprated to June 2015 to provide a valid comparison of real changes in average costs over time.

These measures should not be used to infer any change in the *costliness of equivalent* labour over the period. It is perfectly possible for the composition and skill mix of employees to have evolved differently between WA and Australia within each sector. A general increase in wages might also indicate an increase in workforce productivity. Rather, the measure should be taken simply as an indication of the average labour cost per employee in each of the main industries for the state compared with the equivalent measure for Australia overall.



**Table 5 Labour costs per employee (2015 \$'s): by industry sector, WA and Australia**

	Western Australia				Australia			
	2007-08	2013-14	Diff	% Diff	2007-08	2013-14	Diff	% Diff
Mining	145,402	161,566	+16,164	+11.1%	127,038	141,963	+14,925	+11.7%
Electricity, gas, water and waste services	91,120	98,643	+7,523	+8.3%	94,192	95,491	+1,300	+1.4%
Construction	55,556	76,806	+21,250	+38.2%	47,912	56,167	+8,255	+17.2%
Professional, scientific and technical services	68,597	72,209	+3,611	+5.3%	67,308	68,095	+788	+1.2%
Information Media and Telecommunications	80,461	68,455	-12,006	-14.9%	82,381	81,442	-938	-1.1%
Manufacturing	62,547	68,167	+5,619	+9.0%	62,887	63,005	+117	+0.2%
Administrative and support services	49,561	61,727	+12,167	+24.5%	46,438	41,553	-4,885	-10.5%
Wholesale trade	59,613	61,055	+1,441	+2.4%	65,338	61,543	-3,795	-5.8%
Transport, postal and warehousing	54,191	59,671	+5,480	+10.1%	55,197	57,007	+1,810	+3.3%
Total selected industries	51,736	59,522	+7,786	+15.0%	47,324	47,355	+32	+0.1%
Public administration and safety (private)	37,613	54,200	+16,587	+44.1%	39,598	47,500	+7,902	+20.0%
Education and training (private)	40,723	47,568	+6,844	+16.8%	43,214	46,182	+2,968	+6.9%
Health care and social assistance (private)	44,144	42,679	-1,465	-3.3%	42,134	40,800	-1,334	-3.2%
Rental, hiring and real estate services	37,763	42,596	+4,833	+12.8%	37,337	35,742	-1,595	-4.3%
Arts and recreation services	34,461	31,850	-2,611	-7.6%	31,288	28,737	-2,551	-8.2%
Retail trade	31,189	31,539	+350	+1.1%	31,340	31,297	-43	-0.1%
Accommodation and food services	27,445	28,530	+1,085	+4.0%	26,180	24,028	-2,152	-8.2%
Agriculture, forestry and fishing	15,740	14,869	-871	-5.5%	14,990	13,296	-1,694	-11.3%

Note: Industries are reported using the standard ANZSIC 2-digit classification. Labour costs per employee for WA and Australia for each industry are calculated as the ratio of total labour costs to total headcount employment, with costs uprated to June 2015 prices.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations using ABS Cat No. 6345.0 Wage Price Index, Australia.

The mining sector recorded the highest average labour costs per employee, rising from \$145,402 to \$161,566 between 2007-8 and 2013-14 (both uprated to 2015 dollars) - a real increase of 11.1 per cent in just over half a decade. The utilities sector (electricity, gas, water and waste) paid an average of around \$98,643 per worker - a real increase of 8.3 per cent on 2007-08 figures.

The state saw particularly large increases in real costs per employee since 2007-8 in public administration (up 44.1 per cent, more than double the national sector increase) and construction (up 38.2 per cent, also double the national increase). Low average employee costs are shown on latest data in agriculture (\$14,869), accommodation and food services (\$28,530) and the retail trade (\$31,539). These sectors showed little or no increase over the last half decade, with average labour costs falling particularly in agriculture - down by 5.5 per cent in WA and by 11.3 per cent in Australia. This is most likely explained by lower skilled workers and a higher prevalence of casual, part-time, seasonal and piecemeal work.

A second metric by which to compare the cost of labour over time, and across states, is the ratio of total employee costs to company sales and service income for each industry. The ratio can be interpreted as the number of cents in employee costs for a dollar of company income. For illustration, an index of 10 says that it costs a business 10 cents in labour for every dollar of income earned.

This bears some relation to the productivity of labour, but the correlation will be limited again by differences in skill composition across industries, and by the fact that the measure doesn't differentiate either between capital-intensive and labour-intensive industries, or private commercial versus public service industries.

Table 6 reports the change in average labour costs per dollar of income between 2007-08 and 2013-14 for each industry sector. Results are presented for WA and Australia, and show both levels and changes over the period between 2007-08 and 2013-14.

Measures vary substantially by industry, with mining, manufacturing, retail and IT sectors showing low labour cost to income ratios of between 10 and 20 cents per dollar. The health, education, public administration and administrative support sectors provide public services rather than sales, and labour costs to income ratios are naturally higher as a result - at between 40 and 80 cents per dollar of income.

**Table 6** Labour costs per dollar of company revenue (2015\$): by industry sector, WA and Australia

	Western Australia				Australia			
	2007-08	2013-14	Diff	% Diff	2007-08	2013-14	Diff	% Diff
Wholesale trade	6.9	6.3	-0.6	-9.0%	8.7	7.3	-1.4	-16.5%
Agriculture, forestry and fishing	11.0	7.8	-3.2	-29.1%	11.9	8.9	-3.0	-25.3%
Mining	12.9	10.2	-2.8	-21.3%	13.4	12.2	-1.2	-9.1%
Retail trade	12.2	10.2	-2.0	-16.4%	12.4	10.4	-2.0	-15.8%
Electricity, gas, water and waste services	13.3	11.2	-2.0	-15.2%	14.0	9.2	-4.8	-34.2%
Manufacturing	11.8	11.3	-0.6	-4.9%	16.2	14.4	-1.8	-11.3%
Rental, hiring and real estate services	18.6	15.1	-3.5	-18.9%	16.6	13.0	-3.6	-22.0%
Total selected industries	18.1	15.9	-2.3	-12.4%	20.2	17.6	-2.7	-13.2%
Information Media and Telecommunications	21.2	16.9	-4.3	-20.4%	20.6	18.4	-2.1	-10.3%
Construction	19.3	19.7	0.4	+2.2%	18.6	17.0	-1.5	-8.1%
Transport, postal and warehousing	27.1	20.8	-6.3	-23.3%	25.8	21.5	-4.4	-16.9%
Arts and recreation services	25.6	23.2	-2.4	-9.3%	22.7	22.1	-0.6	-2.6%
Accommodation and food services	31.5	27.3	-4.2	-13.5%	28.9	24.5	-4.4	-15.3%
Professional, scientific and technical services	42.9	32.2	-10.7	-25.0%	43.3	35.0	-8.4	-19.3%
Public administration and safety (private)	53.7	38.2	-15.5	-28.9%	54.2	39.4	-14.9	-27.4%
Health care and social assistance (private)	63.1	56.4	-6.7	-10.6%	63.5	57.0	-6.6	-10.3%
Administrative and support services	65.9	57.5	-8.4	-12.7%	59.2	50.5	-8.7	-14.7%
Education and training (private)	102.8	81.9	-20.9	-20.4%	94.6	88.0	-6.6	-7.0%

Note: Industries are reported using the standard ANZSIC 2-digit classification. Labour costs per dollar of company revenue is calculated as the ratio of total labour costs to total company sales and service income.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations using ABS Cat No. 6345.0 Wage Price Index, Australia.

The WA wholesale trade industry has the lowest labour costs per dollar of sales and service income at an average of 6.3 cents in 2013-14, down 9 per cent from 6.9 cents in 2007-08. Retail is similar in this regard, with the combination of low average costs per worker and high sales and service revenues leading to a low ratio of 10.2 cents in the costs of labour per dollar of income.

Mining, on the other hand, is highly capital-intensive (45 per cent of total cost share). Labour costs per dollar of income in mining run at around 10.2 cents per dollar of income, driven by a combination of highly productive capital and a strong, well-remunerated skills base.

The general pattern over time is of reducing labour cost per dollar of income – with falls of around 10 per cent to 29 per cent across most industries over the last six years. This is the case in all but one sector (construction being the exception, with a 2.2 per cent increase in labour cost per dollar of income over the period).

## Relative labour costs in WA

It is entirely possible to see relatively high labour costs per employee in an industry, but a low labour cost per dollar of income earned, in sectors that generates high revenues and profits. It is important then for us to judge the costs per worker against the company income earned by that labour. We can do so by comparing labour cost to income ratio for similar industries, or for the same industries in different regions.

The degree of capital- and labour intensity, productivity and profitability vary enormously, and it is unreasonable to compare a highly commercial sector – mining, say, or manufacturing – with service oriented sectors such as public administration or education. One shouldn't make too much of inter-industry comparisons within WA, either for labour costs per employee or labour costs per dollar of income. However, more can be inferred about the relative costs of labour in WA to the rest of the country by comparing the levels and changes in the same industry sectors between this state and Australia.

Figure 16 and Figure 17 plots the percentage difference between WA and Australia in the labour cost per employee and labour cost per income measures, for each industry sector. These charts serve to highlight the following features:

- Higher average spending per employee for WA relative to Australia corresponds to a positive percentage difference in labour costs per employee
- Higher average spending per employee for WA relative to Australia corresponds to a higher percentage difference in labour costs per dollar of income.

Those WA industries in the top right segment of each chart (Figure 16 for 2007-08 and Figure 17 for 2013-14) have both high costs per employee relative to the same industry in Australia overall, and also a higher labour cost per dollar of income earned.

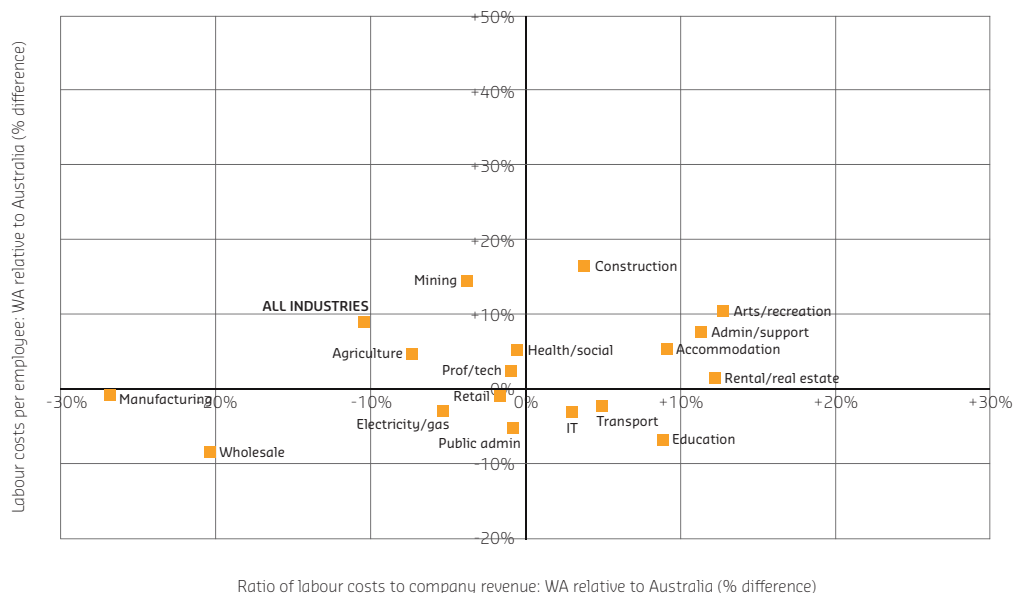
Construction, real estate services, and administration and support services feature in this quadrant for both comparison years. In 2007-08, the average labour cost per employee in construction was around 16 per cent higher in WA than in Australia. By 2013-14 average labour costs per employee in WA were 36 per cent higher. At the same time, the construction industry faced labour costs per dollar of company income that were 4% higher in WA than in Australia in 2007-08, but 15 per cent higher by 2013-14. The administration and support sector also shows a significant increase in labour costs per employee relative to Australia (48 per cent higher by 2013-14), and in labour costs per dollar of income earned (14 per cent higher in 2013-14).

The labour cost per dollar of income earned by businesses is lower in WA compared to Australia in mining (by 16 per cent), manufacturing (by 22 per cent) and agriculture (by 13 per cent), despite there being a higher average wage per employee in these sectors in WA compared to national rates. Labour costs in public administration have also grown significantly faster in WA than in Australia.

Mining also spent more per employee in WA, around 24 per cent higher than the Australian average. However labour costs required to generate a dollar of income for WA mining companies were 3.4 per cent lower in 2007-08, moving to fully 17 per cent lower by 2013-14.

Public administration costs in WA were 4 per cent lower than the Australian average in 2007-08. However, by 2013-14 the costs per employee had risen to around 14 per cent. This is despite labour costs to income ratios in public administration being the same in the state compared with national figures.

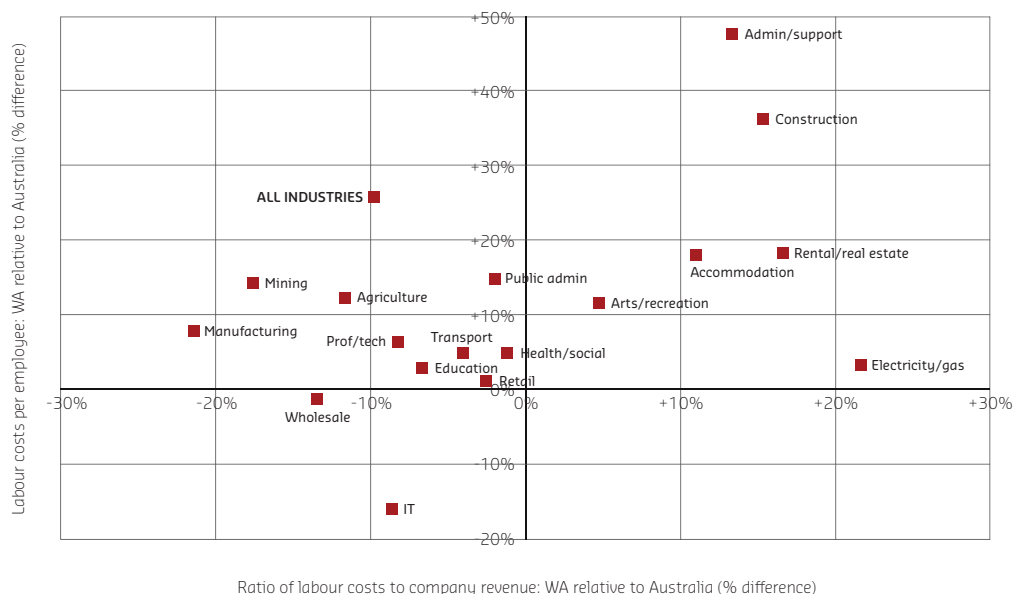
**Figure 16** Relative labour costs per employee and cost per sales/service income in WA relative to Australia: 2007-08, by industry sector



**Note:** Industries are reported using the standard ANZSIC 2-digit classification. Wage costs per employee for WA and Australia for each industry are calculated as the ratio of total labour costs to total headcount employment, with 2007-08 to 2013-14 costs uprated to June 2015 prices. Employee cost per unit of sales/service income is calculated as the ratio of total labour costs to total sales/service income. The chart presents the percentage difference in cost per employee and cost per sales income in WA relative to Australia.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations using ABS Cat No. 6345.0 Wage Price Index, Australia.

**Figure 17** Relative labour costs per employee and cost per sales/service income in WA relative to Australia: 2013-14, by industry sector



**Note:** Industries are reported using the standard ANZSIC 2-digit classification. Wage costs per employee for WA and Australia for each industry are calculated as the ratio of total labour costs to total headcount employment, with 2007-08 to 2013-14 costs uprated to June 2015 prices. Employee cost per unit of sales/service income is calculated as the ratio of total labour costs to total sales/service income. The chart presents the percentage difference in cost per employee and cost per sales income in WA relative to Australia.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations using ABS Cat No. 6345.0 Wage Price Index, Australia.

# Tax costs

on companies

## Taxes on businesses in WA

The suite of taxes formally levied on businesses in Australia are familiar, and include the following main instruments:

- Company tax - levied on business profits
- Payroll tax - levied on labour value added
- Goods and Sales Tax (GST) - added to the price of a companies' goods and services.
- Capital Gains Tax - levied on capital gains from the disposal of assets
- Land tax and business rates - levied on the purchase of land and public services

Company tax is paid on the profits of businesses at a standard rate of 30 per cent for most businesses in Australia. Reforms announced in the 2015-16 budget included a 1.5 percentage point tax cut for incorporated businesses with an annual turnover under \$2 million, and a 5 per cent tax discount up to a \$1,000 cap for unincorporated businesses. Small businesses can also claim a tax deduction for singles asset purchases up to \$20,000. Dividends paid from company profits (and therefore subject to company tax) attract a franking credit, and if companies receive dividends from other business, these franking credits can be used to offset the company tax paid.

GST is formally collected from companies, but the effective incidence is passed onto consumers by including GST in sales prices. Businesses can claim input tax credits for GST paid on their own business purchases, with some also subject to certain GST concessions.

Australia's 2.1 million businesses paid around \$70.5bn nationally in company tax in 2013-14, equivalent to an average of \$33,592 per business. However, the vast majority of company tax is paid by a small fraction of companies.

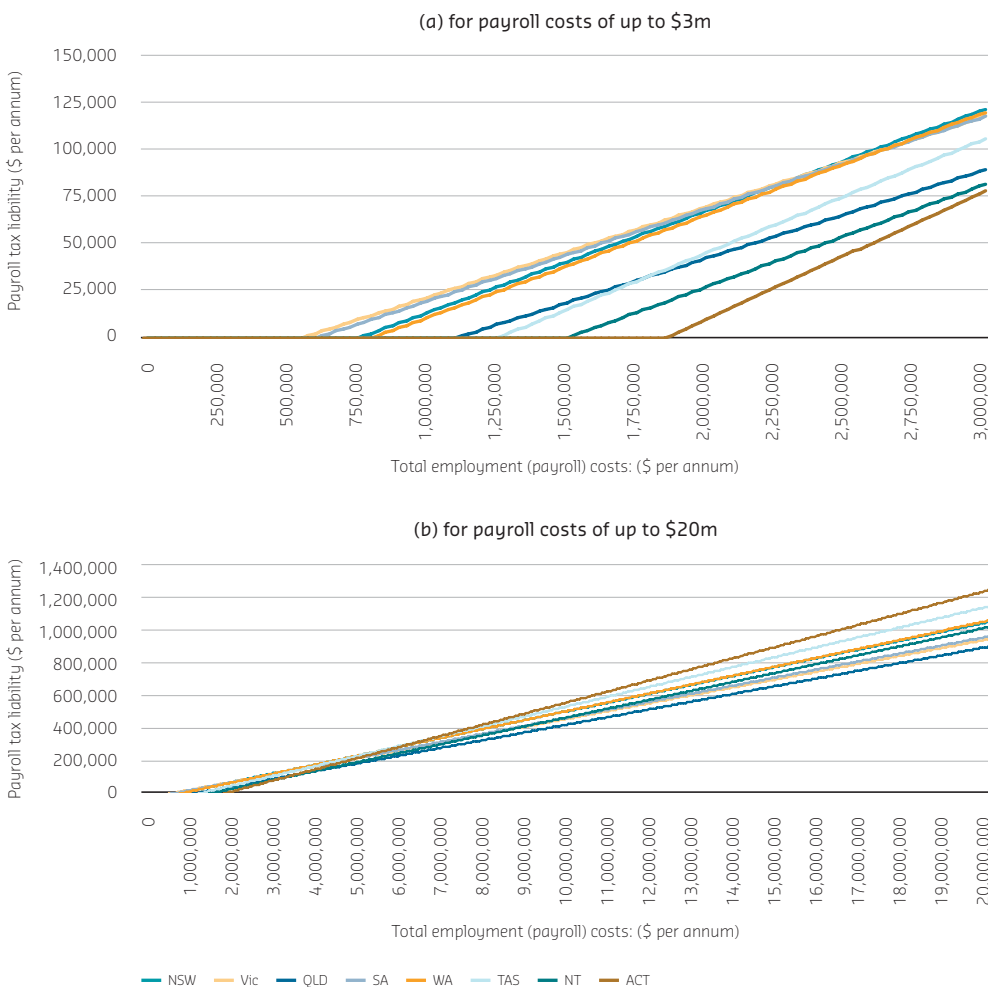


# Payroll tax

Payroll tax is one of the principal tax-related costs to businesses, alongside company taxation and property taxes. Payroll tax is levied on the total employment (payroll) costs incurred by a business, with some exemptions for business-related accommodation and travel costs. As at 1 July 2015, West Australian businesses are currently taxed at a single rate of 5.5 per cent beyond a threshold of \$800,000 in total payroll costs net of exemptions.

However, unlike company tax, there are significant differences between states and territories in the rates and free thresholds for payroll tax. This means that businesses with an equivalent employment payroll will bear a different payroll tax burden in different state/territory jurisdictions. The two panels in Figure 18 illustrate these state/territory differences for payroll costs of up to \$3m (in the left hand panel) and to \$20m (on the right).

**Figure 18** Payroll tax schedules as at July 2015: by state/territory and total employment costs



**Note:** Payroll tax schedules for each state and territory are calculated using tax rates and thresholds as at 1 July 2015. Panel (a) focuses on payroll tax liabilities for employer payroll costs of up to \$3,000,000 while Panel (b) shows payroll tax schedules for payroll costs of up to \$20,000,000.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations

## The costs to WA businesses of payroll tax

What costs do payroll taxes impose on businesses of different scales and profiles in Western Australia? Is payroll tax more penalising in WA than in other states and territories? And are there behaviours or impacts of the payroll tax?

The latest MYEFO update for 2014-15 estimates that payroll tax revenues for WA will amount to \$3.74bn, equivalent to an average of \$17,142 for each registered business in the state, or \$2,736 per employee.

However, the argument that WA is the most costly jurisdiction for payroll tax simply by comparing total payroll tax revenues with the size of the WA population (CCI WA) is spurious. The existence of a payroll tax threshold means that larger firms with a higher salary bill will face a higher average payroll tax liability. With more firms of this type in WA, the per capita (or more appropriately, per employee) payroll tax bill will necessarily be higher in WA than for other states and territories. This does not single out payroll tax as singularly more penalising in WA, but rather that the size and composition of firms in the state are different.

A more appropriate benchmark of the contribution of payroll tax regimes to business costs should compare payroll tax liabilities for the same type of firm, with the same salary bill, in different jurisdictions (which we do in Table 7).

**Table 7 Payroll tax bill – by level of employee costs and state/territory (as at 1 July 2015)**

State/territory	Payroll tax			Employer payroll costs			
	Rate	Threshold	Deduction rate	\$1,000,000	\$2,000,000	\$5,000,000	\$10,000,000
New South Wales	5.45%	750,000	0.00	13,625 <sup>3</sup>	68,125 <sup>4</sup>	231,625 <sup>3</sup>	504,125 <sup>5</sup>
Victoria	4.85%	550,000	0.00	21,825 <sup>1</sup>	70,325 <sup>2</sup>	215,825 <sup>7</sup>	458,325 <sup>8</sup>
Queensland	4.75%	1,100,000	0.25	- <sup>5</sup>	53,438 <sup>5</sup>	231,563 <sup>4</sup>	475,000 <sup>6</sup>
South Australia	4.95%	600,000	0.00	19,800 <sup>2</sup>	69,300 <sup>3</sup>	217,800 <sup>6</sup>	465,300 <sup>7</sup>
Western Australia	5.50%	800,000	0.11	12,313 <sup>4</sup>	73,881 <sup>1</sup>	258,582 <sup>1</sup>	550,000 <sup>2</sup>
Tasmania	6.10%	1,250,000	0.00	- <sup>5</sup>	45,750 <sup>6</sup>	228,750 <sup>5</sup>	533,750 <sup>4</sup>
Northern Territory	5.50%	1,500,000	0.25	- <sup>5</sup>	34,375 <sup>7</sup>	240,625 <sup>2</sup>	550,000 <sup>2</sup>
Australian Capital Territory	6.85%	1,850,000	0.00	- <sup>5</sup>	10,275 <sup>8</sup>	215,775 <sup>8</sup>	558,275 <sup>1</sup>

Note: Payroll tax liabilities for each state and territory are calculated at different employer payroll costs using tax rates and thresholds as at 1 July 2015 (see Appendix for full details).

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations

The architecture of the payroll tax system as shown in Figure 18 – specifically the tax-free threshold – generates a higher average payroll tax liability as company wage costs rise. Businesses with total wage costs below the threshold are exempt from payroll tax, with the average liability as a proportion of the wage bill rising progressively towards the payroll tax rate as payroll costs increase.

A business with wage costs of \$1m will be exempt from payroll tax in Queensland, Tasmania, Northern Territory and ACT. The same business will pay \$12,313 in Western Australia (1.2 per cent of the salary bill), \$13,625 in New South Wales (1.4 per cent of salary) and \$21,825 in Victoria (2.2per cent of salary).

Western Australia ranks first in payroll tax costs for businesses with a total payroll of \$2m (a \$73,881 liability, or 3.7 per cent of payroll costs) and first for businesses with a \$5m payroll (\$258,582, or 5.2 per cent of payroll costs) and second for businesses with \$10m in payroll costs (\$550,000, also 5.5 per cent of payroll costs).

ACT offers the greatest free threshold across all states and territories, to the extent that businesses with up to \$1.85m in employment costs will pay no payroll tax. However, ACT also imposes the highest payroll tax rate of 6.85 per cent. This imposes a progressively higher payroll tax burden for larger businesses – \$558,275 for a company with a \$10m payroll.

Varying payroll tax rates and thresholds do create complexities for businesses that operate in multiple jurisdictions. This remains the case despite agreements between state and territory Treasurers to harmonise the legislation and administration of payroll tax systems nationally, culminating in a formal 2010 Payroll Tax Harmonisation Joint Protocol. Payroll tax is more penalising for labour- rather than capital-intensive businesses, and more small businesses will be drawn into the payroll tax system as wage costs increase.

Payroll tax will necessarily be more penalising if businesses face higher cost of workers for a given level of productivity. However, it's a strained argument to suggest that payroll tax rates should adjust to offset any growth in the costs of labour in WA, in the manner that GST revenues to states and territories even up the revenue generating capacities across jurisdictions.

## Have payroll tax costs increased over time?

Payroll tax revenues in WA have increased as a proportion of total state tax revenue over the last decade, rising from 26.1 per cent in 2005-06 to some 40.5 per cent on latest projections for 2015-16. This can be explained in part by the growth of businesses in WA over the last ten years, both in number and in the size of the workforce employed.

However, part of the increase in payroll tax revenue stems from the fact that the payroll tax system in WA – in common with a number of other states and territories in Australia – has not remained neutral over time. Many payroll tax thresholds – including the threshold that applies in WA – have remained broadly the same in nominal terms over time.

The static nature of payroll tax thresholds means that more businesses have been drawn into the payroll tax regime, or are paying more in tax, simply because thresholds haven't adjusted upwards to match wage inflation. This represents the same sort of bracket creep that afflicts the personal income tax system in Australia.

Table 8 compares payroll tax liabilities for each state and territory using tax rates and thresholds as at 1 July 2005 and 1 July 2015. For comparison, employer payroll costs for 2005 are reweighted by a wage inflator (AWOTE) to compare 2005 tax liabilities with the 2015 employer payroll figures on a like-for-like basis (see Appendix for full details of historical payroll tax rates and thresholds).

In 2015 equivalent dollars, a WA business with employment costs of \$2m is paying \$24,373 more in payroll tax now – some 49 per cent more – than was the case in 2005. This is the largest excess liability for a business of this size across all states and territories. This is because of the 1 July 2015 diminishing threshold, and because the payroll tax rate in WA has remained unchanged at 5.5 per cent over the period since 2005, with the payroll tax threshold rising only once (from \$750,000 to \$800,000 in 2014-15).

In contrast, South Australia has seen rate reductions from 5.67 per cent to 4.95 per cent since 2005, along with an increase in the payroll tax threshold from \$504,000 to \$600,000. As a result, South Australian businesses with wage costs of \$10m are liable for the equivalent of \$59,793 less in payroll tax now than in 2005.

**Table 8** Change in payroll tax liabilities between 2005-06 and 2015-16: by state/territory and employers' payroll costs

State/territory	Payroll tax			Change in equivalent payroll tax liability, 2005-06 to 2015-16			
	Rate	Threshold	Deduction rate	\$1,000,000	\$2,000,000	\$5,000,000	\$10,000,000
New South Wales	5.45%	750,000	0.00	+6,418 <sup>3</sup>	+918 <sup>5</sup>	-15,582 <sup>5</sup>	-43,082 <sup>6</sup>
Victoria	4.85%	550,000	0.00	+11,669 <sup>2</sup>	+7,669 <sup>4</sup>	-4,331 <sup>4</sup>	-24,331 <sup>5</sup>
Queensland	4.75%	1,100,000	0.25	- <sup>5</sup>	+8,699 <sup>3</sup>	-15,644 <sup>6</sup>	- <sup>3</sup>
South Australia	4.95%	600,000	0.00	+5,007 <sup>4</sup>	-2,193 <sup>7</sup>	-23,793 <sup>7</sup>	-59,793 <sup>7</sup>
Western Australia	5.50%	800,000	0.11	+12,313 <sup>1</sup>	+24,373 <sup>1</sup>	+44,074 <sup>1</sup>	+60,492 <sup>1</sup>
Tasmania	6.10%	1,250,000	0.00	- <sup>5</sup>	+14,100 <sup>2</sup>	+14,100 <sup>2</sup>	+14,100 <sup>2</sup>
Northern Territory	5.50%	1,500,000	0.25	- <sup>5</sup>	-6,973 <sup>8</sup>	-33,223 <sup>8</sup>	-70,000 <sup>8</sup>
Australian Capital Territory	6.85%	1,850,000	0.00	- <sup>5</sup>	-1,158 <sup>6</sup>	-1,158 <sup>3</sup>	-1,158 <sup>4</sup>

Note: Changes in payroll tax liabilities for each state and territory are calculated for different employer payroll costs using tax rates and thresholds as at 1 July 2005 and 1 July 2015. For comparison, employer payroll costs for 2005 are reweighted by AWOTE to compare with the 2015 employer payroll figures (see Appendix for full details).

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations

For the WA payroll tax system to have remained neutral over the last decade would require the pre-July 2015 threshold to be 37.5 per cent higher than in July 2005 – rising to nearly \$1,100,00 (in line with wage inflation, and shown in Table 9). This shows that non-uprating of the payroll tax threshold (bracket creep) can disproportionately affect the tax payments of smaller businesses.

**Table 9** Projection of 2015-16 payroll tax liabilities for payroll tax thresholds uprated in line with AWOTE from 2005-06 to 2015-16: by state/territory and employers' payroll costs

State/territory	WA	NSW	VIC	QLD	SA	TAS	NT	ACT
Payroll tax rate as at 1 July 2015	5.50%	5.45%	4.85%	4.75%	4.95%	6.10%	5.50%	6.85%
Payroll tax threshold as at 1 July 2015	800,000	750,000	550,000	1,100,000	600,000	1,250,000	1,500,000	1,850,000
Payroll tax threshold if July 2005 uprated by AWOTE	1,099,856	879,885	806,561	1,246,503	739,103	1,481,139	1,466,475	1,833,093
Employee costs of \$1,000,000								
Payroll tax liability (actual)	11,000	13,625	21,825	0	19,800	0	0	0
Payroll tax liability (if neutral since 2005)	0	6,546	9,382	0	12,914	0	0	0
\$ difference (neutral vs actual)	+11,000	+7,079	+12,443	+0	+6,886	+0	+0	+0
% difference (neutral vs actual)	*	+108.1%	+132.6%	-	+53.3%	-	-	-
Employee costs of \$2,500,000								
Payroll tax liability (actual)	93,500	95,375	94,575	66,500	94,050	76,250	55,000	44,525
Payroll tax liability (if neutral since 2005)	77,008	88,296	82,132	59,541	87,164	62,150	56,844	45,683
\$ difference (neutral vs actual)	+16,492	+7,079	+12,443	+6,959	+6,886	+14,100	-1,844	-1,158
% difference (neutral vs actual)	+21.4%	+8.0%	+15.2%	+11.7%	+7.9%	+22.7%	-3.2%	-2.5%
Employee costs of \$5,000,000								
Payroll tax liability (actual)	231,000	231,625	215,825	185,250	217,800	228,750	192,500	215,775
Payroll tax liability (if neutral since 2005)	214,508	224,546	203,382	178,291	210,914	214,650	194,344	216,933
\$ difference (neutral vs actual)	+16,492	+7,079	+12,443	+6,959	+6,886	+14,100	-1,844	-1,158
% difference (actual vs neutral)	+7.7%	+3.2%	+6.1%	+3.9%	+3.3%	+6.6%	-0.9%	-0.5%

Note: 'Neutral' payroll tax thresholds are calculated by uprating the July 2005 threshold by AWOTE for each state and territory (see Appendix for full details).

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations

There has been some national debate around broadening the payroll tax base through reductions in the tax threshold combined with a reduction in the tax rate. To further understand the distributional aspects of such discussions, Table 10 compares payroll tax liabilities under the pre-July 2015 reform system for a business with \$2m in wage costs with those that would accrue for different combinations of payroll tax rates and thresholds. Table 11 does the same, but focuses on a larger business with a \$20m payroll.

These two tables make clear the fact that lower payroll tax thresholds (either through non-uprating or explicit reductions) have a greater proportionate impact on the payroll tax bills of smaller companies, with increased tax burdens possible even with a corresponding reduction in the payroll tax rate. To illustrate this point, we see that a reduction to \$600,000 from the current WA threshold combined with a reduction to 5.0per cent in the tax rate would *increase* the payroll tax cost by 6.1 per cent for a business with wage costs of \$2m (Table 10, third panel) at the same time as *decreasing* the payroll tax bill by 7.1 per cent for businesses with a \$20m payroll. Conversely, increasing the tax threshold to \$1,200,000 for a business with \$2m is shown to reduce its payroll tax liability by a third (Table 11).

**Table 10** Effect of changes in payroll rates and thresholds on payroll tax liability of small employer (relative to system pre-July 2015)

(a) employer payroll costs of \$2,000,000

Tax rate	Payroll tax threshold						
	\$600,000	\$700,000	\$800,000	\$900,000	\$1,000,000	\$1,100,000	\$1,200,000
	Payroll tax liability (\$)						
6.50%	91,000	84,500	78,000	71,500	65,000	58,500	52,000
6.25%	87,500	81,250	75,000	68,750	62,500	56,250	50,000
6.00%	84,000	78,000	72,000	66,000	60,000	54,000	48,000
5.75%	80,500	74,750	69,000	63,250	57,500	51,750	46,000
5.50%	77,000	71,500	66,000	60,500	55,000	49,500	44,000
5.25%	73,500	68,250	63,000	57,750	52,500	47,250	42,000
5.00%	70,000	65,000	60,000	55,000	50,000	45,000	40,000
4.75%	66,500	61,750	57,000	52,250	47,500	42,750	38,000
4.50%	63,000	58,500	54,000	49,500	45,000	40,500	36,000
	Payroll tax threshold						
	\$600,000	\$700,000	\$800,000	\$900,000	\$1,000,000	\$1,100,000	\$1,200,000
	Difference from pre-July 2015 (\$)						
6.50%	+25,000	+18,500	+12,000	+5,500	-1,000	-7,500	-14,000
6.25%	+21,500	+15,250	+9,000	+2,750	-3,500	-9,750	-16,000
6.00%	+18,000	+12,000	+6,000	-	-6,000	-12,000	-18,000
5.75%	+14,500	+8,750	+3,000	-2,750	-8,500	-14,250	-20,000
5.50%	+11,000	+5,500	-	-5,500	-11,000	-16,500	-22,000
5.25%	+7,500	+2,250	-3,000	-8,250	-13,500	-18,750	-24,000
5.00%	+4,000	-1,000	-6,000	-11,000	-16,000	-21,000	-26,000
4.75%	+500	-4,250	-9,000	-13,750	-18,500	-23,250	-28,000
4.50%	-3,000	-7,500	-12,000	-16,500	-21,000	-25,500	-30,000
	Payroll tax threshold						
	\$600,000	\$700,000	\$800,000	\$900,000	\$1,000,000	\$1,100,000	\$1,200,000
	Difference from pre-July 2015 (% of current liability)						
6.50%	+37.9%	+28.0%	+18.2%	+8.3%	-1.5%	-11.4%	-21.2%
6.25%	+32.6%	+23.1%	+13.6%	+4.2%	-5.3%	-14.8%	-24.2%
6.00%	+27.3%	+18.2%	+9.1%	+0.0%	-9.1%	-18.2%	-27.3%
5.75%	+22.0%	+13.3%	+4.5%	-4.2%	-12.9%	-21.6%	-30.3%
5.50%	+16.7%	+8.3%	-	-8.3%	-16.7%	-25.0%	-33.3%
5.25%	+11.4%	+3.4%	-4.5%	-12.5%	-20.5%	-28.4%	-36.4%
5.00%	+6.1%	-1.5%	-9.1%	-16.7%	-24.2%	-31.8%	-39.4%
4.75%	+0.8%	-6.4%	-13.6%	-20.8%	-28.0%	-35.2%	-42.4%
4.50%	-4.5%	-11.4%	-18.2%	-25.0%	-31.8%	-38.6%	-45.5%

Note: Changes in payroll tax liabilities are calculated relative to the WA payroll tax regime as at 1 July 2005 and 1 July 2015. Changes in payroll tax liabilities for different combinations of rates and thresholds are expressed in dollar terms and as a percentage of the payroll costs under the current system.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations

These two tables make clear the fact that lower payroll tax thresholds (either through non-uprating or explicit reductions) have a greater proportionate impact on the payroll tax bills of smaller companies, with increased tax burdens possible even with a corresponding reduction in the payroll tax rate. To illustrate this point, we see that a reduction to \$600,000 from in the current WA threshold combined with a reduction to 5.0% in the tax rate would increase the payroll tax cost by 6.1% for a business with wage costs of \$2m (Table 10, third panel) at the same time as decreasing the payroll tax bill by 7.1% for businesses with a \$10m payroll. Conversely, increasing the tax threshold to \$1,200,000 for a business with \$2m is shown to reduce its payroll tax liability by a third (Table 11).

**Table 11** Effect of changes in payroll rates and thresholds on payroll tax liability of larger employer (relative to system pre-July 2015)

(b) employer payroll costs of \$10,000,000

Tax rate	Payroll tax threshold						
	\$600,000	\$700,000	\$800,000	\$900,000	\$1,000,000	\$1,100,000	\$1,200,000
	Payroll tax liability (\$)						
6.50%	611,000	604,500	598,000	591,500	585,000	578,500	572,000
6.25%	587,500	581,250	575,000	568,750	562,500	556,250	550,000
6.00%	564,000	558,000	552,000	546,000	540,000	534,000	528,000
5.75%	540,500	534,750	529,000	523,250	517,500	511,750	506,000
5.50%	517,000	511,500	506,000	500,500	495,000	489,500	484,000
5.25%	493,500	488,250	483,000	477,750	472,500	467,250	462,000
5.00%	470,000	465,000	460,000	455,000	450,000	445,000	440,000
4.75%	446,500	441,750	437,000	432,250	427,500	422,750	418,000
4.50%	423,000	418,500	414,000	409,500	405,000	400,500	396,000
Tax rate	Payroll tax threshold						
	\$600,000	\$700,000	\$800,000	\$900,000	\$1,000,000	\$1,100,000	\$1,200,000
	Difference from pre-July 2015 (\$)						
6.50%	+105,000	+98,500	+92,000	+85,500	+79,000	+72,500	+66,000
6.25%	+81,500	+75,250	+69,000	+62,750	+56,500	+50,250	+44,000
6.00%	+58,000	+52,000	+46,000	+40,000	+34,000	+28,000	+22,000
5.75%	+34,500	+28,750	+23,000	+17,250	+11,500	+5,750	-
5.50%	+11,000	+5,500	-	-5,500	-11,000	-16,500	-22,000
5.25%	-12,500	-17,750	-23,000	-28,250	-33,500	-38,750	-44,000
5.00%	-36,000	-41,000	-46,000	-51,000	-56,000	-61,000	-66,000
4.75%	-59,500	-64,250	-69,000	-73,750	-78,500	-83,250	-88,000
4.50%	-83,000	-87,500	-92,000	-96,500	-101,000	-105,500	-110,000
Tax rate	Payroll tax threshold						
	\$600,000	\$700,000	\$800,000	\$900,000	\$1,000,000	\$1,100,000	\$1,200,000
	Difference from pre-July 2015 (% of current liability)						
6.50%	+20.8%	+19.5%	+18.2%	+16.9%	+15.6%	+14.3%	+13.0%
6.25%	+16.1%	+14.9%	+13.6%	+12.4%	+11.2%	+9.9%	+8.7%
6.00%	+11.5%	+10.3%	+9.1%	+7.9%	+6.7%	+5.5%	+4.3%
5.75%	+6.8%	+5.7%	+4.5%	+3.4%	+2.3%	+1.1%	-
5.50%	+2.2%	+1.1%	-	-1.1%	-2.2%	-3.3%	-4.3%
5.25%	-2.5%	-3.5%	-4.5%	-5.6%	-6.6%	-7.7%	-8.7%
5.00%	-7.1%	-8.1%	-9.1%	-10.1%	-11.1%	-12.1%	-13.0%
4.75%	-11.8%	-12.7%	-13.6%	-14.6%	-15.5%	-16.5%	-17.4%
4.50%	-16.4%	-17.3%	-18.2%	-19.1%	-20.0%	-20.8%	-21.7%

Note: Changes in payroll tax liabilities are calculated relative to the WA payroll tax regime as at 1 July 2005 and 1 July 2015. Changes in payroll tax liabilities for different combinations of rates and thresholds are expressed in dollar terms and as a percentage of the payroll costs under the current system.

Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations





# Capital

## Introduction

Generally, costs associated with capital depreciation and capital acquisition (including interest expenses) are around 20% of total expenditure among businesses, as shown in Figure 8 of the WA Business Profile section. However, a large degree of variation exists throughout industries, with capital expenditure for the mining, electricity, gas and water and financial and insurance services relatively more dominant than in other industries (see Figure 9).

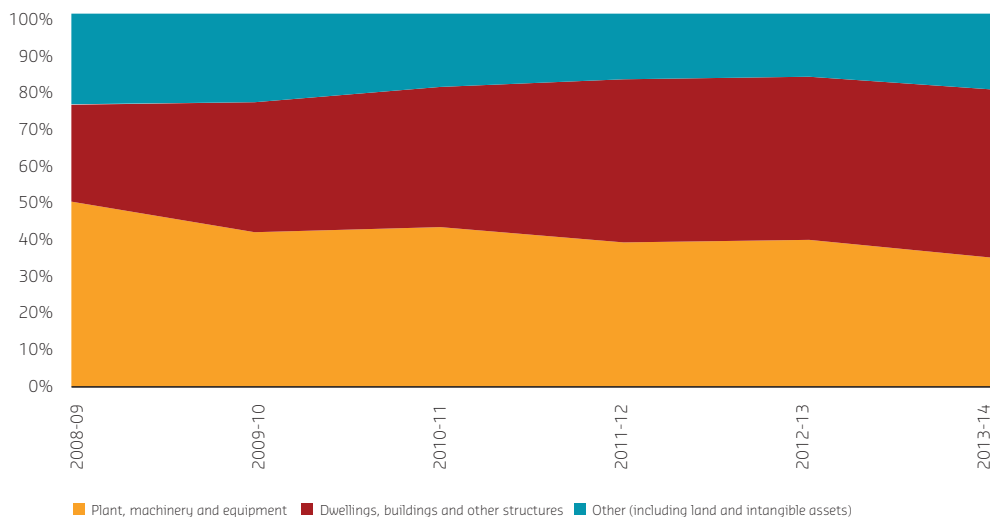
The ability to access and raise capital can be a key element of business operations and success, allowing a business to build and grow. Assessing differences in capital formation and access for WA is challenging, with few data sources to rely upon. Access to capital can be inhibited by a number of factors including red tape and regulations, the financial climate and a lack of information and awareness by those seeking it.

In this section we examine capital expenditure components and capital growth for WA's most dominant industry – mining. We also look at firms reported barriers to accessing finance and generating consistent working capital.

## Capital components and growth

Capital expenditure components among Australian businesses has been changing over the last five years Figure 8. Plant, machinery and equipment constituted around 50 per cent of capital expenditure in 2008-09, this has since fallen to 35 per cent of expenditure (Figure 19). The resource sector moving from a capital-intensive construction phase to a period of production, along with the global financial crisis is likely to be driving these changes. Growth in capital expenditure on dwellings, building and other structures as a proportion of all capital expenditure has been widening across the period, increasing from 26 to 44 per cent. Other capital expenditure including land and intangible assets has declined in the period.

**Figure 19** Capital expenditure components, all industries, 2008-09 to 2013-14

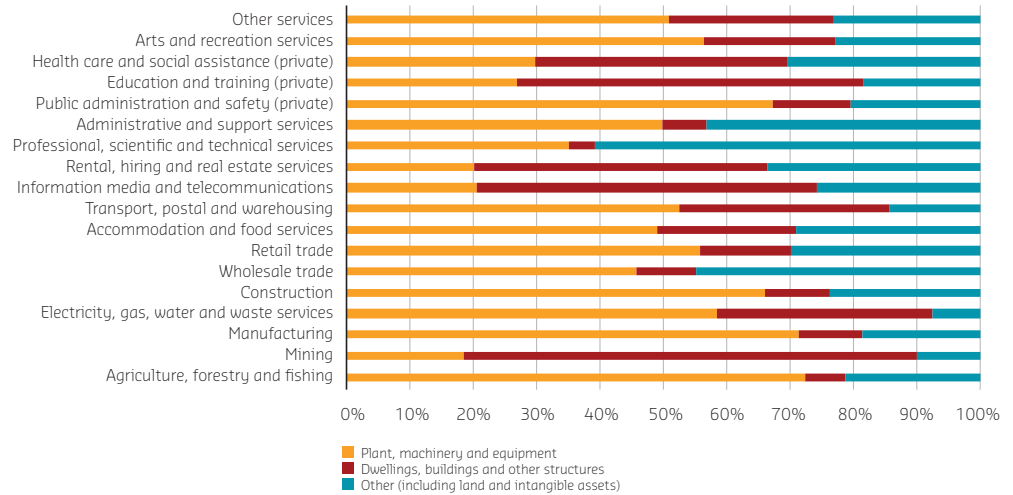


Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no.8155.001, Australian Industry 2013-14.

Capital expenditure components among industries can vary considerably (Figure 20). Manufacturing, public administration and safety, construction and agriculture, forestry and fishing have a high proportion of overall capital expenditure on plant machinery and equipment – more than 60 per cent of capital expenditure. In 2013-14, the states most dominant industry – mining had the highest proportion of capital expenditure allocated to dwellings, buildings and other structures – around 70 per cent of all capital spend. Not surprisingly, professional, scientific and technical services have the highest proportion of capital expenditure on other components, which are likely to constitute intellectual property, patents, copyrights and innovation developments.

Fixed capital formation in the mining sector has increased by almost 700 per cent, between 2005 and 2013.

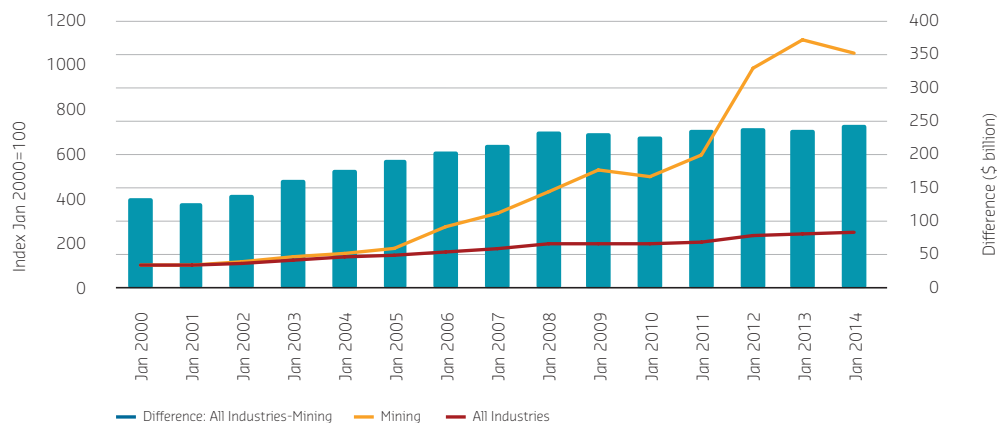
**Figure 20 Capital expenditure components, by industry, 2013-14**



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no.8155.001, Australian Industry 2013-14

Over the last fifteen years, fixed capital formation has been increasing considerably for Western Australia's most prominent industry – mining. Compared to all other industries, which have remained relatively flat, fixed capital formation in the mining sector increased by almost 700 per cent between 2005 and 2013 (Figure 21). There was a dip in capital formation during the GFC, but the industry returned to capital growth soon after. In the more recent period between 2013 and 2014, fixed capital formation has dropped off in the mining sector. While, mining has had an increasing trend since 2003, professional, scientific and technical services industry have shown the opposite pattern, decreasing and remaining below the trend of all industries. With relatively better progress, construction, another important industry in the state, has moved along with national figures in terms of gross capital formation [Graphs not shown].

**Figure 21 Private fixed Capital formation by industry, current prices, 2000 - 2014**



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no.5204.0, Private Gross Fixed Capital Formation, by Industry.

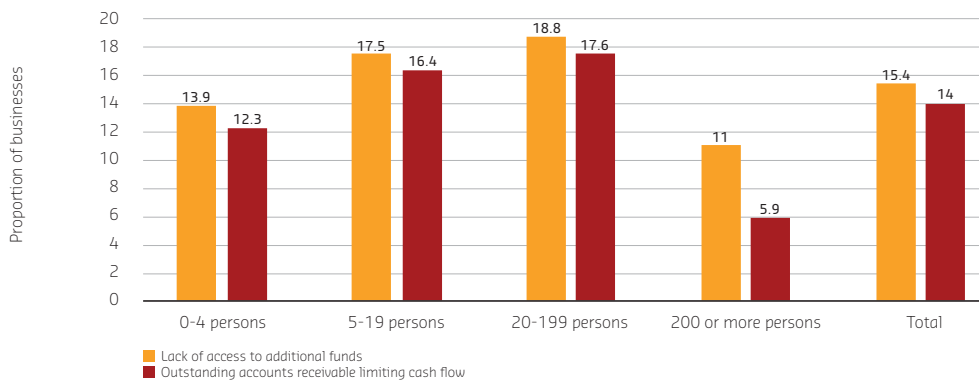
## Barriers to Finance and Working Capital

Barriers to finance and inadequate working capital can restrict business growth and prosperity. Small to medium enterprises can often face considerable challenges in accessing capital and since the GFC this has increased as creditors and regulators tightened conditions.

Small to medium enterprises are more likely to report lack of access to funds and inadequate working capital (outstanding accounts receivable) as a significant barrier to business activity than large businesses (Figure 22).

Businesses with 20-199 persons had the highest rates of reporting lack of access to additional funds and working capital as a barrier to performance – 18.8 per cent and 17.6 per cent respectively. Large entities with more than 200 persons were less likely to report these problems – 11 per cent report access to additional funds as a significant barrier, and around 6 per cent working capital as a barrier.

**Figure 22** Financial barriers to business activities by employment size, 2012-13



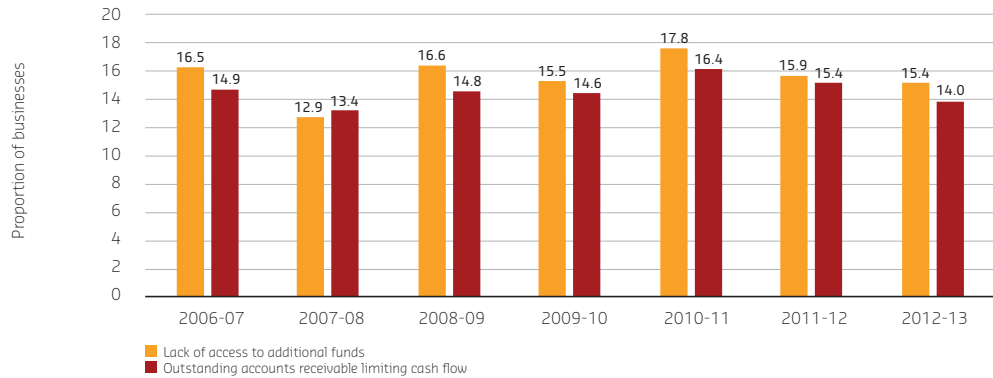
**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.

Between 2007-08 and 2010-11, businesses have increased their reports of lack of access to additional funds and working capital as a significant barrier to business performance and activities. In the last two periods, this has decreased somewhat, with around 15 per cent of businesses reporting access to funds as a barrier and 14 per cent reporting working capital as a problem.

Almost 1 in 4 businesses in the mining and retail sector report lack of access to funds as a significant barrier to business performance.

**Figure 23** Financial barriers to business activities, 2006-07 to 2012-13

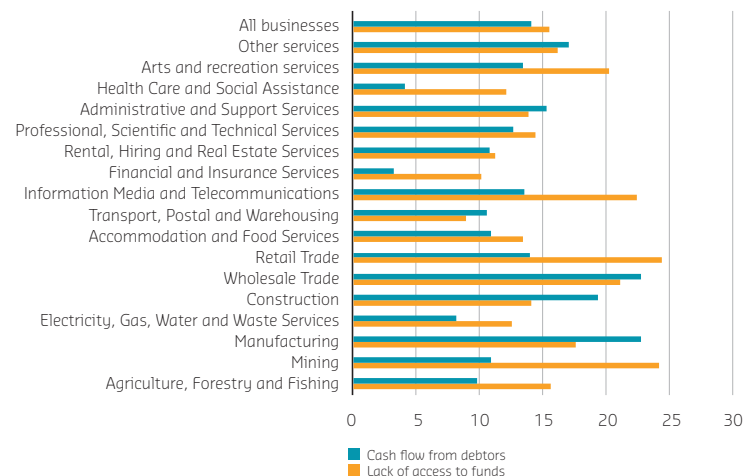


**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.

Again, variation by industry is evident. Most industries have higher rates of businesses reporting lack of access to funds as a substantial barrier to business activities and performance (Figure 24). The mining and retail sector has the highest rate of businesses reporting lack of access to funds as a significant barrier to performance, with around 1 in 4 businesses citing this as an issue in 2012-13. This is closely followed by entities operating in the information media and telecommunications sector – 22 per cent, arts and recreation – 20 per cent and manufacturing – 17 per cent.

Not surprisingly, businesses in the construction sector have one of the highest reports of issues with working capital inhibiting business performance. Around 1 in 5 businesses operating in the construction sector report this as a significant barrier. Businesses operating in the wholesale trade sector and manufacturing sector have the highest rates of reports of outstanding accounts receivable limiting cash flow – 22.6 per cent.

**Figure 24** Financial barriers to business activities by industry, 2012-13



**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.

# Utilities

occupancy and housing

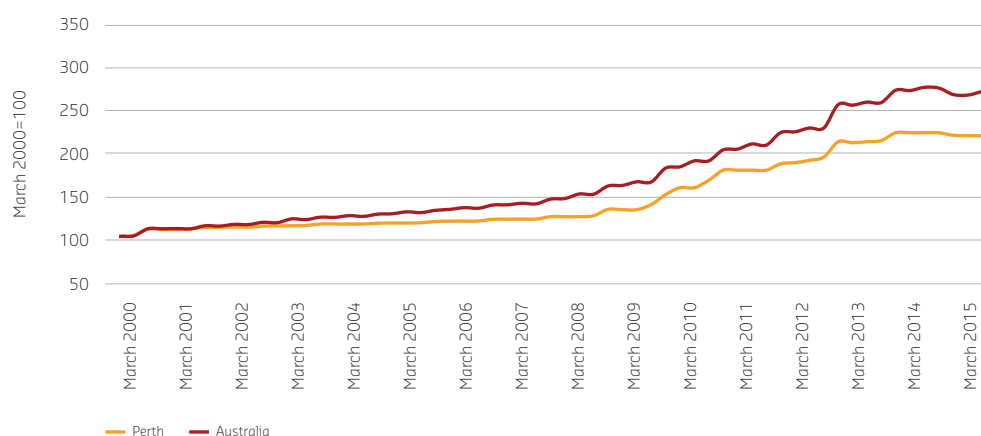
# Utilities

Perth utility prices have remained consistently below the national average over the last decade.

Utilities including electricity, gas and water can be a significant input to business operations, particularly those in the manufacturing, construction and mining sectors. Most of these markets have and continue to be highly regulated due to the nature of the product and are subject to numerous reviews and inquiries. While it is beyond the scope to explore in-depth each market separately, a high level analysis of price movements in WA and compared to other states and territories is offered. The majority of the analysis stems from household price movements, which generally align with business prices, however, there can be divergences between the two sectors.

Compared to national inflation levels for all utilities (electricity, gas, water and sewage and other household fuels), Perth utility prices have remained consistently below the national average, with a widening between the two series observed from 2003 onwards (Figure 25).

**Figure 25** Comparison of Perth adjusted Utilities CPI to Australia



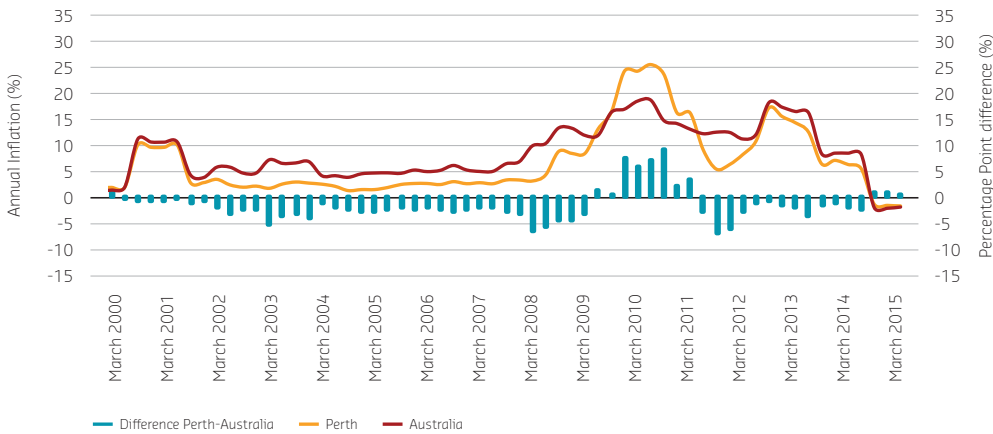
**Note:** CPI has been adjusted to an index reference period of March quarter 2000 = 100 - All Utilities include Electricity, Water and sewage, Gas and other household fuels.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

Annual percentage changes in utility prices have remained smaller in Perth than Australia up until June 2009 (Figure 26). As shown, since then the price of utilities grew at a faster rate in Perth than Australia for two years until June 2011. During this time, annual utility prices in Perth increased by around 20 per cent. From 2012 until the latest period in March 2015, inflation movements in utilities have become more consistent with the national averages.



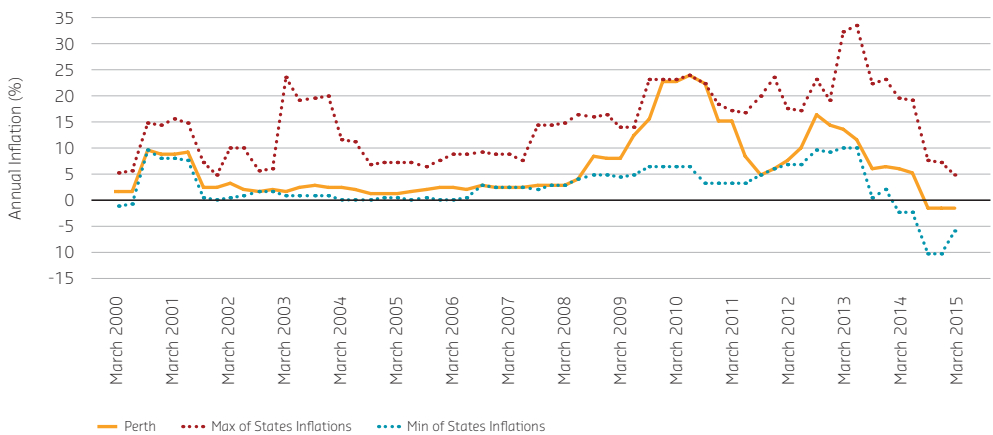
**Figure 26 Comparison of Perth Annual Inflation of Utilities to Australia**



**Note:** Rates presented above calculated on quarterly CPI of all Utilities – All Utilities include Electricity, Water and sewage, Gas and other household fuels.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

Among state and territory capitals, Perth had the lowest growth in utility prices between 2000 and 2008, aligning with the minimum inflation values of all state and territories (Figure 27). From 2009 onwards inflation increased substantially, reaching the maximum rate among all states and territories, but this has since decreased. While not returning to the minimum state value inflationary movements, utility price changes remain lower than the maximum state capital value.

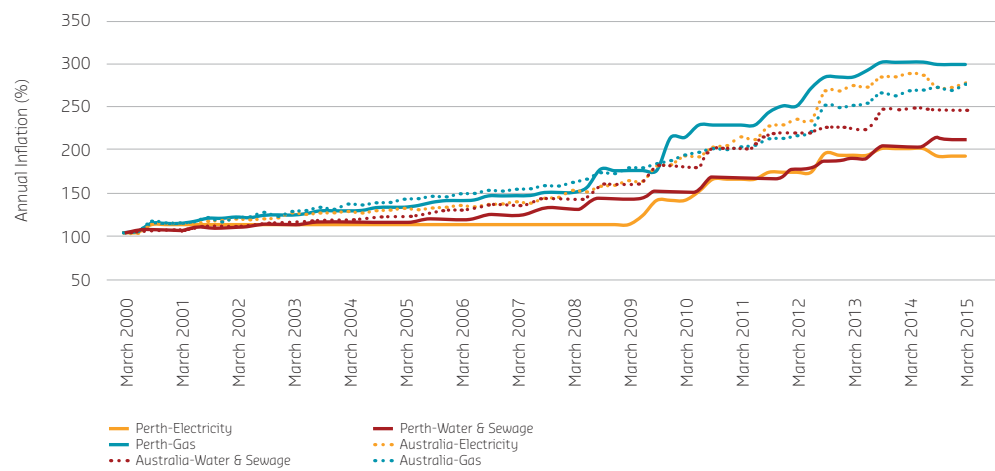
**Figure 27 Comparison of Perth Annual Inflation of Utilities to other states inflation**



**Note:** Rates presented above calculated on quarterly CPI of all Utilities – All Utilities include Electricity, Water and sewage, Gas and other household fuels.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

Are all the Perth utilities cheaper than Australia? A disaggregation of utilities by the major sub groups illustrates that both electricity and water have been consistently lower than national prices, with the gap widening since 2009 (Figure 28). This is despite inflation in utilities being the highest in Perth during this period. Gas, however, is much more expensive in Perth compared to Australia, with prices increasing at a faster rate since 2009/10.

**Figure 28 Comparison of Perth adjusted Utilities CPI to Australia**



**Note:** CPI of Utilities is adjusted relative to Utility CPI of March 2000.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

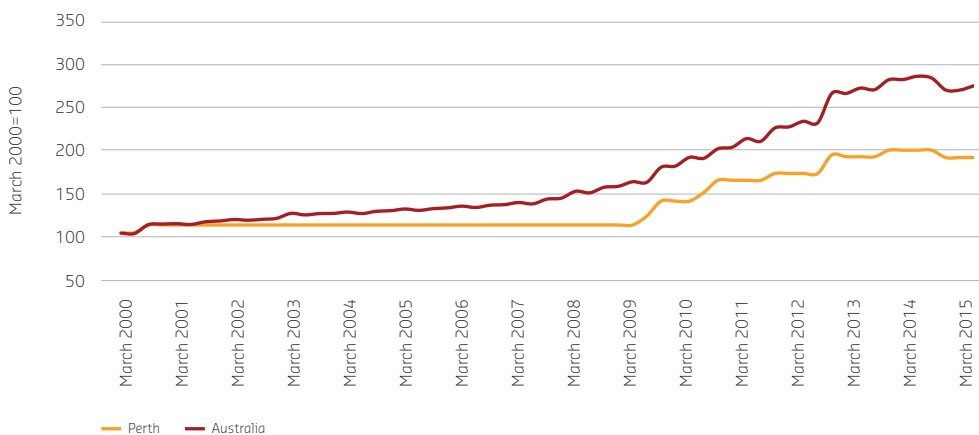
# Electricity

The WA electricity market has been the subject of numerous inquiries and has been on the government's reform agenda for a number of years. The most significant reform was the vertical disaggregation of the state governments supply company – Western Power into four separate state-owned entities in 2006. These included Verve Energy, Western Power, Synergy and Horizon Power. Prior to 1997/98 electricity prices in Western Australia had not seen any price increases for almost a decade. The 2006 reforms saw electricity prices increase significantly, particularly in the South West of the state.

Electricity continues to be high on the government's reform agenda, with a review into the market launched in 2014, initiated by the high subsidies that the state was paying (\$500m per year), and the fact that electricity prices almost doubled between 2008 and 2014 (Figure 29). Prices for Australia have also increased considerably during this time, but at a slightly slower rate – 78 per cent. Between 2014 and 2015, electricity prices in WA have come off slightly, decreasing by 4 per cent.

The price of electricity in Perth has increased by 82 per cent between 2008 and 2014.

**Figure 29** Comparison of Perth adjusted Electricity CPI to Australia



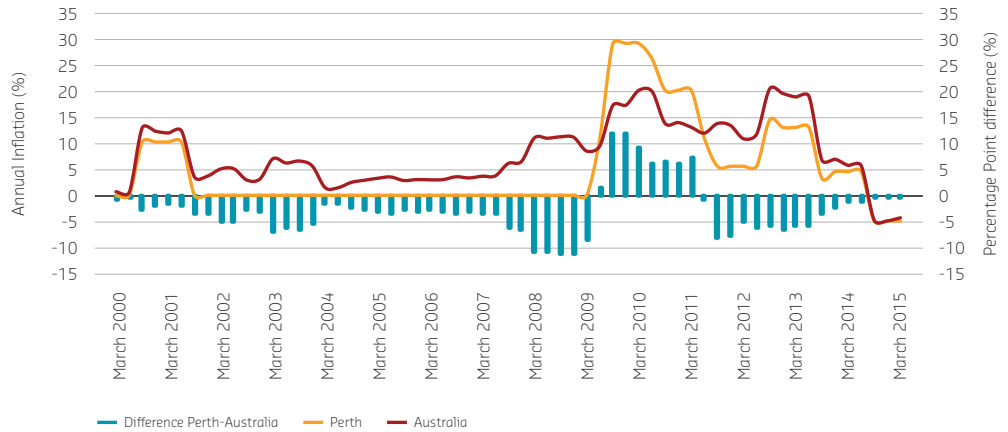
Note: CPI has been adjusted to an index reference period of March quarter 2000 = 100.

Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

The static electricity prices in WA prior to the reforms is evident during the 2000s, with zero change between 2001 and 2009 (Figure 30). Between 2009 and 2010, prices increased dramatically – by 26 per cent, whereas nationally it increased by only 15 per cent. The biggest price difference between Perth and the rest of Australia was between 2008 and 2009, where Perth recorded inflation 11 percentage points higher than the national average. Since 2012, electricity price inflation in Perth has been among the lowest across state capitals.

Electricity tariffs for medium size businesses increased by 29% between 2011 and 2012.

**Figure 30 Comparison of Perth Annual Inflation of Electricity prices to Australia**

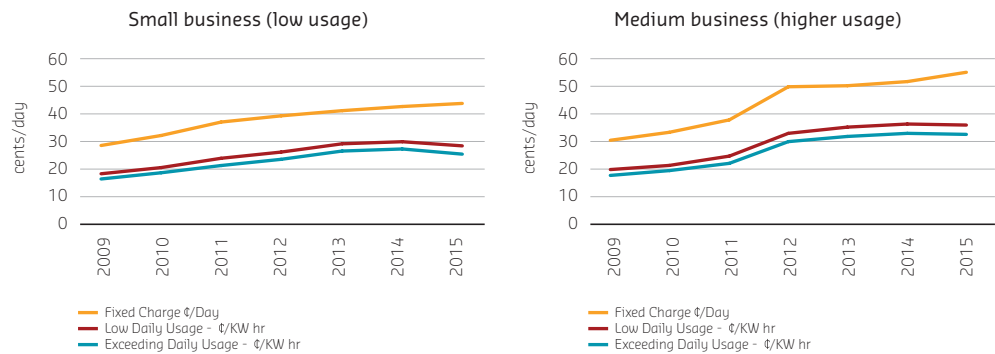


Note: Rates presented above calculated on quarterly Electricity CPI.  
Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

## Business tariffs

A comparison of business electricity tariffs over time is shown in Figure 31 for small and medium businesses using metropolitan prices obtained from the By-laws. A similar pattern to residential electricity prices is observed for WA businesses across the 2009-2015 period. A general increase in business electricity tariffs is observed, particularly for medium size businesses using more than 50 megawatt hours per annum. These businesses have seen tariffs increase considerably between 2011 and 2012, with the fixed daily charge increasing by 11 cents from 38 to 49 cents per day. Since 2012, prices have risen more steadily. Small businesses (those using less than 50 megawatts per annum) have also seen an increase in prices - a 50 per cent increase between 2009 and 2015 - from 28 to 42 cents nationally. for using cent nationally.

**Figure 31 Changes in Electricity Tariffs, 2009-2015**



Note: As in WA Department of Finance website (<http://www.finance.wa.gov.au/>) L2 tariff represents small businesses and L4 represents small/medium businesses. L2 tariff is applicable for consumers getting less than 50 megawatt hours per annum and L4 tariff is applicable for consumers getting 50 megawatt hours or more per annum. L2, L4 tariffs are applicable to regional WA. Low Daily usage represent first 1650 Kw/hr Usage.  
Source: BANKWEST CURTIN ECONOMICS CENTRE | Government of Western Australia - Department of Premier - Acts and Subsidiary legislation.

# Gas

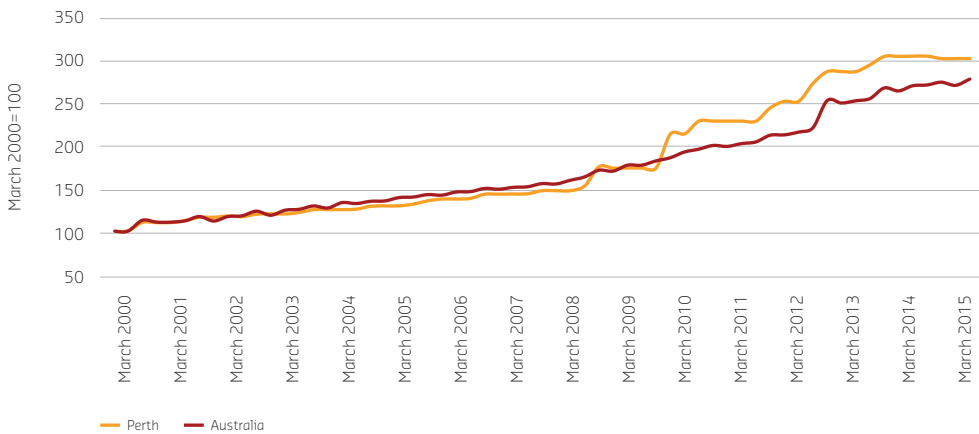
In WA gas prices jumped above national prices since 2009. The higher cost paid for providing gas are likely to change the cost structure of businesses that are heavily reliant on this input and place additional pressures on business costs. Gas prices and the balance between supply and demand have been a topic of policy attention both in WA and throughout the Australia. The recent Inquiry into Microeconomic Reform has focussed on gas supply as a key policy area for microeconomic reform (ERA 2014).

In 2006, to maintain economic growth in long term and provide residents of WA with a secure and affordable energy source, the WA state government announced and adopted a reservation policy, later known as the domestic gas reservation policy or DGR policy. The DGR policy provides for a 15 per cent reserve of the LNG production from each export for the domestic market to ensure consistent supply. While there are suggestions of abandoning this policy, with the rationale that there are more costs than benefits, the issues remains the subject of much debate.

The consumer price of gas in Perth was almost equal to Australia prior to 2008. The increase in the price of gas - known as 2008 WA gas crisis was triggered by a major shortage in the supply of gas due to the Apache Energy plant explosion on 3rd June 2008. This resulted in a sudden loss of almost 35 per cent of the state's gas supply. The increase in the price of gas for Perth consumers is evident during this period, with supply shortages shifting the price of gas by 19 per cent between March and September 2008 (Figure 32).

Since 2008 gas prices have increased considerably and continue to be above national levels.

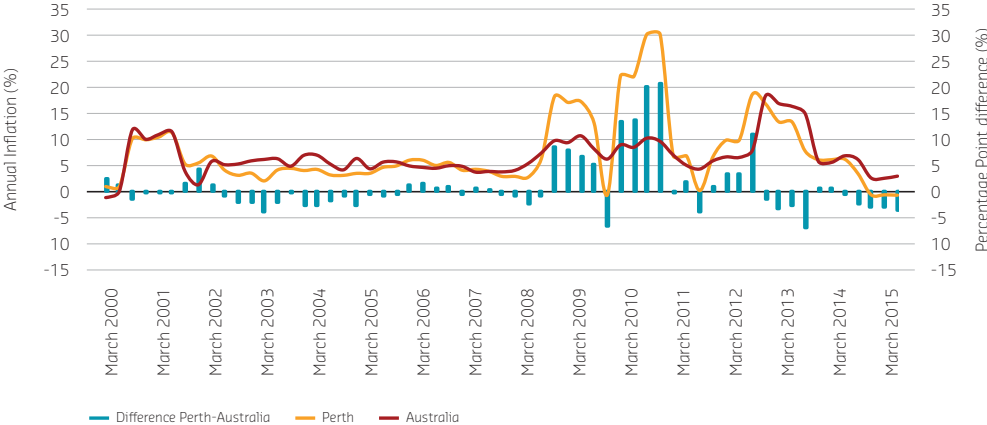
**Figure 32** Comparison of Perth adjusted Gas CPI to Australia



**Note:** CPI has been adjusted to an index reference period of March quarter 2000 = 100.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

Between 2008 and 2012, gas price movements have been volatile, dipping between 2008 and 2009, followed by a sharp increase of 30 per cent between 2009 and 2010, and further decreases and rises. From 2011/12, Perth price movements have largely followed the national pattern.

**Figure 33 Comparison of Perth Annual Inflation of Gas prices to Australia**

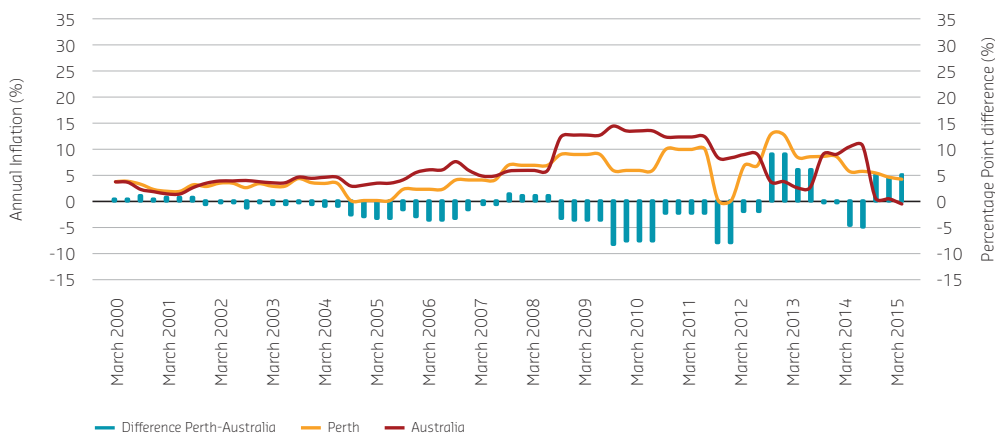


**Note:** Rates presented above calculated on quarterly Gas CPI.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE| ABS Cat No. 6401.0 Consumer Price Index, Table 11.

## Water and Sewage

Price movements have consistently remained lower than national movements, with the exception of the 2012-13 period and recent figures (Figure 34). Between 2008 and 2012, water and sewage prices have increased at a faster rate in Perth compared to all state capitals. Perth water and sewage prices increased by 13 per cent between 2011 and 2012, whereas nationally they increased by only 4 per cent.

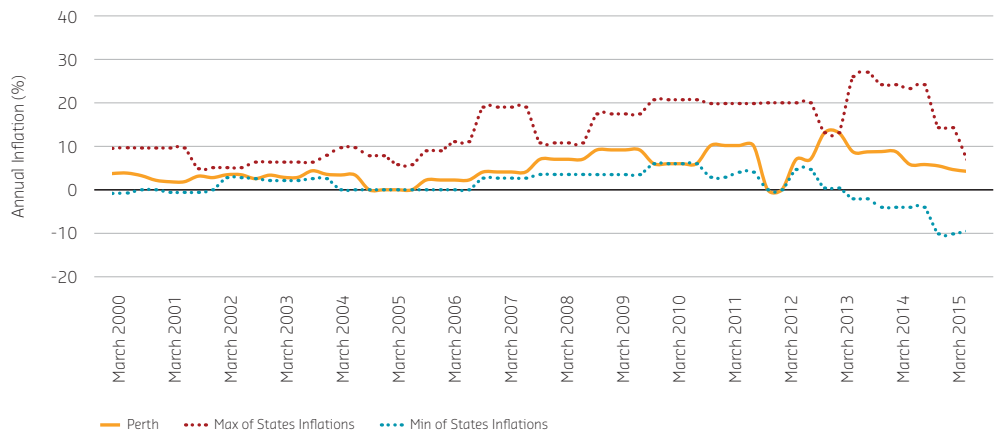
**Figure 34** Comparison of Perth Annual Inflation of Water & Sewage prices to Australia



**Note:** Rates presented above calculated on quarterly Water & Sewage CPI.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

Compared to other utilities, water prices in Perth are among the countries lowest (Figure 35). Inflation in Perth water prices is among the lowest in the nation. Throughout the 2000s, water and sewage price inflation has been the minimum among state and territory capitals and currently remains well below the maximum state capital inflation level.

**Figure 35** Comparison of Perth Annual Inflation of Water & Sewage to other states inflation



**Note:** Rates presented above calculated on quarterly Water & Sewage CPI.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 6401.0 Consumer Price Index, Table 11.

# Occupancy and Housing

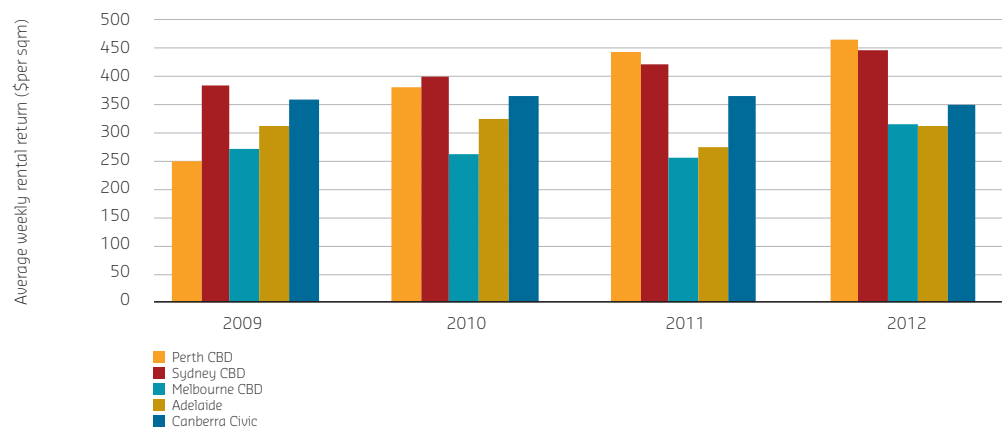
## Occupancy

Commercial rents for office and retail spaces, workshops and other places of business operations can be a substantial cost component for many businesses, particularly those operating in the retail industry. The recent review into the cost of business in the retail sector highlights the significant costs associated with occupancy for those involved in retail and recent increases in costs per square metre of shop space and that rents as a proportion of revenue are generally higher in Australia compared to the United States and United Kingdom (Productivity Commission 2014).

Figure 36 shows estimates of the average benchmark weekly rental price of office space in the Central Business Districts of five state capitals between 2009 and 2012 – Perth, Sydney, Melbourne, Adelaide and Canberra. Average rental returns for Perth CBD office space has almost doubled in the four years to 2012, increasing from \$250 to \$470 per week. Perth CBD office space rents were the highest among the five capitals in 2011 and 2012.

All other capitals have seen very little change in the four years. Sydney began with higher average weekly rents and has only seen slight increases over the same period – from \$387 to \$452. Canberra has seen little change over the period, with rents shifting only slightly and coming off between 2011 and 2012. Adelaide has also seen relatively little change over the period.

**Figure 36** Average Benchmark weekly rental return for office space in Central Business Districts, 2009-2012



**Note:** Values represent weekly rental costs for offices less than 9000 square metres, except Sydney CBD and Canberra Civic which average price for offices less than 4500 and 4500 to 9000 square metres are reported.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from Property Council of Australia Benchmarks Survey of Operating Costs reports.



## Housing

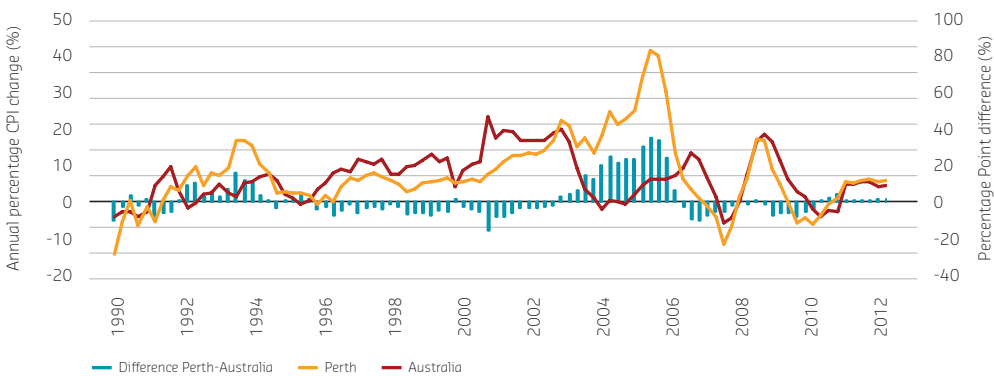
As highlighted in the Pilbara Cost of Doing Business report (RDA 2013), housing can be a considerable factor when attracting skilled workers to an area. It can also play a role in remuneration packages, inflating wages and increasing business costs.

In recent times the resources boom has heavily influenced housing cost shares in regional Western Australia, with the median burden of mortgage costs increasing from 19% in 2003-04 to 25% in 2011-12, an increase of almost six percentage points (Cassells et al 2014c).

Median mortgage costs have also increased in Perth. In 2003-04, the median mortgage costs as a proportion of household disposable income were 23% for Perth home owners, this has increased slightly to 26% in 2011-12.

Housing prices have increased in WA at a rate consistently above the national average for an extended period from 2003-04 (Figure 37). The rate of change in established house prices in Perth was especially high over the boom period with annual percentage changes well in excess of 20 per cent not uncommon.

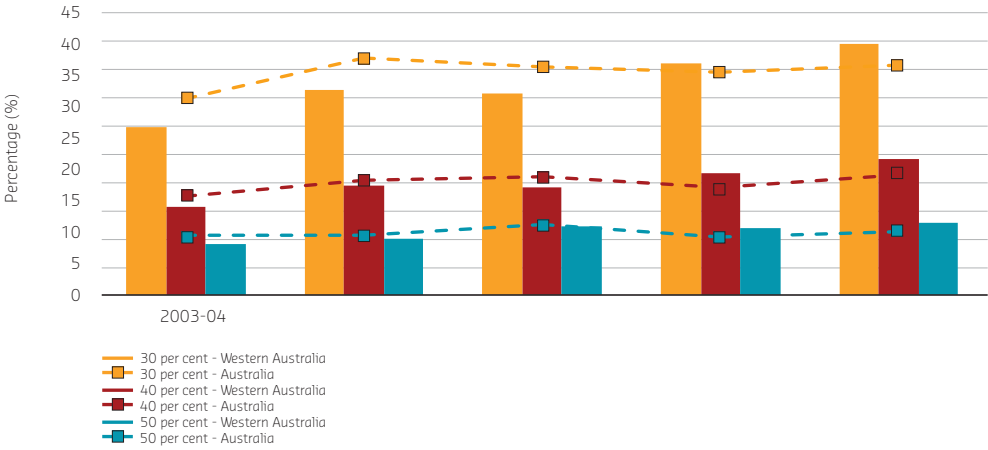
**Figure 37** Percentage change in established house price for Perth and Australia 1990-2013



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

In 2003-04 only one in four WA households were paying more than 30 per cent towards housing costs, compared to over 30 per cent of households in the rest of Australia. By 2011-12, almost 40 per cent of all owner-occupier households were devoting over 30 per cent of their incomes towards mortgage repayments (Figure 38). In addition, the proportion of households paying more than 40 per cent in disposable income has also been increasing for WA, from 14 per cent in 2003-04 to 22 per cent in 2011-12.

**Figure 38 Mortgage cost shares for WA and Australia 2003-04 to 2011-12**



Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Survey of Income and Housing, 2003-04 to 2011-12.

# Transport

# Transport

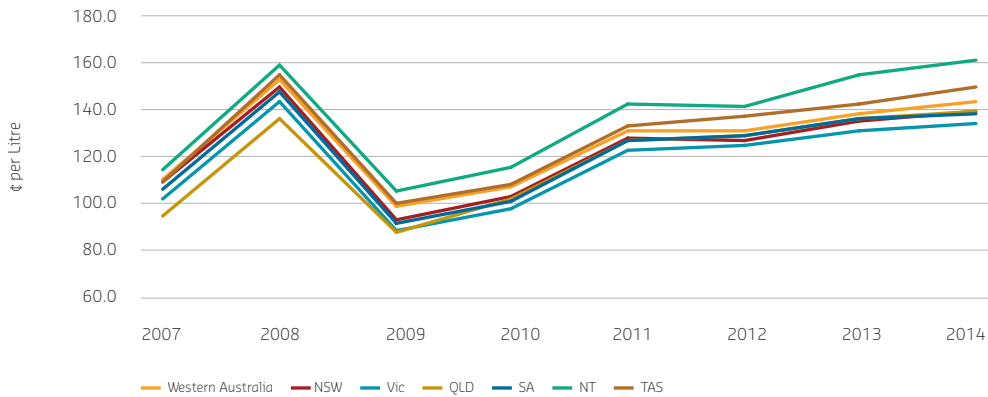
WA has the third highest diesel fuel price across all states and territories.

Transportation is a key component of many business operations. It provides a means of transferring goods and workers to and from businesses and markets. Some industries and entities will rely more heavily on transportation to conduct their business, with cost pressures in this area impacting on business operations and performance more than it may for other businesses. Whatever the business structure it is unlikely that transport costs do not play some sort of role in the overall business cost structure and business performance. The efficiency of transport is largely dominated by two key components – available infrastructure and fuel prices. The latter – fuel prices, can influence a number of business activities, including freight costs and worker productivity.

Australia wide there were 13.9 million petrol powered vehicles registered in 2014 accounting for 78.8% of the total vehicle fleet (ABS 2014). In comparison there were 3.3 million diesel powered vehicles accounting for 18.5% of the fleet. Over the five year period from 2009, the number of Passenger vehicles and Light Commercial vehicles registered with diesel fuel increased by 103.6% and 65.4% respectively.

Figure 39 shows the change in diesel pump prices across states and territories from 2007 to 2014. As expected Australian states and territories have tracked closely together over the last seven years. Queensland and Victoria have generally experienced lower diesel prices per litre at the pump than other states and territories, usually around 10 cents or more less than the highest price per litre which has consistently been in the Northern Territory. Diesel prices increased rapidly between 2007 and 2008 among all states and territories, at a time when the economy was booming, but fell quickly in the following period. Prices have been increase since 2009, but have flattened in more recent periods. Western Australia has remained consistently the state with the third highest diesel price per litre across the period – second only to the Northern Territory and Tasmania.

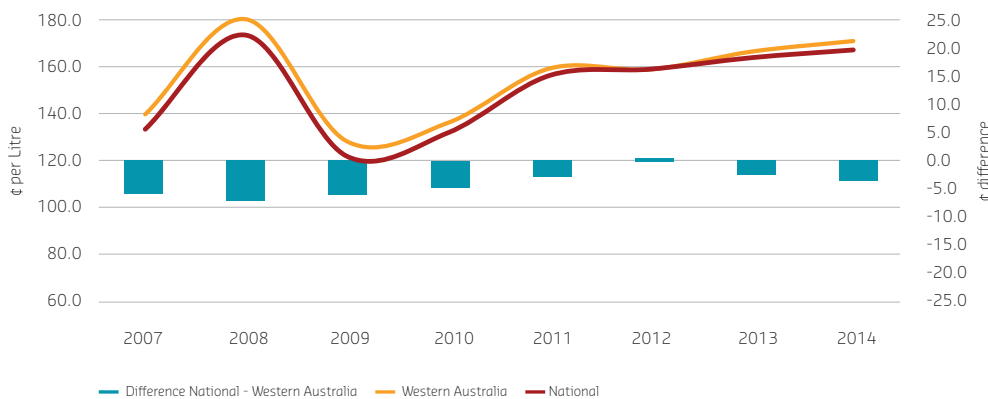
**Figure 39 Diesel Prices across state and territories, 2007 - 2014**



**Note:** Data accessed from Australian Institute of Petroleum however, the information has been prepared by ORIMA Research Pty Ltd for the Australian Institute of Petroleum.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Australian Institute of Petroleum.

From 2007 to 2014, diesel prices in WA have consistently followed and remained above the national average (Figure 40). The difference between the two prices has gradually disappeared, especially as the economy began to slow, however the gap has begun to widen again in the most recent period. The greatest difference between diesel prices in the West and nationally was observed in 2008, where the average price of diesel per litre was \$1.70 in WA, compared to \$1.62 nationally.

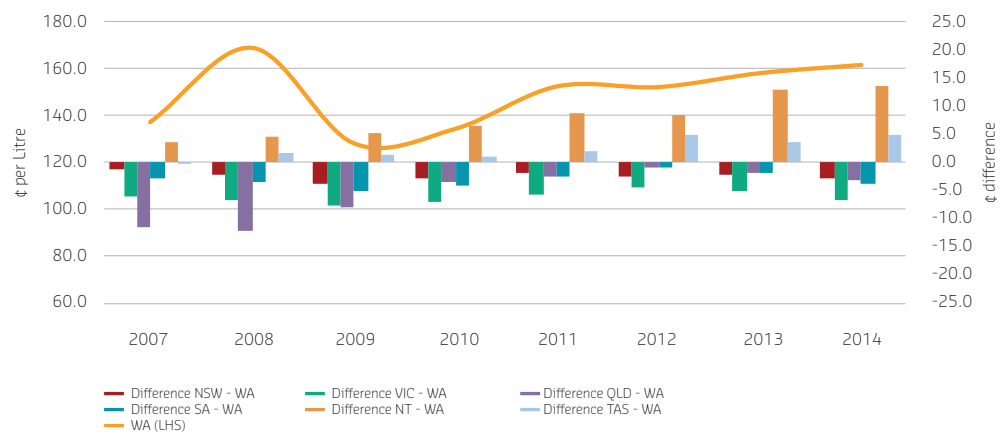
**Figure 40 Comparison of Diesel Prices, Western Australia and Australia, 2007 to 2014**



**Note:** Data accessed from Australian Institute of Petroleum however, the data prepared by ORIMA Research Pty Ltd for the Australian Institute of Petroleum.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Australian Institute of Petroleum.

Differences between average diesel prices in WA and other states and territories over time is visualised in Figure 41 below. The biggest differences are between Northern Territory and Perth, with NT relatively more expensive and increasingly so. This is an interesting finding, given that the NT is also a relatively isolated area. Prior to the GFC, the biggest gap between in diesel prices (with WA less expensive) was between Western Australia and Queensland.

**Figure 41 Comparison of Diesel Prices in WA to other states and territories, 2007 - 2014**

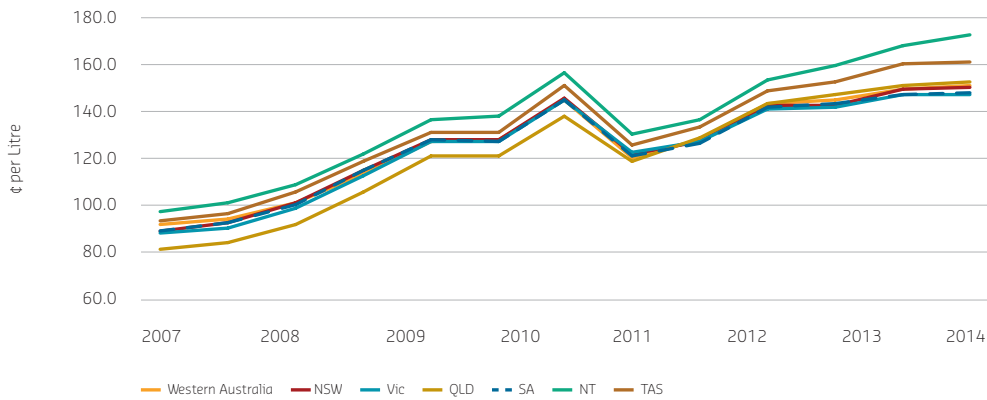


**Note:** Data accessed from Australian Institute of Petroleum however, the data prepared by ORIMA Research Pty Ltd for the Australian Institute of Petroleum.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Australian Institute of Petroleum.

A similar pattern to diesel prices is observed for unleaded fuel prices over time, noting that a longer time series is available (Figure 42). Prices peaked in 2008 across all states and territories before dropping at the peak of the Global Financial Crisis. The Northern Territory and Tasmania remain the regions with the highest price of unleaded fuel per litre, with prices in the Northern Territory increasing considerably above the rest of the states in the last period. Queensland prices have been one of the lowest in fuel prices over time, but other states and territories have dropped to similar levels since the GFC. Western Australia has mostly been mid-range among all states and territories, following closely South Australia, Victoria and NSW.

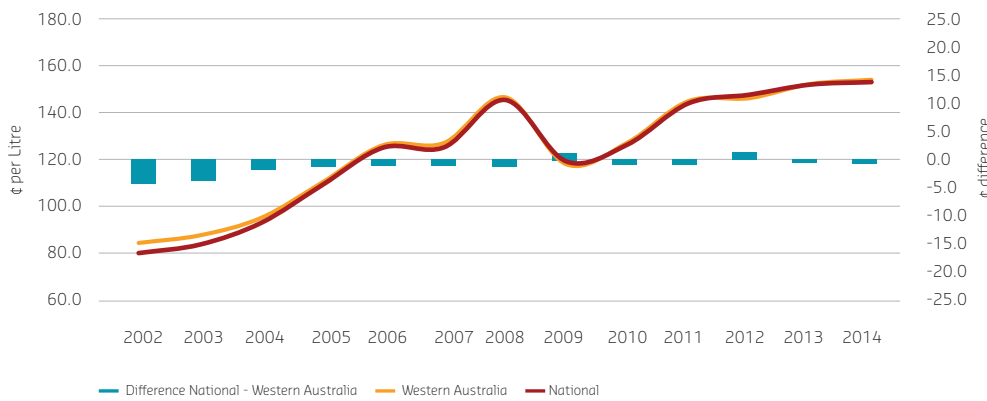
The alignment between WA and other states and territories in unleaded prices over time is illustrated clearly in Figure 43. In the early 2000s WA was more expensive at the pump, but by 2005 unleaded prices per litre were very similar to national prices. The increase since in prices since the GFC is evident.

**Figure 42 Unleaded fuel Prices across states and territories, 2002 - 2014**



**Note:** Data accessed from Australian Institute of Petroleum however, the information has been prepared by ORIMA Research Pty Ltd for the Australian Institute of Petroleum.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Australian Institute of Petroleum.

**Figure 43 Comparison of Unleaded Prices, WA and Australia, 2002 - 2014**



**Note:** Data accessed from Australian Institute of Petroleum however, the information has been prepared by ORIMA Research Pty Ltd for the Australian Institute of Petroleum.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Australian Institute of Petroleum.

In 2014, the Northern Territory was 21 cents more expensive per litre of unleaded fuel than WA.

Differences between average unleaded prices in WA and other states and territories over time are shown in Figure 44. Compared to other states and territories, the Northern Territory and Tasmania again have higher prices per litre in unleaded petrol, with this difference increasing in the last five years. In 2014, the Northern Territory was 21 cents more expensive per litre of unleaded fuel than WA, and Tasmania 9 cents dearer. Unleaded fuel in WA was slightly more expensive in most other states and territories in 2014.

**Figure 44** Comparison of Unleaded Prices in WA to other states and territories, 2007 - 2014



**Note:** Data accessed from Australian Institute of Petroleum however, the data prepared by ORIMA Research Pty Ltd for the Australian Institute of Petroleum.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Australian Institute of Petroleum.



# Red Tape

and regulations

Regulations and compliance are widespread among Australian society, and no entity is aware of this more than the business community. Regulation exists primarily to avoid unwanted community outcomes, however, how this is accomplished, by whom and whether the intervention was necessary in the first place can often result in unwarranted demands on businesses – commercial and not-for-profit alike.

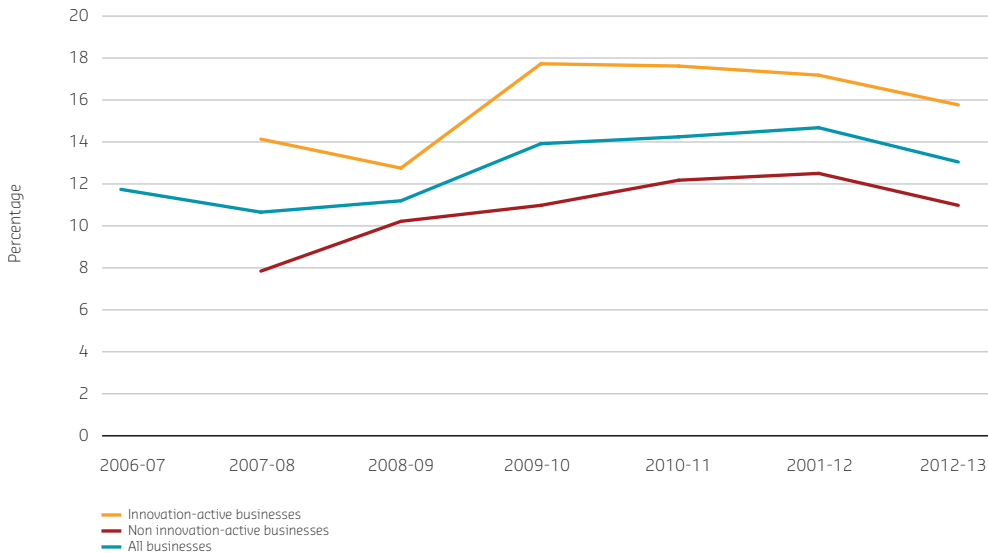
Good regulation can generate a number of positive benefits, for workers, the economy, community and the environment – however, the sweet spot that balances necessary protectionism and liberalism is often hard to strike. Unnecessary or over-burdensome regulations and compliance (“red tape”) can inhibit business performance and potential.

Numerous reports have focussed on the degree of regulatory burden within Australia and the need to balance necessary regulations and compliance with efficient business operations. The Council of Australian Governments (COAG), in recognition of the role that Australia’s federal system plays in adding to the ribbons of red tape that exist, continues to cite deregulation and its goal of reducing red tape as a priority among all governments (COAG 2014).

While similar issues around red tape exist across state borders, including duplication of regulations and taxation and compliance, Western Australia faces a number of persistent issues in relation to inefficient or over-regulated practices. The recent comprehensive Inquiry into Microeconomic Reform in Western Australia identified five key areas that require specific attention to enhance competition – retail trading hours, the taxi industry, potato market, housing sector and domestic gas reservation policy (ERA 2014). These areas suffer from a number of issues requiring changes to regulatory policy and practice. A compendium report to the Microeconomic Reform Inquiry that focussed on red tape in WA found that four sectors were most affected by regulatory burden – the food industry, resources sector, tourism sector and land and infrastructure development were (Synergies 2014). The source of regulatory burden for each sector varies but a common source identified was inconsistencies and overlap between different levels of government (ERA 2014).

Government regulation and compliance was more likely to be cited as a barrier to performance as the economy grew rapidly (Figure 45). Since the global financial crisis this has decreased among all firms at similar rates, with other barriers more likely to become problematic. Innovation-active businesses are much more likely to report government regulation and compliance as a barrier to performance than non-innovating firms. In 2009-10, 18 per cent of innovation-active businesses reported government regulation and compliance as a barrier to performance, whereas only 11 per cent of non-innovation active businesses reported this issue.

**Figure 45** Proportion of firms citing government regulation and compliance as a barrier to performance



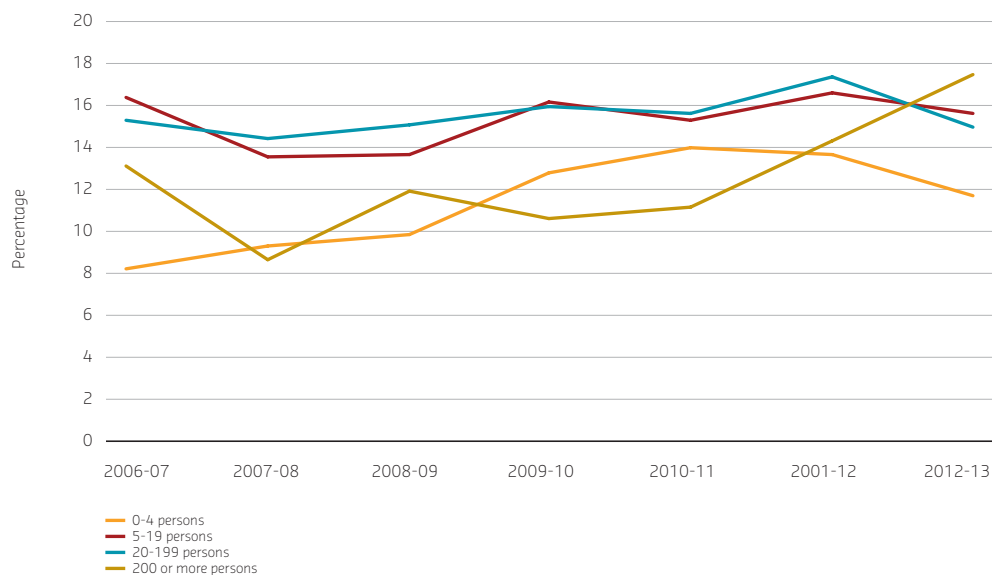
**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance. Innovative activity includes any work that was intended to, or did, result in the introduction of an innovation. An innovation is the introduction of a new or significantly improved good or services; operational process; organisational/managerial process; or marketing method.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.

It has long been considered that small businesses face greater costs and barriers when it comes to regulation and compliance. This is due to the limited resources that they have to draw upon and lower economies of scale than larger firms. Evidence from the Australian Business survey supports this theory, with higher proportions of small to medium size businesses more likely to report regulation and compliance as a barrier to performance than big businesses employing 200 or more persons (Figure 46). In the latest period, around 15 per cent of these businesses reported government regulation and compliance as a barrier to business performance.

The proportion of micro-size businesses (employing 0-4 persons) reporting government regulation as a business barrier increased between 2008-09 and 2010-11, but has since tapered off. Big businesses have increased their reports of government regulation and compliance as a barrier to performance since 2009-10 – from 10 to 18 per cent.

**Figure 46** Proportion of firms citing government regulation and compliance as a barrier to performance by firm size, 2006-07 to 2012-13



**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.

Government regulation and compliance can impact upon certain sectors more than others, as shown in Figure 47. Businesses operating in the Information Media and Telecommunications sector were the least likely to report government regulation and compliance as a barrier to performance in each period from 2006-07 to 2012-13. An increase was evident between 2008-09 and 2009-10, from 5 to around 10 per cent, however this has since come back to previous levels.

Businesses operating in rental, hiring and real estate services and financial and insurance services sectors have increased reports of government regulation as a barrier to business performance substantially between 2006-07 and 2012-13. In 2006-07 the proportion of businesses operating in the rental, hiring and real estate sector that reported government regulation and compliance as a barrier to business performance was 5.2 per cent, by 2012-13 this had increased to 13.6 per cent. Similar increases were observed for the finance sector, increasing from 17 to 30 per cent between 2006-07 and 2010-11. This has since decreased to 22.4 per cent.

In the last two periods, the electricity, gas, water and waste services sector has also seen an increase in regulation and compliance barriers, peaking at almost 1 in 4 businesses reporting this issue in 2011-12, however this has since reduced to 18 per cent of businesses.

Businesses operating in the state’s biggest sector in terms of economic value – mining, have recorded an increase in government regulations and compliance being a hindrance to their performance. In 2006-07, 13.5 per cent of businesses operating in the mining sector reported government regulations as a significant barrier to performance, by 2010-11 this had increased to 1 in 5 businesses. A slight reduction has been seen since, with 17.9 per cent of mining businesses citing government regulation and compliance as a significant performance barrier.

17.9% of businesses operating in the mining sector reported government regulation being a significant barrier to business performance in 2012-13.

**Figure 47** Proportion of firms citing government regulation and compliance as a barrier to performance by industry, 2006-07 to 2012-13



**Note:** Businesses were asked to identify barriers that significantly hampered general business activities or performance.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No. 8167.0 Selected Characteristics of Australian Business, 2012-13, Table 1, Barriers to general business activities or performance.



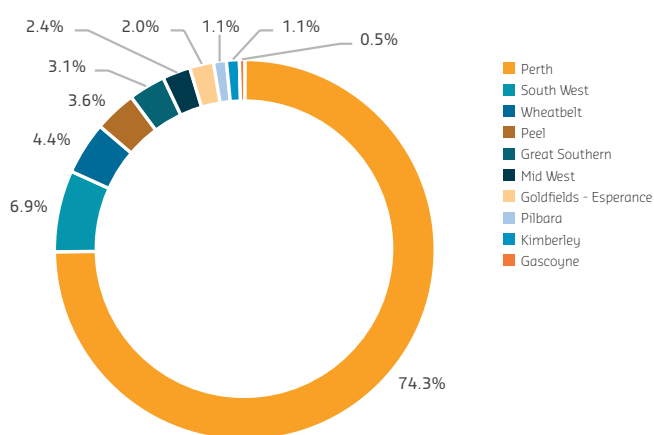
# WA Regions

## Regional Business Profile

Three-quarters of all WA businesses are located in Perth.

The profile of WA businesses at a state level can mask important regional patterns. The dominance of the Perth metropolitan area is clear, with three-quarters of all Western Australian businesses located in this region – 162,495 entities (Figure 48 and Table 1). South West has the second highest number of businesses (15,045), housing almost 7 per cent of all WA businesses. This is followed by the Wheatbelt (4.4%), Peel (3.6%) and Great Southern (3.1%).

**Figure 48** Proportion of all WA businesses among WA regions, 2014



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

While the general pattern of higher proportions of smaller entities and lower proportions of larger businesses is evident, a number of WA regions have slightly different profiles (Table 1). The agricultural Wheatbelt area has a higher proportion of micro-businesses employing 1-4 persons when compared to the state overall – around 30 per cent compared with the state average of 24.8 per cent.

As expected, mining dominant areas, including Goldfields-Esperance, the Pilbara, Kimberley and Gascoyne have higher proportions of businesses employing more than 200 employees – constituting around 5 per cent of all businesses. These areas are more likely to house businesses that are employers than other areas throughout Western Australia (Figure 49).

In terms of overall counts, Gascoyne has the lowest number of actively trading businesses – just under 1,000 entities. The Gascoyne region has a higher proportion of small businesses, employing 5-19 workers – 13.8 per cent compared to the state average of just under 10 per cent. The Kimberley and Goldfields-Esperance regions also follows this pattern, with a higher proportion of small businesses than the state average – 14.9 and 13.4 per cent respectively.



**Table 12** Proportion of business by employment size, WA regions, June 2014

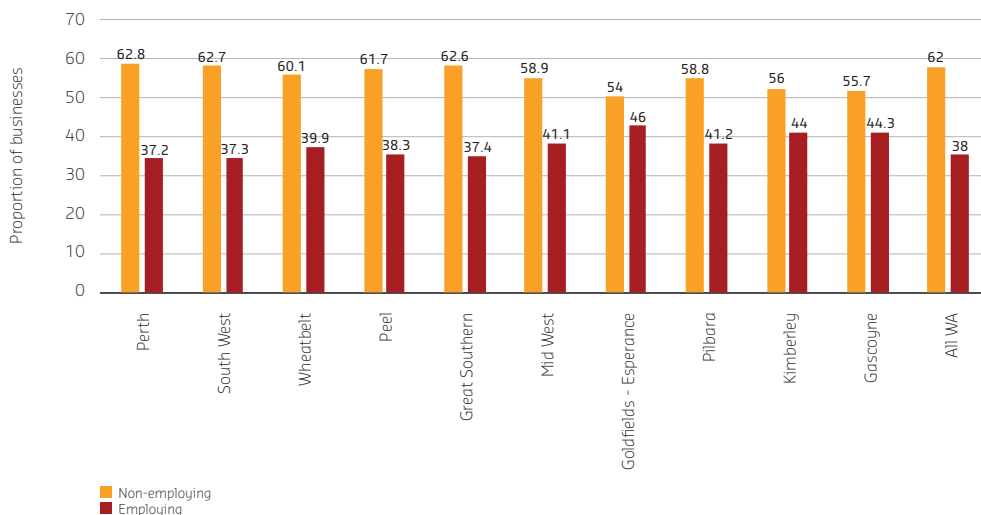
Region	Total	non-employed	1-4	5-19	20-199	200+
Perth	162,495	62.8	24.4	9.6	3.0	0.1
South West	15,045	62.7	23.2	11.0	3.0	0.0
Wheatbelt	9,715	60.1	29.7	8.9	1.3	0.0
Peel	7,787	61.7	26.0	9.5	2.8	0.0
Great Southern	6,779	62.6	25.0	10.1	2.2	0.0
Mid West	5,152	58.9	27.5	11.0	2.6	0.0
Goldfields-Esperance	4,413	54.0	29.1	13.4	3.4	0.1
Pilbara	2,375	58.8	24.5	11.6	5.1	0.0
Kimberley	2,369	56.0	23.8	14.9	5.1	0.1
Gascoyne	988	55.7	25.2	13.8	5.4	0.0
All WA	218,800	62.0	24.8	9.9	3.1	0.2

The Goldfields-Esperance region has the highest proportion of employing businesses – at 46 per cent.

Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

Perth is more likely to consist of non-employing actively trading businesses, with volume in this region driving the state average (Figure 49). Areas surrounding metropolitan Perth – South West, Wheatbelt, Peel and Great Southern, follow similar trends to the state average in terms of the proportion of employing and non-employing businesses. The Goldfields-Esperance region has the highest proportion of employing businesses – at 46 per cent. This is followed by Gascoyne (44.3%) and the Kimberley (41.2%).

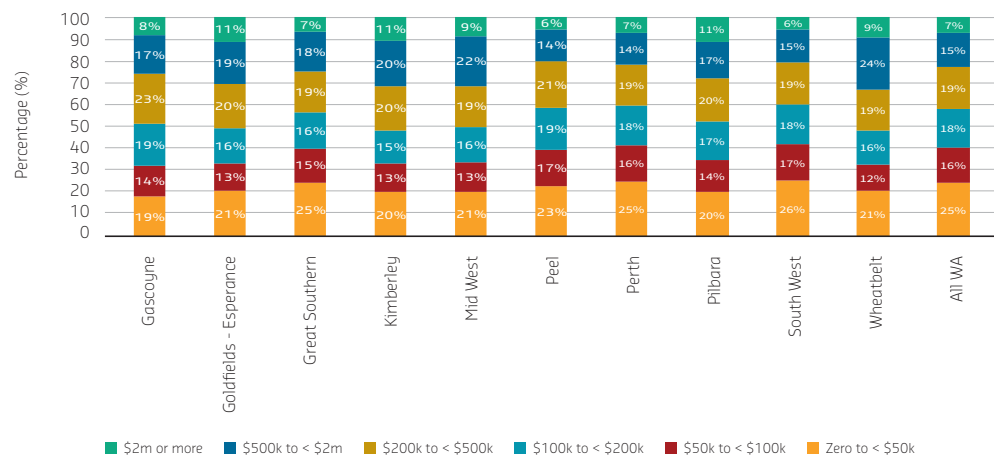
**Figure 49** Proportion of employing and non-employing businesses, WA regions, 2014



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

Comparing annual turnover of businesses, Figure 3 shows the variation that exists among WA regions. The Goldfields-Esperance, Kimberley and Pilbara regions all have greater proportions of businesses with annual turnover of \$2 million or more – 11 per cent compared with the state average of 7 per cent. South West has the lowest proportion of active businesses with turnover of less than \$2 million – 6 per cent. The Gascoyne region has a greater proportion of businesses reporting annual turnover of \$200,000 to under \$2 million and lower proportions of small businesses turning over less than \$50,000 each year. The Wheat Belt has a much higher presence of businesses with an annual turnover of between \$500,000 and less than \$2 million, than any other region, reflecting the farming activity in the region. Almost 1 in 4 actively trading businesses in the Wheat Belt report an annual turnover of between \$500k–\$2million.

**Figure 50** Proportion of businesses by annual turnover size, WA regions, 2014



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

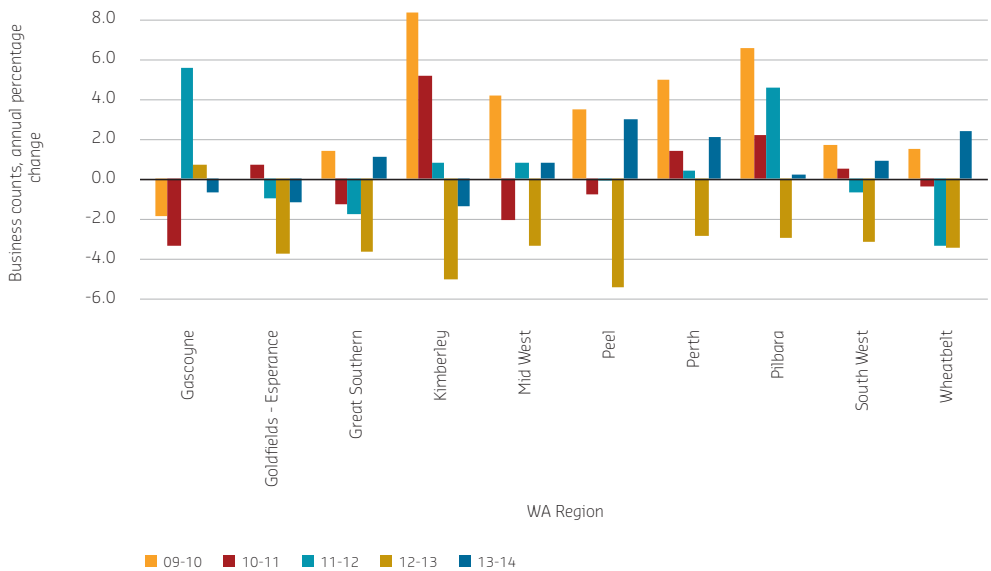
Western Australia’s regions have seen some changes over the last five years in terms of the number of actively trading businesses in each region. Figure 51 shows the annual percentage change in the total number of actively trading businesses for WA’s regions between 2009 and 2014.

The 2011 -12 to 2012-13 period stands out for Western Australian regions, with almost all experiencing a reduction in the number of actively trading businesses over the period, consistent with state and national trends. The Peel and Kimberley regions were hardest hit in the period, with a reduction of 4.7 and 4.4 per cent of businesses respectively. This represented a decrease of 373 businesses in the Peel region and 110 for the Kimberley. The Gascoyne area was the only area to increase business counts between 2011-12 and 2012-13. The Wheatbelt experienced three consecutive periods where business counts declined year on, however, this has since reversed in the last period, with the area showing an overall increase in business counts between 2012-13 and 2013-14 – increasing by 2.1 per cent, which is equivalent to a gain of 197 entities.

Data for the most recent period – from 2012-13 to 2013-14 reveals that most regions have seen a gain in the number of businesses operating in that area, however the growth has been slower than in previous years. These patterns are to be expected, as projects and economic activity ebbs and flows, and can reflect movement of self-employed workers in a flexible labour market. However, a consistent period of reduced business activity and net losses in businesses that are actively employing workers in the area can highlight a declining local economy. These results must be taken together with overall employment figures in regions to be more deterministic, as a reduction of business counts could flag a number of things, including amalgamation of businesses.

The 2011 -12 to 2012-13 period stands out for Western Australian regions, with almost all experiencing a reduction in the number of actively trading businesses over the period.

**Figure 51** Annual percentage change of total number of businesses by region, June 2009 – June 2014



Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat no. 81650 Counts of Australian Businesses, Jun 2010 to Jun 2014.

## Regional Business Costs

Cost pressures can vary among businesses, industries and regions. Western Australia is no exception to this, particularly when it comes to regional differentials around both cost of living and cost of doing business pressures. The expansive and remote geography of the state can make business operations more challenging than might otherwise be the case. A recent report on the cost of doing business in the Pilbara has highlighted these differences, but also the challenge in accessing regional price differentials (RDA 2013).

The Department of Regional Development, through its Royalties for Regions program has recently embarked on producing a Regional price index series, which allows price comparison of WA's major centres and regions to Perth. However, these data primarily relate to household consumption, which while generally aligning with business cost movements, remain a secondary data source. In this section we bring together a number of pieces of information that seek to inform differences in business costs across Western Australia's major regions.

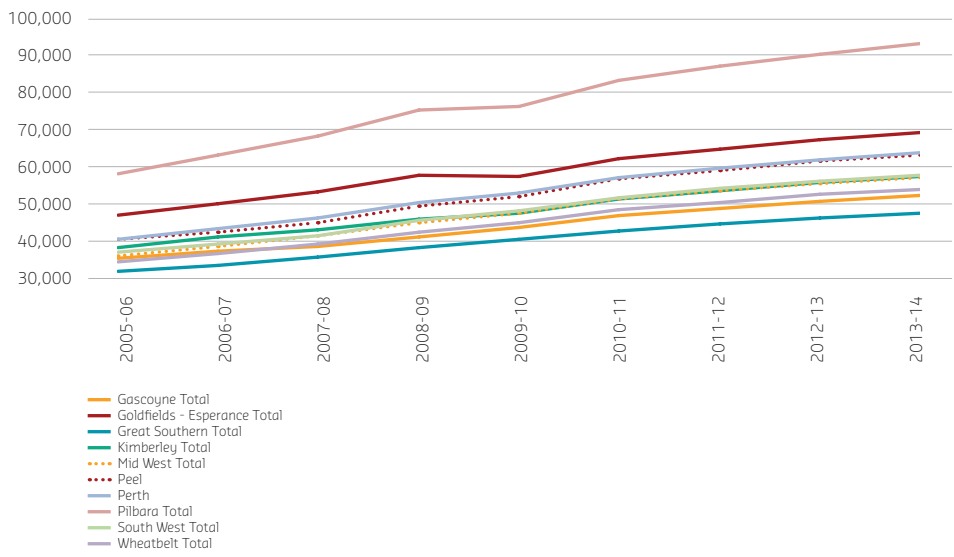
# WA Regional Wages

As discussed above, labour can constitute a considerable component of business costs and are cited as the number one cost pressure by WA businesses. The first Focus on Western Australia report – Sharing the Boom, illustrated the income variability that exists among WA’s regions - with mining prosperous areas more likely to have higher income households than other areas throughout the state (*Cassells et al. 2014d*).

Changes in average annual wages across WA’s major regions between 2005-06 and 2013-14 are shown in Figure 52. Wages in the Pilbara have grown the fastest, increasing by 60 per cent in the ten years to 2013-14, from an average annual wage of \$58,000 to \$93,000. Annual wages for Perth and Peel have tracked closely together over the last ten years, which is unsurprising given the proximity of the areas to each other. Wages in these regions have also grown by 60 per cent in the last decade, from around \$40,000 to \$64,000 – an increase of 60 per cent. The Goldfields-Esperance region has seen substantial wage growth across the period, with employees averaging the second highest wages in the state – around \$69,000 each year.

Wages in the Pilbara have grown the fastest in the state, increasing by 60 per cent in the ten years to 2013-14.

**Figure 52** Average annual wages by WA region, 2005-06 to 2013-14



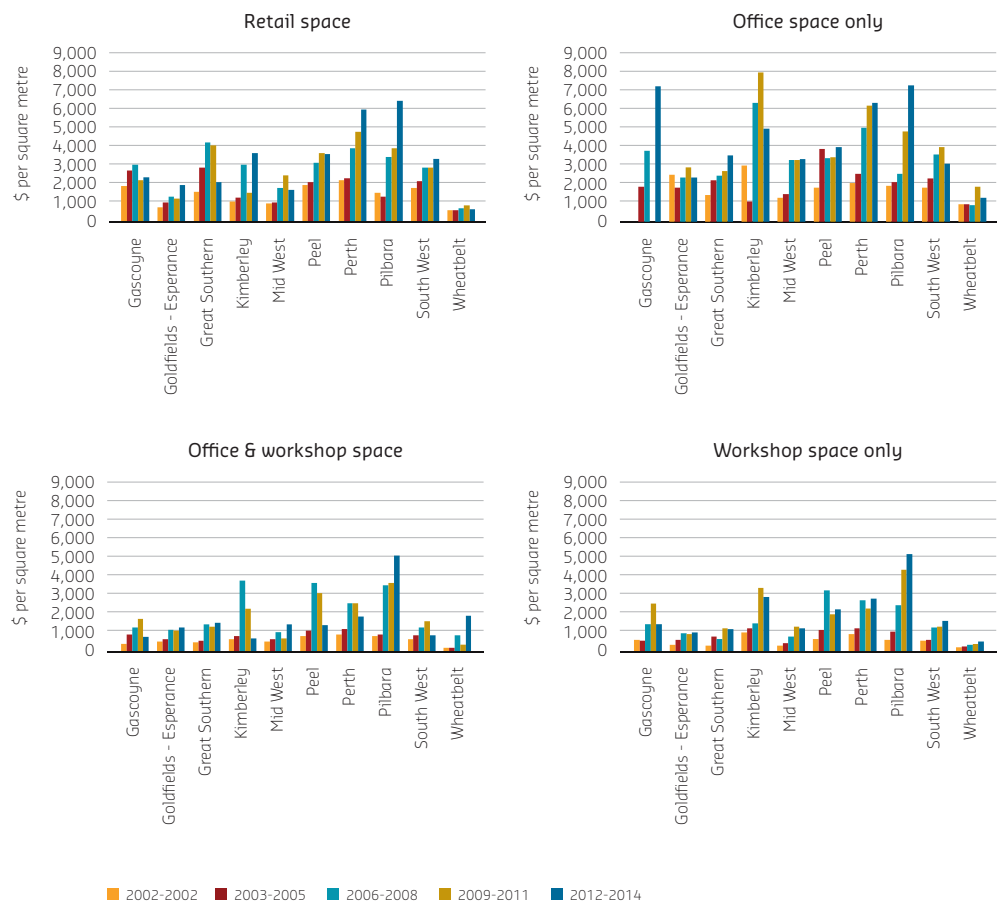
Source: BANKWEST CURTIN ECONOMICS CENTRE | ABS Cat No.1379.0, National Regional Profile, 2009-13.

# WA Regional Occupancy and Housing

Occupancy costs for businesses can be substantial. Lack of supply, particularly in regional areas can increase costs, placing pressure on actively trading businesses and inhibiting potential incumbents. Commercial property prices per square metre have been estimated for WA regions using specialised sale data from Landgate.

Commercial property sale prices per square metre for retail space, workshop space, office space, and combined office and workshop space across Western Australia's regions are shown in Figure 53. The Pilbara and Perth have recorded the highest sale price per square metre for retail space in the last two periods, averaging \$6,340 and \$5,920 per square metre, respectively. Increases in commercial all property classifications, across all regions are evident. The resource rich areas of the Pilbara, Kimberley and more recently Gascoyne area have seen big increases across the period. Perth commercial property space has also increased substantially – particularly for retail and office space. The Goldfields-Esperance, despite its high wages and relative wealth, has lower retail sale prices based on an average square metre. These results may be driven by lower commercial property turnover in these areas.

**Figure 53** Commercial property per square metre, WA Regions, 2000-2014



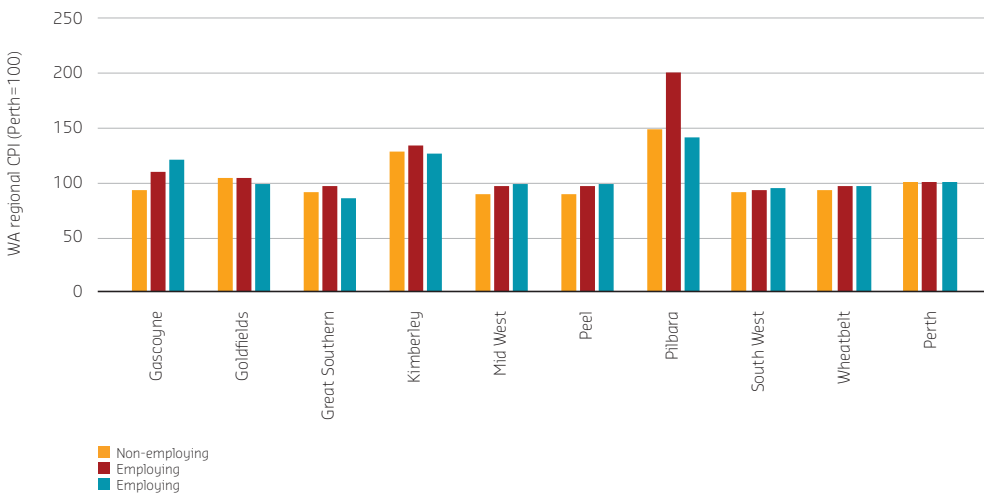
Source: BANKWEST CURTIN ECONOMICS CENTRE | Landgate specialised data request.

Residential occupancy costs can also be an important factor and can contribute to labour costs, especially for regional areas. Housing prices can also play a key role in attracting and retaining skilled workers in an area.

The regional housing index is a reasonable proxy of the relative cost of occupancy for residents and businesses in regional areas throughout Western Australia. Similar to the CPI, it includes mortgage interest rates, local government rates and charges, house repairs and maintenance, private rents, consumer credit charges and insurances costs (DRD 2011).

Generally housing prices have remained lower than Perth throughout all years and most WA regions (Figure 54). Notable exceptions are the usual suspects – the Pilbara, Kimberley and more recently the Gascoyne regions. Housing costs in these regions have been higher than Perth throughout the six years from 2007 to 2013. In 2011, housing costs in the Kimberley were double that of Perth, but have since dropped back to around 40 per cent higher than the state capital.

**Figure 54** Regional Housing Index, 2007-2013



**Note:** Index in every year is relative to Perth, therefore benchmark for each year is different.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | WA - DRD Regional Price Index 2007, 2011, 2013.

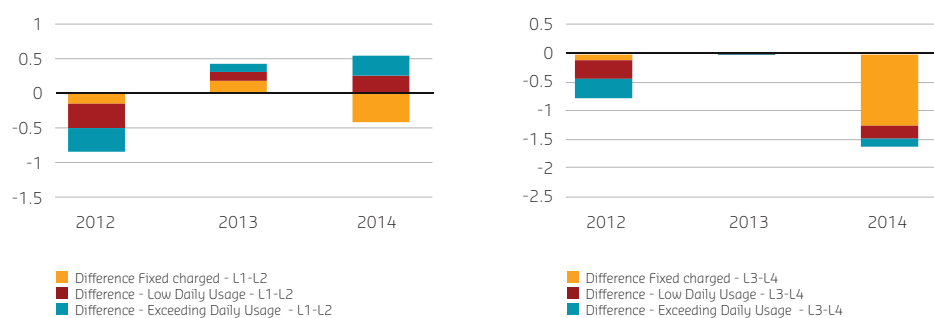
## WA Regional Utilities

Adequate supply for key utilities (electricity and gas) throughout WA's regions has been a policy concern for a number of years. Regional areas often experience greater cost pressures for goods and services, with supply typically more expensive and less demand in terms of volume.

Electricity tariffs in WA's regional areas have largely remained similar when compared to metropolitan WA, however, over the past three years, some small differences have been observed (Figure 55). For small businesses (L1-L2) in 2012, all fixed electricity prices and tariffs in regional WA areas were slightly higher than metro areas. By 2013, this had reversed, with metro prices more expensive than the regions. In 2014, metro prices for daily low and excess usage exceeded regional areas, however, fixed charges for small businesses in regional areas were higher than those in metro.

Prices for medium size businesses, consuming more than 50 megawatt hours per annum are shown in the second panel of Figure 55. Similar to small businesses, tariffs for medium businesses in regional WA were higher than metro areas in 2012. In 2013, no differences were observed between the two areas. However, more recently, regional areas have experienced higher electricity prices than those in metro areas.

**Figure 55** Differences in Regional and Metro Business Electricity Tariffs



**Note:** As in WA Department of Finance website (<http://www.finance.wa.gov.au/>) L1 and L2 tariffs represent small businesses and L3 and L4 represent small/medium businesses. L1 and L2 tariffs are applicable for consumers getting less than 50 megawatt hours per annum and L3 and L4 tariffs are applicable for consumers getting 50 megawatt hours or more per annum. L2, L4 tariffs are applicable to regional WA. Low Daily usage represent first 1650 Kw/hr Usage.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Government of Western Australia - Department of Premier - Acts and Subsidiary legislation.



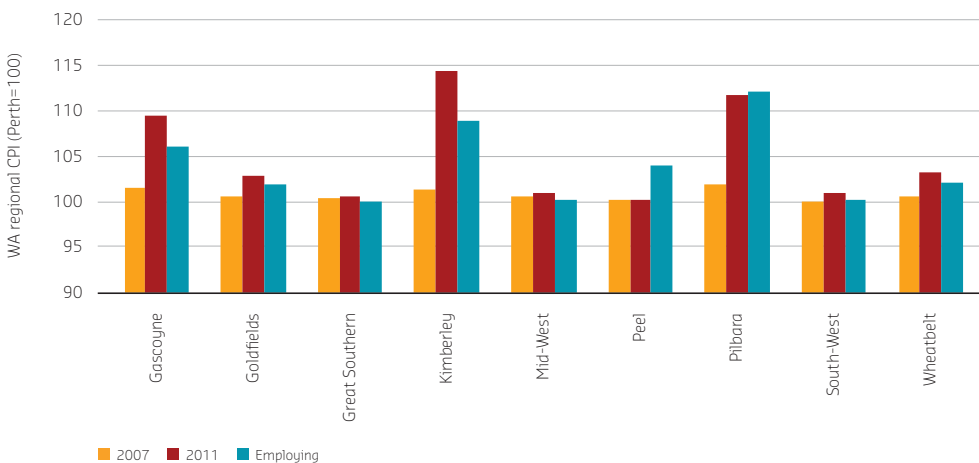
## WA Regional Transport

As discussed earlier, transport prices can be an important component of business operations. For regional areas, businesses typically rely more heavily on the transportation of goods, services and people in and out of the area in order to maintain regular business activity. The regional transport index produced by the Department of Regional Development is a good proxy of the relative cost of transportation for businesses in regional areas throughout Western Australia. It includes motor vehicles, fuel (diesel and unleaded), tyres, auto parts and maintenance and motoring charges such as drivers licence fees and stamp duty (DRD 2011).

Figure 56 presents a series of transport consumer price indices relative to Perth, which has a base of 100 in each year. Many of the regions surrounding Perth have seen similar price growth in transport commodities, with little difference between these areas and the state capital. Peel is the exception to this pattern for the last period (2013), where transport prices were almost 4 per cent higher than Perth. This is an unusual finding, given the proximity of Peel to Perth.

Remote areas including the Kimberley, Pilbara and Gascoyne have experienced higher transport costs compared with Perth, particularly in the last two periods. In 2011 transport prices in the Kimberley were 14 per cent higher than Perth – by 2013, the relativity to Perth had decreased to 9 per cent higher. Transport prices in the Pilbara on the other hand have remained persistently higher than Perth – around 12 per cent in 2011 and 2013. The Gascoyne area has also experienced higher transport prices relative to Perth, with this decreasing somewhat between 2011 and 2013.

**Figure 56** Regional Transport Index, 2007-2013



**Note:** Index in every year is relative to Perth, therefore benchmark for each year is different.

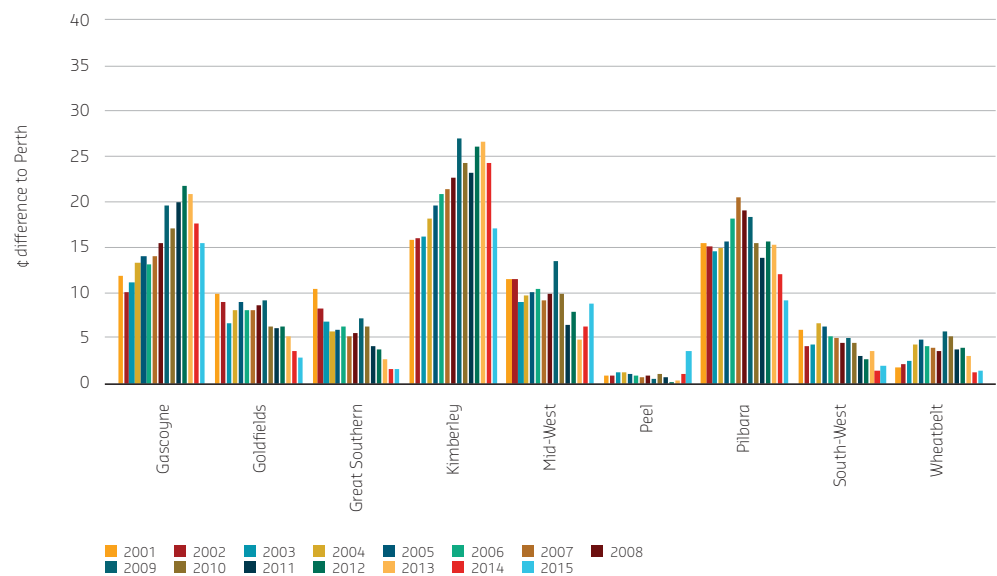
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | WA - DRD Regional Price Index 2007, 2011, 2013.

The cost of a litre of diesel in the Kimberley is 17 cents higher than in Perth.

Turning to fuel prices, Figure 57 shows the difference in real diesel prices in WA regions relative to Perth from 2001 to 2015 using data sourced from FuelWatch. All WA regions record higher average diesel prices per litre compared to Perth across the period. The Pilbara, Kimberley and Gascoyne areas again stand out as regions with much higher prices compared to the state capital, following a similar pattern to that observed in the Regional Transport Index. Differences in average diesel prices peaked prior to and during the GFC, but have since declined in most areas except for Peel. In prices gathered for 2015, the average price per litre for diesel in Peel was 3.5 cents more expensive than in its close Perth neighbour – increasing from relatively little difference in previous years.

The Kimberley has the greatest difference in the average price of diesel when compared with Perth – peaking at almost 27 cents in 2013. This has since decreased in 2015 to an average difference of 17 cents per litre. The second biggest difference is in the Gascoyne region, where the cost of diesel is more than 15 cents higher per litre than in Perth. This is followed by the Pilbara and Mid-West, which currently average 9 cents higher than Perth for a litre of diesel.

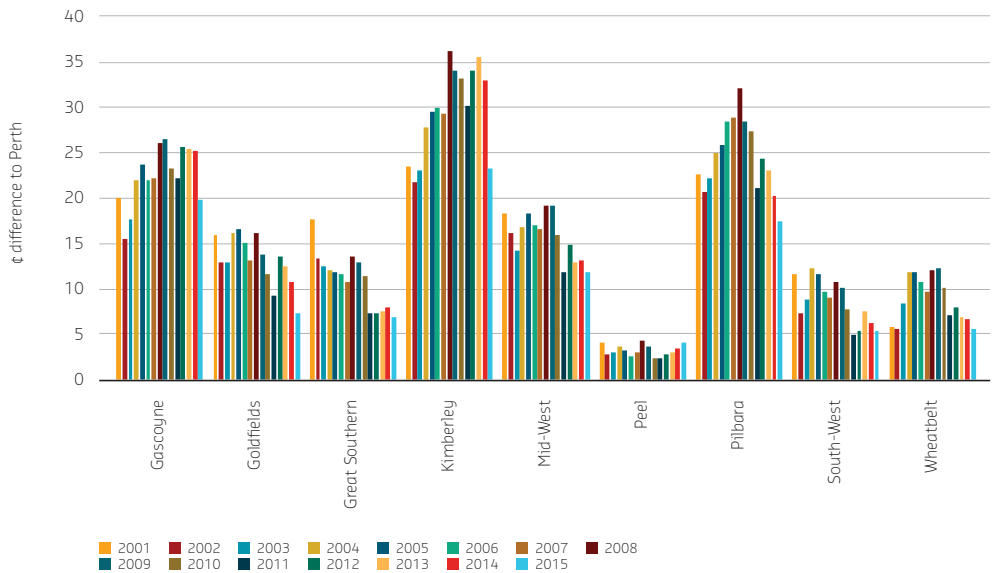
**Figure 57** Difference in real price of diesel, WA regions relative to Perth, 2001-2015



**Note:** Prices are real values and are adjusted with Australian All commodities CPI July 2015.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | FuelWatch by WA Department of Commerce and ABS Cat No. 6401.0.

Similar patterns are revealed when assessing price differences in unleaded petrol between WA regions and Perth over the last fifteen years (Figure 58). Price differentials increased over the 2000s, peaking in 2008, but have since been declining as the economy slows. Differences in the price of unleaded fuel between WA regions and Perth are greater than those observed for diesel prices. The Kimberley region again has the greatest price differential, with a litre of unleaded fuel costing Kimberley residents and businesses 23 cents more than Perth residents.

**Figure 58** Difference in real price of Unleaded Petrol, WA regions relative to Perth, 2001-2015



**Note:** Prices are real values and are adjusted with Australian All commodities CPI July 2015.  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | FuelWatch by WA Department of Commerce and ABS Cat No. 6401.0.



# Discussion

and summary

## Discussion and summary

The question of whether the cost of doing business in Western Australia is more or less expensive compared to other states and territories and whether business input costs have been rising disproportionately over time, is largely a relative one. Much like the question of whether the cost of living has increased, the burden can be more easily borne if coupled with strong income growth.

A number of WA business input costs have been increasing over time and remain high compared to other Australian jurisdictions. However, WA business revenues have also increased at a faster rate than other states and territories.

But - excessive and persistently high business costs can constrain economic growth and competition by discouraging new business entrants, inhibiting existing businesses from growing and diversifying, and creating significant barriers to business performance and productivity.

Common business costs across industries and states include labour, capital and intermediate inputs such as electricity and transport. These costs go alongside skills shortages, regulation and compliance and lack of access to additional funds as the most frequently reported barriers and pressures to business performance.

During the heart of the resources boom in 2006-07, more than 1 in 4 businesses reported a lack of skills in any location as a significant barrier – by 2012-13 this had reduced to 15.6 per cent. Our findings also show that barriers to business activity and performance can vary considerably by industry. For example, one in five businesses in the construction sector report outstanding accounts as a significant barrier to business activity and performance, whereas across all industries only 14 per cent report this issue.

Dealing with regulation and compliance is also often cited by firms as a barrier to performance, more so by small to medium enterprises. These businesses often face greater costs and barriers when it comes to regulation and compliance due to the limited resources that they have to draw upon and lower economies of scale than larger firms. Survey data analysed in this report supports this theory, with higher proportions of small to medium size businesses more likely to report regulation and compliance as a barrier to performance than big businesses employing 200 or more persons. In the most recent survey data, there has been a closer alignment of small and big businesses.

Businesses operating in the state's biggest sector in terms of economic value – mining, have recorded an increase in government regulations and compliance being a significant hindrance to their performance, from 13.5 per cent of businesses in 2007-07 to almost 1 in 5 in 2012-13.

Good regulation can generate a number of positive benefits, for workers, the economy, community and the environment – however, the balance between necessary protectionism and liberalism is often hard to strike. Unnecessary or over-burdensome regulations and compliance can inhibit business performance and potential.

Labour costs are also a significant cost of business, and increased rapidly in the state over the course of the mining boom, commensurate with increases in economic

activity. However, with labour costs shares running at an average of around 28 per cent of total costs for businesses, wage increases can place considerable pressure on business, especially small to medium enterprises that are less able to absorb price increases. The wage price index, which controls for changes in quality and quantity of work performed has increased by 46 per cent in Western Australia from 2005 to 2015 – for Australia, the increase has been 38 per cent across the same period.

Despite this, WA businesses are more effective in translating labour costs to company sales income than their counterparts in the rest of Australia. Average labour costs in the state are around 10 per cent higher than the national average, but businesses have been able to generate sales or service income at 15 per cent lower labour costs than the national average. Labour costs per dollar of income earned by businesses are lower particularly in mining (by 16 per cent), manufacturing (by 22 per cent) and agriculture (by 13 per cent), despite there being a higher average wage per employee in these sectors in WA compared to national rates.

Payroll taxes add to the burden of company taxes on WA businesses and this is likely to increase over the coming years. Payroll tax thresholds have not increased in line with wage inflation in WA, leading to payroll tax bracket creep. This has effectively brought more small businesses into the payroll tax system over time. The diminishing payroll tax threshold introduced in the 2015 state budget will increase WA payroll taxes by up to \$44,000. This would see businesses with a \$2m payroll increase their payroll tax by \$16,500, from \$66,000 to \$86,500. Businesses with a \$4m payroll will pay \$44,000 more in payroll tax under the new system – \$220,000 compared with \$176,000.

The geography of the state – with its capital, Perth, one of the most isolated cities on earth, and with the majority of its land area classified as ‘remote’ or ‘very remote’ – can make business operations more challenging than might otherwise be the case. Business costs in regional areas of WA are among the highest, and increasingly so. The concentration of mining activities in these areas have played a major role in increasing both the cost of living and the cost of doing business. However, it is important to contextualise cost increases alongside the increase in business revenues and economic output that a number of regions have experienced.

Wages in the resource rich areas of the Pilbara and Goldfields-Esperance regions have grown rapidly in the last ten years. In the Pilbara, wages have increased by 60 per cent over the last decade from an average annual wage of \$58,000 to \$93,000. The Goldfields-Esperance region has also seen substantial wage growth, with employees currently averaging the second highest wages in the state – around \$69,000 each year.

Western Australia’s regional areas have some of the highest costs of intermediate inputs, which again can be critical to business operations. Transport costs in the remote Kimberley, Pilbara and Gascoyne regions have been consistently higher than in Perth – for the Kimberley region, almost 12 per cent higher. And over the last fifteen years, all WA regions have faced higher average fuel prices per litre compared to the state’s capital, with the current cost of a litre of diesel in the Kimberley 17 cents higher than in Perth.

Occupancy and housing costs affect businesses directly, and also through the impact of low housing affordability on the capacity of skilled workers to locate to the state. Occupancy costs can also be higher in more remote areas of the state relative to denser areas. The Pilbara recorded the second highest sale price per square metre for retail space in the last two periods, averaging \$5,920 per square metre. Generally housing prices have remained lower than Perth throughout all years and most WA regions. Notable exceptions are the usual suspects – the Pilbara, Kimberley and more recently the Gascoyne regions. In 2011, housing costs in the Kimberley were double that of Perth, but have since dropped back to around 40 per cent higher than the state capital.

Is the cost of doing business in Western Australia problematic? For some businesses and in certain regions and industries – yes. Small to medium businesses, those operating in remote or regional areas and those reliant on inputs that have seen the biggest price increases are among those businesses. For other businesses, cost pressures are for the most part a product of increased demand, fuelled by strong industry-specific economic growth.

Continued monitoring of cost pressures and microeconomic reform that focuses on taxation and industry specific issues will help to ease cost pressures for many business in the West, ensuring that the state builds on previous growth and has the ability to diversify and compete in a global market.



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# Appendix

**Table 13 Payroll tax rates and thresholds by state/territory, 2008-09 to 2015-16**

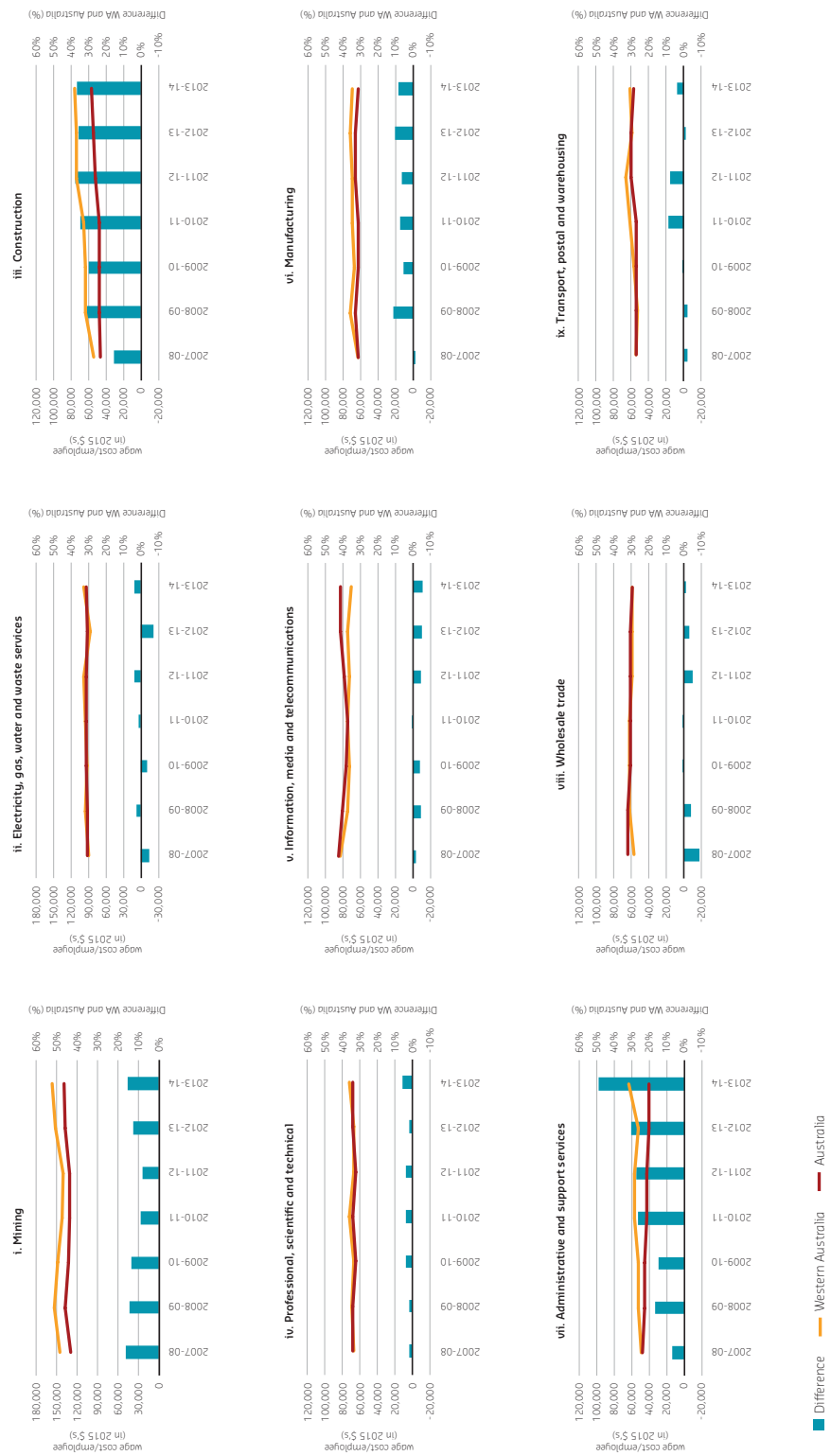
State/territory	WA		NSW		VIC		QLD		SA		TAS		NT		ACT	
	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold
2015-16	5.50%	800,000	5.45%	750,000	4.85%	550,000	4.75%	1,100,000	4.95%	600,000	6.10%	1,250,000	5.50%	1,500,000	6.85%	1,850,000
2014-15	5.50%	800,000	5.45%	750,000	4.85%	550,000	4.75%	1,100,000	4.95%	600,000	6.10%	1,250,000	5.50%	1,500,000	6.85%	1,850,000
2013-14	5.50%	750,000	5.45%	750,000	4.90%	550,000	4.75%	1,100,000	4.95%	600,000	6.10%	1,250,000	5.50%	1,500,000	6.85%	1,750,000
2012-13	5.50%	750,000	5.45%	689,000	4.90%	550,000	4.75%	1,100,000	4.95%	600,000	6.10%	1,010,000	5.50%	1,500,000	6.85%	1,750,000
2011-12	5.50%	750,000	5.45%	678,000	4.90%	550,000	4.75%	1,000,000	4.95%	600,000	6.10%	1,010,000	5.50%	1,500,000	6.85%	1,500,000
2010-11 (1 Jan to 30 June)	5.50%	750,000	5.45%	638,000	4.90%	550,000	4.75%	1,000,000	4.95%	600,000	6.10%	1,010,000	5.90%	1,250,000	6.85%	1,500,000
2010-11 (1 July to 31 Dec)	5.50%	750,000	5.50%	638,000	4.90%	550,000	4.75%	1,000,000	4.95%	600,000	6.10%	1,010,000	5.90%	1,250,000	6.85%	1,500,000
2009-10 (1 Jan to 30 June)	5.50%	750,000	5.65%	638,000	4.95%	550,000	4.75%	1,000,000	4.95%	600,000	6.10%	1,010,000	5.90%	1,250,000	6.85%	1,500,000
2009-10 (1 July to 31 Dec)	5.50%	750,000	5.75%	638,000	4.95%	550,000	4.75%	1,000,000	4.95%	600,000	6.10%	1,010,000	5.90%	1,250,000	6.85%	1,500,000
2008-09 (1 Jan to 30 June)	5.50%	750,000	5.75%	623,000	4.95%	550,000	4.75%	1,000,000	5.00%	552,000	6.10%	1,010,000	5.90%	1,250,000	6.85%	1,500,000
2008-09 (1 July to 31 Dec)	5.50%	750,000	6.00%	623,000	4.95%	550,000	4.75%	1,000,000	5.00%	552,000	6.10%	1,010,000	5.90%	1,250,000	6.85%	1,500,000
2007-08	5.50%	750,000	6.00%	600,000	5.05%	550,000	4.75%	1,000,000	5.00%	552,000	6.10%	1,010,000	6.20%	1,250,000	6.85%	1,250,000
2006-07 (1 July to 31 Dec)	5.50%	750,000	6.00%	600,000	5.05%	550,000	4.75%	1,000,000	5.50%	504,000	6.10%	1,010,000	6.20%	1,250,000	6.85%	1,250,000
2006-07 (1 July to 31 Dec)	5.50%	750,000	6.00%	600,000	5.15%	550,000	4.75%	1,000,000	5.50%	504,000	6.10%	1,010,000	6.20%	1,250,000	6.85%	1,250,000
2005-06	5.50%	750,000	6.00%	600,000	5.25%	550,000	4.75%	850,000	5.67%	504,000	6.10%	1,010,000	6.20%	1,000,000	6.85%	1,250,000

Table 14 Payroll tax liabilities for neutral uprating of tax thresholds since 2005-06: by state/territory

State/territory	WA		NSW		VIC		QLD		SA		TAS		NT		ACT	
	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold	Rate	Threshold
Payroll tax rate as at 1 July 2015	5.50%	5.50%	5.45%	5.45%	4.85%	4.85%	4.75%	4.75%	4.95%	6.10%	5.50%	5.50%	5.50%	5.50%	6.85%	6.85%
Payroll tax threshold as at 1 July 2015	800,000	800,000	750,000	750,000	550,000	550,000	1,100,000	1,100,000	600,000	1,250,000	1,500,000	1,500,000	1,500,000	1,500,000	1,850,000	1,850,000
Payroll tax threshold if July 2005 uprated by AWOTE	1,099,856	1,099,856	879,885	879,885	806,561	806,561	1,246,503	1,246,503	739,103	1,481,139	1,466,475	1,466,475	1,466,475	1,466,475	1,833,093	1,833,093
<b>Employee costs of \$1,000,000</b>																
Payroll tax liability (actual)	11,000	11,000	13,625	13,625	21,825	21,825	0	0	19,800	0	0	0	0	0	0	0
Payroll tax liability (if neutral since 2005)	0	0	6,546	6,546	9,382	9,382	0	0	12,914	0	0	0	0	0	0	0
\$ difference (neutral vs actual)	+11,000	+11,000	+7,079	+7,079	+12,443	+12,443	+0	+0	+6,886	+0	+0	+0	+0	+0	+0	+0
% difference (neutral vs actual)	*	*	+108.1%	+108.1%	+132.6%	+132.6%	-	-	+53.3%	-	-	-	-	-	-	-
<b>Employee costs of \$2,500,000</b>																
Payroll tax liability (actual)	93,500	93,500	95,375	95,375	94,575	94,575	66,500	66,500	94,050	76,250	55,000	55,000	55,000	44,525	44,525	44,525
Payroll tax liability (if neutral since 2005)	77,008	77,008	88,296	88,296	82,132	82,132	59,541	59,541	87,164	62,150	56,844	56,844	56,844	45,683	45,683	45,683
\$ difference (neutral vs actual)	+16,492	+16,492	+7,079	+7,079	+12,443	+12,443	+6,959	+6,959	+6,886	+14,100	-1,844	-1,844	-1,844	-1,158	-1,158	-1,158
% difference (neutral vs actual)	+21.4%	+21.4%	+8.0%	+8.0%	+15.2%	+15.2%	+11.7%	+11.7%	+7.9%	+22.7%	-3.2%	-3.2%	-3.2%	-2.5%	-2.5%	-2.5%
<b>Employee costs of \$5,000,000</b>																
Payroll tax liability (actual)	231,000	231,000	231,625	231,625	215,825	215,825	185,250	185,250	217,800	228,750	192,500	192,500	192,500	215,775	215,775	215,775
Payroll tax liability (if neutral since 2005)	214,508	214,508	224,546	224,546	203,382	203,382	178,291	178,291	210,914	214,650	194,344	194,344	194,344	216,933	216,933	216,933
\$ difference (neutral vs actual)	+16,492	+16,492	+7,079	+7,079	+12,443	+12,443	+6,959	+6,959	+6,886	+14,100	-1,844	-1,844	-1,844	-1,158	-1,158	-1,158
% difference (actual vs neutral)	+7.7%	+7.7%	+3.2%	+3.2%	+6.1%	+6.1%	+3.9%	+3.9%	+3.3%	+6.6%	-0.9%	-0.9%	-0.9%	-0.5%	-0.5%	-0.5%

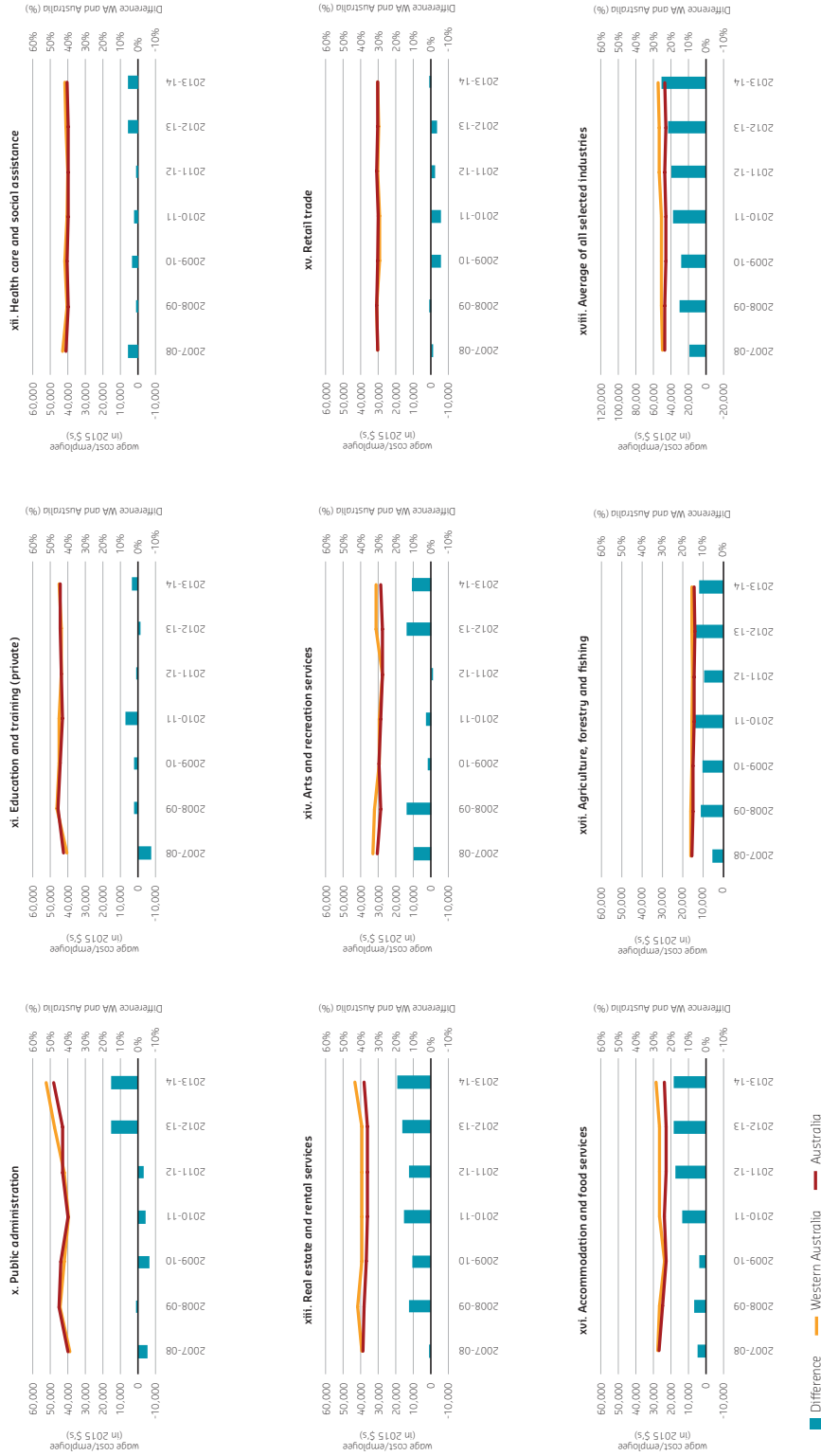
Note: Payroll tax liabilities for neutral uprating of tax thresholds since 2005-06: by state/territory  
Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations

**Figure 59 Average wage costs per employee by industrial sector for WA and Australia: 2007-08 to 2013-14 (in June 2015 prices)**



**Note:** The charts are ordered by 2014 WA employment share. Employment share calculations are based on total numbers employed by major Australian and New Zealand Standard Industrial Classification (ANZSCO 2006 divisions) (ABS Cat No 1292.0).  
**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Cat No 6291.0, February 2014.

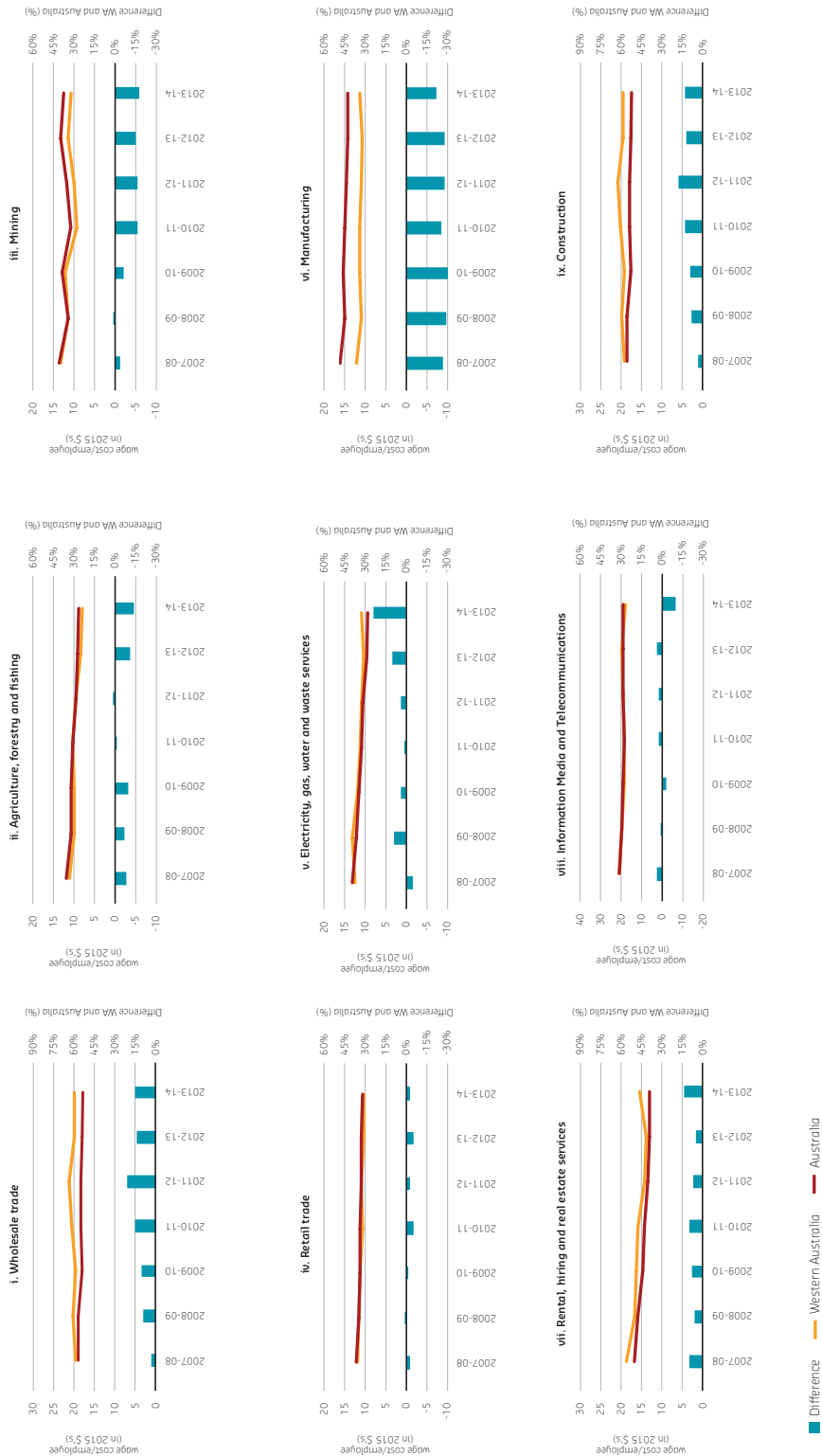
**Figure 59 Average wage costs per employee by industrial sector for WA and Australia: 2007-08 to 2013-14 (in June 2015 prices)**



**Note:** The charts are ordered by 2014 WA employment share. Employment share calculations are based on total numbers employed by major Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 divisions (ABS Cat No 1292.0).

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Cat No 629 1.0, February 2014.

**Figure 60 Average wage costs per dollar of sales/service income by industrial sector for WA and Australia: 2007-08 to 2013-14 (in June 2015 prices)**

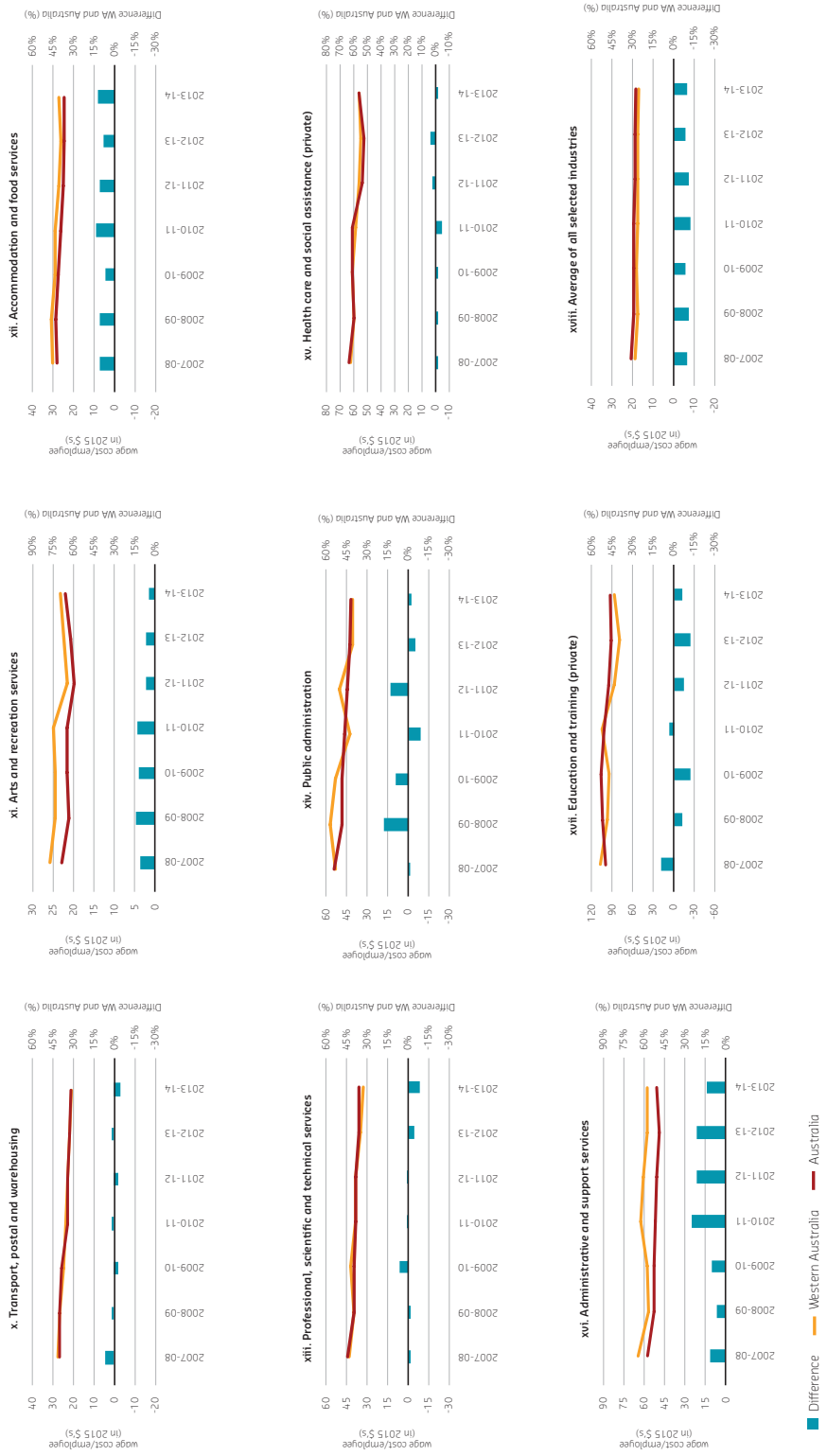


**Note:** The charts are ordered by 2012-13 WA wage cost per employee. Wage costs are expressed in 2015 \$, updated using state or national wage price indices. Average costs per employee are calculated for major Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 divisions.

**Source:** BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Cat No 8155.0, May 2014.



**Figure 60 Average wage costs per dollar of sales/service income by industrial sector for WA and Australia: 2007-08 to 2013-14 (in June 2015 prices)**



**Note:** The charts are ordered by 2012-13 WA wage cost per employee. Wage costs are expressed in 2015 \$, uprated using state or national wage price indices. Average costs per employee are calculated for major-Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006 divisions. Source: BANKWEST CURTIN ECONOMICS CENTRE | Authors' calculations from ABS Cat No 8155.0, May 2014.





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