Housing Markets in Regional Western Australia: Boom and Bust?

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Abstract
The resources boom has had a dramatic affect on regional towns in Western Australia. The demand for accommodation from mining companies and supporting organisations has placed severe pressure on the housing markets of many regional towns, both large and small. Resource industry led demand has increased house prices and rents dramatically in some areas resulting in serious affordability issues for communities. In addition a shortage of accommodation has affected employment supply for both the mining industry and local businesses. Of course many residents benefited from an increase in wealth and hopped on the investment property bandwagon. However, with the current economic downturn affecting the resources industries, demand in many regional towns has softened and in some areas collapsed. This paper explores the impact of the boom and potential bust on regional housing markets in Western Australia. Using house price data for Western Australia over the period 1998-2008, the paper will explore how different housing markets have been affected very differently by the boom conditions. The authors will discuss how the current economic conditions have affected these housing markets and how a deepening of the recession could have serious implications for the economies of many towns that expanded rapidly during the boom conditions. The paper will also explore the experiences of two very different mining towns, Karratha and Kalgoorlie-Boulder, discussing how the resources boom has had a very different impact on housing markets and communities in the two towns.
Introduction - Housing in Regional Western Australia

Since the turn of the new millennium Western Australia has undergone a period of significant economic and population growth, spurred by major resource investment in the State. This economic expansion led to significant population growth during the period 1996-2006 through natural population increase and, more significantly, interstate and overseas migration. Over the ten years to 2006, Western Australia grew by an annual average of over 30,000 persons. Regional Western Australia (WA) grew by 14% in the period 2001-2006, in stark contrast to a previously declining rural population since the 1960 (Australian Bureau of Statistics 2008; 2007a).

As a result of this population growth not only has housing pressure been felt in Perth but also in a number of regional areas. This pressure has been manifested through substantial rises in both the costs of established and new homes and a blow out in construction times due to capacity constraints in the building industry (Australian Bureau of Statistics 2007a, 2007b). Housing problems in regional Western Australia are not new however. As identified by Anthony and Milsom (2006) public housing supply has been inadequate for more than a decade and more recently Commonwealth Rent Assistance has not come close to meeting rental costs or alleviating housing stress in some regional areas such as the south west, the Pilbara and Peel.

Many of the new jobs created by the recent resources boom were full-time, male positions, in regional mining areas and within Perth itself. This created extreme pressure on housing stocks in areas such as the Pilbara and to a lesser extent the Goldfields and Midwest (see Figure 1 for map). Under current conditions in the Pilbara, which includes intense competition for accommodation, significant differentials in remuneration between the resource sector and other non-mining businesses and expensive infrastructure, the region has become a mono-economy, dominated by mining and associated activities. There have been criticisms of the Government’s response to these problems and many were voiced in the recent Senate Select Committee on Housing Affordability (2008) in Australia.

Overall, the Global Financial Crisis (GFC) has had minimal impact on the Western Australian resource boom towns. Prices and demand have remained high. In other parts of regional Western Australia, prices have remained high although demand and turnover decreased slightly over the 2008/09 period, particularly in those towns where agriculture is the predominant industry (Real Estate Institute of Western Australia). One of the problems faced by remote locations in regional WA is the land supply. Land has been released as a reaction to market signals, for example large price rises, rather than as a result of a policy delivering a steady supply of developable land. Such a supply of land provides the ability to develop units when necessary rather than a land supply reaction when demand spikes. This has been one of the critical issues in the mining locations of WA. The pattern and speed of land release can have a significant impact on house prices (McKenzie et al 2009). Landcorp, the State government’s land and property developer, is the main supplier of development land in many areas, including the Pilbara. Landcorp has a responsibility to both maximise commercial returns and deliver affordability which is contradictory at best. Landcorp provides about ten per cent of their new land releases to the Department of Housing and Works but at market prices. Further, it can be inferred from numerous reports (Senate Select Committee on Housing Affordability in Australia 2008; Pilbara Development Commission 2007, 2006) that Landcorp did not respond quickly enough to market signals and has been slow to release land in places like the Pilbara even though prices have been rising rapidly. The gross demand and supply mismatch has been attributed to the sudden resources boom and the tedious environmental, native title clearance and planning compliance processes although land supply has significantly increased since 2007. Landcorp has now responded in towns such as Karratha and Port Hedland, where price issues have been highly publicised, and has implemented programmes of land release designed to alleviate supply shortages and address housing affordability issues.
The labour market in the major resource communities (the Pilbara and Goldfields in particular) is augmented with a fly-in fly-out (FIFO) workforce which brings with it another set of housing challenges (Haslam
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McKenzie et al. 2008; Haslam McKenzie 2007). The Australian Bureau of Statistics (ABS) (2007) and the Chamber of Minerals and Energy (2005) have observed that FIFO positions have increased and many of the ‘home’ addresses of FIFO workers are in Perth, other capital cities such as Brisbane and Melbourne, or increasingly, other regional centres throughout Western Australia. This has meant that multiple home ownership is not uncommon and second homes are no longer restricted to holiday homes. However, accurate data regarding multiple home ownership is difficult to ascertain as the ABS does not collect specific information regarding multiple home ownership.

While problems of the mining areas of regional WA have been well documented there has been less written about housing markets in other areas of the State. Traditionally, second homes in Western Australia have tended to be holiday homes in sea change and tree change communities such as Denmark, Busselton, Margaret River and York all of which have experienced population growth, defying historic rural population trends. The accelerated gains in population in these once small communities, and (recently) very rapid price increases in land and houses, have enabled some to make significant capital gains from property. As discussed by Gallent, Mace and Tewdwr-Jones (2003) ‘open’ markets such as sea change communities have a heightened demand for properties because of an inflated number of competitors (locals, second home buyers, investors, retirees), reducing the affordability and access for those on lower incomes. Costello (2009) discussed the housing affordability issues in the Victorian town of Castlemaine which were partly attributed to the town being a tree change location. Those households who move to sea change and tree change communities for work and for anticipated lifestyle changes in a rural environment are usually also seeking more affordable housing and living costs in comparison to the capital cities. These aspirations however, are often misguided (O’Connor 2004; Murphy 2002) and such households are having to locate to more remote towns to seek the benefits of affordable housing.

Contrary to expectations it is not unusual for sea/tree change communities to exhibit indicators of vulnerability. Research and data indicate that there is a proportion of the permanent population in sea/tree change communities whose assets, education and personal income descriptors convey a picture of disadvantage (Australian Bureau of Statistics 2007; CSIRO Sustainable Ecosystems 2005; Pendergast, Lambert, and Eringa 2004). The CSIRO study confirmed an ‘under-belly’ of economic vulnerability in Western Australian sea and tree change communities and a higher than average incidence of social security recipients (Burnley and Murphy 2004; O’Connor and Haslam McKenzie 2003) including single parent families and aged persons many of whom are on fixed incomes or wholly or partially dependent on pensions. Affordable housing suitable for an unskilled and semi-skilled workforce that underpins the retail, tourism and seasonal work in holiday, agricultural and wine growing regions is increasingly under pressure as a significant number of households pay a high proportion of their incomes on housing (Pendergast, Lambert, and Eringa 2004). Traditional low cost temporary accommodation in the form of caravans and campsites are disappearing because chalets and villas provide a higher return on investment, but these are unaffordable for long term renters and those on the lower income brackets. As a consequence, there is a growing incidence of overcrowding in sea and tree change communities and the number of homeless people, particularly young people, is growing (Williams 2007; Pendergast, Lambert, and Eringa 2004). These dilemmas in the presumed more affluent communities have been largely overlooked by government.

This paper addresses the housing issues in both resources towns and sea and tree change locations throughout regional WA. It identifies the housing market outcomes in 27 regional towns in WA and explores the factors underlying declining housing affordability in these locations. Using WA Valuer General data and ABS statistics, the paper describes the market outcomes and offers a discussion of probable causes. Further research is necessary to dig deeper into the demand and supply factors in individual locations but this paper provides a starting point for a more in depth analysis of regional WA.
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House Price and Population Growth in Regional Western Australia

Figure 1 above shows the regions of Western Australia and highlights the regional towns analysed in this paper. Many are concentrated in the South West where population densities are greatest due to the aesthetic attractiveness of the region, its proximity to the Perth Metropolitan region and the more comfortable climate. However, this study also includes towns located in the other regions of WA which are characterised by mining, tourism and agricultural industries which in the last two decades have not shown population growth.

Table i describes the differences between the median house price of the Perth Metro area and the rest of regional WA. For the purposes of this paper Mandurah, which is the second largest population centre in WA has been excluded from the regional WA figures due to its close relationship with the Perth Metro region. The recent opening of a direct train link between Perth and Mandurah has strengthened this relationship and Mandurah is now related more closely in its housing market characteristics to Perth than to regional WA.

Table i: Median Annual House Prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Perth Metro</th>
<th>Regional WA</th>
<th>Price Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$146,000</td>
<td>$115,000</td>
<td>27%</td>
</tr>
<tr>
<td>2001</td>
<td>$173,000</td>
<td>$125,000</td>
<td>38%</td>
</tr>
<tr>
<td>2003</td>
<td>$242,000</td>
<td>$145,000</td>
<td>67%</td>
</tr>
<tr>
<td>2006</td>
<td>$410,000</td>
<td>$280,000</td>
<td>46%</td>
</tr>
<tr>
<td>2007</td>
<td>$470,000</td>
<td>$340,000</td>
<td>38%</td>
</tr>
<tr>
<td>2008</td>
<td>$412,500</td>
<td>$344,000</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: Landgate Valuer General’s Data

Table ii: Population and Housing Stock

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Housing Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
<td>2006</td>
</tr>
<tr>
<td>Perth Metro</td>
<td>1,282,630</td>
<td>1,445,078</td>
</tr>
<tr>
<td>Regional WA</td>
<td>452,178</td>
<td>514,010</td>
</tr>
</tbody>
</table>

Source: ABS census data

House prices diverged over the period 1998 to 2003 which was a period characterised by slow population growth within WA with economic growth activity focused on the Metropolitan region. Post 2003 the resources boom really started to take effect and house prices in both locations showed rapid price increases. Prices almost doubled in regional WA over a three year period closing the price gap with the metro region. The gap continued to fall during 2007 and fell rapidly as a result of the metropolitan price falls witnessed in 2008. There is now only a 20% difference between median house prices in the metropolitan area and those in regional areas. The factors behind the rapid growth in regional prices since 2003 are explored in this paper.

Two key factors determining house prices are population growth and housing supply. Table ii compares the growth in population and housing stock in regional WA and the Perth metropolitan region. Using ABS census data from 2001 and 2006, the table shows how both areas have exhibited very strong, double digit population growth over the five year period. However, housing stock growth has failed to keep pace in both sectors. Net additions to housing stock would have to grow by a similar proportion to population if supply were to match increases in demand caused solely by a rising population (keeping numbers per household constant). This is one very simple indicator of the intense demand pressures placed on the housing markets of both areas. The table shows that the gap between population and housing stock growth was greater in regional WA. Of course there are many other demand side factors which determine house prices, the performance of the national and local economy being the most important, but if supply cannot keep pace with demand within a strong economy then prices will only move in one direction.
The Western Australian Economy

Australia has seen very strong economic growth over the last decade with Gross Domestic Product (GDP) rising strongly over much of this period. Figure 2 shows how WA’s economic growth has outperformed Australia as a whole. The figure displays the strong and sustained growth in Gross State Product (GSP) from 2001, consistently 2% or more above Australian GDP growth. The general strength of the economy coupled with a number of strong exogenous variables has had a dramatic affect on housing demand. Figure 3 describes how business investment has risen strongly in the State since 2000, particularly in the mining sector. The strong GSP growth and mining investment/activity are attributed to the ‘resources boom’ where strong demand for minerals from emerging economies have driven State demand.

Figure 2: Gross State Product and Gross Domestic Product

![Gross State Product (GSP) and Gross Domestic Product (GDP) Western Australia and Australia, annual percentage change, real (chain volume) terms](image1)

Source: ABS Cat. 5220.0

Figure 3: Business Investment

![Business investment by industry Western Australia, original, current prices](image2)

Source: ABS Cat. 5625.0
In addition to GSP and GDP growth there are a number of other, more specific, variables which help explain
the pattern of house prices over the last 10 years. Population growth, household income and unemployment
all have a significant impact on the demand for residential property. Interest rates and buyer/consumer
confidence are also key drivers of purchasing decisions. Added to these demand side factors are the
availability of existing stock and the supply of new land.

Figure 4 describes the trends in house prices, population, household earnings growth and unemployment
since 1991. All three key variables have shown movements which have contributed to rising house prices,
particularly since 2000. The resources boom contributed to strong positive movements in all three variables
from around 2004.

Population has grown by 17% since 2000, over half of which has been from overseas migration (ABS Cat
3101). The Perth metropolitan median house price was relatively affordable when compared to the Eastern
states before the major boom period of 2005 and 2006, (June 2006 is considered the peak of the house price
boom). This meant that many interstate and overseas migrants, particularly from the UK, were able to secure
relatively cheap property and, in turn, bid up prices. The sustained population growth was partly as a result
of strong employment growth. Unemployment fell from over 10% in 2001 to around 3% in 2008. Strong
employment leads to household income growth (which has also been sustained at historically high levels)
and also confidence in terms of job security. Both factors contribute to decisions to purchase property,
increasing demand.

Figure 4: Economic Drivers of House Prices

The relative affordability of WA housing and the strength of the WA economy led directly to the double
digit house price growth experienced by most urban and regional housing markets during the period 2005-
2007. However, the housing markets in locations dominated by different industries, such as mining, tourism
and agriculture would be expected to perform differently. A market such as Karratha dominated by the
mining sector would expect to see a much greater shift in demand when compared to a small, agricultural
town such as Narrogin if it were the localised, industry growth effects driving demand and prices. This paper
explores the relationships between price movements in individual housing markets to unpick the key drivers
of price growth in regional towns.
House Price Growth in Regional Towns

Table iii describes the main industry for the local government area (as reported in the census and supplementary ABS info) and the growth in population and the housing stock in the 27 regional towns analysed within this paper. The selection of these towns was largely based on the availability of housing transaction data for the period 1998-2008. Towns with insufficient numbers of transactions were excluded for reasons of confidentiality. Raw data on individual transactions were obtained from the Valuer General’s office of Landgate, WA, and time series analysis applied to determine price and supply trends in these locations. The local government area was used as the basis for analysis as this offered the best fit with the price data.

Table iii: Population and Housing Stock Growth in Regional WA

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ravensthorpe</td>
<td>Mining</td>
<td>1,950</td>
<td>52%</td>
<td>13%</td>
</tr>
<tr>
<td>Newman (East Pilbara)</td>
<td>Mining</td>
<td>6,544</td>
<td>27%</td>
<td>-4%</td>
</tr>
<tr>
<td>Ashburton (Tom Price)</td>
<td>Mining</td>
<td>6,078</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>Roebourne (Karratha)</td>
<td>Mining</td>
<td>16,423</td>
<td>21%</td>
<td>10%</td>
</tr>
<tr>
<td>Narrogin</td>
<td>Agriculture</td>
<td>829</td>
<td>12%</td>
<td>4%</td>
</tr>
<tr>
<td>Geraldton - Greenough</td>
<td>Tourism</td>
<td>31,553</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>Busselton</td>
<td>Tourism</td>
<td>25,354</td>
<td>25%</td>
<td>18%</td>
</tr>
<tr>
<td>Collie</td>
<td>Mining</td>
<td>8,614</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Esperance</td>
<td>Agriculture</td>
<td>12,965</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Albany</td>
<td>Agriculture</td>
<td>31,574</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>Dardanup</td>
<td>Retailing</td>
<td>10,339</td>
<td>27%</td>
<td>23%</td>
</tr>
<tr>
<td>Manjimup</td>
<td>Agriculture</td>
<td>9,256</td>
<td>1%</td>
<td>-2%</td>
</tr>
<tr>
<td>Harvey</td>
<td>Agriculture</td>
<td>19,556</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Coolgardie</td>
<td>Mining</td>
<td>3,798</td>
<td>-1%</td>
<td>-3%</td>
</tr>
<tr>
<td>Port Hedland</td>
<td>Mining</td>
<td>11,959</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Kalgoorlie – Boulder</td>
<td>Mining</td>
<td>28,422</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Bunbury</td>
<td>Retailing</td>
<td>29,702</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Exmouth</td>
<td>Tourism</td>
<td>2,063</td>
<td>0%</td>
<td>-1%</td>
</tr>
<tr>
<td>Northam</td>
<td>Agriculture</td>
<td>3,794</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Boddington</td>
<td>Mining</td>
<td>1,379</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Bridgetown</td>
<td>Mining</td>
<td>3,953</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>York</td>
<td>Agriculture</td>
<td>3,116</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Augusta-Margaret River</td>
<td>Tourism</td>
<td>10,353</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>Broome</td>
<td>Tourism</td>
<td>13,059</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>Carnarvon</td>
<td>Agriculture</td>
<td>5,681</td>
<td>-5%</td>
<td>-1%</td>
</tr>
<tr>
<td>Denmark</td>
<td>Tourism</td>
<td>4,511</td>
<td>12%</td>
<td>15%</td>
</tr>
<tr>
<td>Meekatharra</td>
<td>Mining</td>
<td>1,137</td>
<td>-12%</td>
<td>-5%</td>
</tr>
</tbody>
</table>

Western Australia     | 514,010         | 14%                         | 9%                            | 5%                                       |
Table III lists the main, broad industry category of each regional town. In the majority, the town population growth has been well into double digits and has occurred much faster than housing stock growth. The imbalance between population growth and housing supply is accentuated by the housing demand side factors driven by the strong economic growth of the state. Figure 4 showed how earnings have risen rapidly since 2006 and unemployment has fallen to historically low levels. With the incomes available from resource sector employment there has been unprecedented demand for housing within WA. Table IV demonstrates how this demand has affected house prices.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ravensthorpe (M)</td>
<td>$54,500</td>
<td>$375,000</td>
<td>588.1%</td>
<td>146.7%</td>
<td>76.67%</td>
</tr>
<tr>
<td>East Pilbara (Newman) (M)</td>
<td>$130,000</td>
<td>$550,000</td>
<td>323.1%</td>
<td>323.1%</td>
<td>48.90%</td>
</tr>
<tr>
<td>Northam (A)</td>
<td>$60,000</td>
<td>$240,000</td>
<td>300.0%</td>
<td>152.6%</td>
<td></td>
</tr>
<tr>
<td>Roebourne (Karratha) (M)</td>
<td>$170,000</td>
<td>$670,750</td>
<td>294.6%</td>
<td>174.9%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Bridgetown (M)</td>
<td>$80,000</td>
<td>$315,000</td>
<td>293.8%</td>
<td>149.5%</td>
<td>71.43%</td>
</tr>
<tr>
<td>Collie (M)</td>
<td>$65,250</td>
<td>$255,500</td>
<td>291.6%</td>
<td>183.9%</td>
<td>84.81%</td>
</tr>
<tr>
<td>Carnarvon (A)</td>
<td>$77,500</td>
<td>$295,000</td>
<td>280.6%</td>
<td>138.9%</td>
<td></td>
</tr>
<tr>
<td>Broome (T)</td>
<td>$166,000</td>
<td>$630,000</td>
<td>279.5%</td>
<td>90.9%</td>
<td></td>
</tr>
<tr>
<td>Boddington (M)</td>
<td>$98,000</td>
<td>$367,500</td>
<td>275.0%</td>
<td>219.6%</td>
<td>-54.03%</td>
</tr>
<tr>
<td>Narrogin (A)</td>
<td>$65,000</td>
<td>$242,500</td>
<td>273.1%</td>
<td>169.4%</td>
<td></td>
</tr>
<tr>
<td>Denmark (T)</td>
<td>$97,000</td>
<td>$361,500</td>
<td>272.7%</td>
<td>117.8%</td>
<td></td>
</tr>
<tr>
<td>Port Hedland (M)</td>
<td>$150,000</td>
<td>$546,200</td>
<td>264.1%</td>
<td>252.4%</td>
<td>92.41%</td>
</tr>
<tr>
<td>Ashburton (Tom Price) (M)</td>
<td>$100,000</td>
<td>$350,000</td>
<td>250.0%</td>
<td>288.9%</td>
<td>74.04%</td>
</tr>
<tr>
<td>Exmouth (T)</td>
<td>$144,000</td>
<td>$490,000</td>
<td>240.3%</td>
<td>117.8%</td>
<td></td>
</tr>
<tr>
<td>York (A)</td>
<td>$94,000</td>
<td>$307,500</td>
<td>227.1%</td>
<td>119.6%</td>
<td></td>
</tr>
<tr>
<td>Geraldton – Greenough (T)</td>
<td>$105,000</td>
<td>$337,250</td>
<td>221.2%</td>
<td>136.5%</td>
<td></td>
</tr>
<tr>
<td>Albany (A)</td>
<td>$130,000</td>
<td>$390,000</td>
<td>200.0%</td>
<td>105.3%</td>
<td></td>
</tr>
<tr>
<td>Harvey (A)</td>
<td>$122,000</td>
<td>$362,694</td>
<td>197.3%</td>
<td>84.1%</td>
<td></td>
</tr>
<tr>
<td>Esperance (A)</td>
<td>$125,000</td>
<td>$369,000</td>
<td>195.2%</td>
<td>106.7%</td>
<td></td>
</tr>
<tr>
<td>Busselton (T)</td>
<td>$162,500</td>
<td>$475,000</td>
<td>192.3%</td>
<td>63.8%</td>
<td></td>
</tr>
<tr>
<td>Bunbury (R)</td>
<td>$112,000</td>
<td>$325,000</td>
<td>190.2%</td>
<td>73.8%</td>
<td></td>
</tr>
<tr>
<td>Manjimup (A)</td>
<td>$82,750</td>
<td>$240,000</td>
<td>190.0%</td>
<td>108.7%</td>
<td></td>
</tr>
<tr>
<td>Coolgardie (M)</td>
<td>$66,500</td>
<td>$189,500</td>
<td>185.0%</td>
<td>129.7%</td>
<td>41.33%</td>
</tr>
<tr>
<td>Dardanup (R)</td>
<td>$123,000</td>
<td>$350,000</td>
<td>184.6%</td>
<td>81.3%</td>
<td></td>
</tr>
<tr>
<td>Augusta-Margaret River (T)</td>
<td>$175,000</td>
<td>$465,000</td>
<td>165.7%</td>
<td>55.5%</td>
<td></td>
</tr>
<tr>
<td>Kalgoorlie – Boulder (M)</td>
<td>$149,000</td>
<td>$329,000</td>
<td>120.8%</td>
<td>105.6%</td>
<td>53.19%</td>
</tr>
<tr>
<td>Meekatharra (M)</td>
<td>$55,000</td>
<td>$100,000</td>
<td>81.8%</td>
<td>185.7%</td>
<td>-54.92%</td>
</tr>
<tr>
<td>Average Regional WA</td>
<td>$109,593</td>
<td>$344,000</td>
<td>214%</td>
<td>144%</td>
<td></td>
</tr>
<tr>
<td>Perth Metro Region</td>
<td>$146,000</td>
<td>$412,500</td>
<td>182%</td>
<td>62%</td>
<td></td>
</tr>
</tbody>
</table>

M – mining    T – tourism    A – agriculture    R - retail
Table iv records housing prices for 1998, 2004 and 2008. 1998 is the start of the study period. 2004 was chosen as this is considered by many to be the start of the resources boom in WA, at least the period when house prices began a period of double digit growth. In 2008 median prices ranged from $670,000 in the Shire of Roebourne (they are higher in Karratha itself) to $100,000 in Meekatharra. Ravensthorpe saw the greatest 10 year growth rate of over 580%, although from a very low initial price. Median prices in 17 of the towns grew by 200% during the 10 year period. In 2004 there were 22 towns where the median price was under $200,000. In 2008 there were only two. Such price rises have significant impacts on housing affordability.

For the mining based towns the majority of this growth occurred from 2004 suggesting the resources boom had a major impact on the housing markets of the Pilbara in particular. It is the more established regional towns such as Kalgoorlie and towns in the South West where growth has been relatively modest.

Table iv also shows how mining employment has increased dramatically in those towns where mining is the principle industry. An increase in population, high income employment and a housing stock which has failed to keep pace with market demand helps explain the rapid price movements in these mining centres. Demand for accommodation from the mining companies as well as investor demand attracted by the high rental returns, which result from a shortage of rental accommodation, has inevitable price effects and affordability consequences for those on non-mining incomes. In the Pilbara mining towns prices are higher than in the Perth metro area. These prices do not reflect an attractive environment with multiple services but rather employment driven demand for accommodation. A shortage of land supply has also had a significant impact on prices. The provision of Crown land in Western Australia is the responsibility of Landcorp, the State government land agency. There have been certain issues such as native title which have prevented a large scale supply response to demand side shifts but the boom largely took Landcorp by surprise and it is only now that land is being released on a scale necessary to tackle the accommodation shortage. A lack of construction workers and expensive materials also prevented large scale development.

Not all mining towns have experienced price rises similar to those in the Pilbara. Kalgoorlie-Boulder and Coolgardie in the Goldfields and Meekatharra in the Mid West have experienced much more modest price growth. Kalgoorlie is a well established mining town which has ridden out many boom and bust periods over the last 100 years. Mining is the main employer but the town has many other facets such as tourism, retailing, pastoralism and education making the town less susceptible to boom and bust cycles. Demand has risen strongly in Kalgoorlie as a result of the boom but the town is also an affordable location when compared to the Perth metropolitan area. This has attracted many investors and first time buyers to the town and the housing market functions more traditionally than areas such as the Pilbara which are dominated by employment demand for accommodation and less diversified local economies. There was also a much greater quantity of land released for residential development in Kalgoorlie during the 1990s when compared to a Pilbara town such as Karratha providing a steady supply of housing. However, prices have still doubled since 2004 and are continuing to rise despite the downturn in houses prices in the Perth metropolitan area.

The resources boom is one explanation for the dramatic growth in house prices but there has also been significant growth in non mining towns. North West tourism centres such as Broome, Exmouth and Geraldton have all grown by over 200% since 1998, not necessarily the result of population growth but of increased demand for tourism accommodation. Tourism centres in the South West such as Busselton, Margaret River, Denmark and Esperance have also seen rapid price rises, a proportion of which is attributable to sea and tree change demand (Williams 2007). In 2004 prices in these towns were already quite close to Perth metropolitan area levels and much of the growth since has been due to population growth and demand for holiday accommodation as opposed to Perth residents seeking more affordable accommodation.

However, there are a number of regional towns that have neither the mining industry or tourism demand to explain price growth. Towns such as York, Harvey and Narrogin are traditional agricultural centres but price growth in these locations has kept pace with other towns in regional WA. The most obvious explanation is the affordability of these locations when compared to the rest of regional WA and the Perth metropolitan area. York, Harvey and Narrogin are within a 90 minute drive of Perth and have attracted sea and tree
change populations through the affordability of property but also their relative proximity to Perth. Younger Australians looking to move into home ownership but still seeking a large block of land have also been able to secure their real estate requirements in these locations. Another explanation could be related to the mining sector. FIFO shift patterns where workers may have three weeks on and a week off offer flexibility in terms of a home base location. As long as the worker has access to an airport to catch a flight to the mining town perhaps twice a month then this opens up a much wider range of locations in comparison to the Perth commuter. Towns such as York and Harvey which offer affordable properties on relatively large blocks offer good value and lots of space and proximity to the Perth airport, the single largest FIFO hub. Further research is required on the factors contributing to the rapid growth in prices in non mining/tourism towns but enhanced affordability, sea/tree change and resource worker demand have certainly had an impact on demand and prices.

Figure 5 shows the strong relationship between population growth and house prices in regional WA. Higher house price growth is associated with high population growth; the cause of which may be mining employment growth, sea/tree change movements or buyers searching for affordable property. There are one or two exceptions but population is key to explaining price growth where there is an inadequate supply response.

**Figure 5: Housing Price and Population Growth: Regional WA**

| Housing Affordability in Regional Towns |

Price growth is related to economic activity with increases in employment and wages, especially as a result of the resources boom, driving demand for housing in regional WA. Mining towns in the North West of the state have experienced very rapid price increases, especially since 2004, but so have those towns that were relatively affordable at the start of the boom. On the surface, affordability seems more serious in the mining towns because of the house price levels. Even in small, remote locations such as the East Pilbara and Port Hedland median prices are well above those of Perth. With high median incomes in these locations, the result of high levels of mining employment, standard measures of affordability such as price:income ratios rate these locations as more affordable than towns in the South West where median incomes are much lower. Table v below describes the median price to median income ratios for each of the 27 regional towns. The table shows that the mining towns are actually some of the most affordable towns in WA when based on median incomes. Of course, not all residents are on the high mining incomes meaning...
such ratios mask the housing affordability issues affecting many in these communities, particularly for employees in small business and retail and key workers such as police, teachers and health workers. Other sectors of the local population, such as indigenous people have been marginalised from their communities because of housing affordability and inaccessibility.

Research by McKenzie et al (2009) highlights the issues faced by communities within remote mining towns. The recent Senate Select Committee on Housing Affordability (2008) heard evidence on how the resources boom has affected towns such as Karratha in a variety of ways leading not only to housing problems but also complex social and economic issues. A lack of employees for non-mining related local businesses, labour and business turnover, domestic violence and drug and alcohol abuse by some transient mining workers has had serious implications for the liveability of the town. However, not all mining towns have been affected in this way. Kalgoorlie-Boulder is one example where housing has remained relatively affordable and it does not have the social issues blighting towns like Karratha and Port Hedland. Reasons for this include the diversity of employment within the town, the strong sense of local community shown by the residents and a healthy housing market with first time buyers prevalent (McKenzie 2009).

Table v: Regional Housing Affordability 2008 (Median Household Income and Median House Prices)

<table>
<thead>
<tr>
<th></th>
<th>Price:income Multiplier</th>
<th>Price:income Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>9.86</td>
<td>Roebourne</td>
</tr>
<tr>
<td>Broome</td>
<td>9.76</td>
<td>Harvey</td>
</tr>
<tr>
<td>Augusta-Margaret River</td>
<td>8.82</td>
<td>Dardanup</td>
</tr>
<tr>
<td>Busselton</td>
<td>8.63</td>
<td>Northam</td>
</tr>
<tr>
<td>Exmouth</td>
<td>8.09</td>
<td>Manjimup</td>
</tr>
<tr>
<td>Albany</td>
<td>8.06</td>
<td>Port Hedland</td>
</tr>
<tr>
<td>Bridgetown</td>
<td>7.05</td>
<td>Newman (East Pilbara)</td>
</tr>
<tr>
<td>Esperance</td>
<td>7.03</td>
<td>Collie</td>
</tr>
<tr>
<td>York</td>
<td>6.93</td>
<td>Narrogin</td>
</tr>
<tr>
<td>Ravensthorpe</td>
<td>6.14</td>
<td>Kalgoorlie – Boulder</td>
</tr>
<tr>
<td>Geraldton - Greenough</td>
<td>6.09</td>
<td>Ashburton (Tom Price)</td>
</tr>
<tr>
<td>Carnarvon</td>
<td>6.01</td>
<td>Coolgardie</td>
</tr>
<tr>
<td>Boddington</td>
<td>6.01</td>
<td>Meekatharra</td>
</tr>
<tr>
<td>Bunbury</td>
<td>5.92</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Valuer General’s Data, ABS Census Data

The South West, which has seen the greatest influx of the sea/tree change residents, now has the greatest affordability issues. Because of the proximity to Perth, the climate and the attractive natural environment, many have chosen to move to these areas. In 2007, a mining company began regular FIFO services from the town of Busselton to the Pilbara region. Additionally increasing wealth, the result of the very strong WA economy, has fuelled the demand for holiday accommodation and areas such as Denmark, Margaret River and Busselton have rental, land and house prices either above the Perth metropolitan median or prices which have grown very rapidly in recent years and are approaching these levels. Median incomes in these areas are well below the metropolitan region making housing particularly unaffordable for those living within the community and seeking to form a household or those wishing to move into the area to seek employment without the income or savings necessary for a house purchase.

Housing affordability is a crucial issue for regional WA but methods used to quantify affordability issues are often misleading. The price:income ratios described above provide a general indication of affordability for
new buyers but median and average incomes tend to ignore those on low incomes that are most in need of affordable housing.

Mortgage stress is one of the key measures used to define housing affordability. The measure is usually based on the number of households whose net housing costs exceed 30% of gross household income. The Senate Select Committee on Housing Affordability in Australia heard evidence that almost one in four Australians was in Housing Stress in 2006/7 (Tanton, Nepal and Harding 2008). This figure rose to 55% for households headed by an unemployed person and 62% for households who bought a home in the previous three years. This measure can also be misleading as households, in whatever income bracket, can choose to spend more than 30% of gross income on housing costs for a variety of reasons including:

- Household is comfortable spending over 30% on housing costs.
- Expectation of future earnings increases.
- Prospect of capital growth secured from housing over time increasing long term wealth.
- Accommodation of family growth.
- Short term lifestyle change.

Housing need is an important concept related to housing affordability that is often ignored. In Australia, housing need has traditionally been linked closely with housing affordability measures such as the number of households in housing stress. However, housing stress is not a particularly good measure of housing need as it may define affordability for those already within public and private housing but ignores those who would like to access such housing and who are excluded because of price levels. Existing residents of a community may be in housing need if the accommodation within which they reside is unsuitable for their basic requirements due to:

- quality,
- overcrowding,
- location (this includes many indigenous households).

There are also existing residents that wish to form a new household within their community but are unable to do so because of a lack of available and affordable accommodation. These groups are hidden from the system as they reside within accommodation, albeit unsuitable for their housing requirements, so are traditionally not considered to be in need if housing stress is used as the policy measure or reside outside the location and commute long distances to access work or services. There are also those that would like to move into a community now, or sometime in the future, for the purposes of employment or because they have ties to the community. If such groups are unable to make this move due to unaffordable or unavailable accommodation then they should also be considered to be in housing need (Pendergast et al., 2004).

**Conclusions - Regional Housing Market Bust?**

The global financial crisis has had an effect on housing markets throughout the world. The downturn has affected the resources industry which, in turn, has had some affect on the WA economy. A rise in unemployment, particularly within the mining sector, has contributed to falling house prices in the Perth metropolitan region in the latter half of 2008. The Real Estate Institute of Western Australia reported a fall of 12% in 2008. However, business confidence returned relatively quickly, boosted by the decision to develop the Gorgon gas fields off shore from the Pilbara in late 2009. As the Western Australian economy picks up, unemployment is dropping and house prices are on the rise. The December 2009 Quarter showed that median house prices were once again at record levels, not only in Perth but in resource boom towns such as Kalgoorlie-Boulder, Karratha and Port Hedland (Real Estate Institute of Western Australia, 2010). This paper has analysed house price data for 2008 and first quarter of 2009 examining the direction of prices within the 27 regional housing markets. If these towns, particularly the mining towns, are so reliant on a healthy economic and resources sector, then fairly substantial, immediate price effects would be expected. If other towns are driven by non industry related factors the impact should not be as significant unless sea/tree change movements result in rising population growth. Table vi describes the direction of prices within each of the housing markets for 2008 and the first quarter of 2009.
There was a 12% fall in house prices in the Perth metro area in 2008 followed by a slight recovery in the first quarter of 2009. This is not a pattern reflected in the majority of regional towns where there was significant, positive growth in 2008, especially in the mining towns which saw the highest growth rates of all the regional towns analysed. The majority of 2008 growth was at the beginning of the year. Following the downturn, prices have started to fall in the mining towns as evidenced by the growth rates in early 2009 but more recently, prices have recovered quickly.

Generally, the towns closer to Perth saw the biggest declines in house prices in 2008. This could be attributed to the usual ripple effect of prices out of the main population centre but could also be due to a decline in second home purchases and possibly sea and tree change relocation demand.

There is significant investor demand within mining towns due to the rental returns available (up to 10% in Karratha) and a decline in such demand and investment disposals may have caused short term price falls, but this pattern was short-lived increased resource project certainty and investment demand has stabilised prices. A fall in demand for second homes and a general lack of market confidence may have affected demand in the tourism and agricultural towns with sea and tree change purchasers delaying or postponing their decisions due to a fall in income or uncertainty.

### Table vi: Recent Housing Market Performance

<table>
<thead>
<tr>
<th>Regional Town (Main Industry)</th>
<th>Distance from Perth (km)</th>
<th>Growth 2008</th>
<th>1 year Growth to June 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meekatharra (M)</td>
<td>771</td>
<td>117%</td>
<td>25.9%</td>
</tr>
<tr>
<td>Ashburton (Tom Price) (M)</td>
<td>1458</td>
<td>46%</td>
<td>41.4%</td>
</tr>
<tr>
<td>Ravensthorpe (M)</td>
<td>530</td>
<td>38%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Port Hedland (M)</td>
<td>1638</td>
<td>23%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Coolgardie (M)</td>
<td>556</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>East Pilbara (Newman) (M)</td>
<td>1186</td>
<td>20%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Kalgoorlie – Boulder (M)</td>
<td>595</td>
<td>20%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Narrogin (A)</td>
<td>192</td>
<td>14%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Bridgetown (M)</td>
<td>268</td>
<td>13%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Roebourne (Karratha) (M)</td>
<td>1535</td>
<td>7%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Broome (T)</td>
<td>2200</td>
<td>5%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Augusta-Margaret River (T)</td>
<td>277</td>
<td>4%</td>
<td>-11.3%</td>
</tr>
<tr>
<td>Exmouth (T)</td>
<td>1270</td>
<td>3%</td>
<td>-4.9%</td>
</tr>
<tr>
<td>Collie (M)</td>
<td>200</td>
<td>2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Geraldton – Greenough (T)</td>
<td>424</td>
<td>2%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Esperance (A)</td>
<td>725</td>
<td>2%</td>
<td>-5.4%</td>
</tr>
<tr>
<td>Dardanup (R)</td>
<td>183</td>
<td>-1%</td>
<td>0%</td>
</tr>
<tr>
<td>Carnarvon (A)</td>
<td>900</td>
<td>-2%</td>
<td>-14.8%</td>
</tr>
<tr>
<td>Manjimup (A)</td>
<td>304</td>
<td>-4%</td>
<td>-8%</td>
</tr>
<tr>
<td>Boddington (M)</td>
<td>123</td>
<td>-5%</td>
<td>-11%</td>
</tr>
<tr>
<td>Albany (A)</td>
<td>409</td>
<td>-5%</td>
<td>-11.9%</td>
</tr>
<tr>
<td>Harvey (A)</td>
<td>141</td>
<td>-5%</td>
<td>-4%</td>
</tr>
<tr>
<td>Northam (A)</td>
<td>100</td>
<td>-6%</td>
<td>-5.8%</td>
</tr>
<tr>
<td>York (A)</td>
<td>96</td>
<td>-7%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Bunbury (R)</td>
<td>174</td>
<td>-7%</td>
<td>-4.8%</td>
</tr>
<tr>
<td>Denmark (T)</td>
<td>400</td>
<td>-8%</td>
<td>-13.2%</td>
</tr>
</tbody>
</table>
With population continuing to increase and the WA economy showing signs that it is recovering quickly from the downturn with unemployment once again decreasing, a property market bust throughout regional WA is unlikely. It is only where industry collapses and the town’s main employer exits leaving few other employment opportunities will a town see a major property market bust. This could be the case in Ravensthorpe with the closure of the BHP nickel mine, although even there junior miners have purchased the BHP Billiton asset (at a considerable discount) and have announced future development plans. Nonetheless, the massive price growth, 588% over 10 years, the highest of all the towns analysed is unlikely to be sustained however growth was strongly positive in the year to June 2009. The junior mining companies will not have the same scale of operation nor the ambitious export plans so it is expected there will be a surfeit of quality housing stock in Ravensthorpe and Hopetoun, at least in the short term, restricting price growth.

Reports surrounding housing affordability problems in regional WA have centred on the mining towns due to high median prices. However, affordability and availability of property is also a significant issue in the non mining locations due to low median incomes. Of course affordability is a serious concern for residents of mining towns on non mining incomes but agricultural and coastal towns such as Albany, Denmark, York and Narrogin, to name just four, have seen rapid rises in median prices but no associated rise in incomes. These locations have largely been forgotten in the rush to blame the mining companies for the decline in affordability in the Pilbara especially. The problem is much more widespread than this.

As noted by Haslam McKenzie et al. (2009, 95), successful housing strategies in regional communities depend on coordinated action involving a range of government, market and community stakeholders. This involves resolution of the diverse and conflicting interests of these stakeholders and agreement about who is responsible for what. Even if this active engagement and coordination can be achieved, regional towns, including mining communities, face intractable problems associated with lags in housing supply and the need to plan for and manage decline and exit phases of industry activity. This requires agile responses to both expanding and declining resident populations and a fluctuating non resident workforce, suggesting a need for flexible housing responses. The housing challenges and opportunities will be different in each context and appropriate responses and implementation mechanisms need to be designed that take account of local housing markets, mining activity and the specifics of local contexts. It would therefore be naïve to presume that there is a one size fits all solution or package of policy responses that will be applicable across communities.

It is evident that adequate supply and timely land release is critical to meeting demand for housing in times of rapid expansion. It takes time if all the competing uses for land are to be reconciled, especially around regional centres. Initiatives such as the development of potential land banks should be entertained. Decisions regarding whose responsibility it is for the provision of infrastructure, ongoing maintenance and upgrading of current infrastructure are all important in ensuring supply for future demand for land suitable for housing. Governance structures that enable stakeholders to resolve land supply issues in a timely and collaborative manner should be in place before, rather than during or after, the boom conditions hit. Local government is an important stakeholder and it is critical that strategic planners are well-informed and supported in their work by State government planning, land development and infrastructure agencies. Local government needs to be sufficiently resourced and supported in the development of processes and structures that facilitate timely land release and the resolution of land use conflicts. Well informed and co-ordinated growth management planning is an essential tool for agile and responsive land supply strategies.
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Senate Select Committee on Housing Affordability in Australia. 2008. A good house is hard to find: Housing affordability in Australia. Canberra: Commonwealth of Australia.