RESIDEX

Market Commentary Report

Victoria

Data for the Quarter Ending December 2015

Market Update

A summary of major market performances is presented in table 1. In capital growth terms, most markets saw modest growth. Sydney dwellings were an exception, with annualised growth of 18.36% in houses and 13.48% in units, as were Melbourne houses with annualised growth of 13.00%.

T1: Statistics Summary – Data Ending December 2015

Houses												
		Growth				Rent				Sales		
Area	Median Value	10 Years %pa	Growth Dec 2014-Dec 2015	Last Quarter	Last Month	Rate Month Ending Dec 2015	Month Ending Dec 2015	Month Ending Dec 2014	Year Change	Year Ending Dec 2015	Year Ending Dec 2014	Year Change
ACT	$577,500	4.79%	5.53%	1.69%	1.41%	4.57%	$505	$500	1.00%	4705	4560	3.18%
Adelaide	$442,500	4.64%	4.80%	3.04%	0.86%	4.42%	$375	$375	0.00%	20015	18319	9.26%
SA Country	$262,000	3.21%	1.43%	-0.15%	-1.08%	5.40%	$270	$270	0.00%	6998	6706	4.35%
Brisbane	$500,500	4.07%	3.40%	1.00%	-0.10%	4.76%	$455	$450	1.11%	41959	38769	8.23%
QLD Country	$401,500	3.18%	3.36%	1.53%	1.22%	4.89%	$375	$380	-1.32%	33739	33326	1.24%
Darwin	$571,000	6.19%	0.50%	-1.32%	-1.17%	5.30%	$580	$590	-1.69%	1095	1361	-19.54%
Northern Territory	$534,000	6.31%	0.49%	-1.39%	-1.09%	5.43%	$555	$560	-0.89%	1456	1877	-22.43%
Hobart	$387,000	2.98%	4.90%	1.81%	0.79%	4.95%	$365	$350	4.29%	2174	2064	5.33%
TAS Country	$267,000	2.35%	1.71%	1.07%	0.16%	5.34%	$275	$270	1.85%	4252	3666	15.98%
Melbourne	$737,000	7.24%	13.00%	2.68%	-0.76%	3.21%	$455	$445	2.25%	53901	45657	18.06%
VIC Country	$366,000	4.61%	5.06%	2.51%	1.40%	4.79%	$335	$330	1.52%	48084	42128	14.14%
Perth	$527,000	3.23%	-0.66%	0.57%	2.30%	4.30%	$435	$460	-5.43%	25297	27693	-8.65%
WA Country	$322,000	2.06%	-6.62%	-5.52%	-1.90%	5.43%	$335	$345	-2.90%	6025	6140	-1.87%
Sydney	$1,065,500	7.13%	18.36%	1.73%	-0.14%	3.23%	$660	$645	2.33%	47558	47513	0.09%
NSW Country	$429,000	3.74%	9.61%	2.49%	0.66%	4.98%	$410	$385	6.49%	51621	47772	8.06%
Australia	$517,500	4.61%	6.70%	1.76%	0.65%	4.34%	$430	$425	1.18%	347784	326190	6.62%

Units												
		Growth				Rent				Sales		
Area	Median Value	10 Years %pa	Growth Dec 2014-Dec 2015	Last Quarter	Last Month	Rate Month Ending Dec 2015	Month Ending Dec 2015	Month Ending Dec 2014	Year Change	Year Ending Dec 2015	Year Ending Dec 2014	Year Change
ACT	$401,500	3.05%	0.46%	0.94%	0.05%	5.23%	$400	$405	-1.23%	3896	2946	32.25%
Adelaide	$318,500	4.25%	0.77%	-0.02%	-0.98%	5.07%	$310	$310	0.00%	5243	4828	8.60%
SA Country	$225,500	2.15%	-0.89%	-4.33%	-1.68%	5.18%	$225	$225	0.00%	492	459	7.19%
Brisbane	$384,500	3.82%	3.76%	1.22%	0.14%	5.19%	$385	$380	1.32%	20407	18804	8.52%
QLD Country	$335,000	1.58%	4.86%	1.08%	0.16%	5.55%	$355	$350	1.43%	17146	15892	7.89%
Darwin	$400,000	6.09%	-5.55%	-3.53%	-1.97%	5.79%	$445	$475	-6.32%	470	721	-34.81%
Northern Territory	$381,500	5.80%	-5.14%	-3.75%	-1.81%	5.80%	$425	$455	-6.59%	581	909	-36.08%
Hobart	$277,500	3.31%	7.19%	-0.66%	1.21%	5.50%	$290	$285	1.75%	661	673	-1.78%
TAS Country	$199,500	1.80%	-1.92%	-2.23%	-0.02%	5.60%	$215	$220	-2.27%	537	576	-6.77%
Melbourne	$495,500	5.54%	5.34%	1.21%	0.19%	4.29%	$405	$400	1.25%	39579	37334	6.01%
VIC Country	$273,500	3.70%	5.09%	1.97%	1.73%	5.21%	$275	$260	5.77%	6634	6749	-1.70%
Perth	$447,000	4.35%	-3.96%	-1.17%	1.85%	4.72%	$405	$440	-7.95%	11245	12333	-8.82%
WA Country	$300,000	2.47%	-3.18%	1.28%	-0.25%	5.64%	$325	$330	-1.52%	928	1039	-10.68%
Sydney	$688,500	6.25%	13.48%	1.67%	0.04%	4.17%	$550	$540	1.85%	45838	46546	-1.52%
NSW Country	$358,000	2.72%	9.70%	2.50%	0.03%	5.06%	$345	$330	4.55%	13098	11932	9.77%
Australia	$478,000	4.51%	6.57%	0.97%	0.83%	4.59%	$420	$415	1.20%	166285	161020	3.27%

Source: Residex

Perth houses saw an unexpected surge of 2.30% in the month of December, while Adelaide, Hobart and ACT houses showed steady capital growth over the last 12 months.

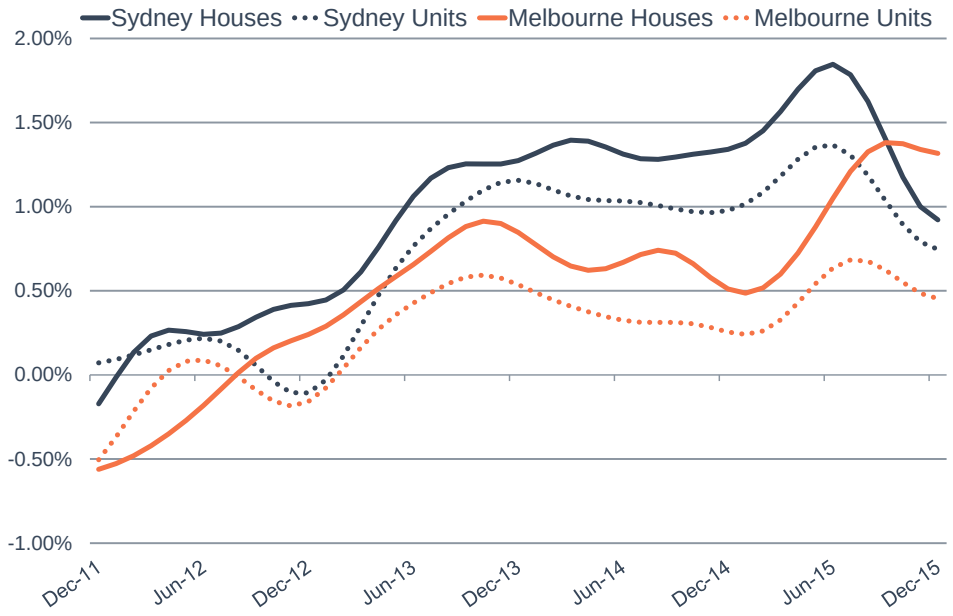
End of the Sydney Boom - Will Growth Spill Over?

The end of 2015 marked an end for the Sydney housing boom. The upswing in the current cycle lasted almost three years, and in real dollar terms, typical houses increased approximately $375,000.

Historically, Sydney leads growth on the east coast, and is followed by Melbourne and Brisbane. Given this general historical pattern, the Melbourne house market could peak sometime in the first quarter of 2016, with Brisbane to follow later in the year. However, global economic trends and a national crack-down on speculative buying may hamper growth for the other east coast cities.

Graph 1 shows the monthly growth trend in capital growth of Sydney and Melbourne. The graph depicts Melbourne's peak growth in houses following Sydney.

G1: Monthly Capital Growth Trend: Sydney and Melbourne Dwellings



Source: Residex

It is difficult to say what exacerbated the last upswing in Sydney, and whether similar factors will impact the other major dwelling markets.

Many have speculated and reported anecdotes of Chinese foreign investment pushing up real estate values. There is no reliable dataset in existence that documents foreign investment in Australian residential real estate[1], so it is not rigorously sound to say that this was part of enormous value increases.

In any case, the People's Bank of China has placed restrictions upon citizens taking capital out of China, in an effort to encourage investment within their country. Citizens are permitted to take just US$50,000 out of the country each year[2]. This action could limit the growth experienced in other Australian cities.

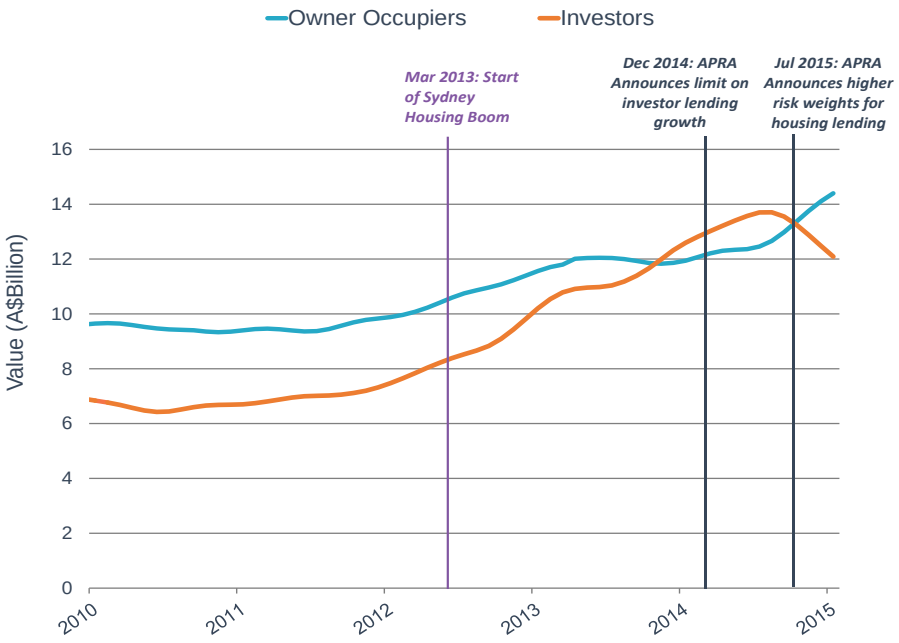
It is also not necessarily true to say that speculative *domestic* investment bid up the market. However, there is some evidence suggesting that investors became more active than owner occupiers in the latest housing boom.

The ABS collects data of the amount of money lent for the purposes of owner occupation versus investment. In recorded history, 2014 was the first time investors over-took owner occupiers who were buying something to live in. A graph of this data set over the last 5 years is presented in Graph 2.

[1] **Source:** https://theconversation.com/dont-be-misled-on-chinese-foreign-investment-read-the-facts-25316
[2] **Source:** http://www.businessinsider.com.au/chinas-crackdown-on-capital-flight-is-starting-to-bite-in-the-sydney-property-market-2016-1

It is worth noting that the lending figures in Graph 2 are for Australia wide lending, so the phenomena of investors over-taking owner occupiers may not be specific to the Sydney market. I have also excluded borrowing figures for the purpose of re-financing.

G2: Significant Lender's Finance Commitments to Investors versus Owner Occupiers



Source: ABS Catalogue number 5609.0 Housing Finance, Australia

Note: Excludes refinancing for owner occupiers

The graph suggests that, either investors were buying higher value dwellings, *or* investors were buying a higher volume of dwellings at this time.

Theoretically, investors who owned property in Sydney could have continued to bid up prices in the market while interest rates were low. The ability to borrow equity against property facilitates this: the higher prices go, the more equity investors with property have to purchase new dwellings.

In December 2014, the Australian Prudential Regulation Authority (APRA) announced banks must adhere to a 10% growth limit in the number of investors they would lend to[3]. By the beginning of July 2015, a downswing in the Sydney market had begun. In July 2015, APRA announced further regulations[4] that would require lenders to hold more capital against home loans. Sydney house values fell 0.14% in the month of December, the first fall in the aggregate market since January 2014.

One of the criticisms of APRA's decision was that it was not specific to the rapidly growing markets of Sydney and Melbourne.

However, of the 514,066 sales Residex recorded across Australia for 2015, approximately 20% of these were recorded just in the Sydney metropolitan region. Another 20% were concentrated just in the Melbourne metropolitan. If anything, high home loan rates may cause investors to spread their wealth among more affordable cities across the country.

Evidence of this is already emerging. Developers such as Stockland and Mirvac have reported Sydney buyers registering interest for apartments in Brisbane; private developers have also recorded Sydney buyers making up as much as 40% of investment in new developments[5].

[3] **Source:** http://www.apra.gov.au/mediareleases/pages/14_30.aspx
[4] **Source:** http://www.apra.gov.au/MediaReleases/Pages/15_19.aspx
[5] **Source:** http://www.afr.com/real-estate/the-real-sydney-buyers-heading-to-brisbane-20151002-gjzqnn

While spill-over of investment from Melbourne and Sydney may result in capital growth for the Brisbane market, it is important to note that short term growth and interest from investment is not necessarily synonymous with a long term growth prospects.

A reported 20,000 mining jobs have been lost across Queensland. Though this has mostly been in regional Queensland, Brisbane's state product growth could remain subdued as the result of revenue lost from mining royalties, and a higher unemployment burden. Indeed, the latest state accounts data showed that Queensland was the only state to see a decline in gross state product per capita in the year to June 2015, of -0.9%.

I expect those in regional mining areas may start migrating to the south-east cities of Queensland in search of new work. However, as the dominant services and tourism sectors in Brisbane are not as high paid or productive, the 'new normal' in the Brisbane economy may be low growth which, in time, would filter into dwelling values.

Where to now for the resource states?

The house price index (HPI)[6] for Perth and Darwin dwellings are presented in Graph 3. The dwelling markets of Perth and Darwin have experienced patchy growth in 2015, but overall seemed to have sustained higher levels than the pre-mining boom period of the mid 2000's.

Judging by movements in the HPI, the outlook for Perth and Darwin look quite positive. Indeed, the statistics summary in Table 1 show that Perth houses went up 2.30% in the month of December. However, monthly data is volatile, so this result may not reflect a larger trend.

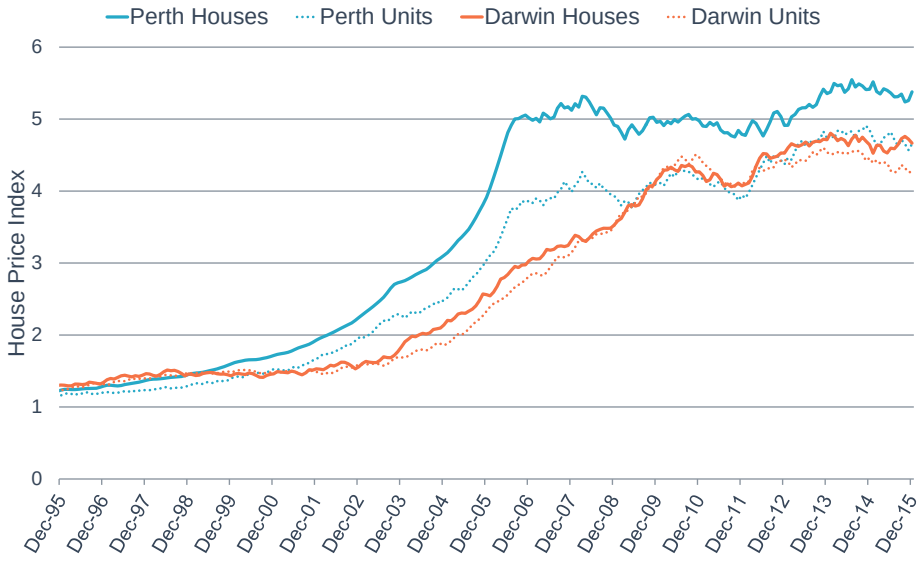
The troubling thing about these markets is that although the gross state product figures suggest buoyancy in these states, the state final demand and employment figures show a slightly different story.

At the moment it seems that Western Australia is being propped up by exports from a sector which is shedding many jobs, which means that the wealth is not being widely distributed, which may limit dwelling demand and rental yields in the future.

Nationally, the shift from resources and agricultural sectors to the knowledge economy has been sluggish, with the federal government accused of being risk averse and discouraging of an innovative 'start-up' culture in Australia.

[6] The HPI represents how many times the value of a property has increased by since the first data point. For example, a HPI of 5.97 in Perth Houses means that houses are 5.97 times what they were worth since the first point of data in 1993.

G3: House Price Index – Perth and Darwin dwellings



Source: Residex

This is reinforced by the Productivity Commission report released in December 2015. The report revealed just half a% of new businesses are start-ups (innovative firms with high growth ambition and potential), and less than 2% of all businesses could be described as innovating. The report concluded economic growth potential in Australia lags as a result of a lack of mentorship and culture around risk and innovation.

While employment in Australia seems to be improving, wage growth is still at a record low of 2.3%. Consumer confidence fell 3.5% from December to January.

2016 is likely to see difficult economic times across Australia. While there may be a continuation of growth cycles in Melbourne and Brisbane, and some short term upswings in Perth over the next quarter, investors and home buyers should keep in mind the long term growth fundamentals of a market.

Economic Report

International

The global economy was off to a rocky start in January 2016, with oil prices and Chinese economic performance continuing to dominate movements in the global economy.

Following the Saudi execution of a leading Shia cleric on January 1st[7], diplomatic ties between Iran and Saudi Arabia were severed. The event was one manifestation of decades of tension.

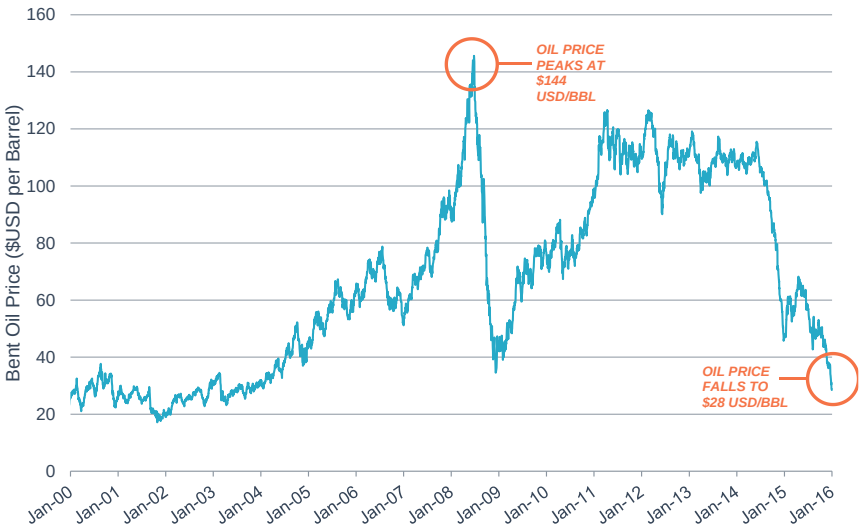
The dispute partially accounts for oil price volatility, as both countries are members of the Organization of the Petroleum Exporting Countries (OPEC). The value of bent crude rose over 3% on Monday the 4th when stock markets opened in 2016. Two weeks later, prices fell to a 13 year low of USD$28 per barrel.

Graph 1 displays the oil price in terms of US dollars. The graph shows a sharp decline in oil prices from mid-2014. Price falls are attributed to an increase in suppliers, such as in the US.

Prices are expected to fall further as the US and the EU prepare to lift oil trading sanctions on Iran in the coming months. This may have the effect of pushing out recent entrants to the market who have lower economies of scale.

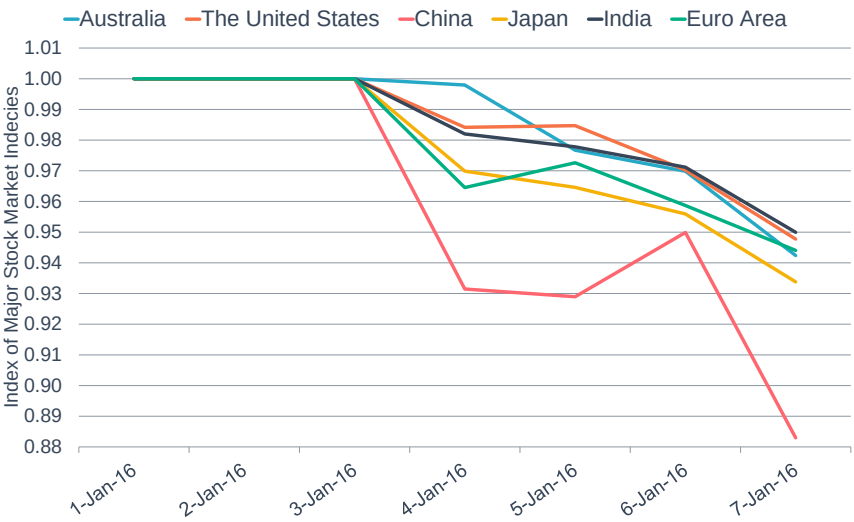
[7] **Source:** http://www.theguardian.com/world/2016/jan/02/saudi-execution-of-shia-cleric-sparks-outrage-in-middle-east

G1: Oil Price – USD/BBL



Source: Trading Economics

G2: Performance of Major Stock Markets around the World – 1st-7th, January 2016



Source: Trading Economics

Also on Monday the 4th, the Chinese Manufacturing Purchasing Managers Index (PMI)[8] was released. Manufacturing PMI was expected to improve following deterioration since October 2014.

It did not improve. PMI declined further from 48.60 in November to 48.20 in December.

These events sent the Shanghai Composite Index plummeting by 6.9% on the first trading day of the year. The Chinese government temporarily halted trading using 'circuit breakers'[9], which have since been suspended. The Circuit breakers had the perverse effect of encouraging *more* selling by spooking traders.

Graph 2 shows movements in major stock market indices, based on what the stock markets were worth when they opened on Monday the 4th. The Chinese stock market suffered a major decline, quickly followed by other markets.

[8] The Manufacturing PMI is an index that measures manufacturing activity. It is derived using survey data from over 400 industrial companies based on orders, output, employment, delivery times and stock of items purchased.
[9] Circuit Breakers are a mechanism by which the Chinese stock markets automatically shut down for 15 minutes following a 5% market decline, and for the rest of the trading day if the fall reaches 7%. **Source:** http://www.abc.net.au/news/2016-01-08/china-suspends-circuit-breaker-mechanism/7075454

The Indian and United States stock markets were most resistant to the shock; India has a strong consumption base which insulates it from external shocks, and the US has experienced relative strength in employment and currency, making it a 'safe haven' for investors.

As economic performance slows, many economies are experiencing currency devaluation. Interestingly, despite currencies weakening in relation to the US dollar, global trade of final goods and services is *falling*[10]. The World Bank suggests that currency depreciation is approximately half as effective in boosting export demand as it was in the 1990's[11].

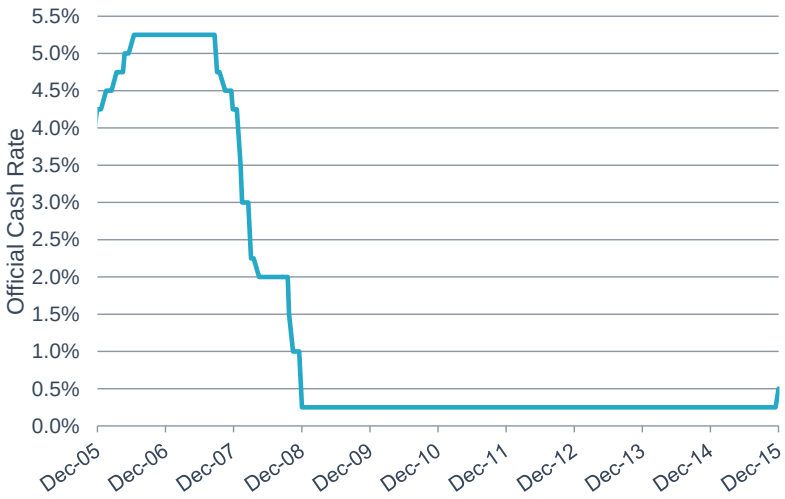
This is arguably exacerbated by global production chains. A lower value currency makes final goods and services cheap, but it also makes production inputs from overseas more expensive. This increases production costs and reduces revenue for firms and individuals.

Slowed growth in the global economy is 'the new normal'. However, there are some bright spots emerging, particularly in the US, in India and in parts of Australia. The following sections will explore in more detail how the major economies are performing, and how this impacts Australia's economic performance and housing.

United States

Despite being the epicentre of the Global Financial Crisis in 2008, the United States is now considered a steady economic force in a chaotic, global economy. In December 2015, the US Federal Reserve increased the cash rate for the first time since 2008. The rate increased by 0.25 percentage points to 0.50.

G3: Federal Reserve Cash Rate – December 2005-2015



Source: Trading Economics

The increase in the cash rate signals strength in the US economy. As I predicted last quarter, this has attracted many to the Greenback, which increased markedly from an average index of 92.81 in January 2015, to nearly 100 in late January 2016. As uncertainty in China, Europe and commodity exporting economies continues, the USD is likely to remain popular with investors in 2016.

A strengthening in the Greenback has driven currency depreciation in other economies, such as Australia, which is measured against the USD.

Confidence in the employment situation in the US partially fuelled the Federal Reserve decision to increase the cash rate. In December, the unemployment rate remained unchanged from the previous month at 5%. Unemployment is expected to fall below 5% in 2016, for the first time since 2008.

[10] **Source:** https://www.imf.org/external/pubs/ft/wp/2015/wp1506.pdf

[11] **Source:** http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/08/11/090224b08306790b/1_0/Rendered/PDF/Depreciations00lasticity0of0exports.pdf

Many believe that the increase in employment could lead to higher wage growth. As the pool of unemployed people shrink, employers may use higher wages to entice workers. High employment also increases consumption, which can (theoretically) lead to demand pull inflation. This is a desirable outcome for the Federal Reserve, because the United States inflation rate is below their target of 2%.

However, as noted in previous quarters, *under-employment* can constrain wage growth. This is because workers bargain for more hours instead of higher pay if they are under-employed. Under-employment has trended down over time, but surged again in November to 14% of the workforce, according to the United States Economic Policy Institute.

Wage growth is important, because it is a predictor of consumer confidence and inflation. Without willingness to spend, the recent tightening of monetary policy could have a contractionary impact on the US economy. Wage growth has been falling, and inflation is also low.

Whether economic growth continues in the US depends on the *type* of employment experienced. More full time employment and high skilled employment would encourage wage growth. Although inflation is below target, it is slowly increasing. This signals steady growth could continue in the US in 2016.

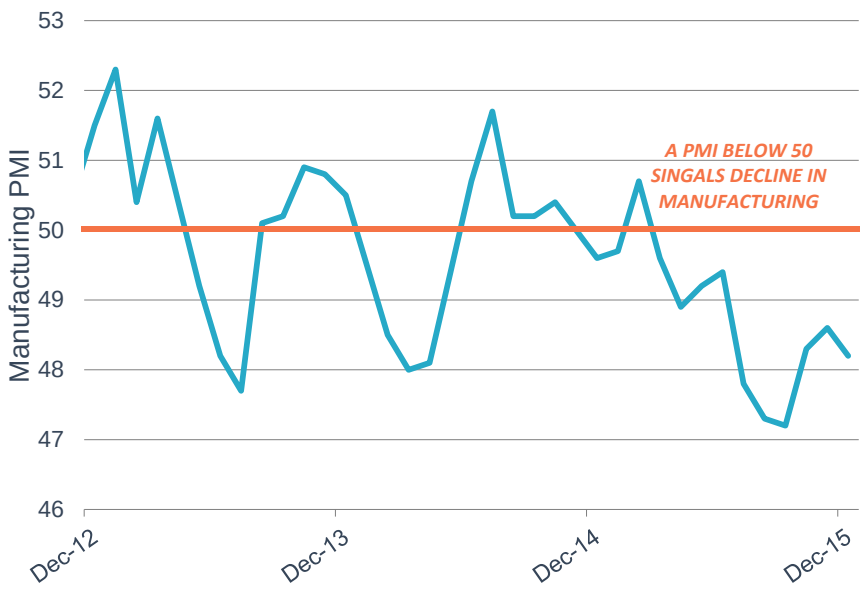
China

In late January, the Chinese government reported their lowest annual GDP growth rate in 25 years, of 6.8% for the December quarter. This was expected from forecasters as China transitions to a more service and domestic-consumption based economy.

Despite the dramatic losses in the Chinese stock market, bearishness toward Chinese stocks does not have huge spill-over into the Chinese economy. Approximately only one third of Chinese businesses are represented on the stock market. Overcapacity in manufacturing, debt levels and demographic change present more of a challenge.

Graph 4 shows the Purchasing Managers Index (PMI) for Service and Manufacturing sectors in China.

G4: Chinese Manufacturing PMI



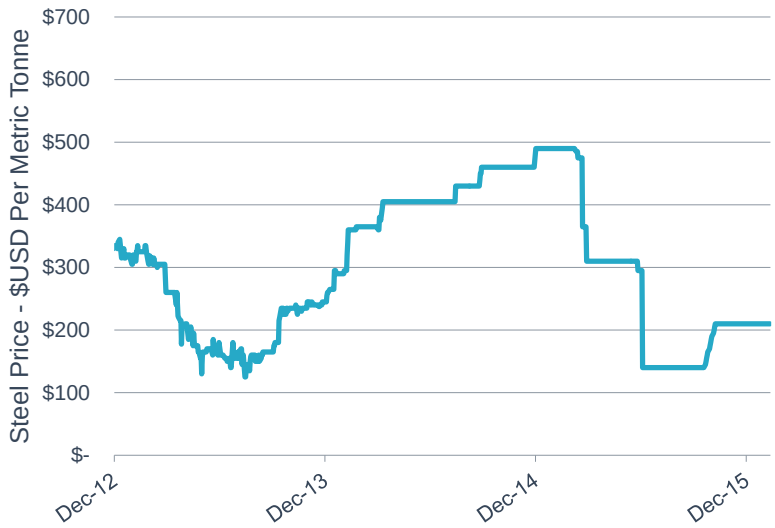
Source: Trading Economics

PMI is derived from business surveys on conditions of production, orders, inputs, inventories and employment. A PMI of below 50, as observed in Chinese manufacturing since March 2015, indicates purchasing managers believe business is deteriorating.

The steel sector exemplifies how manufacturing is necessarily falling. Development and subsidies from the Chinese government have sent artificial signals to steel producers. Producers are thought to be overcapacity by approximately 400 million tonnes[12].

An over-supply of steel has led to plummeting prices, as can be seen in Graph 5.

G5: Steel Price in $USD per Dry Metric Tonne



Source: Trading Economics

Subsequently, PMI and industrial production has fallen. Perceived price dumping on other countries has further threatened job security in the global economy, such as in the European Union, which is the world's second largest producer of steel.

Falling levels of production are worrying given the high levels of household and private debt, which is at approximately 207% of GDP[13]. Government debt to GDP has also risen significantly over the last 4 years.

Another important challenge faced by Chinese people is the aging population. In October last year, the government abandoned the controversial 'one child' policy amid realisations that the working age population is shrinking[14]. Though the effects of repealing the policy will take a long time to boost the working population, it is a positive, long term strategy for the economy of China.

Accepting failure of government policy is considered the new way forward by many Chinese business leaders. Deloitte China's chief economist Xu Sitao expressed that "closing down factories [and] allowing certain financial institutions to fail"[15] would be key for reform in the volatile economy. While this would create short term pain and long term stability within the Chinese economy, many countries around the world will experience subdued growth as a result.

Euro Area

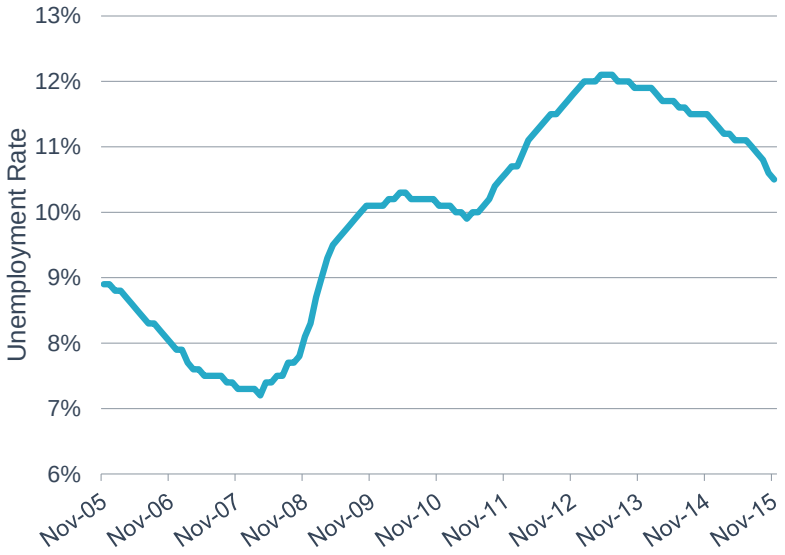
The Euro Area economy is a mixed bag of sentiments and indicators. The unemployment rate in the Euro Area is trending down strongly, as can be seen in in Graph 6. Unemployment fell to 10.4% in December against a participation rate of 56.8% in the September quarter.

[12] **Source:** http://www.cnbc.com/2015/11/18/overcapacity-growth-fears-drives-china-steel-prices-to-record-lows.html
[13] **Source:** http://www.bloomberg.com/news/articles/2015-07-15/china-s-debt-to-gdp-ratio-just-climbed-to-a-new-record-high
[14] **Source**: https://www.washingtonpost.com/world/asia_pacific/china-lifts-one-child-policy-amid-worries-of-graying-population/2015/10/29/207fc0e6-7e2b-11e5-beba-927fd8634498_story.html
[15] **Source:** http://www.abc.net.au/news/2016-01-19/china-posts-slowest-economic-growth-in-25-years/7098230

Among the member states, the lowest unemployment figure was recorded in Germany at 4.5%, and the highest was in Greece (24.6%), followed by Spain (21.4%). Compared with a year ago, the unemployment rate in November 2015 fell in twenty-five Member States.

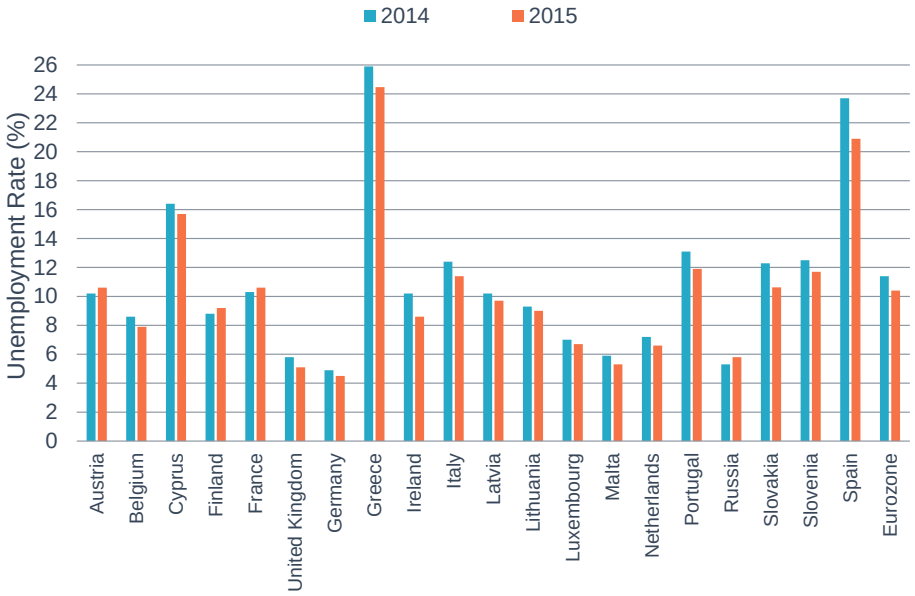
Graph 7 shows the unemployment rate at the last point of measurement in 2014 and 2015 in major Euro Area economies. Year on year, most European countries saw improvement in the unemployment rate, though perhaps most notably in Spain.

G6: Euro Area – Unemployment Rate



Source: Trading Economics

G7: Euro Area – Unemployment Rate by Country (2014-15)



Source: Trading Economics

Since the implementation of the European Central Bank Quantitative Easing program in the beginning of 2015, the annual GDP growth cycle for the Euro Area picked up marginally, which is likely to have absorbed workers into employment.

Manufacturing PMI has increased steadily over 2015, and was last recoded in December as 53.2. While this is a positive movement, the European economy is not as dependant on manufacturing as the Chinese economy, with manufacturing accounting for approximately 20-25% of GDP in Europe.

Rising tensions between Iran and Saudi Arabia may see further refugees of war seek refuge in Europe, on top of the 1 million that arrived in 2015. In 2016, the European Commission expects 1.5 million migrants to make the journey. As discussed last quarter, it is difficult to evaluate the exact economic impact that an influx of refugees has on the European economies.

So long as a government has a large enough economy to support the settlement of refugees, adding residents to an area can boost the size of an economy by increasing consumption demand, and providing labour to supplement an aging workforce.

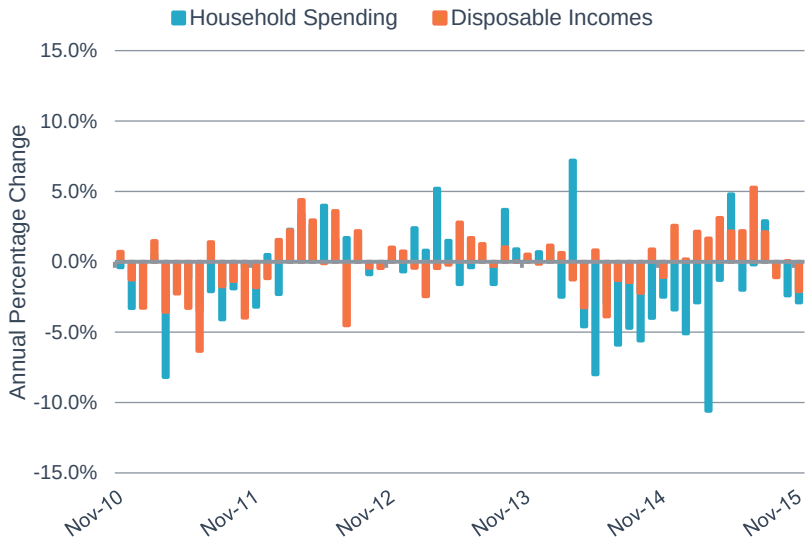
However, with tensions rising in Europe between extremist groups, it is unlikely that migrants will make a smooth settlement into Europe, and conflict between groups can lead to a contraction in economic growth through the destruction of property or the deploying of public forces to mitigate conflict.

Japan

In 2012, Prime Minister Shinzo Abe launched a three pronged policy to reform the Japanese economy using monetary policy, fiscal policy and structural reform. Three years on, and there are some modest improvements in the Japanese economy, but the fundamental problem of an aging, declining population remains unaddressed.

Japan narrowly avoided a recession in the third quarter of 2015, with GDP inching up by 0.30% in the September quarter. Annual GDP growth at September was up to 1.6%. While low, this is a relatively pleasing figure in the post-GFC economy.

G8: Annual Change in Household Spending and Disposable Incomes – Japan



Source: Trading Economics

Abe's policies of quantitative easing and progressive fiscal policy are having a slow burning effect on consumers and industry. Consumer confidence in Japan was up to 42.7 in December form 42.6 in November, however a consumer sentiment index below 50 still indicates pessimism about household expenditure and employment.

Cautious savings culture in Japan is evidenced in Graph 8. It shows the annual change in household spending in Japan, and average monthly disposable income taken at each month.

The last two years have seen conservative spending as incomes have experienced negative or very modest growth in response to low interest rates.

While unwillingness to spend in households may constrain economic growth to an extent, these saving patterns evolve from geographical risks such as earthquakes, mudslides and typhoons, which encourage people to save for such destructive events. Spending was also discouraged with a rise in consumption taxes handed down in April 2014.

Abe's fiscal policies included spending on aged care and child care to help people with dependents into the labour force. This appears to have been more successful, with participation in the workforce increasing over 2015. However, the *number* of employed persons is falling, signifying those entering the workforce with the aid of fiscal subsidy is not enough to compensate for those who are retiring from the workplace.

The key challenge for Japan is expanding population to increase demand. Japan's population is expected to contract over 30% in the next 50 years[16]. As the economy continues to dwindle, constrained economic growth in Japan could threaten Australia's trade with Japan. Japan made up over $3 billion worth of Australian export demand in November 2015 alone, but demand has been in decline since 2013.

India

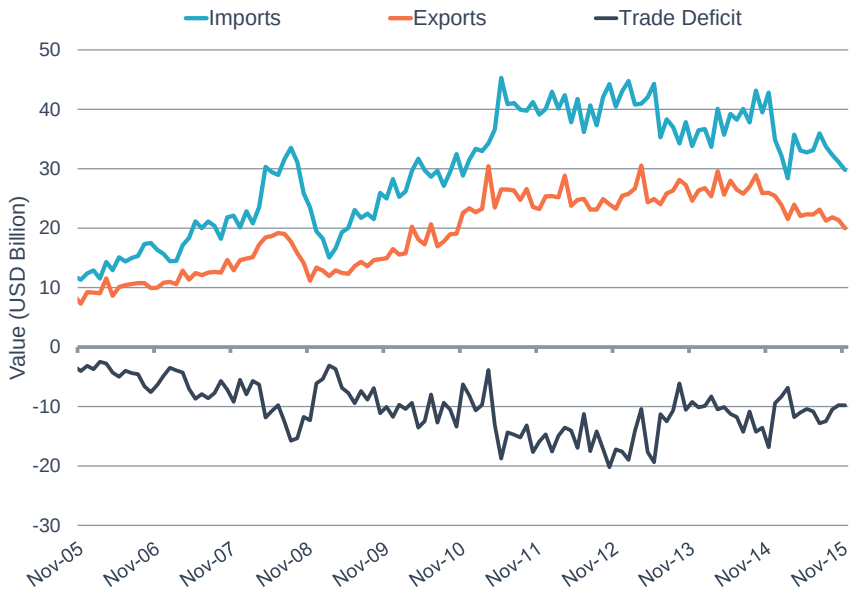
Annual GDP growth in India at September 2015 was 7.4%. This impressive figure cemented India as an economic leader among emerging economies, outpacing growth in China, where GDP growth was 6.9%.

India has economic fundamentals which should see continued steady growth in the current climate, such as a strong domestic consumption base, and the fact that the country is an importer of oil. India imports over 3 million barrels of oil per day.

However, India is not untouched from a global confidence crunch. The Manufacturing PMI figure fell to 49.1 in December - the lowest figure in over two years. Industrial input was down by 3.2% in November, which was largely due to a 4.4% fall in manufacturing.

Graph 9 plots the trade situation in India with the value (in USD billion) of imports, exports and the trade deficit at each month. The trade deficit began to improve over 2015, as the value of imports fell. While it looks as though this situation began to deteriorate towards the end of 2015, the reduced price of oil could help narrow the gap between the value of exports and imports, provided this is not offset by a fall in demand for exports.

G9: India – Value of Imports, Exports and the Trade Deficit (2005-2015)



Source: Trading Economics

[16] **Source:** http://www.telegraph.co.uk/finance/economics/12068068/Mapped-how-a-demographic-time-bomb-will-transform-the-global-economy.html

The trade data from India indicates that the domestic consumption base is strong, with Indian businesses and households importing more goods than are sent out of the country. This tendency to consume has increased tourism from India[17] as GDP per capita has rapidly increased. This boosted the tourism sector of other countries, including Australia.

Reduced industrial activity and the ripple of the stock market crash in China could further impact trade from India.
However, it seems government officials are not so concerned about the trade position, as they securing foreign investment. With capital outflows from China increasing in the wake of slowed GDP growth and a stock market crash, Indian officials are seizing the opportunity to further their 'Make in India' initiative.

Raghuram Rajan, Governor of the Reserve Bank of India, argues that one of the main challenges for India is the implementation of new infrastructure and regulatory changes that would make foreign investment easier.

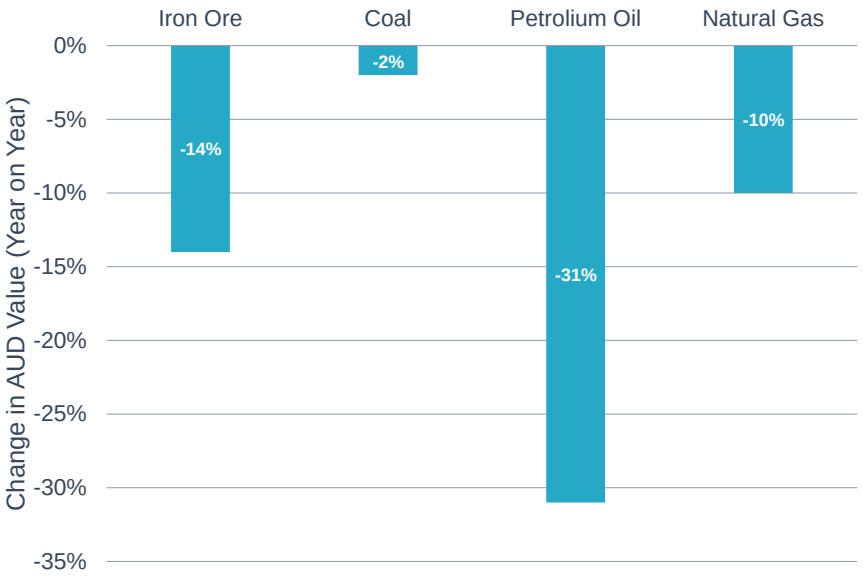
The 2016-17 budget for India addresses this to an extent, including a focus on irrigation infrastructure for rural produce growers, a sector of the economy which has taken a hit after two consecutive seasons of drought. Restructuring for shipyard finance will also allow cheaper loans for this sector. An efficient shipping sector makes it easier for Indian businesses to be part of a global production chain.

However, it is likely that, while India is a bright spot in the global economy, it will not escape the confidence crunch to be experienced over the next few years. Growth in India will likely remain buoyant in 2016, but the reduction in trade and investment in the global economy may prevent India from reaching its full economic growth capacity.

Australia

The Australian economy is making an awkward transition from its reliance on commodities to a more service-based, and (supposedly) knowledge based economy.

G10: Australia – Value Change in Major Commodity Exports (2014-2015)

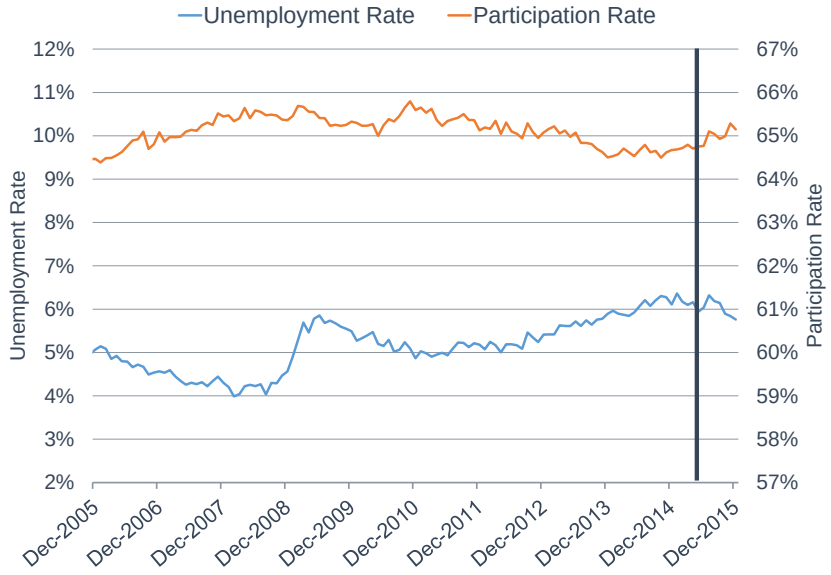


Source: Trading Economics

Graph 10 shows the annualised growth rates in the AUD value of major exported commodities. It is worth noting these commodities combined made up 43.61% of total exports in November 2015.

[17] **Source:** http://www.theguardian.com/business/2016/jan/20/india-will-step-up-as-chinas-economy-slows-says-josh-frydenberg

G11: Australia – Labour Force (2005-2015)



Source: Trading Economics

This could be partially explained by a fall in demand from China, but due to volumes secured from existing contracts, it is more likely to do with the falling *value* of these commodities.

The decline in growth, consumption and production in China is worrying for Australia. China made up 32.66% of demand for Australian exports in October 2015. Figures from the Department of Foreign Affairs and Trade (DFAT) and the University of Sydney estimate that in 2014, Chinese investment into Australia was worth USD$8.35 billion, making China Australia's fifth largest investor.

Approximately 72% of that investment went into New South Wales. With Chinese businesses scaling back investment and spending, Australia's economy will see dramatic changes in export revenues and economic growth.

Despite the poor outlook for the Australian economy in 2016, employment levels moved favourably in 2015. One could be forgiven for being surprised at the job figures, as redundancies have been salient in the media. Chevron is one of many examples. The company announced job cuts of up to 7,000 employees amid the completion of construction of the Gorgon liquefied natural gas project.

The employment situation is shown in Graph 11. The dark blue line indicates the start of a trend where participation in job search and work activity (the participation rate) rose, and the unemployment rate went down.

This general trend may be attributed to an increase in part-time employment (3.2% year on year) and full-time employment (2.3% year on year) over 2015. With thousands of jobs lost to divestment from Australian mining, these figures beg the question:

Where is jobs growth in Australia coming from?

Firstly, jobs growth is particularly concentrated in New South Wales. Annual jobs growth in New South Wales at December was a whopping 4.2%, compared with a national average of 2.5%. Reserve Bank of Australia Governor Glenn Stevens offered that growth may be occurring in sectors with low input costs, such as services and in retail.

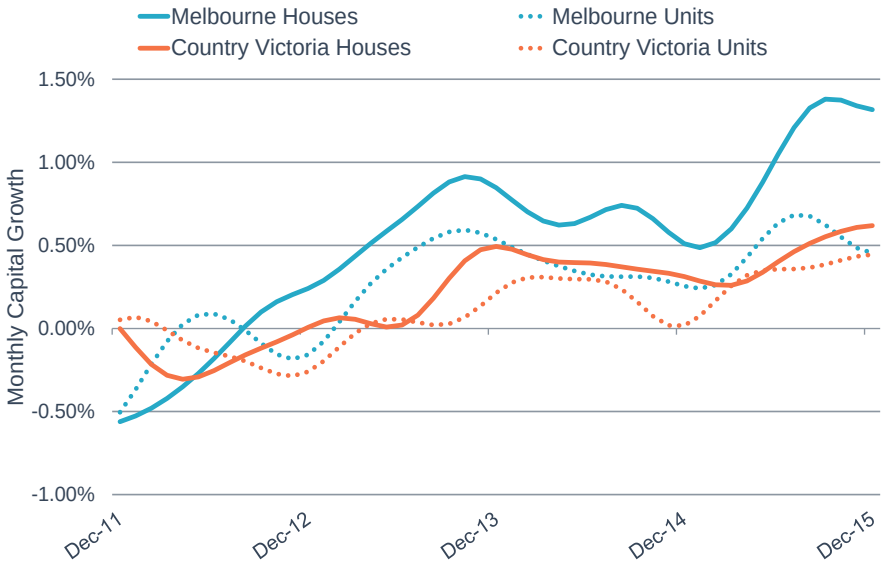
Analysis from the Australian jobs board 'Seek' reflected this sentiment. Seek data shows that specific vocations with high vacancies include programming, carpentry, and site management, forklift driving and sales people. These areas of employment reflect demand in the economy. The Australian government must ensure investment in vocational and technological training to ensure these vacancies can be filled.

Victoria Comment

As discussed in the Market Update section of this report, Melbourne houses are coming to a peak in the capital growth cycle, following the Sydney dwelling markets at a lag. In terms of the aggregate market, Melbourne houses increased 13% in value over the year to December.

Graph 1 displays the monthly capital growth trend for median Melbourne and Country Victoria dwellings. The growth discrepancy between Melbourne houses and units has been particularly large over the recent upswing. Country Victoria has also seen relatively subdued growth.

G1: Monthly Capital Growth Trend – Melbourne and Country Victoria Dwellings



Source: Residex

The large volume of stock in units is indicated by the dwelling approvals in the greater Melbourne Metropolitan region, displayed in Graph 2. The graph shows the quarterly number of approvals for houses and units. Units have consistently outperformed housing approvals since the start of 2012.

Figure 1 (on the following page) uses Residex data to give a rough indication of growth patterns in Melbourne Metropolitan houses over the past 10 years.

The graphic colour-codes the median value of houses in each Melbourne metropolitan suburb. The more brown/red the colour, the higher the median value.

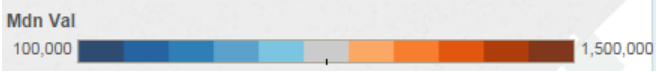
Over time, Figure 1 shows that the inner-eastern suburbs of the Melbourne Metropolitan reliably lead capital growth.

This growth spreads along the south-east coast and east and north-east corridors. It is interesting to note that rail services are also more heavily concentrated in these areas.

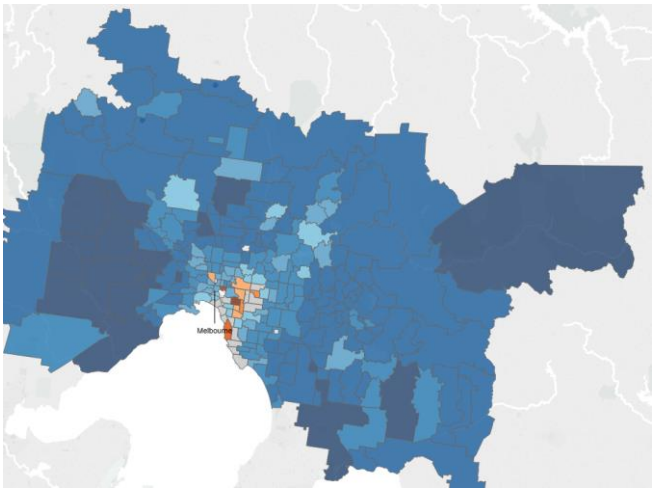
The north-west suburbs of Melbourne such as Broadmeadows, Glenroy and Tullamarine, appear to be among the last suburbs with reasonable proximity to the Melbourne CBD to catch up capital growth.

The implications of these growth patterns are that one may expect the north-west to be the last to experience capital growth in the current cycle, and that the eastern suburbs of Melbourne appear to grow more rapidly.

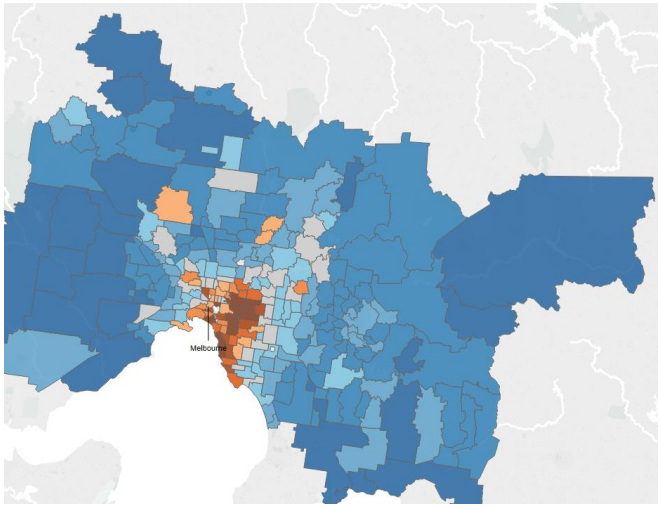
Fig1: Snapshot of Melbourne Median Value by Suburb (Source: Residex)



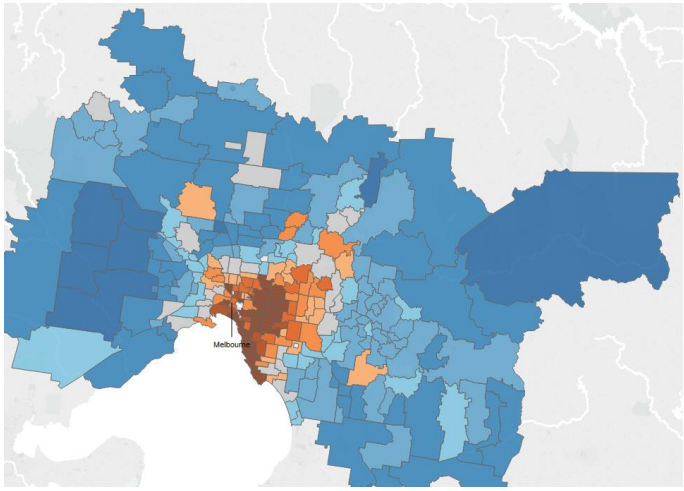
2005



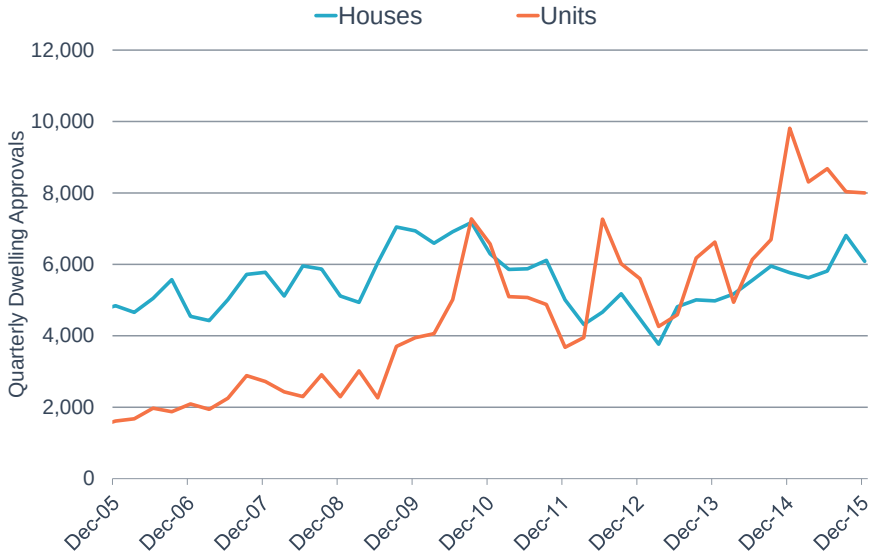
2010



2015



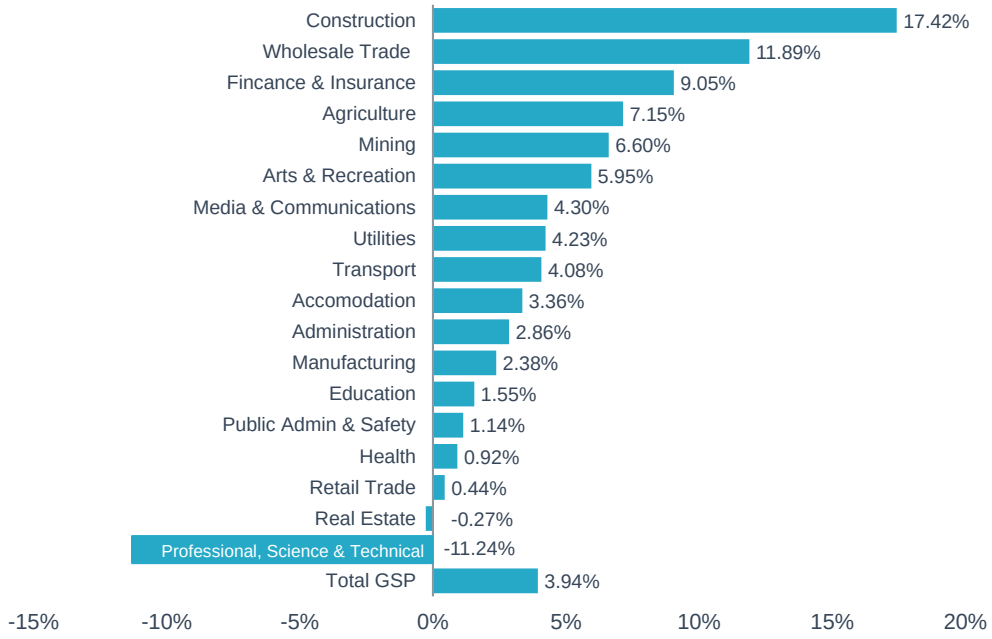
G2: Quarterly Dwelling Approvals – Greater Melbourne Metropolitan



Source: ABS Catalogue Number 8731.0: Building Approvals, Australia

The Victorian economy appears to have performed well, with most sectors experiencing an increase in gross factor income[18] over the 2014-15 financial year. The largest contributor to the Victorian economy, according to Gross State Product figures from June 2015, is the financial services and insurance sector, which delivered earnings of approximately A$72 billion, or over 12% of State Income in Victoria.

G3: Growth in Factor Income of Economic Sectors – Victoria, June 2014-15



Source: 5220.0 - Australian National Accounts: State Accounts, 2014-15

[18] Factor income is income earned from the different factors of production. It includes compensation of employees, gross operating surplus and gross mixed income, plus taxes less subsidies on production and imports.

Professional, scientific and technical services was the second largest contributor, despite the sector contracting by almost 10% in the financial year. Growth in the various sectors in Victoria is presented in Graph 3.The fastest growing sector in Victoria was construction, which grew by an enormous 17.42%.

State final demand (SFD)[19] figures for September indicate that although the Victorian economy grew strongly over the year (4.2%), the September quarter saw growth flat line. The slowdown in momentum is attributed to government investment, which fell 13.2%.

Government investment, particularly in transport infrastructure, has become politicised and strained. The former state government organised $5.7 billion in contracts to build the first stage of an East West Link. The current state government, elected in late 2014, terminated the existing contracts for the East West Link, and instead are pursuing an underground train line worth $11 billion, and the removal of railway crossings in Melbourne. The move cost the state $1 billion.

The Andrews government has attempted to lease the Port of Melbourne to raise up to $6 billion in revenue for their infrastructure plans. However, the deal is subject to delays due to concerns about the lease from the federal government and the Australian Competition and Consumer Commission.

Other indicators in the Victorian economy suggest there is still high economic and dwelling growth potential. As of September, the state of Victoria had the highest population growth of all the states and territories, at 1.7% for the year.

Employment figures for December show that unemployment is slightly above the national average at 5.9%, though the Victorian unemployment rate has trended down from 6.4% in the previous year. Detailed ABS employment data suggests that a larger portion of the working age population is engaged in the workforce in the Melbourne Metropolitan area than in the rest of Victoria.

Employment vacancies in Victoria rose by 21% in the year to November, suggesting a high capacity for future employment and economic growth.

The length of the cyclical upswing in Victoria may be limited by a smaller number of investors being active in the Australian housing markets, both domestically and from abroad. In addition, regional Victoria faces challenges in the form of drought, with farming communities in western Victoria calling for more water infrastructure.

However, relative to most other areas around Australia, Melbourne and Victoria still have promising growth fundamentals. Victoria is second only to New South Wales in migration and job vacancy numbers, which attracts people to settle in the region. Even if the current cycle is cut short by structural intervention from APRA, the Melbourne market has grown impressively over the long term.

[19] State final demand measures the total value of goods and services that are sold in a state to buyers who wish to either consume them or retain them in the form of capital assets. SFD is measured in chain volume measures. Chain volume measures use a base price over time to capture the change in the quantity of goods and services produced, rather than quantity and price changes.

Important State Statistics for VIC

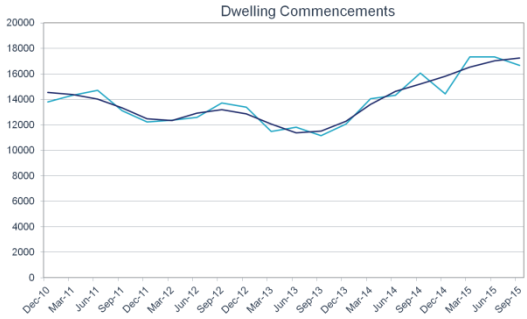
In this section we display a set of tables and graphs which are relevant to the housing market for the state as a whole. The graphs and tables have been developed around the knowledge that the important issues for prices and rental yields revolve around supply, take up of supply and demand being a result of population growth or retraction via immigration or natural increases.

Housing Approvals

Trend Change

Quarter Ending November 2015	15,544
6 Months Ending November 2015	32,069
Year Ending November 2015	68,123
Median Quarterly Change last 5 Years	13,850
Current Difference to Quarterly Median	1,694

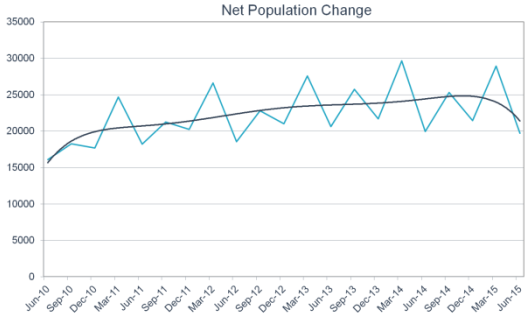
Commencements and Trends



Trend Change

Quarter Ending September 2015	17,251
6 Months Ending September 2015	34,266
Year Ending September 2015	66,604
Median Quarterly Change last 5 Years	13,468
Current Difference to Quarterly Median	3,783

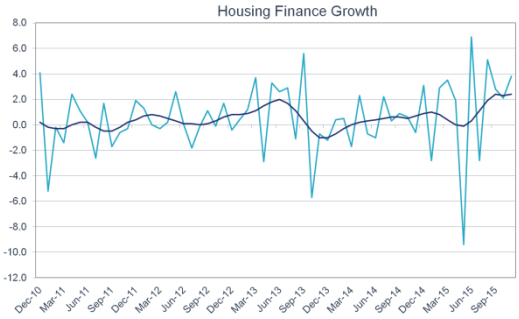
Population and Trends



Trend Change

Quarter Ending June 2015	19,711
6 Months Ending June 2015	48,656
Year Ending June 2015	95,378
Median Quarterly Change last 5 Years	21,349
Current Difference to Median	-1,638
% Change due to Immigration	
Quarter Ending June 2015	46.36%
6 Months Ending June 2015	56.30%
Year Ending June 2015	56.67%
Median Quarterly Change last 5 Years	58.76%
Current Difference to Quarterly Median	-12.40%

Finance and Trends



Trend Change

Month of November 2015	2.40%
Quarter Ending November 2015	7.27%
Year Ending November 2015	14.20%
Median Monthly Change Last Year	0.35%
Current Difference to Monthly Median	2.05%

Seasonally Adjusted

Trend

Residex developed all information presented in this table from the most recent ABS publications.

Housing Surplus Estimate: 24,000 to 28,000

The estimated new dwellings needed per annum measure is based on ABS data and assumes household formation of 2.58 persons per household.

Residex is not certain and cannot be confident that the number of people required for household formation is as quoted. Further, ABS numbers are unlikely to be complete. Having said this, the final estimate will provide a good guide to what the situation is.

If the Housing Surplus Estimate is negative, it is likely that there is a state housing shortage, which causes house prices to increase and/or rentals to increase. A housing surplus, indicated by a positive figure for the Housing Surplus Estimate, causes housing values to stagnate or adjust slightly. Changes also cause housing formation numbers to alter. That is, if rental and housing purchase costs are generally unaffordable the population will have a tendency to increase the number of people per property. The only time a reasonably clear indicator of the number of people likely to be the basis of housing formation is at the Census date.

Due to the above, it is not wise to aggregate shortages/surpluses year on year. It is better to simply identify or develop a broad understanding of what the current likely housing requirement is in the current year. A very positive number indicates that there are a significant number of dwellings required, which would be taken up if they were available and affordable. This is said because clearly, at any point in time, the population is basically housed but potentially not in a fashion that they would prefer.

Affordability - VIC

Median Household Income:	$100,731 p.a.
Assumed Tax Rate:	17.2%
Median House Cost:	$737,000
Median Unit Cost:	$495,500
Assumed Deposit:	20%
Assumed Interest Rate:	4.98% p.a. convertible monthly
Rental Yield Houses:	3.21% p.a.
Rental Yield Units:	4.29% p.a.

Loan repayment for house = 49.51% of after tax household income or after loan repayments borrower has $807 per week to spend on other things.

Rent for house = 28.38% of after tax household income or after rent tenant has $1145 per week to spend on other things.

Loan repayment for unit = 33.29% of after tax household income or after loan repayments borrower has $1066 per week to spend on other things.

Rent for unit = 25.46% of after tax household income or after rent tenant has $1191 per week to spend on other things.

Based on history it seems as if a maximum commitment level for a household is something in the order of 35% to 40% of after tax household income.

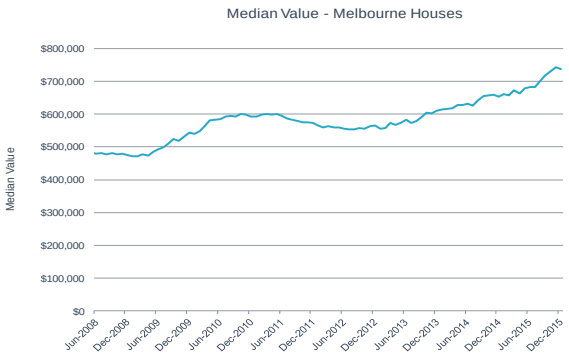
Melbourne at a Glance

Houses and Units Combined

- The median value of Melbourne properties as at 31/12/2015 was $631,500
- The overall rate of growth for Melbourne property was 2.11%

Melbourne Houses

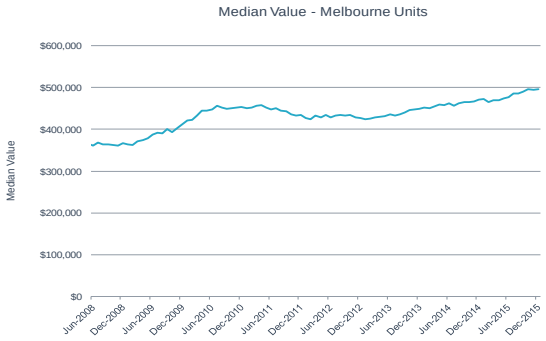
- There were 53,901 house sales in Melbourne during the last year.
- Capital growth in the Melbourne housing market over the last year was 13.00% and the Melbourne median house value is now $737,000.
- The Melbourne house median rental yield is 3.21% p.a. and the median weekly rent is $455.



Current Quarter		Future Predictions
Median Value: $737,000	Capital Growth: 2.68%	1% p.a. next 5 yrs
Number of sales: 15,605	Rental yield: 3.21% p.a.	3% p.a. next 8 yrs
Median rent: $455/wk	Total return: 3.51%	

Melbourne Units

- There were 39,579 unit sales in Melbourne during the last year.
- Capital growth in the Melbourne unit market over the last year was 5.34% and the Melbourne median unit value is now $495,500.
- The Melbourne unit median rental yield is 4.29% p.a. and the median weekly rent is $405.



Current Quarter		Future Predictions
Median Value: $495,500	Capital Growth: 1.21%	2% p.a. next 5 yrs
Number of sales: 9,961	Rental yield: 4.29% p.a.	3% p.a. next 8 yrs
Median rent: $405/wk	Total return: 2.30%	

Market Activity - Capital Growth

In this section we are looking at the various segments to identify where the activity is and if any sectors are failing to maintain growth or are in an upswing. From this information it is possible to understand the areas at risk with respect to security values, if you are lender or an investor, and the areas where there is some risk of failing.

Melbourne by Price Ranges in Dollars

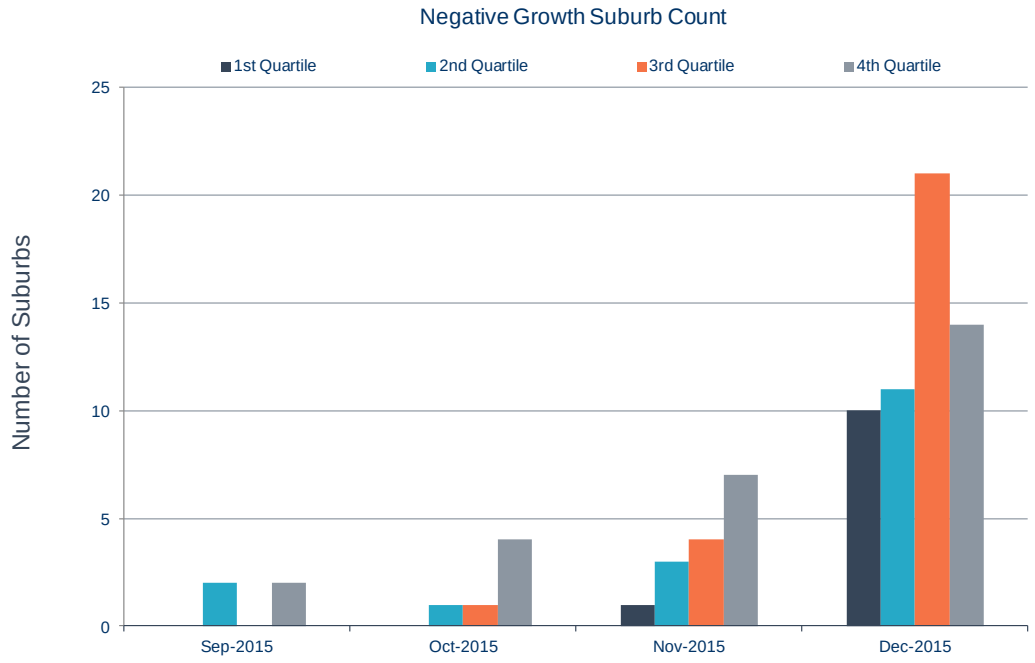
House Price Ranges	Number of Suburbs	Suburbs falling in Value last Quarter %	Suburbs falling in Value last Quarter by Number
From $291,500 to $502,000	57	17.54%	10
From $502,000 to $737,000	94	11.70%	11
From $737,000 to $1,090,500	98	21.43%	21
From $1,090,500 to $2,744,500	90	15.56%	14

Unit Price Ranges	Number of Suburbs	Suburbs falling in Value last Quarter %	Suburbs falling in Value last Quarter by Number
From $202,500 to $375,000	72	18.06%	13
From $375,000 to $495,000	110	19.09%	21
From $495,000 to $656,500	97	18.56%	18
From $656,500 to $1,381,500	43	16.28%	7

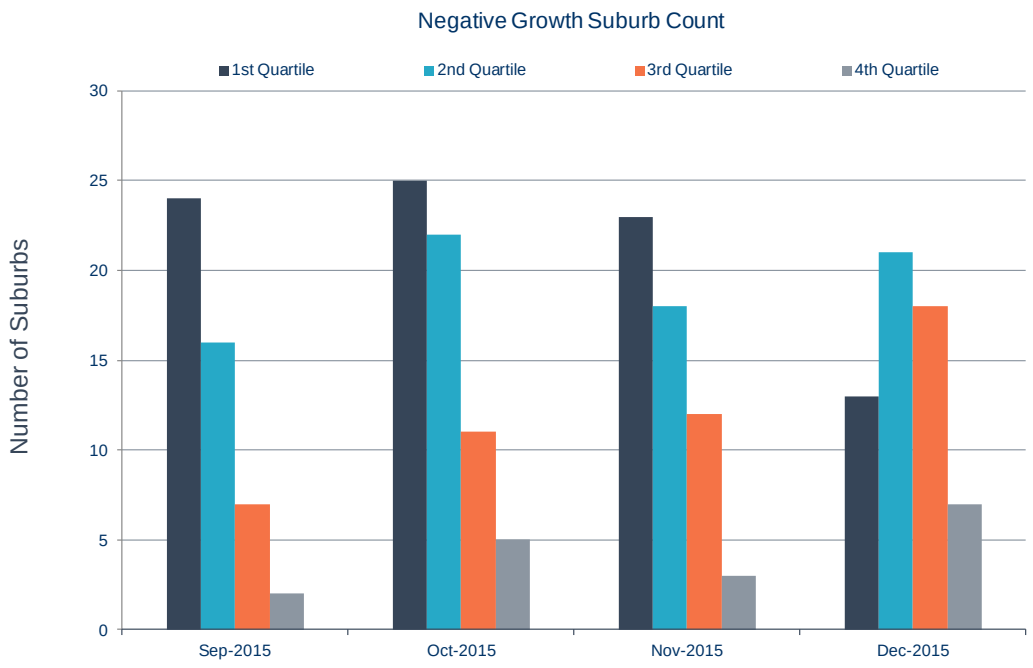
Melbourne by Price Ranges in Dollars over 12 months

By looking at the change in the sectors over the last 12 months, it is possible to understand if a segment is moving into or out of trouble or is simply stable.

Houses



Units



Melbourne by Number of Properties

Group	% that Gained Value	% that Lost Value	*Change since Last Quarter
Houses: Under the Median Value	86.09%	13.91%	-12.57%
Houses: Above the Median Value	81.38%	18.62%	-17.56%
Units: Under the Median Value	81.32%	18.68%	2.82%
Units: Above the Median Value	82.14%	17.86%	-11.24%

*Note: A positive change indicates the number that is showing growth has increased while a negative number indicates the number showing growth has decreased.

The Sales Activity Report

This section provides information on the market's activity.

The **Median Sale Price** table provides the median price of properties that have sold in the last quarter and the last year.

The **Market Activity** table presents the percentage of properties sold in each quartile of the market. Quartile ranges are developed from the values of all properties in the Melbourne and Country Victoria markets.

Melbourne

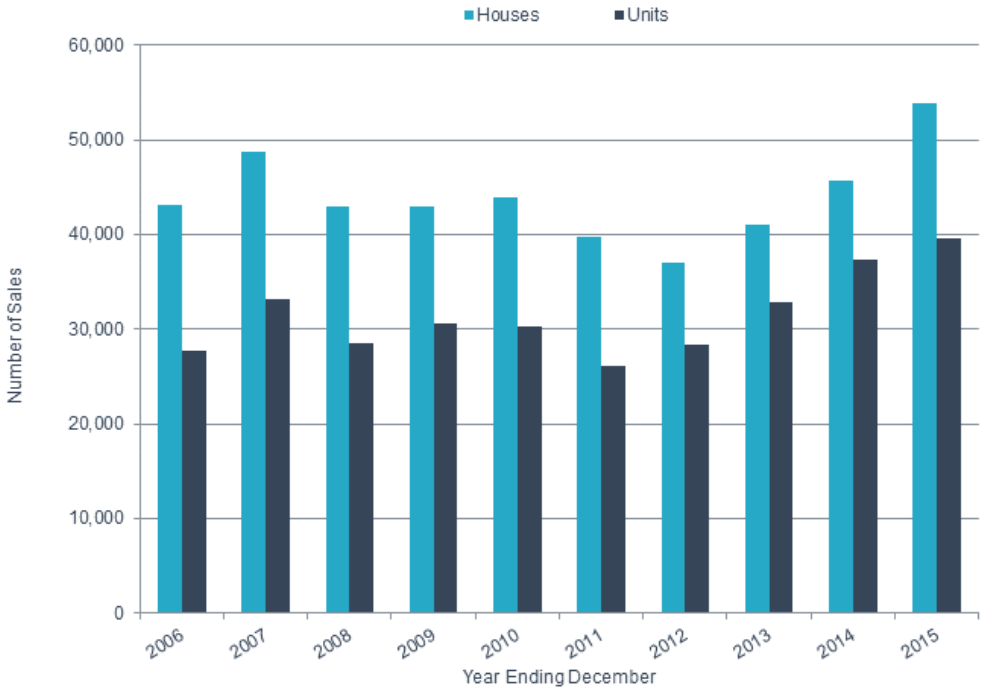
Median Sale Price

	Last Quarter	Last Year	Quarterly Change	Annual Change
Houses	$742,000	$640,000	14.15 %	15.94 %
Units	$500,000	$465,000	1.83 %	7.53 %

Market Activity

	Lower Quartile	2nd Quartile	3rd Quartile	Upper Quartile
Houses	28.28 %	23.79 %	21.80 %	26.13 %
Units	23.50 %	23.74 %	24.33 %	28.43 %

Sales Activity



Country VIC

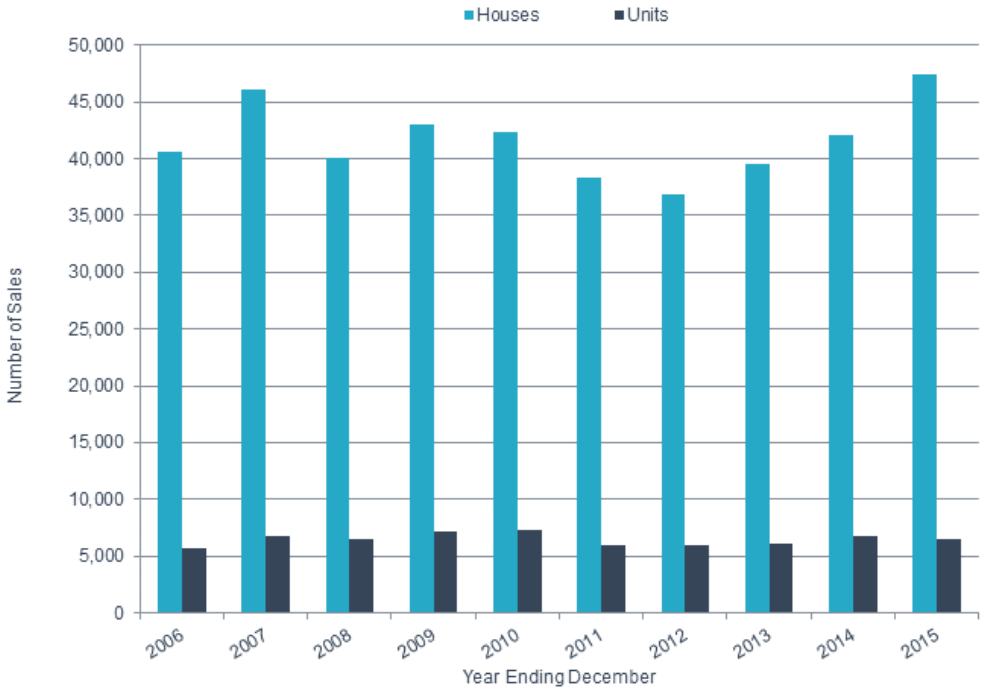
Median Sale Price

	Last Quarter	Last Year	Quarterly Change	Annual Change
Houses	$370,000	$350,000	2.35 %	5.71 %
Units	$285,000	$275,000	-0.35 %	3.64 %

Market Activity

	Lower Quartile	2nd Quartile	3rd Quartile	Upper Quartile
Houses	24.20 %	22.36 %	25.12 %	28.31 %
Units	23.86 %	18.21 %	25.80 %	32.13 %

Sales Activity

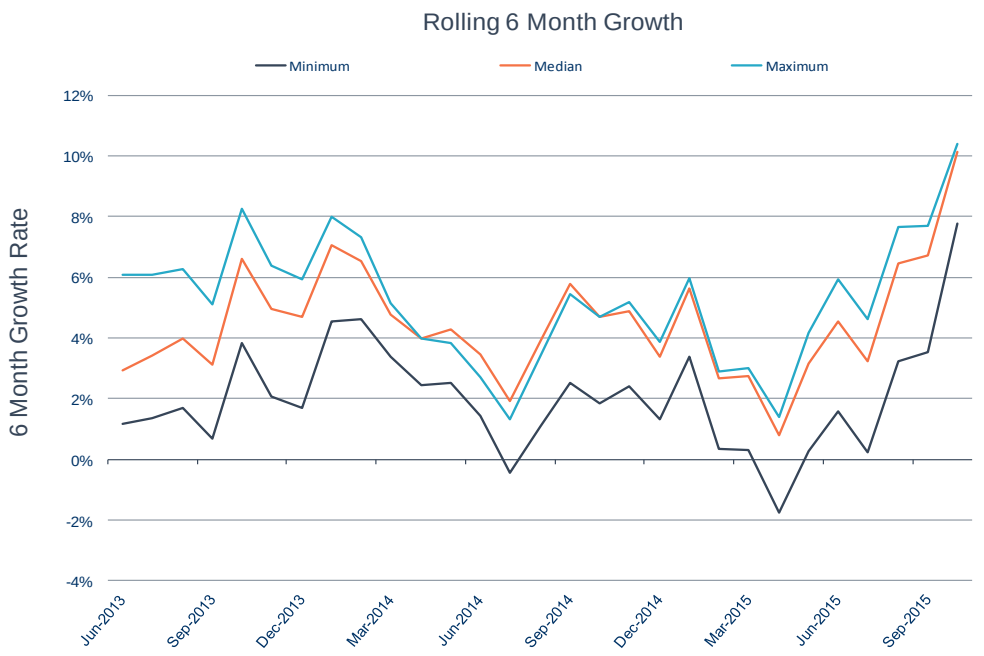


Melbourne Growth Cycle Identifier

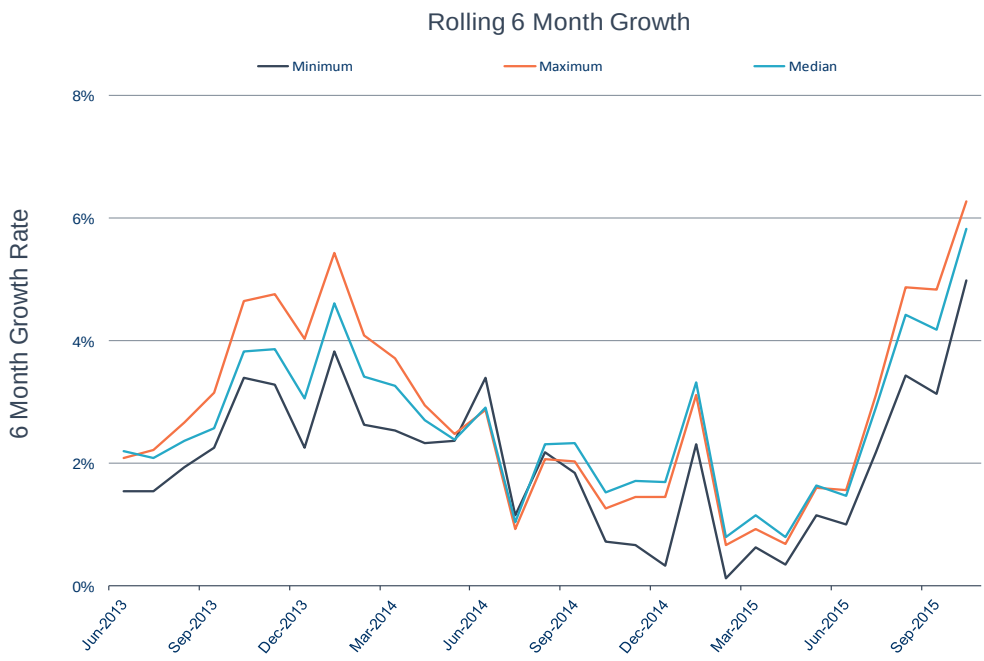
In relation to the two graphs shown below, the sequences of events in growth cycles are:

- The higher cost or upper socioeconomic at the start of a period of growth;
- The middle of the market grows once the market growth cycle is under full swing; and
- Towards the end of the growth period, the lower socioeconomic areas start to show strong growth.

Houses



Units



Note: 2.5% represents the very low cost properties and 97.5% represents the very high cost properties whilst 50% represents the median value properties.

These graphs display the segment(s) of most growth within a market and can often be an indicator of where the market is heading. Government actions like the first Home Buyers grants can distort markets and make it hard to see what is happening. Notwithstanding this careful consideration of the data in conjunction with knowledge of the government's actions can still allow an understanding of where we are in any housing cycle.

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