Housing affordability:

What is driving house prices in Sydney and Melbourne?

KPMG Economics

June 2017
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Executive Summary

— In October 2016 KPMG Economics published a Research Report on housing affordability in Australia, which specifically discussed the economic and social drivers impacting on affordability, and proffered a range of both demand side and supply side actions that could provide a way forward to improve housing affordability on a permanent basis.

— Since the release of this report some six months ago the topic of housing affordability has gained even greater prominence, primarily due to the continued rise in house prices in Sydney and Melbourne.

— In the recent Federal Budget the Commonwealth Government has announced a range of measures which are aimed at ‘putting downward pressure on rising housing costs’, with the Treasurer even acknowledging in his Budget speech that ‘there are no silver bullets to making housing more affordable’.

— Housing markets are not homogeneous across Australia’s states and territories. Housing markets are not even homogeneous within each state or territory, with market dynamics different between capital cities, major towns and rural and regional locations. The relationships between local, regional and state housing markets are complex as is the relationship between housing markets generally and the broader economy.

— Conventional wisdom suggests house prices are primarily influenced by factors like interest rates, building activity and population growth. These factors do not influence house prices in isolation, but rather they work in combination; often counter balancing each other to some degree. When house prices move in an ‘abnormal’ way it is because one or more of these drivers become distorted relative to their ‘normal’ settings.

— Sydney house prices have become more pronounced and volatile since the GFC, albeit without the same degree of volatility in the supply, demand or cost variables. It appears that when the labour market and monetary policy are stable, investing in housing is more attractive as the underlying market risk is lower in these circumstances.

— KPMG anticipates both foreign investors and domestic investors will be less active in the market over the coming years due to the introduction of additional prudential controls and the adoption of new measures such as those outlined in the Budget and those recently implemented by some State governments, including increased stamp duty rates and vacant property taxes for foreign buyers.

— Much applied economic research has focused on what are the primary drivers influencing house price growth in Australia. KPMG Economics has found an error-correction model to be a useful aid in further understanding the behavior of the Sydney and Melbourne housing markets. Using this approach KPMG Economics found evidence of a long-run relationship between house prices and variables relating to the stock of dwellings, population and borrowing by residential property investors.

— Our analysis suggests that while short term factors have pushed median dwelling prices for Sydney and Melbourne above their long term equilibrium prices by about 14 percent and 8 percent respectively (as at the end of FY2016), this degree of disequilibrium has been experienced previously in these housing markets and they have managed to return to equilibrium without price movements resembling a ‘bursting of the bubble’.

— KPMG Economics sees no reason why this will not occur again, and our forecasts suggest the Sydney housing market will experience a greater adjustment than will Melbourne, but nonetheless this adjustment is unlikely to be abrupt or to significantly overshoot the long run equilibrium price on the downside.
Introduction

In October 2016 KPMG Economics published a Research Report on housing affordability in Australia¹, which specifically discussed the economic and social drivers impacting on affordability, and proffered a range of both demand side and supply side actions that could provide a way forward to improve housing affordability on a permanent basis.

We noted that any solution for permanently improving housing affordability Australia must involve all levels of Government working together, given the factors driving the problems are not under the remit of any one level of government. We also concluded our report by saying this issue should be a priority area of public policy.

Since the release of this report some six months ago the topic of housing affordability has gained even greater prominence, primarily due to the continued rise in house prices in Sydney and Melbourne.

In the recent Federal Budget the Commonwealth Government has announced a range of measures which are aimed at ‘putting downward pressure on rising housing costs’². Most of the measures announced in the budget are aimed at boosting the supply of housing by encouraging either the development of new dwellings or more effective use of the existing stock of dwellings. This is particularly relevant for the heated property markets of Sydney and Melbourne.

The National Housing Infrastructure Facility (NHIF) is an initiative with the potential to boost the supply of new dwellings. The NHIF will be established with funding of $1 billion over 5 years to provide local governments with access to concessional loans, equity investments and grants to help build infrastructure that will speed up the supply of new housing such as transport links, power and water networks and site remediation works.

The Western Sydney City Deal that the government is developing in partnership with state and local governments in NSW is still under negotiation but the aim is to reward planning reforms that deliver agreed housing supply targets.

The Budget outlines plans by the government to make under-utilised and surplus Commonwealth land available for housing. At this stage one specific parcel of surplus Defence land in Maribyrnong near the Melbourne CBD has been earmarked for the development of up to 6,000 new homes. Remediation of this land will take several years.

To boost the supply of affordable rental housing the Budget introduces a 60 percent capital gains tax discount to individuals and Managed Investment Trusts that invest in rental properties that are provided at below market rent to eligible tenants on low incomes.

There are two main initiatives in the Budget that target more effective use of the existing dwelling stock. The first aims to facilitate downsizing by older Australians by allowing individuals aged 65 and over to make an additional non-concessional contribution of up to $300,000 to their superannuation fund from the proceeds of the sale of a principal place of residence held for at least 10 years. The second initiative targets foreign owners that do not occupy or make their properties available for rent for 6 months or more each year.

Foreign investors will also be impacted by two additional budget initiatives. First, a 50 percent cap on pre-approved foreign ownership in new multi-storey developments with at least 50 dwellings is to be introduced. The aim of this policy is to improve access to such developments for Australian buyers. Second, foreign investors will be less able to avoid paying capital gains tax in Australia with the introduction of more stringent capital gains tax rules. This, together with an increase in the CGT withholding rate from 10 percent to 12.5 percent and reduction in the threshold from $2 million to $750,000 is likely to reduce the attractiveness of Australian residential property to foreign investors.

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Introduction

The Budget also contains several measures aimed at taxpayers who are also property investors. From 1 July 2017, deductions for travel expenses relating to inspecting, maintaining or collecting rent for residential property will not be allowed. Also from that date, plant and equipment depreciation deductions will be limited to outlays actually incurred by investors, albeit that existing investments are grandfathered from this new policy.

To assist first home buyer enter the property market the government has introduced the First Home Super Saver Scheme, which will commence on 1 July 2017. The scheme allows first home buyers to use their superannuation fund as a vehicle to save for a house deposit. The concessional treatment of savings in superannuation vehicles allows first home buyer to build their deposit more rapidly.

KPMG has recognised that the housing affordability problem is complex and that a solution must encompass supply and demand side initiatives. The Treasurer’s Budget speech also acknowledged that “there are no silver bullets to making housing more affordable”.

But are the measures contained in the Budget likely to have a positive impact on housing affordability in Australia. Do they pull the levers that are driving house prices, and if so, are the levers being pulled in a coordinated and helpful way?

A component of our Research Paper last year was the development of a model to explain the key influences on median house prices. This analysis, which was itself an update from modelling we had completed a decade before, showed the change in median house prices was mostly influenced by the underlying strength of the economy, the proportion of housing being purchased by investors relative to owner occupiers, wages, interest rates and housing supply.

In this study we have extended this analysis on the basis that the traditional drivers of house price growth appeared to be less influential in the period post the global financial crisis (GFC).

The remainder of this report examines the drivers of house price movements in Sydney and Melbourne, and presents forecasts of houses prices given expectations of how various drivers have now been influenced by various government interventions.
Housing markets are not homogeneous across Australia’s states and territories. Housing markets are not even homogeneous within each state or territory, with market dynamics different between capital cities, major towns and rural and regional locations. The relationships between local, regional and state housing markets are complex as is the relationship between housing markets generally and the broader economy.

Conventional wisdom suggests house prices are primarily influenced by factors like interest rates, building activity and population growth. Even recently we have seen economic commentators say that interest rates are ‘the big lever’ that shifts housing affordability in Australia; and that a ‘1 percent increase in interest rates would cut about 7 percent from housing prices’.

Individually each of these factors provide a some explanation as to the movement in house prices for the past few decades. However, in reality each of these factors does not influence house prices in isolation, but rather they work in combination; often counter balancing each other to some degree. When house prices move in an ‘abnormal’ way it is because one or more of these drivers become distorted relative to their ‘normal’ settings.

As mentioned previously, in completing our earlier paper on housing affordability we developed a model to explain the key influences on median house prices which showed they were mostly influenced by the underlying strength of the economy, the proportion of housing being purchased by investors relative to owner occupiers, wages, interest rates and housing supply.

As shown above, the movement in Sydney house prices has become more pronounced and volatile since the GFC, albeit without the same degree of volatility in the supply, demand or cost variables. This data suggests that when the labour market and monetary policy are stable, investing in housing is more attractive as the underlying market risk is lower in these circumstances.

The following pages present a discussion on these key variables that have traditionally be identified as driving house prices, as well as several others that KPMG Economics have identified as having a greater influencing in recent years.
Key drivers influencing house prices

Housing Supply
Housing approvals are a leading indicator on housing completions, with there generally being about as 12 month lag between when a residential project receives approval to be constructed and when that project is actually completed and enters the housing stock. Our analysis also suggests that about 94 percent to 95 percent of residential dwellings approved in NSW and Victoria in one year are completed in the next, as some projects fail to reach or finish the construction stage for a variety of reasons, including change of plans by the proponent, inability to secure finance, etc.

It also seems that for every 10 residential dwellings completed, the housing stock only increases by about 9, which reflects the fact that not all housing developments are constructed on vacant land. That is, it appears in about 10 percent of cases an existing dwelling is demolished in order to construct a new residential property.

As shown in the chart, there has been a noticeable increase in the number of residential dwellings approved in NSW since 2009, with Victoria following a similar trend from 2013. For the period 1986 to 2016 average annual building approvals for residential dwellings was about 43,600 and 41,500 for NSW and Victoria respectively. Since 2013 approvals, particularly for multi-unit dwellings, have increased dramatically, averaging 57,400 and 59,900 for NSW and Victoria respectively.

On a per capita basis, housing approvals in NSW and Victoria have averaged about 1 dwelling approved per 150 and 120 people respectively between 1986 and 2016. Again, this has jumped significantly over the past few years to average 1 dwelling approved per 130 and 100 people respectively since 2013. Of note in this analysis is the fact that since 1998 Victoria has consistently supplied more dwellings per capita than NSW.

Chart 2 also shows the existence of a ‘building cycle’, with periods of above average growth followed by periods of below average growth. This confirms the general view that the housing supply follows a pattern similar to a ‘hog cycle’ where price pressures drives supply upwards; dwellings are over supplied; prices drop (or stay flat); access to financing is limited, so supply falls; demand soaks up the excess supply over time; prices rise; access to finance is opened up again; developers start building again; and dwellings are over supplied (again).
Foreign investors

The number of approved sales of residential property to foreign investors has increased dramatically since 2010, albeit they total less than 40,000 transactions per annum\(^5\). At the end of June 2016 the total stock of houses in Australia was approximately 9.7 million\(^6\), which means sales to foreign investors represented only 0.39 percent of the total housing stock in that year. However, this is a significant increase to historical transaction rates, which averaged about 0.05 percent of Australia’s total housing stock per annum between 1988 and 2009.

While these volumes may appear small, it is well understood in economics that prices are determined at the margin, and if this small investor cohort is impacting house prices at the margin then their influence could be more significant than the volume of transactions indicates.

FIRB annual reports indicate that Chinese investors have progressively increased their importance as a cohort of buyers of residential properties in Australia over the past five years to now represent about 25 percent of all foreign purchasers of real estate in Australia (by value).

It seems the purchasing activity by Chinese investors has been influenced by movements in the Chinese Yuan (CHY) to the Australian dollar and the reduction of foreign exchange reserve holdings in China. In the last few years it seems that for every 1 percent appreciation in the CHY/AUD, the value of purchases made by Chinese investors in Australian real estate increased by 6 percent.

Anecdotal evidence suggests the demand by Chinese investors for Australian residential property may have softened in recent months due to a combination of factors, including the adoption of differential stamp duty in some States and the tightening of currency controls in China.
Key drivers influencing house prices

The Budget contains a number of measures aimed at ‘toughening’ the rules associated with foreign investors purchasing residential real estate. These measures include:

• a 50 percent cap on the total amount of dwellings a developer can sell to foreign persons under a New Dwelling Exemption Certificate has been introduced for applications made from 7:30pm (AEST) 9 May 2017;

• an annual vacancy charge (equivalent to the relevant foreign investment application fee imposed on the property at the time it was acquired by the foreign investor) on new foreign owners of residential property where the property is not occupied or genuinely available on the rental market for at least six months each year. The charge is to be implemented on foreign persons who make a foreign investment application for residential property from 7:30pm (AEST) on 9 May 2017; and

• a 10 percent increase in the current application fees for foreign purchases of residential properties valued at less than $10 million effective from 1 July 2017.

Of these changes the one most likely to have the greatest impact is the re-introduction of the 50 percent cap on the proportion of dwellings a developer can sell to foreign investors. This cap was initially lifted in December 2008, where historically these purchases represented about half of all sales of residential properties to foreign investors. In 2016 sales of new residential property developments represented about two-thirds of the 40,000 transactions for the year.

Domestic investors

Over the past 25 years lending to investors to purchase residential property has lifted from about 15 percent of total lending to purchase residential property to 38 percent today. Lending to property investors peaked at 45 percent to total lending in May 2015, and then dropped 33 percent over the subsequent 6 months. This drop in lending to investors was influenced by the introduction of new rules by the Australian Prudential Regulation Authority (APRA), which required higher capital reserves and limits in annual growth for investor lending.

Chart 5
Lending to Investors as a Proportion of Total Lending to Purchase Residential Property

Source: RBA, KPMG Economics
Key drivers influencing house prices

Despite the introduction of these additional prudential controls, investor lending continued to rise again during the remainder of 2015 and 2016, albeit peaking at 39 percent. APRA have recently required banks to restrict interest-only loans to be no more than 30 percent of new residential mortgage loans, which is likely to assist in the curtailing of growth to this cohort.

One theory as to why investors have become more prevalent in the residential property market is that asset allocation preferences have shifted from equities to property. This post-GFC risk diversification strategy can be seen through the lending data as well, with investors share of lending to purchase residential property just under 33 percent on average between January 1999 and December 2008, but steps up to 36 percent on average between January 2009 and February 2017. The rise in self-managed super funds over this period may have also reinforced this shift in the wealth portfolio.

Real interest rates
Despite a few periods where the inflation adjusted cash rate rose, there has been a strong downward trend in real interest rates in Australia over the past 30 years. Currently, due to the combination of low cash rate settings and below RBA target band inflation, real interests rates have been sitting at less than 1 percent since the end of 2012, and by the end of 2016 were essentially zero.

This trend is not unique to Australia. The combination of expansionary monetary policy settings post-GFC and a low inflationary environment around the global has resulted in near-zero or negative real interest rates in many jurisdictions.

There is also a growing consensus amongst central bankers that this period of low interest rates is coming to end. Increased demand for funds from governments to finance infrastructure and other public sector capital spending is causing government bond yields to rise.

Previous analysis by KPMG Economics has shown Australian 10-year bond yields lead the bank bill swap reference rate (BBSW) by about 6 months. This analysis also showed BBSW and the cash rate follow each other. So given Australian 10-year bond yields have risen about 0.7 percent since August 2016, it would not be unexpected to see the cash rates move upwards in the near future.
Key drivers influencing house prices

Working age population

The working age population as a proportion of the total population in NSW peaked in 2008 at 67.0 percent. That is, at the end of June 2008 the NSW population was just under 7 million people, of which 4.65 million people were aged between 15 and 64 years old. By June 2016, the working age population had risen to just over 5 million people, but the total population had grown to about 7.7 million people, resulting in the working age population ratio falling to 65.4 percent. In comparison the working age population was just over 4 million people from a total population of about 6 million in Victoria at the end of June 2016.

The ABS Population Projections anticipate the working age population ratio for both NSW and Victorian will to continue to fall over the next 5 years, dropping from 65.4 percent to 64.1 percent and 66.1 percent to 65.1 percent respectively between June 2016 and June 2021.

Chart 7

Working age population as a proportion of total population

Source: ABS, KPMG Economics
Modelling house prices

Much applied economic research, including our own, has focused on what are the primary drivers influencing house price growth in Australia. If these drivers are incorrectly identified or poorly specified then perverse outcomes could occur if specific ‘levers’ are targeted in some form of policy intervention by Government.

KPMG Economics has analysed various econometric models of house price growth and we concluded that an error-correction model (ECM) to be a useful aid in understanding the behavior of the Sydney and Melbourne housing markets. Using this approach KPMG Economics found evidence of a long-run relationship between house prices and variables relating to the stock of dwellings, population and borrowing by residential property investors.

It appears that over time house prices tend to revert back to the equilibrium suggested by the long run relationship, but that in the short run transitory dynamics can counteract or reinforce this reversion to long run equilibrium. A useful feature of this approach is that allows policy makers to distinguish between the short-term and long-term drivers of housing prices.

Before discussing the details of our models we provide a brief overview of the modelling technique.

General Form of an Error-correction model

An ECM can be conceptualized in two parts. The first is a long-run equilibrium relationship, such as:

$$\text{Ln}Y = A + B \text{Ln}X + \mu$$

Where $X$ is a vector of independent, contemporaneous variables. Broadly, the ECM framework recognises that $Y$ can deviate from its long run equilibrium level in the short run but that if the long run relationship is robust then there will be a tendency for $Y$ to revert to the equilibrium level over time.

This is captured by embedding the long run relationship within a dynamic model as follows:

$$\Delta \ln Y_t = \alpha + \sum_{s=1}^{S} \theta_s \times \Delta \ln Y_{t-s} + \sum_{s=1}^{S} \delta_s \times \Delta \ln X_{t-s} + \sum_{s=0}^{S} \beta_s \times \Delta \ln Z_{t-s} - \gamma [\ln Y - A - B \times \ln X] + \epsilon_t$$

This model captures the mechanisms driving the dynamics of $Y$. In simple terms, when long run equilibrium is reached all first difference variables (ie: those represented with a $\Delta$ prefix) converge to a value of 0, leaving the long run relationship to determine the value of $Y$.

In the short run a range of variables (including lagged changes in $Y$) can have transitory impacts on $Y$, counteracting or reinforcing its transitions towards equilibrium. The parameter gamma ($\gamma$) measures the speed with which disequilibrium is eliminated over time.

Specification of the HP-ECM

KPMG Economics’ preferred long run equilibrium relationship for Sydney and Melbourne median dwelling prices can be expressed as:

$$\ln Y = \alpha + \beta X_1 + \theta \ln X_2 + \delta \ln X_3 + \sigma X_4 + \mu$$

Where:

<table>
<thead>
<tr>
<th>Y</th>
<th>Real median dwelling prices as per rolling 4-quarter average of REIA house and attached dwelling data</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1$</td>
<td>Ratio of borrowing by investors to total lending for residential property, Australia</td>
</tr>
<tr>
<td>$X_2$</td>
<td>Working aged population (15 to 64 years)</td>
</tr>
<tr>
<td>$X_3$</td>
<td>Housing stock</td>
</tr>
<tr>
<td>$X_4$</td>
<td>Dummy variable representing the introduction and existence of tighter APRA controls for investor lending</td>
</tr>
</tbody>
</table>
Modelling house prices

The following chart shows the trajectories of the residuals in the long run equilibrium models for real dwelling prices in Sydney and Melbourne. The residuals reflect estimates of the degree of disequilibrium in these markets, with the pattern of the residuals indicating that house prices oscillate above and below a long run price.

KPMG Economics has experimented with several ECM models of the Sydney and Melbourne housing markets, including one where we permit only those dynamics related to variables that appear in the long run relationship (‘pure’ error correction model), and then other versions where we relax this restriction and allow for the inclusion of additional ad hoc dynamic variables (identified as ‘Z’ in the general form equation set out above).

Chart 9 shows the residuals of the ‘pure’ error correction model are broadly random and have zero mean.

Housing market forecasts

KPMG Economics has prepared forecasts of house prices in Sydney and Melbourne for the period FY2017 to FY2021 our ECMs.

Values for the explanatory variables are based on the forecasts in KPMG’s most recent Quarterly Economic Outlook (inflation, cash rates and lending margins) and on our best estimates of the responses of domestic and foreign investors. Population growth rates are sourced from the ABS.
### Table 1
Forecast Parameter Values for Dynamic Error Correction Models by Financial Year

<table>
<thead>
<tr>
<th>Year ended 30 June</th>
<th>2015(a)</th>
<th>2016(a)</th>
<th>2017(f)</th>
<th>2018(f)</th>
<th>2019(f)</th>
<th>2020(f)</th>
<th>2021(f)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lending to property investors as % of total lending to purchase residential property</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>43.3%</td>
<td>35.7%</td>
<td>38.0%</td>
<td>38.0%</td>
<td>38.0%</td>
<td>38.0%</td>
<td>38.0%</td>
</tr>
<tr>
<td>Low</td>
<td>43.3%</td>
<td>35.7%</td>
<td>38.0%</td>
<td>35.0%</td>
<td>33.0%</td>
<td>33.0%</td>
<td>33.0%</td>
</tr>
<tr>
<td><strong>No. of properties approved by FIRB for purchase by foreign investors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>35,858</td>
<td>39,135</td>
<td>30,000</td>
<td>32,000</td>
<td>34,000</td>
<td>36,000</td>
<td>38,000</td>
</tr>
<tr>
<td>Low</td>
<td>35,858</td>
<td>39,135</td>
<td>30,000</td>
<td>28,000</td>
<td>26,000</td>
<td>25,000</td>
<td>25,000</td>
</tr>
<tr>
<td><strong>Housing stock – NSW (‘000)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>2,943.6</td>
<td>2,986.3</td>
<td>3,046.0</td>
<td>3,105.3</td>
<td>3,163.7</td>
<td>3,221.4</td>
<td>3,278.2</td>
</tr>
<tr>
<td>Low</td>
<td>2,943.6</td>
<td>2,986.3</td>
<td>3,046.0</td>
<td>3,105.3</td>
<td>3,161.0</td>
<td>3,214.1</td>
<td>3,266.5</td>
</tr>
<tr>
<td><strong>Housing stock – Victoria (‘000)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>2,432.9</td>
<td>2,483.7</td>
<td>2,540.3</td>
<td>2,595.5</td>
<td>2,641.0</td>
<td>2,686.9</td>
<td>2,733.2</td>
</tr>
<tr>
<td>Low</td>
<td>2,432.9</td>
<td>2,483.7</td>
<td>2,540.3</td>
<td>2,595.5</td>
<td>2,639.2</td>
<td>2,682.2</td>
<td>2,725.5</td>
</tr>
<tr>
<td><strong>Real mortgage interest rates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Source: KPMG Economics

Key assumptions underpinning the parameter values contained in Table 1 include:

- From a building activity perspective house commencements generally follow housing approvals within the same year, but commencements represent only about 99 percent of approval numbers. Further, house completions usually lag house commencements by 1 year, with completions representing around 94 percent to 95 percent of housing commencements in the period t-1;

- The long run average for completion of new residential property in NSW and Victoria are about 39,000 and 38,000 properties respectively per annum;

- Average FIRB approvals for the sale of residential property to non-residents increased by around 12,000 per annum between FY13 and FY14 and between FY14 and FY15. During that time FIRB approved purchases by non-residents from China on real estate assets in Australia rose from $5.9m in FY13 to $24.3m in FY15;
Modelling house prices

— Prudential controls implemented by APRA are anticipated to limit the growth of domestic investors purchasing residential property to between 33 percent (low) and 38 percent (high) of all lending for the purchase of residential property;
— Cash rate and inflation will follow forecasts prepared by KPMG Economics as per the March 2017 edition of the KPMG Quarterly Economic Outlook; and
— Population growth rates will follow the ABS Population Projections Series B as presented in ABS Cat.No 3222.0.

Chart 10 and Chart 11 provides our forecast of how Sydney house prices may adjust over the coming 5 years in real and nominal terms respectively.

KPMG anticipates both foreign investors and domestic investors will be less active in the market over the coming years due to the introduction of additional prudential controls and the adoption of new measures such as those outlined in the Budget and those recently implemented by some State governments, including increased stamp duty rates and vacant property taxes for foreign buyers.

The low scenario, which adopts more conservative estimates of purchasing activity by these two investor classes, anticipates Sydney dwelling prices to peak in real terms in FY2018 at around $940,000 (in $2016) and then contract to around $840,000 (in $2016); which is about 5 percent lower than median dwelling prices at the end of FY2016. In nominal dollar terms these declines are somewhat muted due to the presence of inflation over the forecast period, with median dwelling prices peaking at about $975,000 in FY2019, before falling slightly to be about $930,000 by the end of FY2021.
Modelling house prices

The modelled high scenario follows a similar profile, albeit the decline in median dwelling prices post FY2018 is smaller, with the peak-to-trough decline only about 7 percent compared to 11 percent for the low scenario. Again inflation enables negative price adjustments be negligible in nominal terms, with median dwelling prices in Sydney anticipated to decline from $980,000 at the end of FY2019 to be about $955,000 by the end of FY2021.

Melbourne median dwelling prices are expected to strengthen during FY2017, and then growth will moderate for the remaining years of the forecast period, including negative real growth of between -1 percent and -4 percent during FY2019.

While we anticipate a slowdown in prices during the forecast period, by the end of FY2021 our analysis indicates Melbourne median dwelling prices in real terms will still be some 9 percent to 16 percent higher than median dwelling prices at the end of FY2016 (or between 19 percent and 27 percent higher in nominal terms).

Our analysis suggests that while short term factors have pushed median dwelling prices for Sydney and Melbourne above their long term equilibrium prices by about 14 percent and 8 percent respectively (as at the end of FY2016), this degree of disequilibrium has been experienced previously in these housing markets and they have managed to return to equilibrium without price movements resembling a ‘bursting of the bubble’. KPMG Economics sees no reason why this will not occur again, and our forecasts suggest the Sydney housing market will experience a greater adjustment than will Melbourne, but nonetheless this adjustment is unlikely to be abrupt or to significantly overshoot the long run equilibrium price on the downside.
Concluding remarks

House prices in Australia, specifically within the context of housing affordability, has become an increasingly significant talking point by politicians and the broader community alike.

KPMG Economics published a brief Research Report on housing affordability in Australia in October 2016 which specifically discussed the economic and social drivers impacting on affordability, and proffered a range of both demand side and supply side actions that could provide a way forward to improve housing affordability on a permanent basis. However, since that report was published house prices have continued to spiral upwards, particularly in Sydney and Melbourne, and prospect of home ownership for many seems to have become even more distant.

Various commentators have blamed a range of factors that have ‘caused’ house prices to rise, including high net international migration, not enough social housing, limitations on the timing and release of new ‘greenfields’ development sites, and even the price of smashed avocado on toast for breakfast at a café.

KPMG Economics’ latest research found evidence of a long-run relationship between median dwelling prices and variables relating to the stock of dwellings, population and borrowing by residential property investors. Each of these variables influences dwelling prices in different ways and to different degrees, confirming that the recent behavior of the Sydney and Melbourne property markets is indeed complex.

Our analysis suggests that while short term factors have pushed median dwelling prices for Sydney and Melbourne above their long term equilibrium prices by about 14 percent and 8 percent respectively (as at the end of FY2016), this degree of disequilibrium has been experienced previously in these housing markets and they have managed to return to equilibrium without price movements resembling a ‘bursting of the bubble’.

KPMG Economics sees no reason why this will not occur again, and our forecasts suggest the Sydney housing market will experience a greater adjustment than will Melbourne, but nonetheless this adjustment is unlikely to be abrupt or to significantly overshoot the long run equilibrium price on the downside.

In conclusion, we reiterate the solutions presented in our earlier report Housing Affordability : What can be done about the Great Australian Dream remain current today. Briefly, these were:

— **CGT reduction**: reducing the capital gains tax discount from 50 percent to 25 percent, thereby making property investment marginally less attractive.

— **Aggregate property tax**: abolish stamp duty on the transfer of residential property and conflate rates, land tax, insurance taxes and emergency service levies into a new Property Services Tax.

— **Systemic reforms** aimed at maintaining the supply and diversity of land and housing in established and growth areas, through setting targets, streamlining planning and empowering public supply.

— **Targeted Reforms** aimed at improving access to those groups who are the most excluded from affordable home ownership. This package would focus on more low cost housing, improved assistance to those who need it, and promoting shared equity.
Technical appendix

The dwelling price series used in this study is one constructed from data provided by the Real Estate Institute of Australia (REIA).

Specifically, KPMG Economics purchased the REMF1 and REMF2 datasets from the REIA, which contain information on the average quarterly median prices by capital city for houses and other dwellings respectively. Data for Sydney and Melbourne is available from the March Quarter 1980 for both houses and other dwellings.

KPMG Economics also analyzed property price and transaction volume data from the Australian Bureau of Statistics (Cat. No. 6416.0, Residential Property Price Indexes: Eight Capital Cities) for both established houses and attached dwellings. We then established a median dwelling series for the ABS data set, which is available for the period March quarter 2002 to the December quarter 2016.

We then prepared a simple regression model (with a zero constant term) to identify the relative weighting houses and other dwellings had on the constructed ABS median dwelling price for Sydney and Melbourne. These models showed the median dwelling price for Sydney and Melbourne were made up by allocations of median house prices and median other dwelling prices of 63 percent/34 percent and 62 percent/38 percent respectively.

KPMG Economics then applied these weighting to the REMF1 and REMF2 datasets to establish a single median dwelling price series for Sydney and Melbourne. The median dwelling price series used in this analysis is a 4-quarter rolling average, which we then ‘deflate’ by using a 4-quarter rolling average of the weighted average of the eight capital cities all groups CPI index (rebased so March Quarter 2016 = 100.0) to establish a real median dwelling price series for Sydney and Melbourne.
End notes


2. Second reading of the Appropriation Bill (no. 1) 2017-18 (‘the Budget Speech) on 9 May 2017 by the Hon. Scott Morrison MP, Treasurer of the Commonwealth of Australia

3. Ibid

4. AM with Sabre Lane, ‘Wage weakness undercutting budget benefits of income surge: economist’, Transcript 1 May 2017

5. ABS.StatBETA No. of residential dwellings (’000)

6. Foreign Investment Review Board Annual Reports, edns

7. RBA, Commonwealth Government 10-year bond series (ID – FCMYGBA10), difference in yields between August 2016 and May 2017


9. See Technical Appendix for discussion on how the KPMG median dwelling price series was constructed

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Reserve Bank of Australia, Household debt, housing prices and resilience, Speech by Philip Lowe, 4 May 2017

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