STATE OF HOUSING AFFORDABILITY

Key points

- The COVID-19 pandemic and its associated economic shock has greatly influenced demand for housing. Its effects on demand flow through to both prices and supply and, in turn, affects housing affordability, particularly in the rental market.
- There is likely to be downward pressure on rents that could improve overall rental affordability in the short term, particularly within the more densely populated eastern seaboard cities—but the impact of COVID-19 is disproportionately affecting industries where employees are more likely to be renting.
- Lower income households in the private rental market are more vulnerable to rental stress. The proportion of private renters in the bottom two income quintiles spending more than 30 per cent of their disposable income on housing costs has increased by almost 10 percentage points since 2008.
- As a result of rents being set as a fixed proportion of income, affordability for state social housing tenants has mostly been unaffected by the pandemic. However, given the pandemic's impact on jobs and the wider economy, it is likely the significant existing waitlists for state social housing will increase.
- First home buyers have been taking advantage of the recent softness in dwelling prices, lower interest rates and government stimulus accounting for more than 40 per cent of total new housing loans —10 percentage points higher than the long-term average.
- Over the longer term, NHFIC's projections see housing demand bouncing back and will exceed new housing supply between 2023 and 2025. Affordability for renters and prospective first home buyers could deteriorate if supply is not responsive to the strong rebound in demand over this time and beyond.

Introduction

Housing affordability is important at the household level, but also because of its effects on the wider economy and society.

Housing affordability has a significant impact on wealth distribution and intergenerational equity. Rising real house prices add to wealth for existing homeowners at the expense of rendering home ownership less affordable for first home buyers.[24] Similarly, retirees who own their home experience less financial stress than retirees who have to rent.[25] Housing affordability also has spatial dimensions and can affect inequality between cities and regions by restricting labour mobility as people are discouraged from working in low affordability areas. Within cities, gentrification in inner-city areas can push affordable housing to urban fringe areas, some with low amenity, with implications for employment, health, and social connectedness.[26]

Housing affordability is defined by the relationship between housing expenditure, such as mortgage payments or rent, and household incomes.[27] Having housing that is affordable means households can access an adequate standard of housing without unduly compromising their other needs.[28] Domestic and international organisations use several ways to assess affordability, and we draw on a variety of these measures in this chapter to assess the state of housing affordability in Australia. Different measurements come with advantages and limitations.

These measures will differ depending upon whether we look at owners or renters, and perceptions of affordability differ for specific buyers or renters, like first home buyers or low-income households. Research suggests groups most affected by high housing costs are low-income households, so it is therefore important to incorporate income metrics in affordability measures to provide insights into these specific market segments.[29]

The aim of this chapter is to introduce and discuss several measures which help assess housing affordability across the housing spectrum, including acknowledging the advantages and limitations of different metrics. We consider that assessing affordability for public renters, private renters and prospective first home buyers is the most appropriate focus of any affordability analysis. We will continue to build our metrics and understanding of affordability issues in future reports.

24 Yates J (1 January 2008) *Affordability and access to home ownership: past, present and future?*, Australian Housing and Urban Research Institute.
25 Coates B and Chen T (11 April 2019) '*Retiree home ownership is about to plummet. Soon little more than half will own where they live*', The Conversation.
26 Yates J and Milligan V (21 September 2007) *Housing Affordability: a 21st century problem*, Australian Housing and Urban Research Institute.
27 Thomas M and Hall A (2016), *Housing affordability in Australia*, Parliament of Australia.
28 Commonwealth of Australia (2010), *Australia's future tax system—Report to the Treasurer: Part Two Detailed analysis.*
29 Daley J and Coates B (March 2018) *Housing Affordability: Re-imagining the Australian Dream*, Grattan Institute.

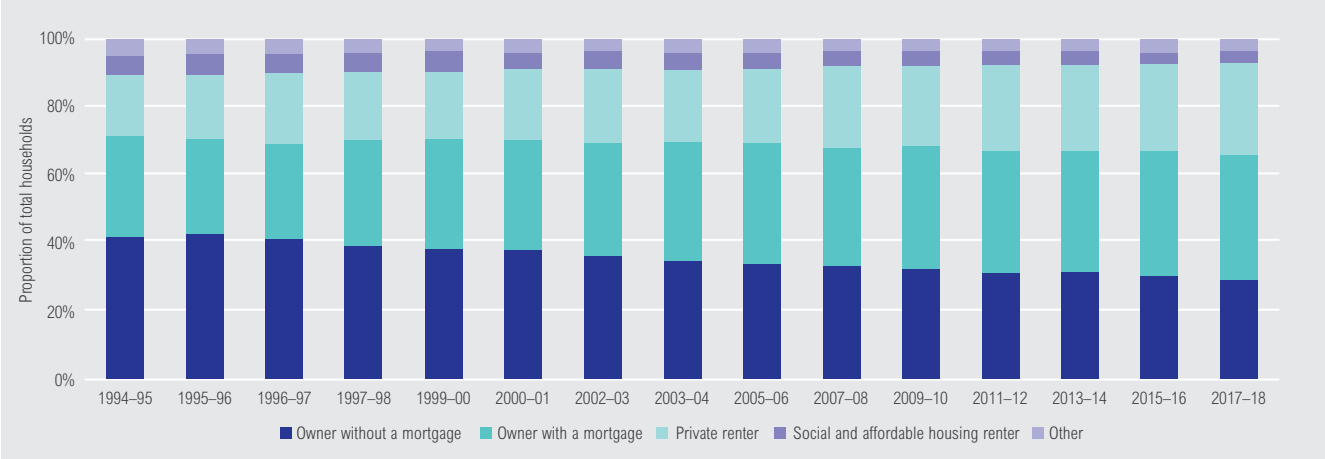
Housing spectrum

At one end of the housing spectrum are people who are homeless, renters in social and affordable housing and renters in the private rental market that includes low-income households. Around one-third of Australian households are renters. Moving along the spectrum, we have potential first home buyers who are renting but attempting to access home ownership. In August this year, more than two-fifths of total owner-occupier housing loan commitments in Australia belonged to first home buyers.[30] Homeowners are at the other end of the spectrum. Around 70 per cent of Australian households either own their home with a mortgage or outright. The proportion of private renters in the market has consistently risen over time, while the proportion of owners who own their home outright without a mortgage has declined (Figure 5.1).

Provided employment for households at the home ownership end of the spectrum has not been impacted by the global pandemic, they generally tend to experience fewer affordability challenges compared with households at the other end of the spectrum. Existing home owners benefit from price rises. Also, rising house prices do not in themselves indicate an affordability problem. Higher income households commonly prefer to spend more on housing as a lifestyle choice, whether it be on upgrading to a larger dwelling, or on paying a location premium to access more desirable suburbs.

This is why we concentrate on assessing the affordability of housing services for public renters, private (particularly low-income) renters and prospective first home buyers.

Figure 5.1: Australian housing market by tenure, 1994–2018



Source: Australian Bureau of Statistics, *Housing Occupancy and Costs*, 2017–18

30 Australian Bureau of Statistics (August 2020) *Lending Indicators*, tables 3 and 24.

Table 5.1: Australian housing spectrum[31]

Homelessness

0.5% of the population was homeless on the Census night in 2016.

Key Metrics:

- The ABS Census of Housing and Population collects national and state data on number of homeless persons and homelessness rates, which account for population density. They also collect data on demographics such as gender, age, ethnicity, and where people are staying.

Social and affordable rental

In 2018–19, 3% of households lived in social and affordable housing.

Key Metrics:

- State social housing rents are set at less than 30 per cent of income and affordable housing rent is set at around 80 per cent of local market rent.
- Trends in number of social and affordable housing per capita and waiting times.
- Quality of housing can be assessed by examining if state social housing amenities meet needs and overcrowding rates indicate if dwelling sizes are suitable.

Private rental

In 2017–18, 27% of households were renting from private landlords.

Key Metrics:

- Increase in rental vacancy rates generally indicate improved rental affordability for those looking to renew a lease, unless income has also been adversely affected.
- The rent-expenditure-to-income ratio define households as being in rental stress. If rent exceeds 30% of disposable income and households are overburdened if rent exceeds 40% of disposable income. The 30/40 rule applies the rent-expenditure-to-income ratio to households who earn the lowest 40% of income.
- Residual income measures examine whether a household's income after housing costs is sufficient to cover non-housing expenditure.

First home buyers

In 2017–18, potential first home buyers consisted of around 15% of households.

Key Metrics:

- Trends in time to save for a deposit, upfront capital required to buy a property, loan sixes, the proportion of housing loans being taken out by first home buyers, and mortgage-repayment-to-income ratio indicates whether accessibility is becoming more difficult over time.
- The mortgage-repayment-to-rent ratio for FHBs compares cost of renting to the cost of servicing a mortgage.
- A Lorenz curve distribution of affordable dwellings by income decile can show what proportion of properties potential FHBs can afford at different income levels.

Home ownership

In 2017–18, 67% of households were homeowners. 37% of households had a mortgage.

Key Metrics:

- The ABS uses a tenure-neutral approach to measure the cost of housing services, which consists of both the rent paid by tenants and imputed rent, which is the rent an owner occupier would pay if their dwelling were rented.
- Costs are expected to be exceeded by capital appreciation.

31 Data on proportion of population is based on where household tenure was known, sourced from Australian Institute of Health and Welfare's home ownership and housing tenure snapshot released in August 2020. Data on FHBs was derived from ABS Table 2.2 Housing Occupancy and Costs 2017–18

Social and affordable rental

Social housing covers subsidised rental housing allocated and managed by state governments or not-for-profit organisations, including community and Indigenous housing organisations. Social housing is funded by state governments and through federal programs such as the National Housing Homelessness Agreement and Commonwealth Rent Assistance. State social housing targets those on low household incomes, who are often on the brink of homelessness. Rent is typically set at around 25–30 per cent of income. In many jurisdictions, housing is considered affordable if households do not spend more than 30 per cent of their disposable income on housing,[32] so state social housing tenants are predominantly not in rental stress.

The affordability and certainty offered by state social housing has resulted in significant waiting lists. From 2015 to 2019, the number of households on the waiting list considered to be in greatest need of state public housing increased by a third to 52,644 households.[33] Recent work by AHURI shows that in addition to current waiting lists, over the next 20 years an estimated 727,300 additional social dwellings will be required[34]. In order to manage the growing level of demand, state social housing is often allocated based on the greatest level of need. For instance, 72 per cent of new allocations to households in greatest need were provided within one year of being on the waitlist. This is compared with 38 per cent of new allocations to households that were not considered in greatest need.[35] This prioritisation has meant tenants in state social housing consists almost entirely of households reliant on government welfare payments as their primary source of income (Table 5.2),[36] which has decreased the revenue bases available to state social housing providers and made it more difficult to improve the supply of state social housing.[37] Also, a widely acknowledged issue with assessing social and affordable housing need is the lack of good publicly available data. NHFIC will continue to work with stakeholders to identify potential solutions to improving the housing data ecosystem in this area.

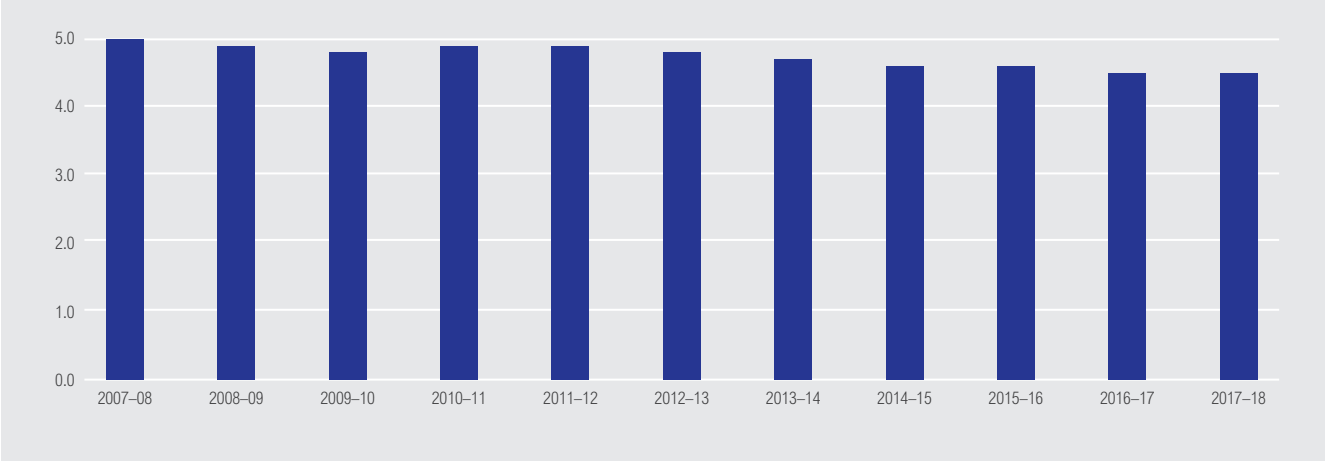
Table 5.2: Income characteristics of state public housing households

Primary source of income	Number	Per cent
Employee cash income	21,731	7.4
Youth allowance	1,525	0.5
Newstart allowance	37,891	12.9
Unemployed	854	0.3
Age pension	72,991	24.8
Disability pension	81,901	27.9
Other government payment	55,347	18.8
Other cash income	1,688	0.6
Not stated	20,129	6.8
Total	**294,057**	**100**

Source: Australian Institute of Health and Welfare, Data Tables: social housing households Table 4, 2019

32 Herbert C, Hermann A and McCue D (25 September 2015), *Measuring housing affordability: Assessing the 30 percent of income standard*, Joint Center for Housing Studies of Harvard University.
33 Australian Institute of Health and Welfare (2019) *Data tables: Social housing dwellings*, Table 22.
34 Lawson J, Pawson H, Troy L, van den Nouwelant R and Hamilton C (15 November 2018) *Social housing as infrastructure: an investment pathway*, Australian Housing and Urban Research Institute.
35 Australian Institute of Health and Welfare (5 August 2020) *Housing assistance in Australia 2020*.
36 Australian Institute of Health and Welfare (2019) *Housing assistance in Australia 2019—Data tables: Social housing tenants*.
37 Affordable Housing Working Group (October 2016) *Innovative Financing Models to Improve the Supply of Affordable Housing*, Council on Federal Financial Relations.

Figure 5.2: State social housing dwellings per 100 households—Australia



Sources: AIHW analysis of AIHW National Housing Assistance Data Repository 2017–18, ABS Household and Family Projections, Australia, 2011–2036.

In 2017–18, 3.1 per cent of Australian households lived in state public housing. Despite the overall stock of state social housing increasing each year, the overall number of Australian households has increased at a greater rate.[38] This has pushed state social housing per capita down over the past decade (Figure 5.2).

Australia's community housing sector is still relatively nascent (with around 93,000 dwellings)[39], and the funding gap is one of the widely acknowledged constraints on its growth. This gap is the difference between the costs of delivering and operating new community housing developments (including construction and ongoing management costs) and the rental returns.

The funding gap for a community housing development project will depend on a range of factors, particularly geographic location and tenancy mix. For example, the funding gap for state social housing will be larger than that for affordable housing as state social housing brings lower rental returns.

Affordable housing differs from state social housing as it targets those on low to moderate incomes, including workers in lower paid occupations such as retail or manufacturing, and key workers, such as emergency services and health care workers who often live near their place of work. Affordable housing rents are set at 75–80 per cent of the local market rent in the area. Because rent does not directly track income, and affordable housing tenants are less reliant on government payments to subsidise living costs, these tenants potentially face greater rental stress compared to state social housing tenants.

The pandemic has drawn out the distinction between social and affordable housing tenants. Low-income workers in affordable housing who have their employment and income adversely affected by the pandemic are more likely to face higher rental stress. But affordability for state social housing tenants will be less affected because rent payments continue to be set in line with their respective income, mostly welfare payments. Given the pandemic's impact on jobs and the wider economy, it would be reasonable to assume the waitlist volume for social and affordable housing is likely to increase.

38 Australian Institute of Health and Welfare (18 July 2019) *Housing assistance in Australia 2019*.

39 The number of community housing dwellings includes dwellings that are owned by state housing authorities and managed by CHPs—Productivity Commission '*Report on Government Services 2020*', Table 18.3.

Private rental

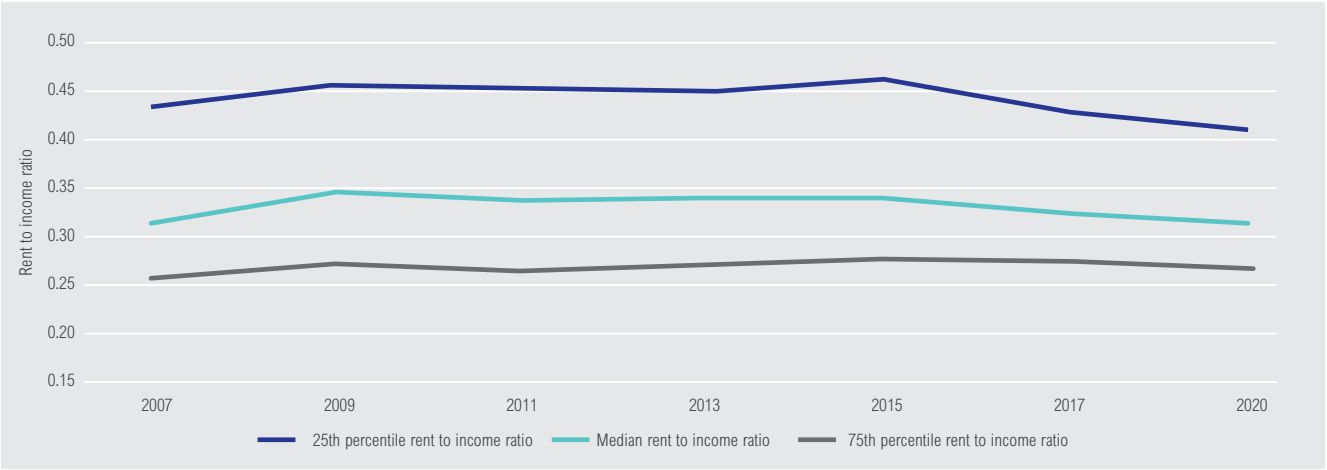
Private rents reflect the actual cost of consuming housing services in the housing market and are therefore an important bellwether indicator for housing affordability. Almost a third of Australian households rent in the private market, with this number having grown since the 1990s.

Residual income measures are useful in identifying vulnerable renting households that are struggling even if housing costs relative to their income are not excessive. An example of this is measuring whether a household's remaining income after housing costs is sufficient to cover a minimum basket of non-housing expenses.[40] Alternatively, others have assessed whether remaining income is above or below an adjusted poverty line.[41] However, what counts as necessary expenditure is subjective and there is no universal way to quantify the minimum income households require for non-housing expenses. In fact, a household's inability to afford non-housing items could be driven just as much by the cost of the items themselves rather than the cost of housing.

To focus on housing-related spending, the payment-to-income ratio can also be applied to private renters. In Australia, the rent-to-income ratio peaked in 2009 and has since declined slightly, although remains higher than 30 per cent of income (Figure 5.3). Assuming renters in the 25th percentile of income are also paying the 25th percentile of rent, the rent-to-income ratio suggests they have been paying more than 45 per cent of income on rent, although this ratio has decreased to 42 per cent more recently.

However, assessing affordability by a fixed percentage of income spent on housing is somewhat arbitrary, and the percentage threshold that defines what is affordable can change over time, indicating a limitation of this indicator. Some researchers are also critical of applying a fixed proportional rate without considering income distribution.[42] As incomes rise, households are prepared to spend a higher proportion of income on housing without experiencing affordability problems. This highlights that housing can be considered both a necessity and a luxury good, which further complicates assessments of affordability.[43]

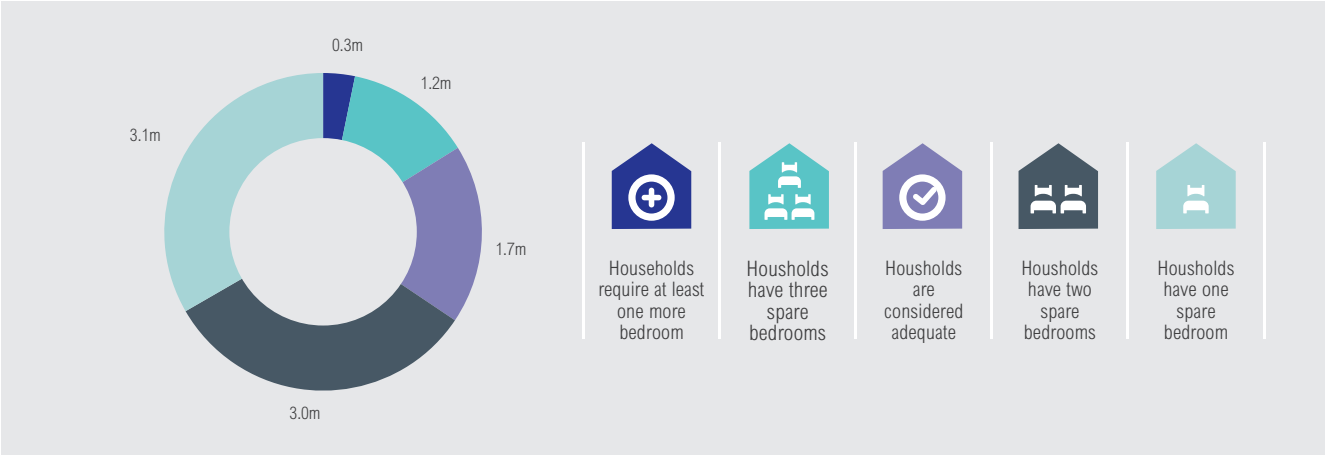
Figure 5.3: Rental payment-to-income ratio



Source: Income data from Australian National University; Rent data from CoreLogic

40 Stone M (31 August 2006) '*A Housing Affordability Standard for the UK*', Housing Studies, 1(4):453–476.
41 Kutty N (31 March 2010) '*A new measure of housing affordability: Estimates and analytical results*', *Housing Policy Debate*, 16(1): 113–142.
42 Stone M, Burke T and Ralston L (5 May 2011) *The residual income approach to housing affordability: the theory and the practice*, Australian Housing and Urban Research Institute.
43 Albouy A, Ehrlich G and Liu Y (2016) *Housing Demand, Cost-of-Living Inequality, and the Affordability Crisis*, National Bureau of Economic Research.

Figure 5.4: Adequacy of Australian housing utilisation



Source: Australian Bureau of Statistics, Housing Occupancy and Costs, 2017–18. Utilisation is based on the criteria of the Canadian National Occupancy Standard

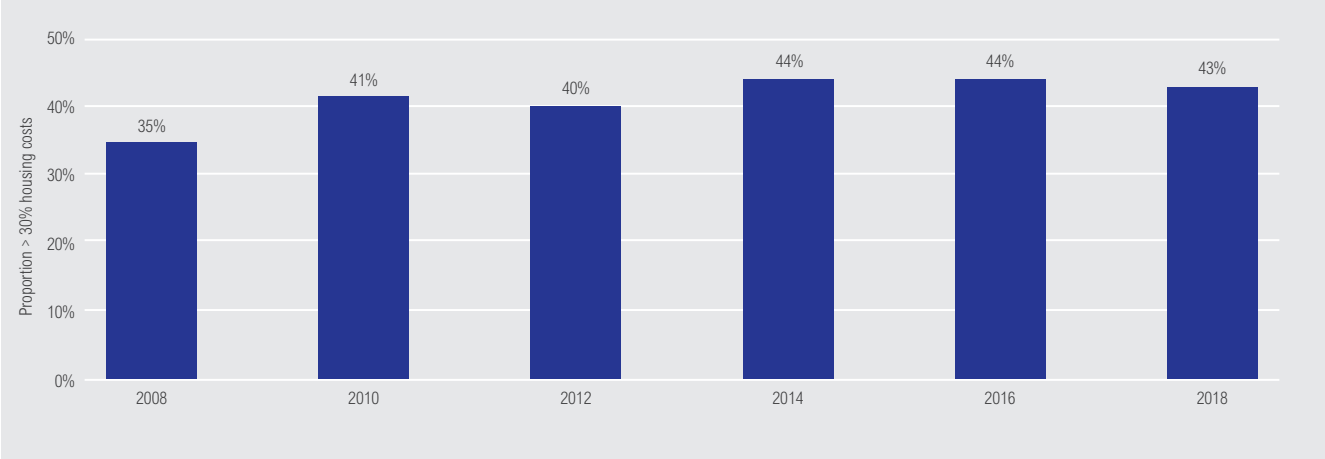
The quality of dwelling households can afford to live in is also relevant, although certain characteristics might be more relevant to some people. Poor quality housing disproportionately affects low-income households. Some countries look at repair and maintenance deficiencies in homes and absence of essentials such as sanitary facilities.[44,45,46]

Others measure overcrowding rates, which refers to the number of rooms per household member after accounting for different household compositions.[47,48] In Australia, there is an average of 2.6 persons per household and 3.2 bedrooms per dwelling. The ABS measures the adequacy of housing utilisation by determining the number of bedrooms a household requires to adequately accommodate its occupants. Around 4.2 million Australian dwellings were considered underutilised in June 2018 (Figure 4.5), which is defined by having two or more spare bedrooms by other comparable countries.[49]

This effectively means that at this time, there were close to 10 million empty bedrooms across Australia. Couples with no children are the predominant household type who reside in underutilised dwellings. Eight out of 10 Australian households have at least one spare bedroom, with only 3.5 per cent requiring a larger dwelling (Figure 5.4). The high rate of underutilised homes highlights there are inefficiencies in the housing system that disincentivise downsizing. For instance, in a 2017 study, a third of seniors reported stamp duty as one of the major discouraging factors when considering downsizing as it represents a high cost of transacting property.[50]

44 OECD Social Policy Division: Directorate of Employment, Labour and Social Affairs (2019) *HC2.3 Severe housing deprivation.*
45 Statistics Canada (2020) *Housing suitability and dwelling condition, by tenure including social and affordable housing.*
46 Stats NZ (5 June 2019) *Framework for housing quality.*
47 OECD Social Policy Division: Directorate of Employment, Labour and Social Affairs (2019) *HC2.1 Living space.*
48 Eurostat (6 June 2014) *Overcrowding rate.*
49 A dwelling is said to be underutilised when it consists of 2 or more bedrooms surplus to the household requirements as determined by the *Canadian National Occupancy Standard.*
50 Rees K and McCallum J (August 2017) *Downsizing: Movers, planners, stayers*, National Seniors Australia.

Figure 5.5: Proportion of low-income private renters under rental stress (using the 30/40 indicator)



Source: Australian Bureau of Statistics, Housing Occupancy and Costs, 2017–18

The limitation of some of these measures is they do not adequately account for the distribution of housing outcomes that can provide important insights into affordability. This is why some organisations refer to more refined expenditure-to-income ratios to exclude high-income households. For example, the 30/40 rule applies the ratio to households in the bottom 40 per cent of income distribution. In Australia, the proportion of private renters in the bottom two income quintiles spending more than 30 per cent of their disposable income on housing costs has increased almost 10 percentage points since 2008, to 43 per cent (Figure 5.5). One of the reasons behind this is the increased proportion of vulnerable households renting privately as state public housing availability has waned and rising house prices has rendered home ownership unattainable. Renters that are considered vulnerable include those that are raising children, unemployed, elderly, and with a disability. Typically, vulnerable renters experience the highest levels of rental stress.

A limitation to using ratio measures is that they tend to classify more single person households as being in housing stress, compared to couples with children.[51] The OECD overcomes this limitation by adjusting household incomes for household composition.[52] Similarly, Anglicare tracks how many rental properties are affordable but also meet size requirements for different household types.[53]

Further assessment of affordability has been examined by assessing how much of the cumulative rental stock is considered affordable for each income quintile. However, before presenting this analysis, it is useful to understand how tenure of housing across Australia has changed over time by income distribution. A report on vulnerable renters released by the Productivity Commission shows that, over the last two decades, there has been a disproportionate increase in lower income private renters (Figure 5.6). This is partly due to changing demographics and household needs, but more significantly around households transitioning from state public housing into private rental.[54]

51 Gabriel M, Jacobs K, Arthurson K, Burke T and Yates J (May 2005) *Conceptualising and measuring the housing affordability problem*, Australian Housing and Urban Research Institute.
52 OECD Project on Income Distribution and Poverty, *Adjusting household incomes: equivalence scales*.
53 Anglicare Australia (2019) *State of the Family Report—Our Better Selves: Appreciating and Re-Imagining Our Work to Create Change*
54 Commonwealth of Australia Productivity Commission (September 2019) *Vulnerable Private Renters: Evidence and Options*.

Figure 5.6: Change in the proportion of households in different tenures between 1994–96 (averaged) and 2015–18 (averaged), by equivalised household income quintile[a,b,c]

a. Changes are calculated as the difference between the averaged proportions from the 1994–95 and 1995–96 survey years, and those from the 2015–16 and 2017–18 survey years. Averages are used to account for volatility. **b.** The changes in public renting for quintiles 4 and 5 is the 2015–16 survey year. The proportion for 2017–18 could not be used for confidentiality reasons, and differs negligibly. **c.** The 'other' tenure category is not shown here, meaning the changes within each quintile do not sum to zero. The category accounted for between 3 and 5 per cent of households over the period.

Sources: Productivity Commission estimates using ABS (*Microdata: Household Expenditure, Income and Housing, 2015–16*, Cat. No. 6540.0, and *Microdata: Household Expenditure, Income and Housing, 1994–95 and 1995–96, 2017–18*, Cat.no. 6541.0.30.001).

Figure 5.7 and Figure 5.8 are a form of Lorenz curve analysis in that it illustrates the *distribution* of affordability outcomes for renters as opposed to relying on averages which are more commonly used to assess affordability. The Lorenz curve is typically used to provide a graphical representation of wealth distribution and inequality within an economy by showing the cumulative share of income for different percentiles of the population.[55] They are useful in assessing affordability because they can graphically demonstrate what proportion of housing services or stock are affordable for households at *each income level*. For the Lorenz curve analysis conducted in this report, if there was perfect equality, those in the bottom income quintile could afford 20 per cent of dwellings, those in the second bottom income quintile could afford 40 per cent of dwellings, and so on. The further away the curve is from the 45-degree straight line of equality, the higher the level of housing affordability inequality.

For example, Figure 5.7 and Figure 5.8 illustrate the proportion of rental properties people could potentially afford at each level of income (in this case, each income quintile). For the graphs below, 'affordable' is deemed to be if people spend less than 30 per cent of their income on housing services. As of June 2020, the lowest 20 per cent of renters by income could afford less than 10 per cent of rental stock and the second lowest income quintile could afford just 20 per cent of rental stock. By the third income quintile, affordability improves considerably with more than 60 per cent of all rental dwellings considered affordable.

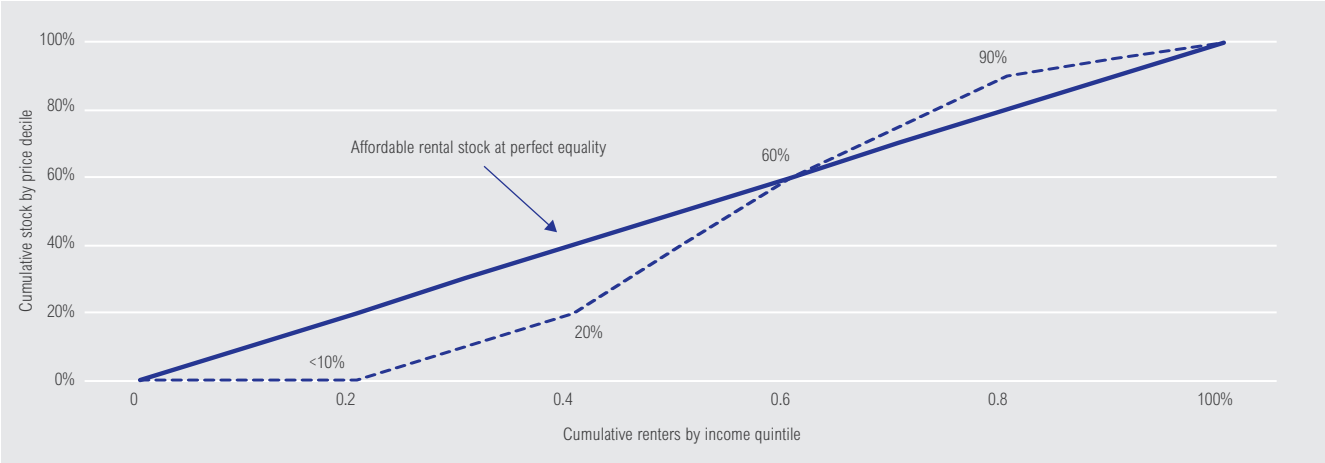
Figure 5.8 shows the same Lorenz curve for the Greater Sydney region comparing June 2007 and June 2020.[56] Interestingly, the distribution has remained largely unchanged since 2007. Given rent price data has been reported by deciles in this analysis, the limitation is in determining whether affordability for the lower income renters has changed at a more granular percentile level. There might still be households *within* the quintile income distribution facing higher housing costs. For example, rents for the bottom price quintile increased between 2007 and 2020 by 63.9 per cent compared with income for the bottom quintile growing by just 30 per cent.[57]

55 Meen G and Whitehead C (2020) *Understanding Affordability: The Economics of Housing Markets*, Bristol University Press.
56 Prior to 2007, rental price data was not accurately captured and considered to be unreliable.
57 Income data from Australian National University; Rent data from CoreLogic

It is also worth considering what the measure is not covering. While lining up all rental dwellings from cheapest to most expensive against renters from lowest to highest income is a useful exercise, what is not shown is if renters are perfectly matched to rental stock. For instance, it does not show whether renters in the highest income quintile are renting stock from the highest price quintile. Renters on the higher end of the income ladder may be renting stock from the lower end of the price market, thereby reducing the amount of stock for lower income renters that is both available and affordable. In fact, studies have shown that access to affordable rental accommodation has diminished over time for lower income renters.[58]

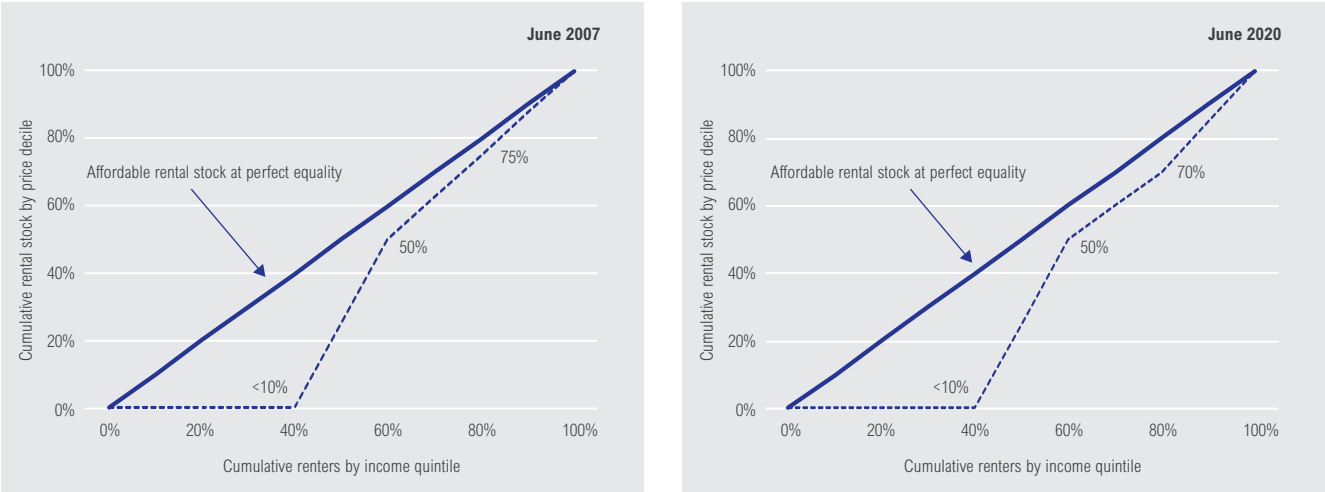
The COVID-19 pandemic and its associated economic shock has greatly influenced demand for housing. Its effects on demand flow through to both prices and supply, and in turn affects housing affordability. As discussed in the State of Housing Demand chapter, one of the most impacted sectors of the housing market amid COVID-19 has been the rental market.

Figure 5.7: Distribution of affordable rental dwellings by income quintile—Australia, June 2020



Source: Income data from Australian National University; Rent data from CoreLogic; Understanding Affordability: The Economics of Housing Markets, 1 July 2020, by Geoffrey Meen & Christine Whitehead

Figure 5.8: Distribution of affordable rental dwellings by income quintile—Greater Sydney, June 2007 vs. June 2020



Source: Income data from Australian National University; Rent data from CoreLogic; Understanding Affordability: The Economics of Housing Markets, 1 July 2020, by Geoffrey Meen & Christine Whitehead

58 Hulse K, Reynolds M, Nygaard C, Parkinson S and Yates J (December 2019) *The supply of affordable private rental in Australia cities: short-term and longer-term changes*, Australian Housing and Urban Research Institute.

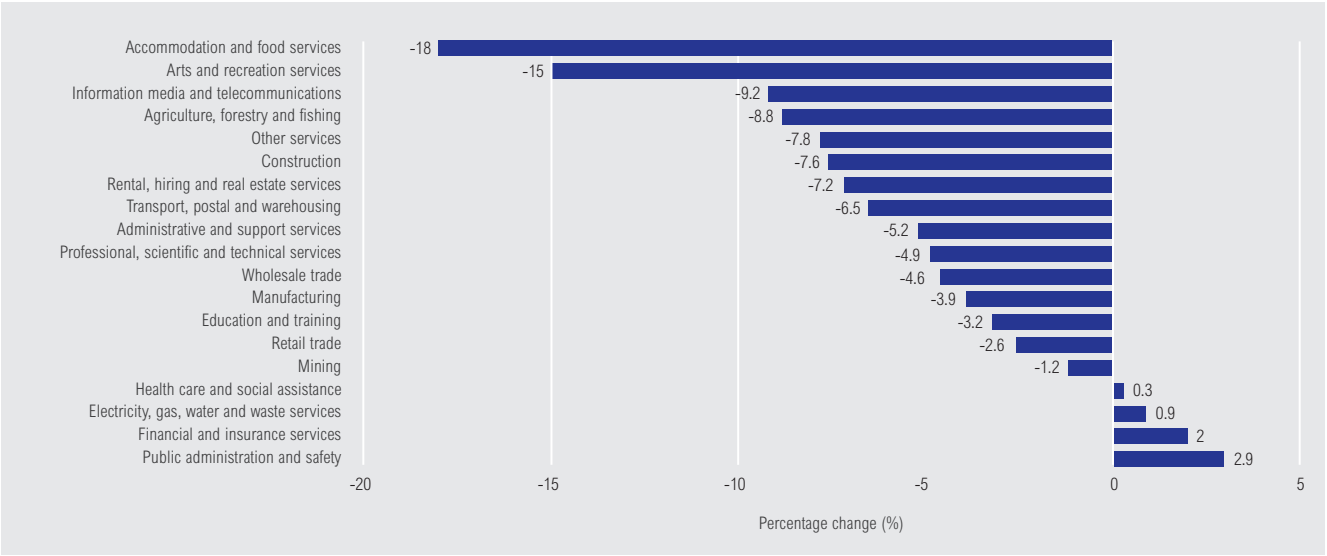
Despite falls in rental prices, particularly for inner-city dwellings in Sydney and Melbourne, it does not necessarily mean dwellings will become more affordable for all renters. This is because one of the drivers of the demand shock has been a disproportionate loss of employment in industries where workers were more likely to be renting.[59] Between March and October, 17.4 per cent of jobs had been lost across the accommodation and food services, and 12.9 per cent in arts and recreation services (Figure 5.9). This compares with an average decline of 3.8 per cent of jobs across other industries. Furthermore, in a recent AHURI survey conducted in October (see Figure 5.10), 63 per cent of rental households reported their employment or income had been affected by the pandemic. Specifically, 22 per cent of respondents experienced reduced hours, 19 per cent reported reduced income, 13 per cent experienced temporary job loss and a further 10 per cent reported complete loss of income. Reduced working hours and temporary job losses were particularly prevalent for younger renters aged 18 to 29 years of age and for low-to-moderate income households earning less than $90,000 per annum.

Despite the recent improvement in employment figures, affordability into the future for renters remains uncertain. Renters continue to face potential affordability challenges with a range of factors currently safeguarding them from the full impact of the economic downturn. A recent survey on Australian renters found personal savings, access to superannuation, rental deferments, and a range of government stimulus measures such as JobKeeper and JobSeeker have kept renters from financial hardship.[60]

Looking ahead, NHFIC supply and demand projections suggest rental affordability will improve out to 2022, particularly in more densely populated eastern seaboard cities, as there are fewer households forming to soak up new supply. In inner-city areas of Sydney and Melbourne, a blend of back-logged rental listings, reduced demand and the economic downturn will most likely result in downward pressure on rents. But the economic hit to jobs will to some degree offset some of the improvement in affordability. In markets like Perth, rising rents, low levels of supply and low wage growth will see upward pressure on rental affordability. Beyond 2022, projections show demand bouncing back with the reopening of international borders spiking rental demand. Over time the excess supply will be absorbed and, given historical lags in the supply chain response and demand running above supply particularly in 2024 and 2025, the affordability of rental accommodation could deteriorate over the longer term.

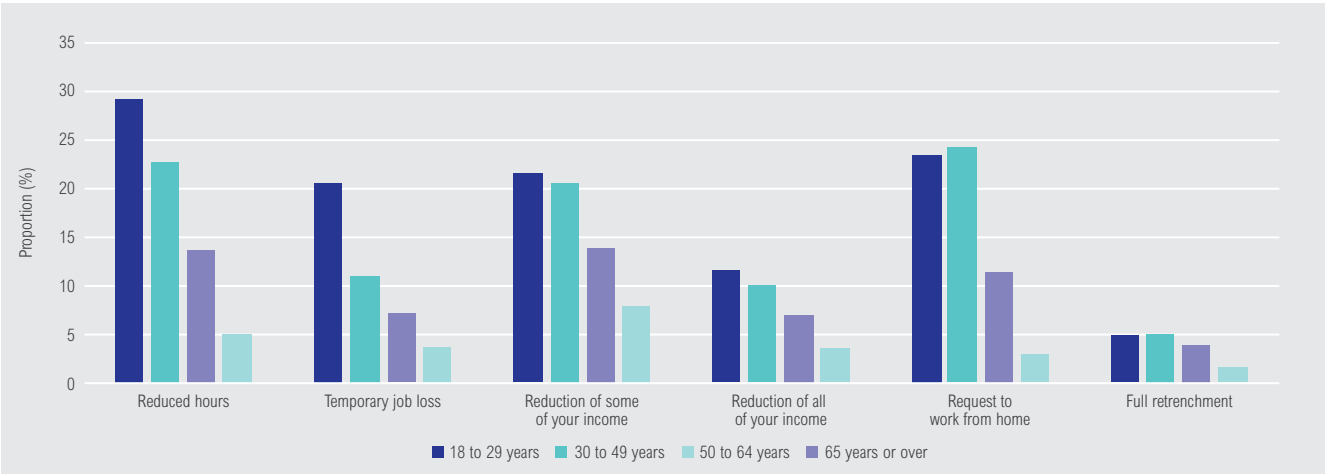
59 CoreLogic (20 July 2020) *ANZ CoreLogic Housing Affordability Report 2020*.
60 Baker E, Bentley R, Beer A and Daniel L (15 October 2020) *Renting in the time of COVID-19: understanding the impacts,* Australian Housing and Urban Research Institute.

Figure 5.9: Change in payroll jobs between 14 March and 17 October, Australia



Source: Australian Bureau of Statistics, Weekly Payroll Jobs and Wages in Australia, September 2020; ANZ-CoreLogic 2020, 'Housing Affordability Report', Sydney

Figure 5.10: Employment changes due to the COVID-19 pandemic



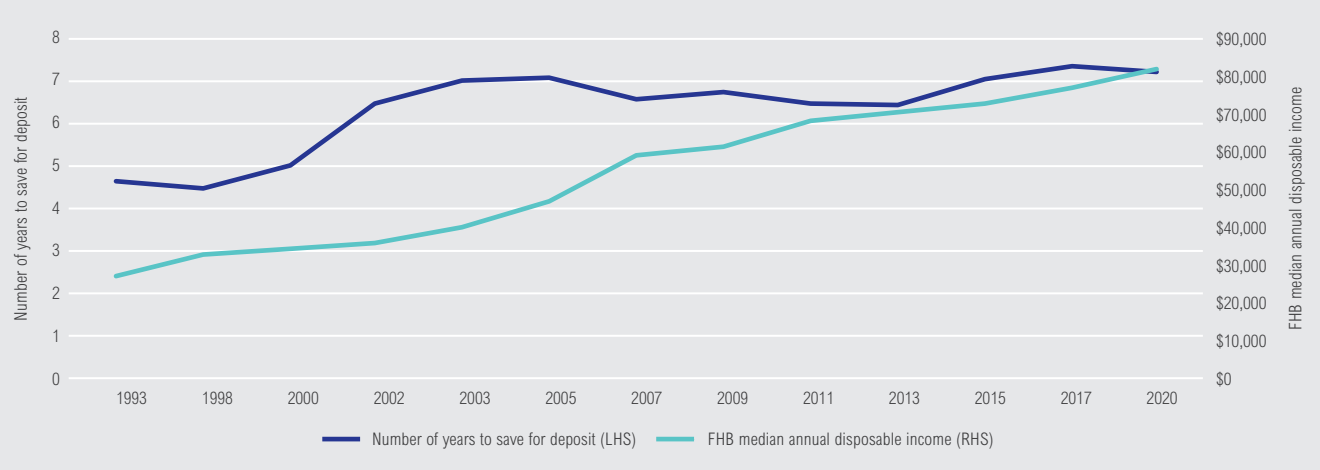
Source: AHURI 2020, COVID-19 and the impact on Australian renters, October 2020, Australia.

First home buyers

An important aspect of housing affordability is the ability for households to transition from renting to buying their first home. Prospective first home buyers have been identified as those currently renting which have a household head aged between 25 and 39 years old.[61] The ability to comfortably transition into home ownership can be assessed by looking at trends in tenure rates by income and age, the median age of first home buyers over time, and the proportion of first home buyers represented in annual housing turnover.[62,63]

Measures that capture cost barriers behind these trends include looking at the size of the deposit gap between an affordable loan and current housing prices, time required to save for a typical deposit, and threshold income required to qualify for a typical first home loan.[64,65] The upfront capital required for first home buyers to secure a home loan has increased more than fourfold since the early 1990s to be more than $100,000. This underscores the value of the Federal Government's First Home Loan Deposit Scheme (FHLDS) for first home buyers, as the minimum deposit required is only 5 per cent. The time required for first home buyers to save for a conventional 20 per cent deposit has increased from around four to seven years since the early 1990s, and this is despite significant income growth. NHFIC's 'First Home Loan Deposit Scheme: Trends and Insights' paper showed that for buyers under this scheme, first home buyers could reduce the time saving for a deposit by up to five years in some states (which is lower than the seven per cent reported above largely due to the price thresholds under FHLDS). The median first home buyer's annual disposable income has grown from around $30,000 in the early 1990s to over $80,000 (Figure 5.11).

Figure 5.11: Time to save 20 per cent deposit for prospective first home buyer



Source: Income data from Australian National University; savings rate derived from Australian Bureau of Statistics Household Expenditure Survey Table 3.2, 2017; Dwelling sales prices from CoreLogic

61 La Cava G, Leal H and Zurawski A (2017) *Housing Accessibility for First Home Buyers*, Reserve Bank of Australia.
62 Reserve Bank of Australia (June 2015) *Submission to the Inquiry into Home Ownership*
63 Bloxham P, McGregor D and Rankin E (2010) *Housing Turnover and First-home Buyers*, Reserve Bank of Australia.
64 Commonwealth of Australia Productivity Commission (31 March 2004) *First Home Ownership: Productivity Commission Inquiry Report No. 28.*
65 Whitehead C and Williams P (18 July 2017) *Changes in the regulation and control of mortgage markets and access to owner-occupation among younger households*, OECD.

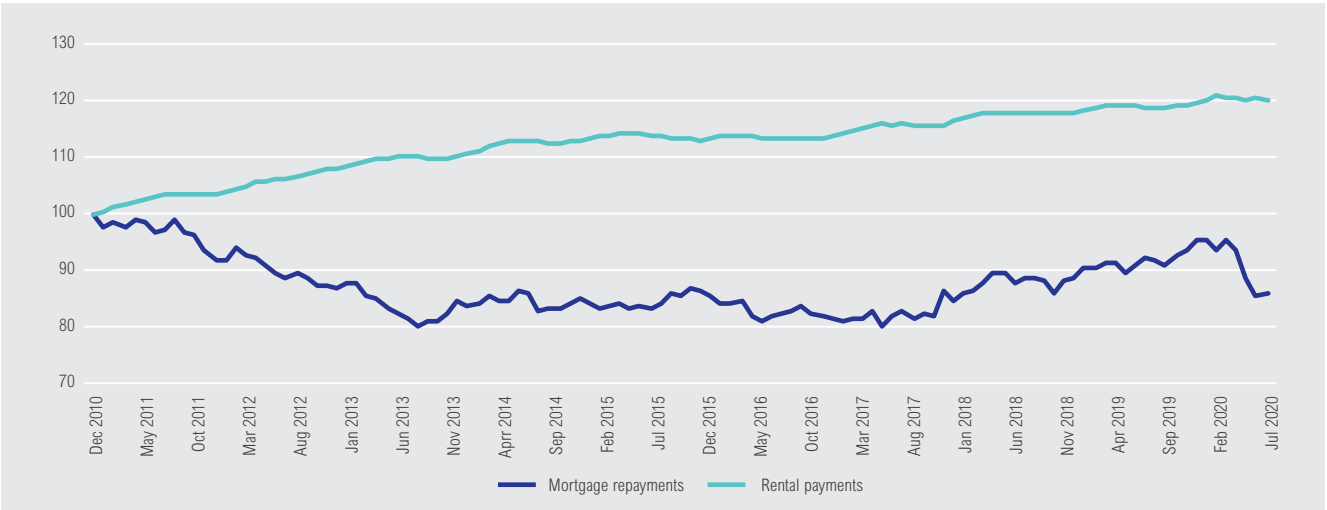
Researchers have also examined whether it is more expensive to rent or buy as a way to assess if house prices are overvalued.[66] A comprehensive way to do this is by assessing the user cost of home ownership, which accounts for financial returns associated with owner-occupied housing, as well as differences in risk, tax benefits, property taxes, depreciation and maintenance costs, and any expected capital gains. Overvaluation is characterised when the expected annual cost of owning a home is more expensive than the cost of renting. We adopt a simpler approach focusing on comparing the cost of renting to the cost of servicing a mortgage.

Figure 5.12 shows first home buyers' mortgage-repayments-to-rent ratio has decreased over time, which is reflective of the decline in lending rates. Mortgage repayments had consistently exceeded rental costs up until 2013, peaking in late 2008 when mortgage repayments were 1.5 times the cost to rent. More recently, mortgage serviceability costs are on par with rental costs, with the most recent data showing average rental costs are more expensive than average mortgage repayments. Figure 5.13 suggests a combination of lower mortgage serviceability costs and rising rental costs has driven the mortgage to rent payment ratio below one.

Figure 5.12: Monthly mortgage-repayments-to-rent ratio, Australia

Source: Rent data from CoreLogic; Australian Bureau of Statistics, Lending Indicators Table 24, August 2020; Reserve Bank of Australia Table F5 Lending Rates

Figure 5.13: Mortgage repayment vs rental repayment growth, Australia—indexed, base of 100 = December 2010



Source: Rent data from CoreLogic; Australian Bureau of Statistics, Lending Indicators Table 24, August 2020; Reserve Bank of Australia Table F5 Lending Rates

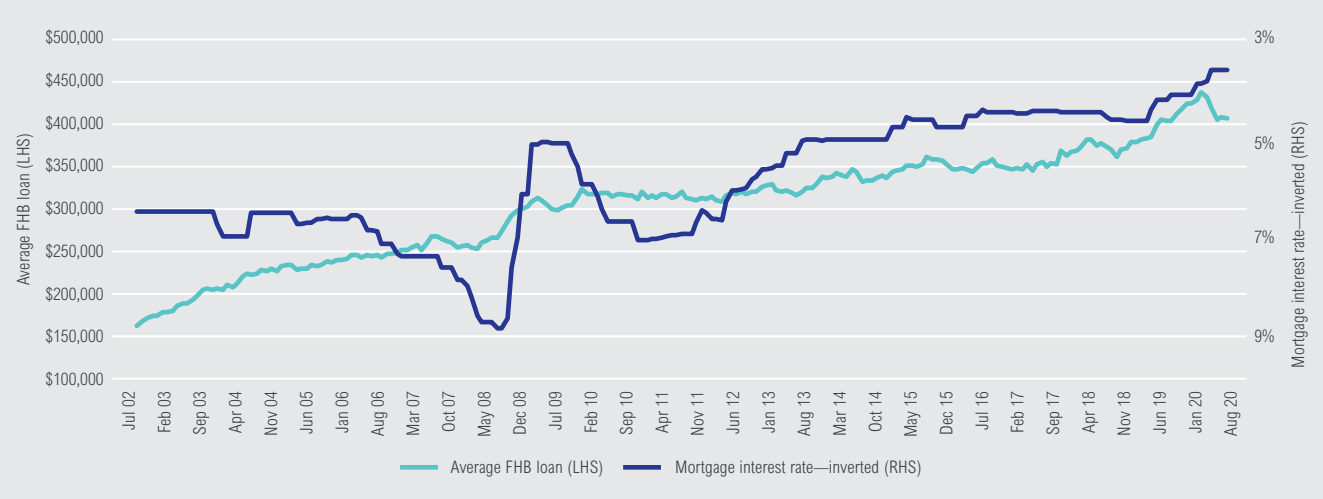
66 Fox R and Tulip P (July 2014) *Is Housing Overvalued?*, Reserve Bank of Australia.

To compare affordability for owner-occupiers and renters, organisations measure both the rent paid by renters, and imputed rent, which is the rent an owner-occupier would pay if their dwelling were rented. While there are complexities surrounding how to calculate imputed rent, such imputations allow for a more meaningful comparison of the income circumstances of people living in different tenure types, and to understand changes over time in income levels and distribution of income when tenures may also be changing over time.[67]

Accessibility to home ownership is especially significant in a historically low interest rate environment, as new entrants into the housing market are able to take on higher levels of debt. There has been a more than fourfold increase in the average first home buyer debt since the 1990s (Figure 5.14). Despite increased loan sizes, reductions in interest rates have kept monthly mortgage repayments steady since 2008. This indicates the main barrier to transitioning into home ownership is saving for a deposit rather than ongoing mortgage serviceability.

A simple and commonly used measure to look at the affordability for prospective first home buyers is ratio of dwelling prices to household disposable income. If dwelling prices rise faster than income, the price-to-income ratio increases and suggests housing is becoming less affordable. A higher ratio implies that households have to borrow more to buy a home. Alternatively, they may need to save for a larger deposit. Although, because this ratio is calculated at the aggregate average level, price-to-income ratios do not assess the distribution of housing costs, or the cost of servicing debt. The UK enhanced this measure by identifying properties a buyer could afford in different locations based on household income levels. However, this measure still does not provide any indication of the quality of the housing the households are paying for. It also ignores the effect of changes in interest rates on borrowing costs that may affect the household's ability to buy a home.

Figure 5.14: First home buyer debt relative to discounted mortgage interest rate, 2002 to 2020



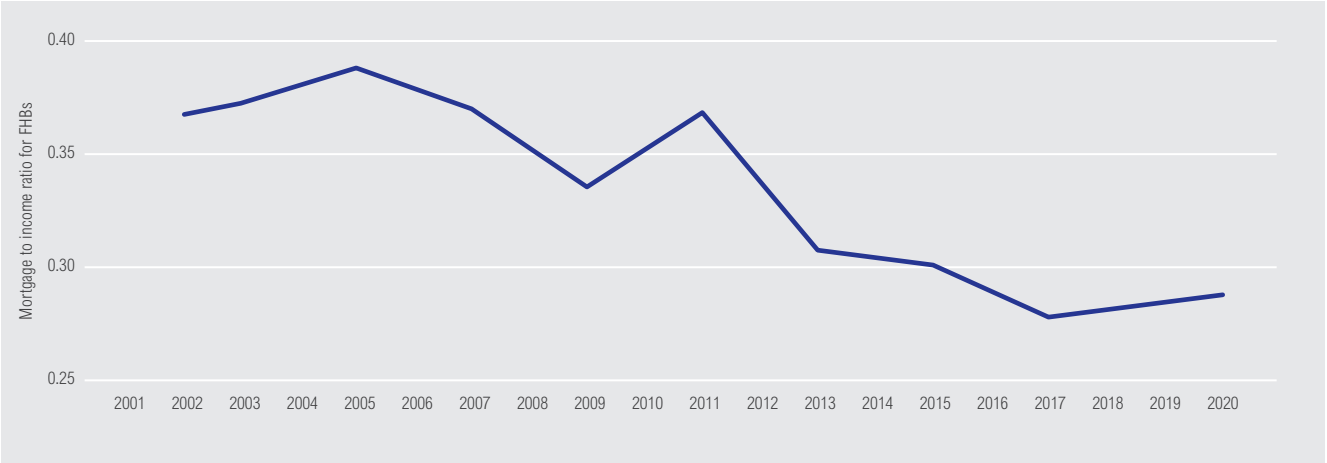
Source: Australian Bureau of Statistics, Lending Indicators Table 24, August 2020; Reserve Bank of Australia Table F5 Lending Rates

67 Australian Bureau of Statistics (12 July 2019) *Survey of Income and Housing, User Guide, Australia, 2017–18: Imputed rent.*

RBA researchers have used a mortgage debt-serviceability ratio to assess the purchasing capacity for potential first home buyers, based on the assumption that buyers can make loan repayments worth 30 per cent of their disposable household income.[68] The mortgage-repayment-to-income ratio for prospective first home buyers indicates mortgage repayments have fallen from 39 per cent of disposable household income in 2005 to 29 per cent of disposable household income more recently (Figure 5.15).

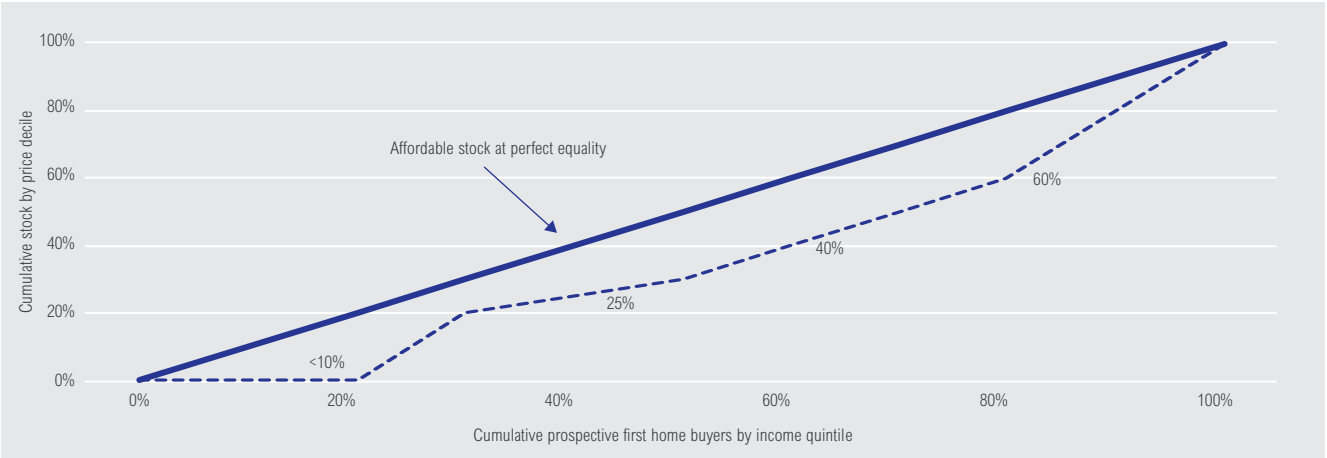
The same Lorenz curve analysis used in Figure 5.7 and Figure 5.8 is used here to illustrate the distribution of affordable dwellings for prospective first home buyers based on different income quintiles. Figure 5.16 shows that at the national level, a quarter of dwellings are considered affordable to prospective first home buyers within the bottom two income quintiles.

Figure 5.15: Minimum mortgage-repayment-to-income ratio for prospective first home buyers



Source: Income data from Australian National University; Australian Bureau of Statistics Lending Indicators Table 24, July 2020; Reserve Bank of Australia Table F5 Lending Rates

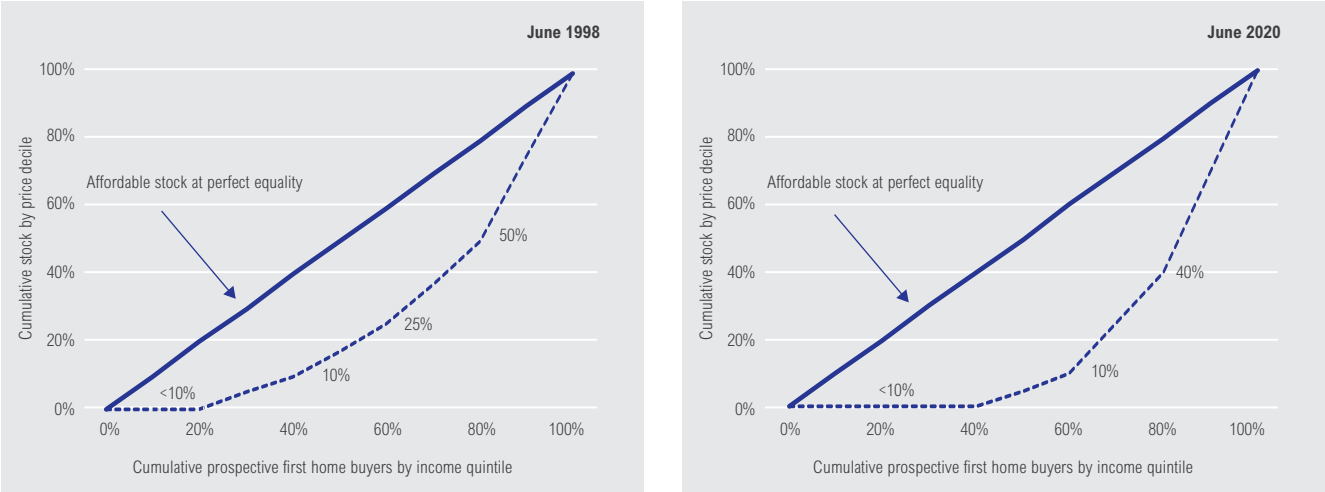
Figure 5.16: Distribution of affordable dwellings for prospective first home buyers by income quintile—Australia, June 2020



Source: Income data from Australian National University; CoreLogic; Reserve Bank of Australia Table F5 Lending Rates; Understanding Affordability: The Economics of Housing Markets, 1 July 2020, by Geoffrey Meen & Christine Whitehead

68 La Cava G, Leal H and Zurawski A (2017) *Housing Accessibility for First Home Buyers*, Reserve Bank of Australia.

Figure 5.17: Distribution of affordable dwellings for prospective first home buyers by income quintile—Greater Sydney, June 1998 vs. June 2020



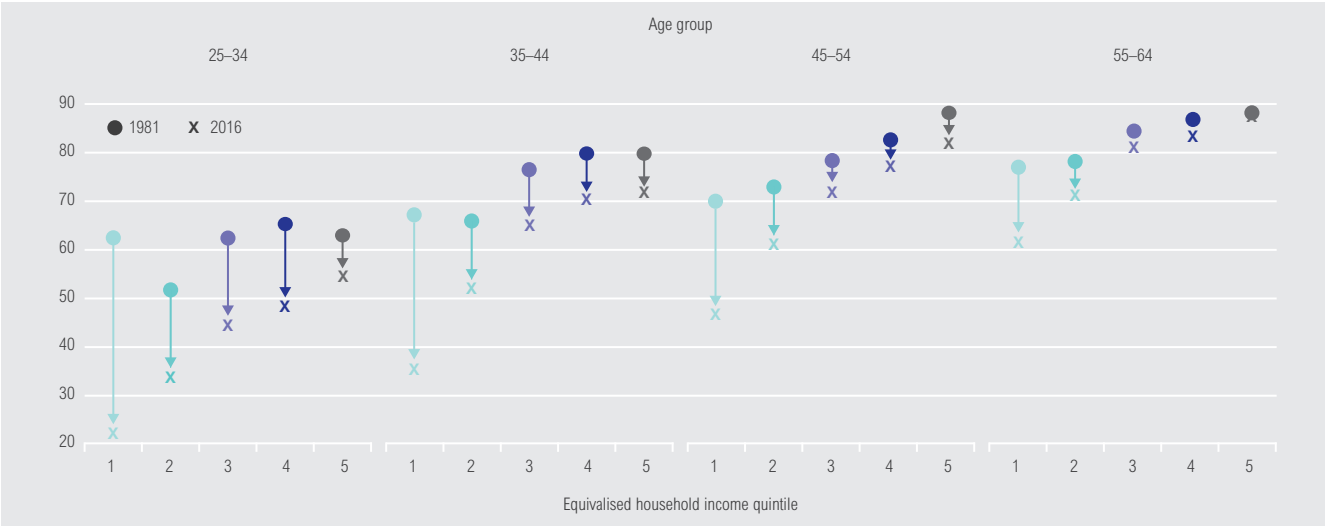
Source: Income data from Australian National University; CoreLogic; Reserve Bank of Australia Table F5 Lending Rates; Understanding Affordability: The Economics of Housing Markets, 1 July 2020, by Geoffrey Meen & Christine Whitehead

But given the spatial dimensions of affordability, it is instructive to look at this on a capital city basis. Figure 5.17 applies the Lorenz curve to the Greater Sydney region. Affordability for those looking to transition into home ownership has deteriorated from 1998 to 2020. In 1998, those in the third income quintile could afford a quarter of Greater Sydney dwellings. In 2020, those in the same cohort can afford just 10 per cent of stock across Greater Sydney. Those in the second highest income quintile can afford 40 per cent of Greater Sydney dwellings in 2020. The curves demonstrate that, in contrast to renters, affordability for prospective first home buyers has worsened in recent decades. Research by the Grattan Institute based on 1981 and 2016 census data also shows a decline in home ownership rates, particularly for the lowest income quintile (Figure 5.18).[69] These analyses highlight both age and income distribution are important factors for assessing affordability.

Australia's housing affordability situation is not unique. Over the past two decades, Australian real house prices have grown 110 per cent, which is higher than the UK (85 per cent) and US (38 per cent), but lower than Canada (146 per cent) and New Zealand (178 per cent).[70] The drivers behind these affordability trends have been relatively similar. According to the IMF, increases in household disposable income, accumulation of household net financial wealth, population growth and real interest rates falling and staying close to or below zero have all contributed to real house price growth across many global economies. Other institutional factors such as tax relief, stricter rent control, land-use restrictions, and lack of supply responsiveness due to inefficient regulations have also driven house prices up.[71] Similar to Australia's housing market, and despite the rise in mortgage debt burdens in the 2000s, the ability to service that debt either stabilised or improved in countries including Denmark, France, Germany, Italy, Ireland, Spain, Sweden, and the UK since the early 1990s due to declining interest rates.[72]

69 Daley J, Duckett S, Goss P, Norton A, Terrill M, Wood D, Wood T and Coates B (April 2019) *Commonwealth Orange Book 2019: Policy priorities for the federal government*, Grattan Institute.
70 OECD (2019) *Housing prices data*.
71 Geng N (13 July 2018) *Fundamental Drivers of House Prices in Advanced Economies*, International Monetary Fund.
72 OECD (2005) *Recent house price developments: the role of fundamentals*.

Figure 5.18: Home ownership rates by age and income, 1981 and 2016



Notes: Updates Burke et al. (2014) using ABS Census special request data. Household incomes based on Census data are approximate, and so small changes in ownership rates may not be significant. Excludes households with tenancy not stated (for 2016) and incomes not stated.

Source: Grattan analysis of Burke et al. (2104) and ABS (2016b).

In recent months, buyers in major capital cities across Australia are increasingly looking at purchasing in outer suburbs and regional centres.[73] Over the September quarter, Melbourne dwelling prices fell 3.3 per cent and Sydney dwelling prices declined 1.6 per cent. Regional markets have rebounded more quickly than their nearby capital cities, with prices in Dubbo and Noosa up by 8.7 and 6.4 per cent respectively over the six months to end of September.[74] Furthermore, in October, 13 regional centres including Wingecarribee, Shoalhaven, Lockyer Valley and Coffs Harbour featured in the top 20 Australian regions that recorded the highest year-on-year increase in property sales.[75] This is a notable change compared to February this year, where only four regional centres featured in the list. However, despite the proportional changes, the overall number of transactions in regional markets pales in comparison to the capital city regions. It is also hard to predict whether these trends will continue when the pandemic ends. For instance, a survey found the majority of Australian workers would prefer to return to the office a few days a week after the pandemic.[76]

Similar to the trend seen during the global financial crisis, first home buyers have already taken advantage of the softness in prices earlier this year. In August 2020, the ratio of first home buyer loan commitments to total dwelling commitments was 41.7 per cent—more than 10 percentage points higher than the long term average with Victoria's ratio closer to 50 per cent in that month.[77]

Looking ahead, affordability for prospective first home buyers can also be influenced by the fact that supply can be slow to respond to changes in demand.[78] NHFIC projections indicate there will be an excess supply of 195,000 dwellings due to less anticipated household formation owing to the COVID-19 demand shock in 2021 and 2022. But this is likely to be short-lived. From 2023 onwards, a projected rapid recovery in demand coupled with a delayed supply response will drive market undersupply. Unmet demand risks artificial dwelling price gains, further exacerbating affordability constraints for prospective first home buyers.

73 Malo J (17 September 2020) '*Buyers ditch inner city for the 'burbs as coronavirus crisis shifts demand: Domain report*', Domain.
74 Fuary-Wagner I (26 October 2020) '*Regional hotspots where house prices have surged*', *The Australian Financial Review*.
75 The Demographics Group, based on data by Ripehouse Advisory.
76 Ziffer D (22 June 2020) '*Most workers want 'hybrid' jobs at the office and at home after coronavirus, study finds*', ABC News.
77 Australian Bureau of Statistics (August 2020) *Lending Indicators*, tables 3 and 24.
78 Ong R, Dalton T, Gurran N, Phelps C, Rowley S and Wood G (May 2017) *Housing supply responsiveness in Australia: distribution, drivers and institutional settings*, Australian Housing and Urban Research Institute.