Australian Government

NHFIC
National Housing Finance and Investment Corporation

State of the Nation's Housing 2021–22

NHFIC Research
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About NHFIC Research

Established in January 2020, NHFIC's research function conducts comprehensive research into housing demand, supply and affordability in Australia. NHFIC research was established to inform engagement and interest in relevant housing topics and encourage better housing outcomes, through better connected conversation between government, research and industry.

NHFIC's research program is supported by an expert panel of academics, industry and public policy professionals. NHFIC also engages closely with a broad range of stakeholders across the housing sector to identify problems with a view to undertaking practical and relevant research, and elevating and popularising key housing issues, which helps inform public policy debate.

About the State of the Nation's Housing

State of the Nation's Housing is NHFIC's flagship report, and provides an annual snapshot of housing demand and supply across the country, with a view to identifying supply shortfalls that could over time exacerbate affordability problems. State of the Nation's Housing is complemented by NHFIC's core ongoing research program which aims to contribute applied and practically focused research.

Acknowledgements

NHFIC would like to thank the authors for their contributions and insights, as without them the State of the Nation's Housing 2021 could not have been compiled. Special thanks to Macroplan for their modelling inputs, NHFIC's expert panel who provided feedback on the report, and representatives from peak industry bodies and developers for participating in our industry roundtables and giving us an on the ground assessment of housing markets.

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NHFIC's first State of the Nation's Housing report used a concept called 'adjusted underlying demand', which was another name for new household formation. In this report, to improve understanding, we refer only to household formation. See more on pages 42–43.

Foreword

The profound effect of the COVID-19 pandemic on Australia's housing market is reflected in all the main themes of our second State of the Nation's Housing research report.

During the early stages of COVID-19, the closure of international borders caused net overseas migration (NOM) and, with it, household formation to collapse, leading to a surge in vacancy rates and declining rents in both Sydney and Melbourne which had previously been the main destination for migrants. Other capital cities were less affected.

Responding to the economic impact, the Reserve Bank of Australia (RBA) cut the target cash rate to 0.1%. In tandem, the Federal government launched the HomeBuilder program and most state governments boosted their contribution to first home buyers. The states also provided rental assistance to those in financial distress.

At the time of writing the last report, house prices were starting to surge in the cities and regions and rental markets (outside of Sydney and Melbourne) were tightening across the country as the economy performed significantly better than most feared.

In the early stages of the pandemic, the population shifted from the capital cities to the regions, with the price differential helping homeowners to upsize. However, the extent to which relocations become permanent is yet to be seen.

During the year, the housing market was buffeted by the push-pull factors of strong house price growth, supported by low interest rates and fiscal stimulus measures, and weak new household formation (in aggregate) due to low population growth.

The emergence of the Delta variant forced a further round of prolonged lockdowns in both Sydney and Melbourne. However, it also spurred on vaccination rates, resulting in both cities being among the first to open with the virus continuing to circulate in the community.

The net result is that, despite its many challenges, the pandemic has been a period of strong demand for housing in 2021, with robust house prices and solid lead construction indicators, which responded predictably to lower interest rates and fiscal stimulus.

House price growth remained robust for most of the year on the back of record low interest rates, to the point where APRA intervened to address any high risk lending. Unit prices are now trending up in both Sydney and Melbourne after declining in the early stages of the pandemic. In other capital cities and regional areas, unit prices are rising strongly.

Construction momentum remained robust, albeit a little weaker in the detached market after HomeBuilder was phased out. The outlook for construction of other multi-unit dwellings is improving, driven by low interest rates and tightening rental vacancies. A moderation in construction activity is unlikely until interest rates begin increasing, although current and potential macroprudential lending regulations could slow the market.

As international border restrictions are relaxed, household formation is expected to return to close to pre-pandemic levels by 2024–25. Other key domestic macro variables, such as employment and household income, also suggest household formation will rebound, driving the need for new net housing additions. The forecasts in the 'State of household formation' chapter quantify this long-term outlook.

An unintended consequence of robust housing markets over the course of the past year has been deteriorating affordability for many renters and first home buyers. This reinforces the need for an ongoing strong pipeline of new housing, but also improved provision of social and affordable housing.

To help readers understand the multiple pandemic impacts in context, this year's report has been expanded in several ways, with:

- **New chapters** on the:
  - **Housing market** describing current conditions in Australia's states and capital cities.
  - **Regions and cities** showing how the pandemic has impacted on housing in regional areas.
- **Longer projections** (10-years up from 5-years) to better align the projections with the housing development cycle.

I would like to thank the NHFIC research team and our advisors, along with the many people that have provided feedback and input into the report.

We hope the report assists housing market stakeholders in delivering better housing outcomes for all Australians.

Nathan Dal Bon
Chief Executive Officer
National Housing Finance and Investment Corporation

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Executive Summary

KEY POINTS

COVID-19 has had profound effects on housing markets. Closed borders and falls in net overseas migration (NOM) have led to fewer households forming (in aggregate), but housing markets have remained strong.

- NOM of -89,000 in 2021 and expected NOM of -41,000 in 2022 has underpinned lower rates of household formation. While the Centre for Population has upgraded its outlook for NOM since our first report, it still expects Australia's population to be 1.5 million lower by 2030–31 compared with the pre-pandemic outlook.
- Despite the large shock to population growth and lower rates of household formation, housing markets have remained resilient and price growth has remained strong on the back of fiscal and monetary stimulus.
- Strong house price growth has raised concerns about financial stability. The Australian Prudential Regulation Authority (APRA) has intervened by increasing the mortgage serviceability buffer, with price growth slowing in recent months.

Over the medium term, we anticipate new housing supply to remain strong, with more than 550,000 net new dwellings expected over the next 3 years.

- Over the next 3 years, we expect an average of 184,000 net new dwellings will be constructed per annum, which are historically high levels.
- Rising interest rates are likely to lead to a a slowing of new construction. At the time of finalising our projections, the RBA said raising interest rates wasn't plausible until 2024, although more recently has said rates could rise sooner. Financial markets also anticipate an earlier rise in interest rates.
- NHFIC's supply projections have been revised up substantially since our last report particularly between 2022 and 2024, largely due to the stronger than anticipated impact of the stimulus put in place to support the construction pipeline.
- The stimulus put in place to mitigate the impact of the pandemic on the economy – including the Federal Government's HomeBuilder program – has led to dwelling construction running well ahead of the NOM-induced falls in new household formation. The gap is expected to close over the next three years as NOM recovers and stimulus is withdrawn. If housing supply grows faster than expected new household formation over the next few years, it could help to put downward pressure on housing costs.

550k+

Net new dwellings

CONTRIBUTING TO HOUSING SUPPLY IN THE NEXT 3 YEARS

2024–25

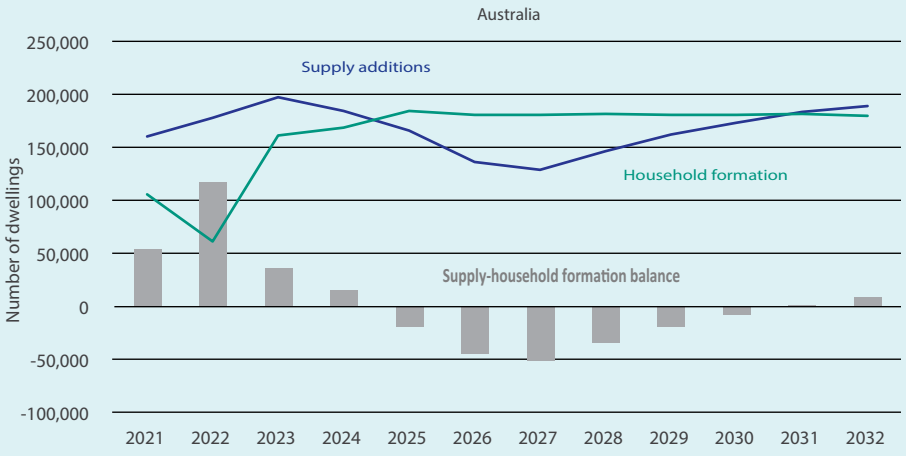
The year net overseas migration

(NOM) IS EXPECTED TO RECOVER TO PRE-PANDEMIC LEVELS

More than 1.7 million new households are expected to form from 2022 to 2032, led by growth in lone person households, although ongoing uncertainty about the COVID-19 pandemic means there is a significant risk to the NOM outlook.

- New household formation is expected to recover strongly from 60,000 in 2022 to 182,000 by 2025. Annual average household growth of around 175,000 is expected over the 10 years to 2032
- NHFIC expects around 361,000 families with children (21% of total growth), 488,000 families without children (29% of total growth) and 595,000 lone person households (35% of total growth) to form from 2022 to 2032.
- From 2022 to 2023 (cumulatively), new household formation is expected to be broadly in balance with anticipated new supply. However this is largely driven by lower levels of household formation, owing to COVID-19. Once NOM recovers back to pre-pandemic levels by around 2024–25, new household formation is expected to exceed new supply by a cumulative 163,400 dwellings out to 2032.

Annual change in household formation and supply and supply-household formation balance



Source: Macroplan, NHFIC

1.7m
New households
EXPECTED TO FORM FROM 2022 TO 2032

488k
additional
COUPLE FAMILIES WITHOUT CHILDREN BY 2032

595k
additional
LONE PERSON HOUSEHOLDS BY 2032

▲ 26%

regional
dwelling prices

▲ 21%

capital city
dwelling prices

IN THE YEAR TO
DECEMBER 2021

6 years

THE TIME IT CAN TAKE
TO GET NEW HOUSING
SUPPLY TO MARKET

KEY POINTS (continued)

Supply impediments and growing lags and lead times in many (particularly detached) markets around Australia are increasing housing costs.

- NHFIC's liaison suggests there have been difficulties in accessing new land supply, despite demand rapidly outpacing supply in many greenfield markets, particularly parts of Sydney and SE Queensland.
- Given it can take more than 6 years to get new housing supply to market in some areas, pulling back on development decisions now will exacerbate affordability problems in future years when population growth is expected to return to more normal levels.
- If housing authorities actively slow or impede the flow of new housing supply, it can exacerbate upward pressure on rents and prices, something that should be avoided if improved housing affordability is a primary objective.

COVID-19 has induced strong movements of people from major cities to outer metropolitan and regional areas, putting pressure on local housing markets. COVID-19 has also seen less people leaving the regions for the capital cities.

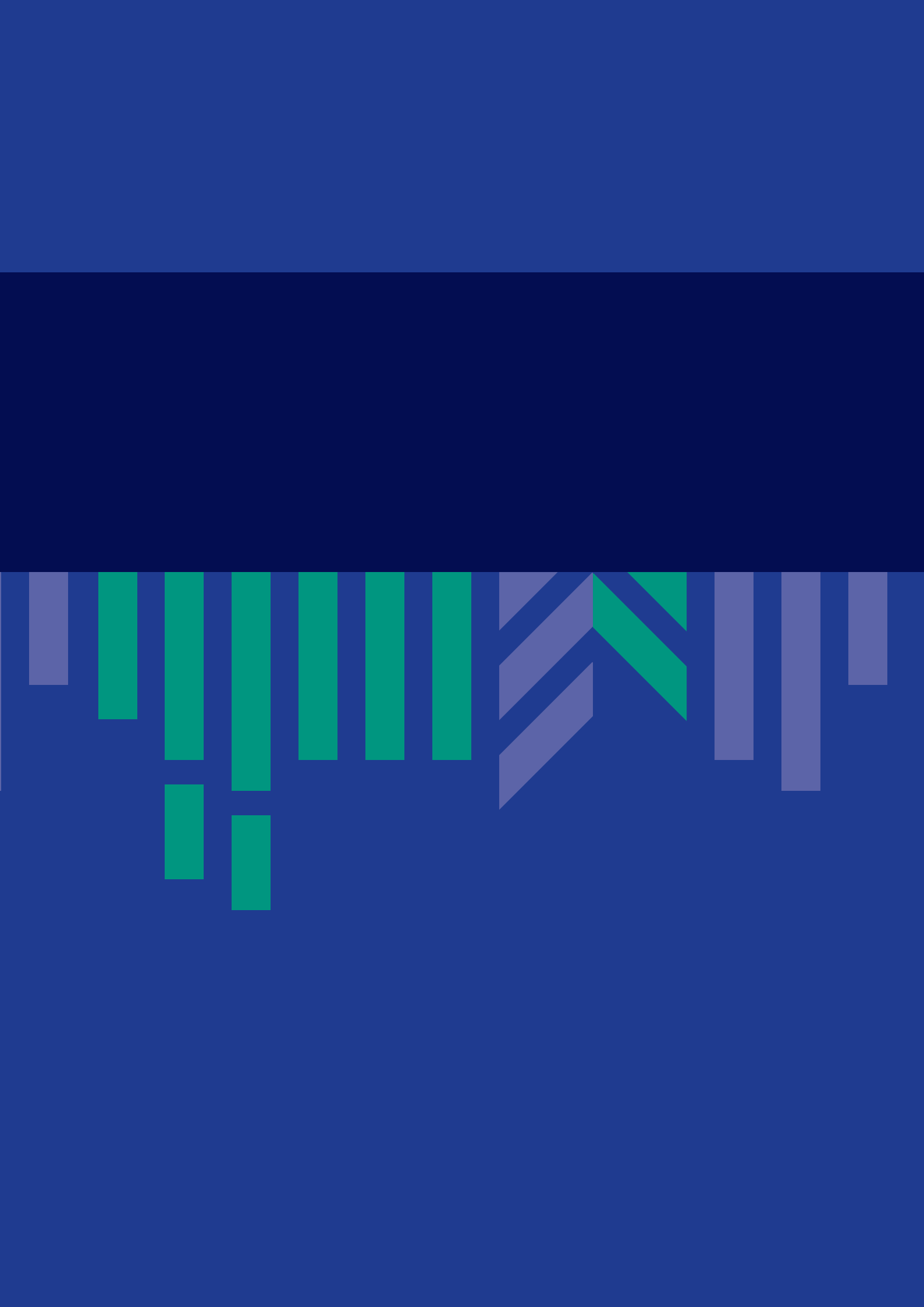
- Regional dwelling prices grew an average of 26% over the year ending December 2021, outpacing capital cities where prices grew 21%. Regional rents rose more than capital city rents in all states except NT and WA over the course of the pandemic.
- Over 2020 and 2021, regional VIC saw dwelling price growth of 30% which is more than double the growth in Melbourne. Regional NSW saw dwelling price growth of 40% compared with 27% in Sydney.
- Trends in 2021 suggest that in the larger states, there could be ongoing strong net movement from capital cities to the regions into 2022, although it will take some time to determine whether these behaviours are sustained relative to pre-pandemic urban-regional trends.

Affordability for renters and first home buyers deteriorated across most cities and regions in 2021. Rents are likely to continue to rise in the near term as international border restrictions are relaxed.

- In Sydney and Melbourne, rental affordability improved modestly since 2020 (through to September 2021) given these cities were most affected by the falls in migration, although rental pressures in these cities have been building on the back of falling vacancy rates. In other cities and regional areas, rental affordability has deteriorated.
- Sydney and Hobart remain the most unaffordable places for first home buyers, with the bottom 60% of income earners being able to afford mortgage repayments on less than 10% of the housing stock in the market. This is a further deterioration in affordability since 2020.
- First home buyers continue to fare relatively better in regional areas, but affordability has also deteriorated across many regions in 2021, particularly regional NSW, Vic and Tas due to relatively strong price growth.
- Recent pandemic related initiatives to support social and affordable housing will likely provide some partial catch up for addressing growing waiting lists. Governments should continue to improve the quality and consistency of their social and affordable housing data to help inform improved long term housing needs assessments.

Sydney & Hobart

THE LEAST AFFORDABLE CITIES FOR FIRST HOME BUYERS



State of the housing market

State of the Nation's Housing 2021–22

State of the housing market

23% increase

in house prices

IN AUSTRALIAN CAPITAL CITIES OVER 2021

60% growth

in detached dwelling building approvals

AIDED BY HOMEBUILDER, IN THE YEAR TO MAY 2021

40%

of Sydney rental listings were **withdrawn**

reducing vacancy rates and impacting rental affordability

KEY POINTS

- House prices across Australia exhibited strong momentum since the middle of 2020. Regional areas generally outperformed capital cities as buyers flocked to more affordable lifestyle markets to upsize and take advantage of more flexible work arrangements. However, the capital city markets have also remained strong and first home buyer affordability is now deteriorating after peaking in early 2021.
- Price growth in the multi-density market has generally been softer than for detached dwellings, particularly during the early stages of the pandemic. However, the fundamentals in the rental market have improved and investor interest is picking up. Consequently, price growth is now increasing, even in Sydney and Melbourne, where international border closures caused a sharp rise in vacancy rates in 2020.
- Strong house price growth was not just confined to Australia. Germany and Canada experienced similar trends. In NZ, growth soared 23%. Record low global interest rates and expansionary fiscal policies promoted a relatively quick economic rebound from the early stages of the pandemic. In Australia, this increased household confidence and created a solid background for strong house price growth. Now, with financial stability concerns emerging, Australia has followed China and NZ in reining in credit and dwelling price growth.
- Construction activity for detached housing was increasing rapidly on the back of low interest rates and state and federal government stimulus measures. However, lead indicators, such as home loan and building approvals, are now slowing after the HomeBuilder program ended. Nonetheless, construction activity should remain at high levels in the year ahead with other stimulus remaining in place. Approvals in the multi-density market are already rising, led by NSW.
- After being severely hit in the early stages of the pandemic, vacancy rates fell sharply in the Sydney and Melbourne rental markets over 2021 to be on par with or below pre-pandemic levels. The fall in vacancy rates in these markets was largely driven by the withdrawal of rental listings – many likely sold to owner-occupiers. Deteriorating affordability may have forced some first home buyers into the rental market, also contributing to declining vacancy rates. In other capital city rental markets, which were relatively less affected by border closures, rents and prices are now rising strongly.
- Around the world, COVID-19 has disrupted the supply of materials and labour in the construction industry. Australia experienced supply constraints in materials such as structural timber, PVC pipes and reinforcing steel. The supply constraints combined with strong demand for construction has seen the price of these building materials increase sharply, with price growth in some materials soaring 20–34% in 2021. In contrast, wage growth has remained more modest.

Introduction

Low interest rates, fiscal policy support and income growth are supporting confidence in the housing market even though the post-COVID path of recovery remains relatively uneven, with some lingering uncertainty.

In 2021, house prices rose rapidly in both capital cities and regional areas. However, this has not yet led to a concerning pick up in credit growth. Investor housing credit growth has only risen by 3% over the past year. Access to finance for developers doesn't appear to be constraining construction activity.

The Sydney and Melbourne multi-density rental markets saw sharp rises in vacancy rates during the early stages of the pandemic, but these markets now seem more evenly balanced as a large number of properties have been withdrawn for rent and likely sold to owner occupiers. The rental markets in the other capital cities and in regional areas are tighter, with rents rising solidly.

Construction activity has lifted in response to the low interest rate environment and fiscal stimulus, led by the detached market and alterations and additions. Multi-density and apartment construction is picking up in NSW, but in other states the recovery has less momentum. A shortage of unit completions is expected in the next 2–3 years, especially now the rental market is already tightening, and demand will lift as international borders reopen.

The Federal Government's HomeBuilder program was very successful and helped drive a surge in building approvals in detached housing and alterations and additions. The end of the program has naturally led to a decline in detached dwelling approvals. However, lending commitments for detached dwellings have returned to pre-pandemic levels, suggesting construction activity in this segment of the market should remain at relatively high levels for some time yet.

Global supply chain disruption has been felt keenly in the construction industry. Supply of materials such as structural and laminated timber, steel reinforcement and PVC pipes has been limited. Combined with strong demand, this has led to sharp price increases and delays in the start and completion of projects in some jurisdictions.

Prices and rents

Detached housing market

After the first few months of the pandemic, national housing prices increased led by strong demand for detached houses, driven by record low mortgage rates. Strong house price growth continued throughout 2021, despite extended lockdowns in both Sydney and Melbourne.

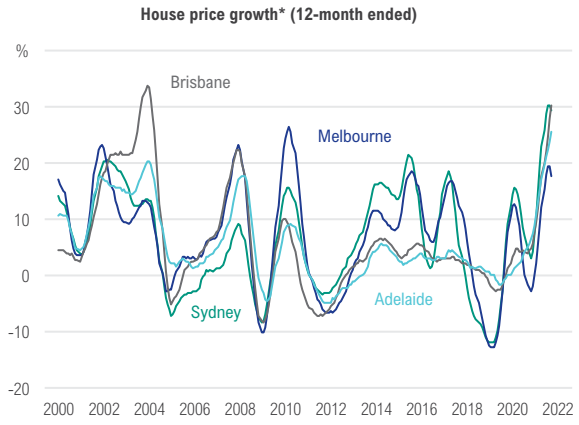
In the detached market the average capital city price growth was 23%. In Sydney, Adelaide and the ACT, this pace of growth has exceeded that seen during previous housing booms in the last two decades.

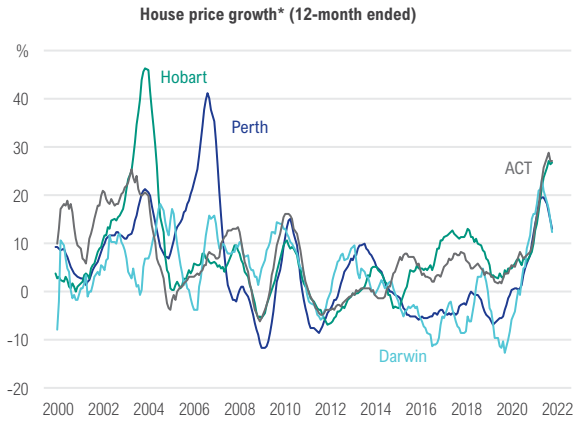
In the past 12 months, house price growth was very strong in Brisbane and Sydney (both 30%), as well as the ACT and Hobart (both 27%). Darwin recorded the weakest growth (12%) after a slowdown in the second half of the year.

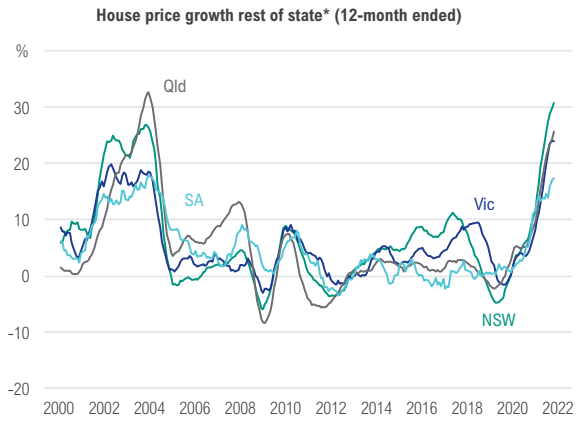
Detached prices in regional areas across the country saw an average increase of 22% in the past 12 months. Moreover, growth in the regional areas of NSW, Vic, WA and Tas outpaced gains in capital city areas of these states.

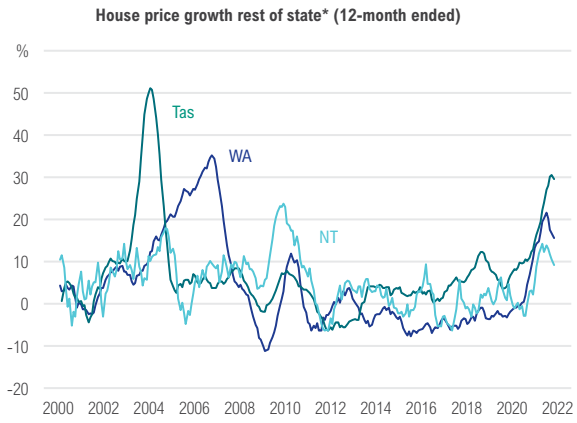
Regional NSW and Tas saw the strongest regional price increases (31% and 29% respectively) followed by regional Qld (26%) and regional Vic (24%).

Figure 1.1: House price growth (12-month ended)



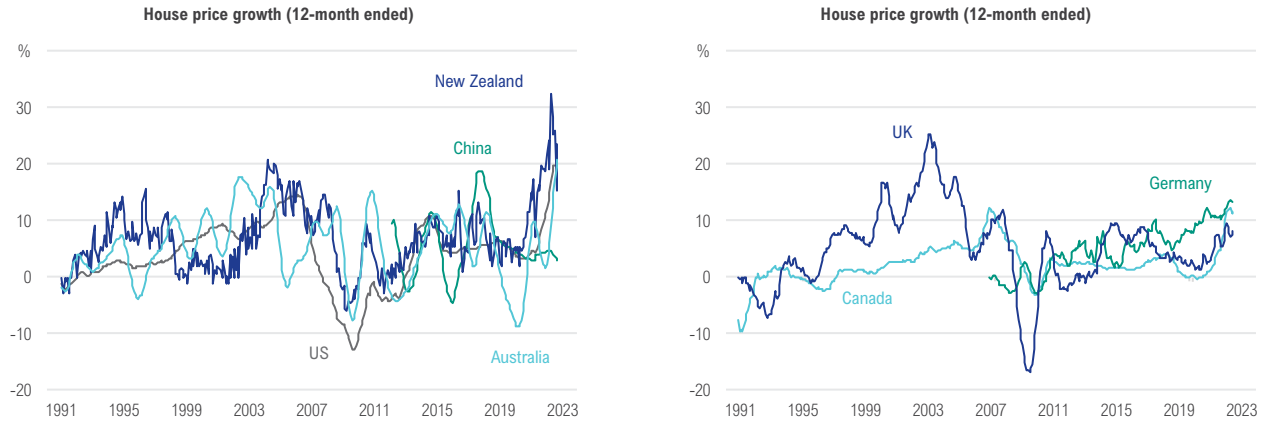






*Indicates Hedonic Index
Source: CoreLogic, NHFIC.

Figure 1.2: International house price growth (12-month ended)



Source: Refinitiv, CoreLogic, NHFIC.

International comparisons of house price growth

Australia was not the only country experiencing strong residential property price growth during the pandemic. Over the past 12 months low global interest rates underpinned house price growth of 13% in Germany and 12% in Canada.

Stronger price gains were recorded in NZ (23%) and the US (20%), while growth was weaker in the UK (8%) and China (3%). By comparison, house prices in Australia rose by 21% over the same period.

NZ house prices increased strongly during the first year of the pandemic, with 12–month ended price growth reaching 32% in May 2021. In response, the Reserve Bank of New Zealand (RBNZ) introduced macro-prudential regulation limiting investors from deducting mortgage interest from their taxable incomes. These new rules, announced in March 2021, took effect at the start of October. The RBNZ also raised interest rates in response to rising inflationary pressures.

China's house price growth remained relatively stable throughout the pandemic. Price growth has remained well-contained in the past few years as authorities reined in credit availability for both developers and households.

In 2020, Chinese authorities capped the share of mortgages and property-related loans that banks hold and limited the amount of debt property developers could accumulate. This has contributed to a decline in home sales and a broad residential property downturn.

The most noteworthy byproduct of the tighter lending standards has been the deteriorating outlook for one of China's largest property developers: Evergrande. At the end of June 2021, Evergrande had a debt-to-equity ratio of 3.0 and a long-term debt to capital ratio of 33.6%. The company is listed on the Hong Kong stock exchange, with $US92 billion of debt outstanding. Its stock price has fallen by 90% since the start of 2021. Other Chinese property developers also appear under pressure to meet coupon payment obligations to their investors.

Other dwelling market

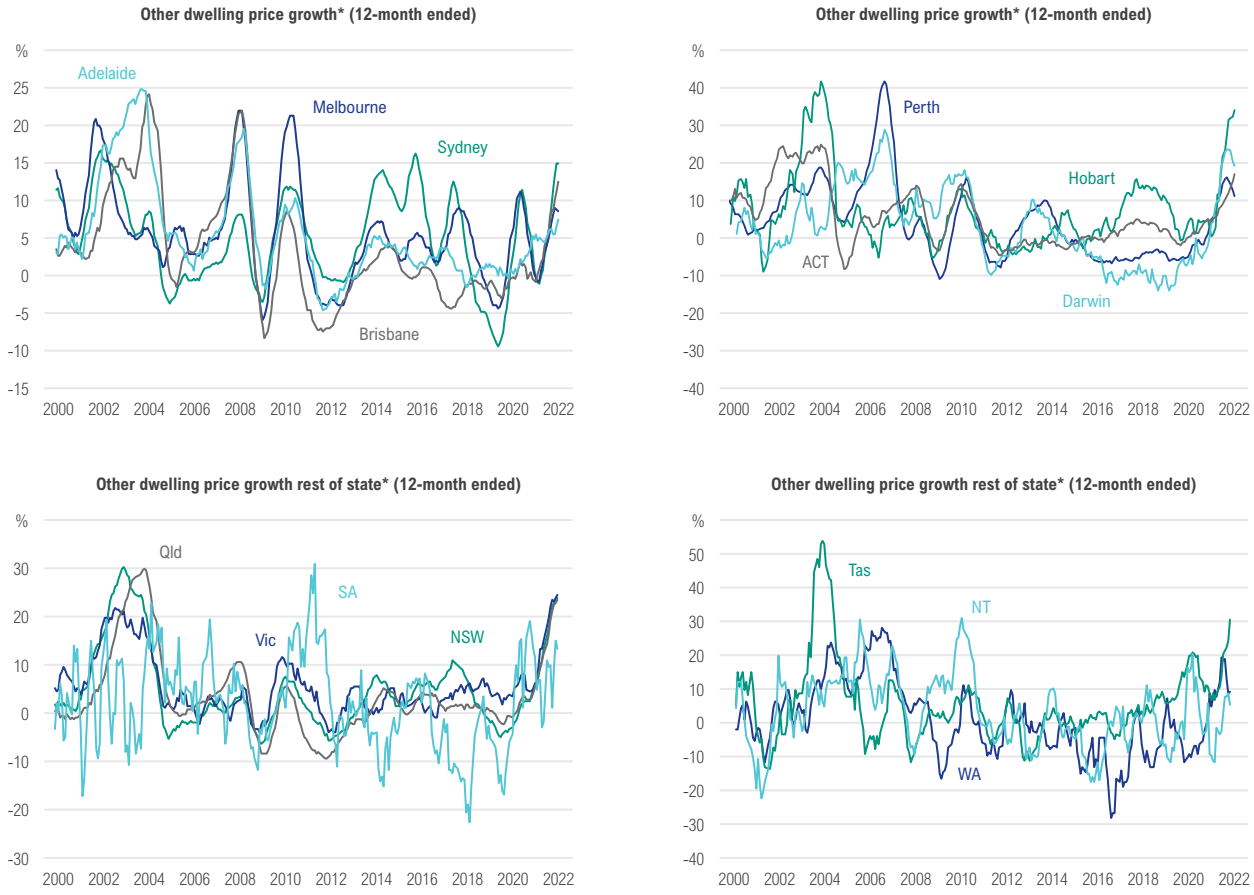
Despite Australia's international borders being closed to foreign students, other dwelling[1] prices also appreciated across most capital cities over 2021, albeit at a slower pace than detached dwellings. More recently, the pace of growth has picked up as falling affordability squeezed buyers out of the detached housing market. Regional NSW, Vic and Qld have seen investor interest return strongly.

The pickup in other dwelling prices in capital cities in the past 12 months was strongest in Hobart (34%) and Darwin (20%), followed by the ACT (17%). Other dwellings in Sydney, Melbourne and Brisbane experienced price growth of 15%, 9% and 13%, respectively.

Other dwelling prices in regional areas outpaced those in capital cities in most states apart from WA, Tas and NT. In the past 12 months growth was strongest in regional Tas (31%), followed by regional Vic (25%), regional NSW and regional Qld (both 24%). Limited supply and stronger demand in lifestyle and coastal regions probably underpinned the strong performance.

Regional detached dwelling prices generally appreciated faster than regional other dwelling prices, except in regional Vic and Tas.

Figure 1.3: Other dwelling price growth (12–month ended)



Source: CoreLogic, NHFIC. *Indicates Hedonic Index

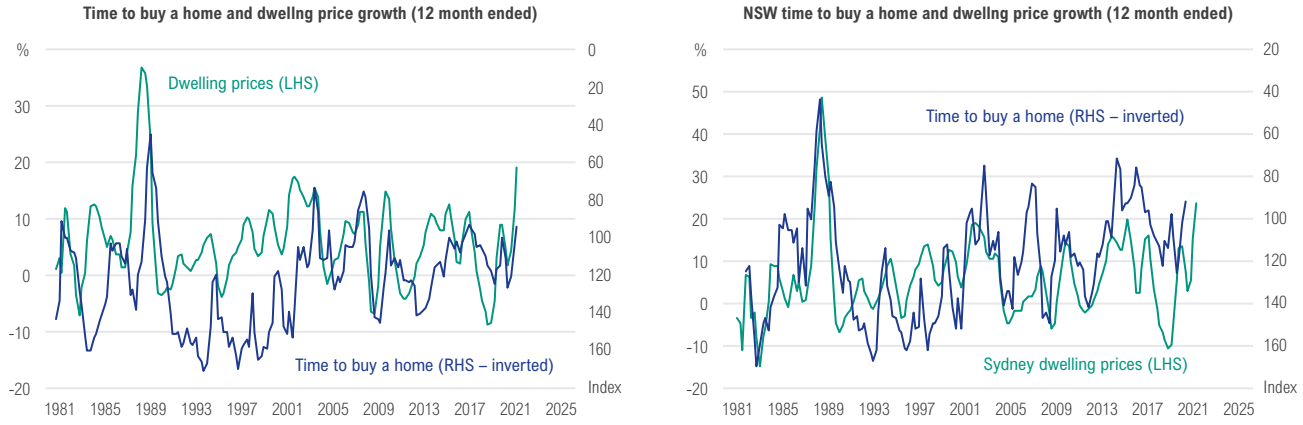
1 Other dwellings refers to properties on a strata title where the title holders own a shared claim to common land that multiple properties may reside on. This includes apartments, villas and townhouses.

Buyer sentiment

Across Australia, buyer sentiment (measured by Westpac's 'time to buy a home' survey) fell during the early stages of the pandemic, but quickly rebounded to peak in December 2020 to levels unseen since early 2014. At the time of writing, buyer sentiment remains positive, despite the strong increase in dwelling prices, although it has eased since early 2021.

In NSW, buyer sentiment remains above the levels seen during 2014–2017 when unit prices and apartment construction was booming. However, sentiment has declined alongside recent solid price increases.

Figure 1.4: Time to buy a home and dwelling price growth (4–quarter ended)



Source: Westpac Survey, CoreLogic Home Property Value Index – 5 capital city aggregate

Property listings and sales

The number of sales in Sydney were easing before the 2021 lockdown, but sales activity picked up over spring to be in line with 2020 levels and above the average of the 2017–19 period.

Despite the seasonal increase in listings in spring, sales as a proportion of total listings were still higher than the previous 2017–19 period average – suggesting demand still remains strong.

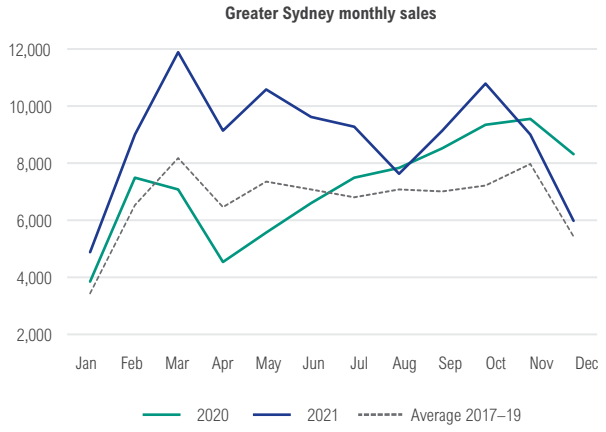
Sales picked up in Melbourne during the first half of 2021, to be above the average of the 2017–19 period. The number of advertised property listings in the city in 2021 was generally above 2020 levels and the average of the 2017–19 period.

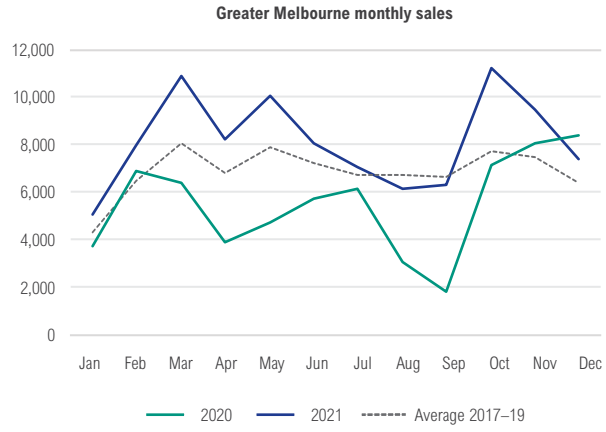
Sales as a proportion of listings declined in both Sydney and Melbourne in the last few months of 2021. It is difficult to tell whether this is the normal seasonal slowdown leading into Christmas, or whether tighter lending restrictions are having an effect.

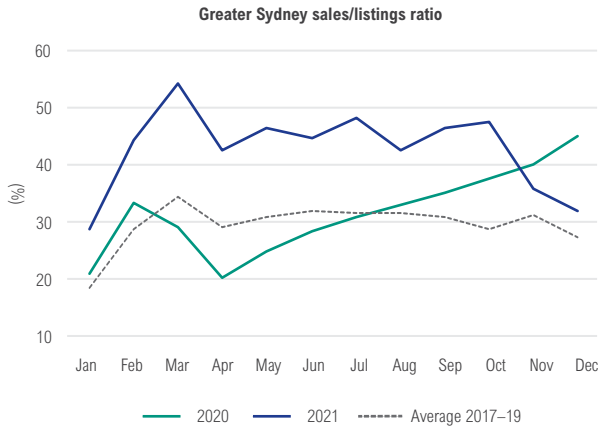
Figure 1.5: Property listings

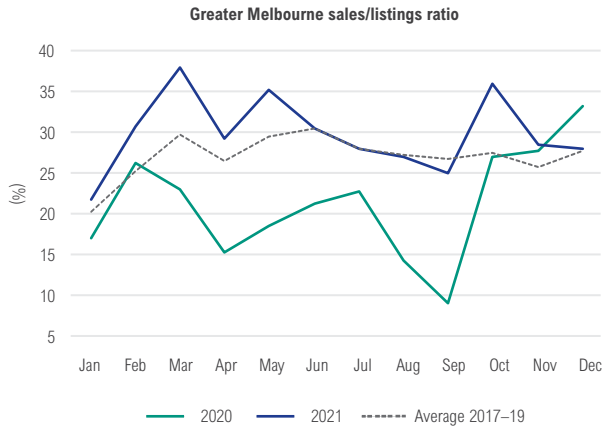
Across Australia, buyer sentiment fell during the early stages of the pandemic, but quickly rebounded to peak in December 2020 to levels unseen since early 2014.

Figure 1.5: Property listings (continued)









Source: CoreLogic, NHFIC

Figure 1.6: Auction clearance rates in Sydney and Melbourne

Source: CoreLogic, NHFIC

Fewer listings and strong buyer demand over the year kept auction clearance rates firm at around 80% in Sydney for most of 2021. However, the clearance rate declined to around 60% and this provides further evidence that the slowdown could be due to weaker underlying demand rather than seasonality. In Melbourne, auction clearance rates also declined to around 60% and sales declined to around 7,000 properties from a peak of 11,000 at the start of 2021.

Rental markets

In this section, we focus on other dwellings rather than detached dwellings because the rental market for these properties tends to be larger. Since mid-2021 price growth has outstripped growth in rents, and rental yields on other dwellings in most capital cities are now at record lows.

The premium that investor variable mortgage rates have over rental yields tightened following cuts to the variable mortgage rate in March 2020 but has since widened due to the decreases in rental yields.

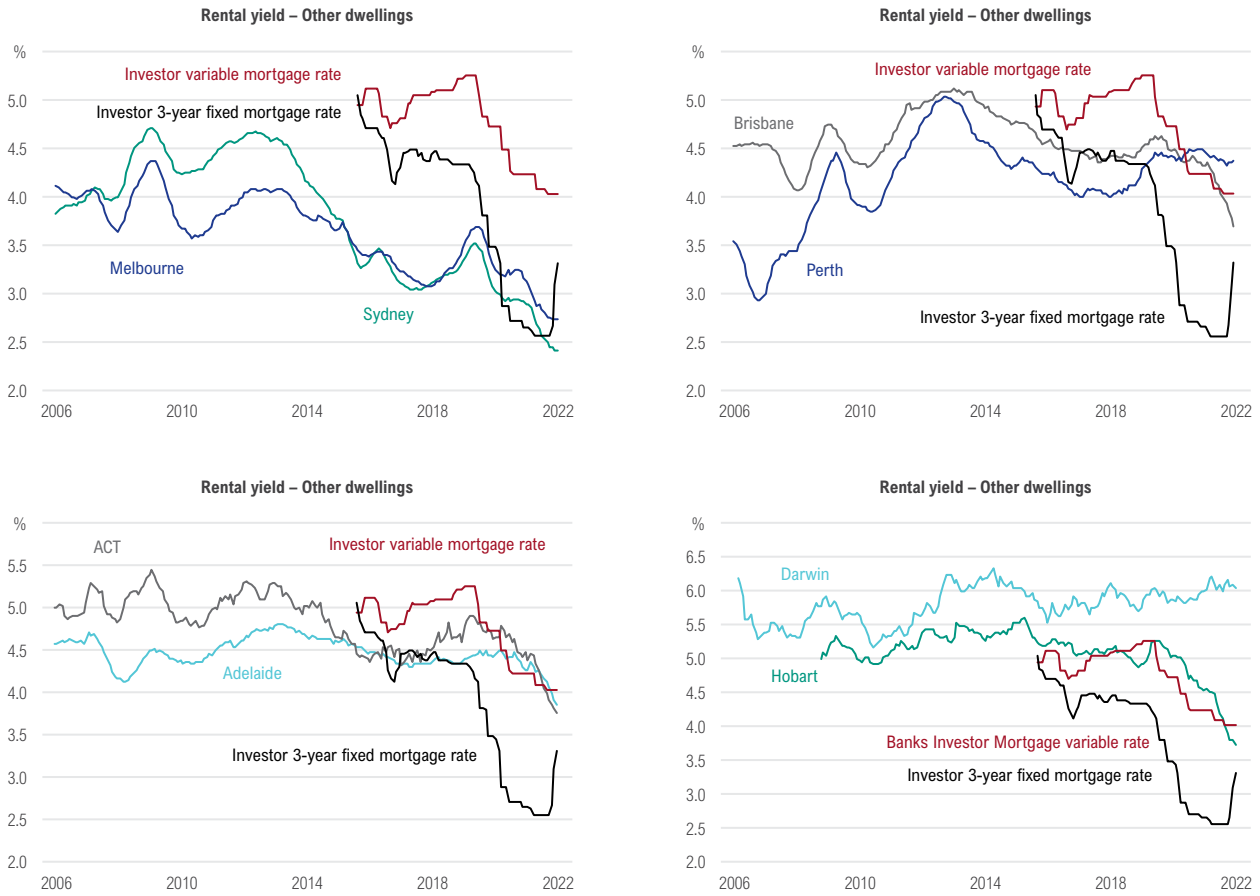
This spread between the rental yield and the investor variable mortgage rate is larger in Sydney and Melbourne than the other capital cities. Latest data shows the variable mortgage rate is on average 1.5 percentage points greater than rental yields in those cities.

But investor fixed mortgage rates have also fallen significantly over the last 3 years on the back of falling global interest rates. However, global interest rates increased during the second half of 2021 and at the time of writing, fixed mortgage rates were 3.3%, after falling to 2.6% in early 2021. This low cost of finance is a large part of the positive backdrop for investors contemplating entering the property market, although this recent rise in fixed rate mortgages has resulted in the fixed mortgage rate being above yields in Sydney and Melbourne.

Vacancy rates in other dwellings rental markets declined in 2021, despite international borders being closed. Vacancy rates in most capital cities apart from Sydney are now below their long-term average, with almost all capital cities recording vacancy rates close to 1%. The largest vacancy rate falls over the past year were recorded in Melbourne (-4.3% pts), Sydney (-2.2% pts) and Brisbane (-1.6% pts). Brisbane's vacancy rate had been trending downwards since 2016. By comparison, Sydney's rental vacancy rate generally increased in the period 2017–2020 due to a hangover of apartment supply, but declined sharply in 2021 to 2%.

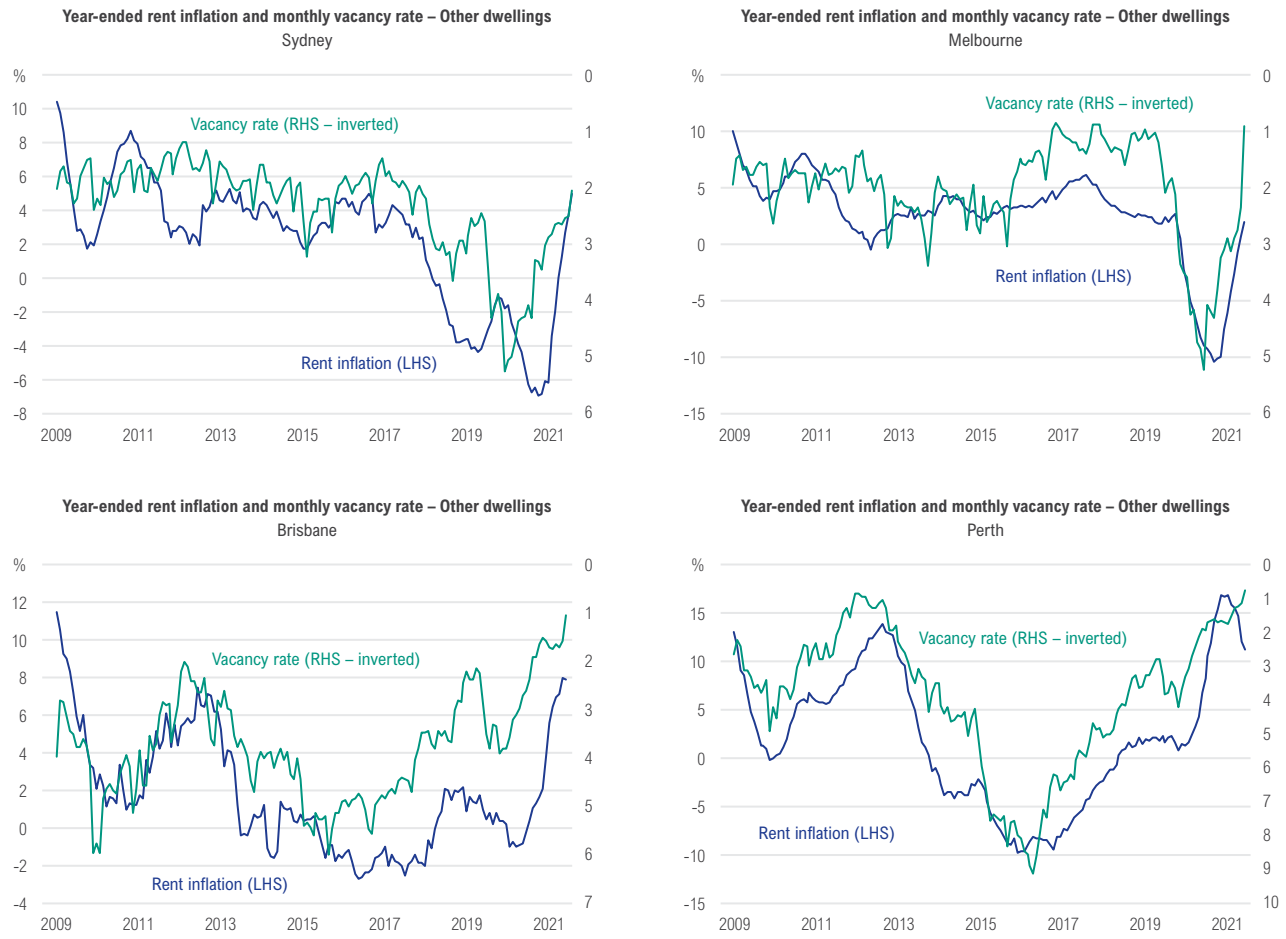
Rental prices of other dwellings in capital cities generally rose in 2021, with Sydney, Melbourne and Brisbane seeing the slowest pace of growth. By mid–2021, rental prices in Sydney (-3%) and Melbourne (-7%) were lower than what they were mid-2020. But, since then, they have been increasing. Latest data shows Sydney's rents are 5% higher than the same time in the previous year, and 2% higher in Melbourne. In Brisbane, rents grew 8% over the year.

Figure 1.7: Other dwelling gross rental yield and investor mortgage rates



Source: CoreLogic, NHFIC, RBA.

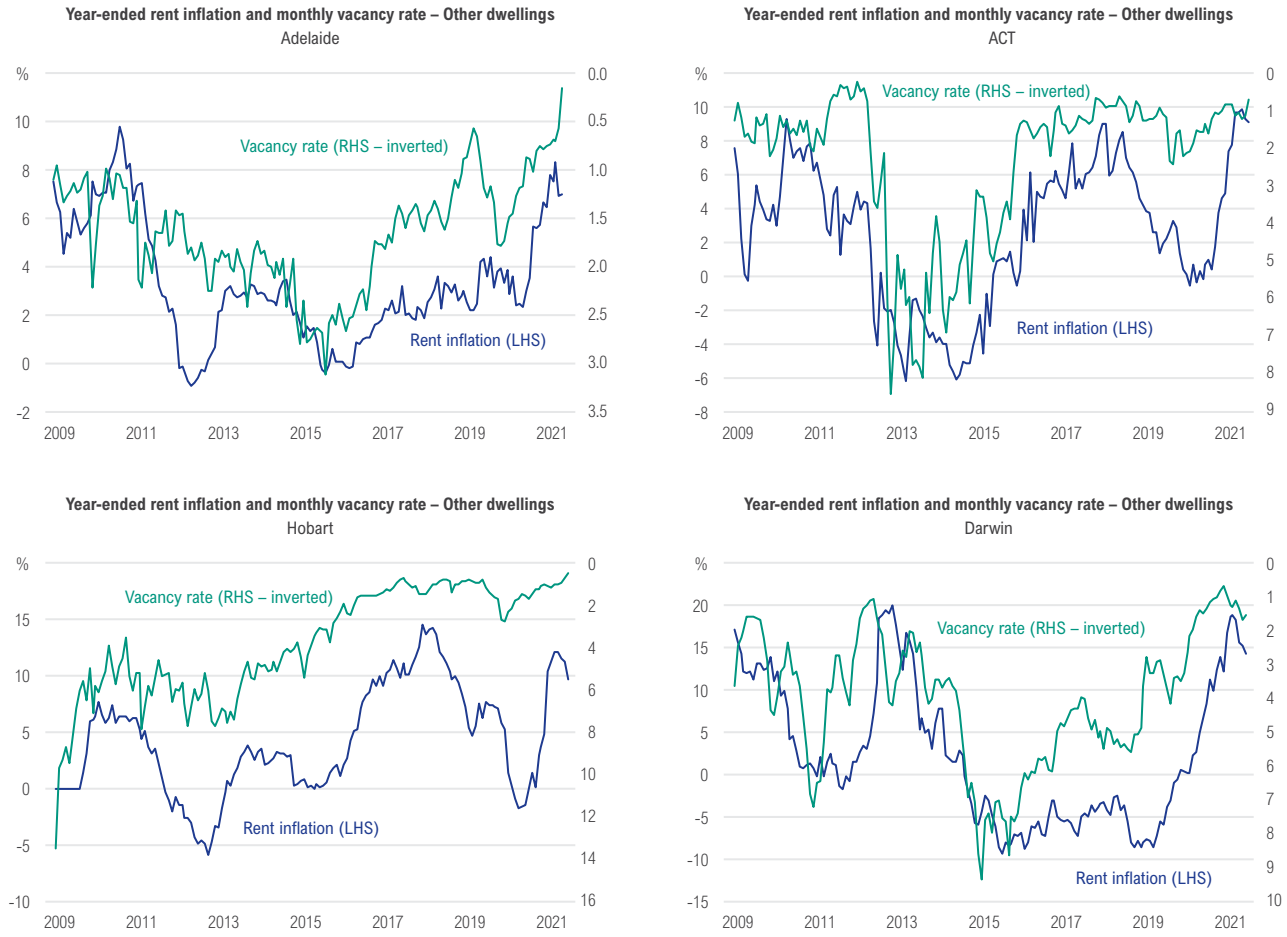
Figure 1.8: Other dwelling advertised rental growth (12–month ended) and vacancy rates



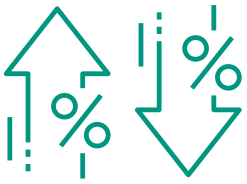
Source: CoreLogic, NHFIC (The vacancy rates published by CoreLogic use a different methodology to those published by the Real Estate Institute of Australia (REIA). The CoreLogic vacancy rate is more a measure of the time properties are vacant whereas the REIA data reports the proportion of rental property that is vacant. A shortcoming of the REIA data is that it is not reported by dwelling type. Most available datasets show a decline in vacancy rates, with CoreLogic showing they are falling further than what other datasets suggest.)

Rent growth over the year was strongest in Darwin (14%) and Perth (11%) followed by Hobart (10%) and the ACT (9%). Vacancy rates in these cities decreased during the pandemic and remain very low at less than 1% on average.

Figure 1.9: Other dwelling rental growth (12–month ended) and vacancy rates



Source: CoreLogic, NHFIC



Since mid-2021 price growth has outstripped growth in rents, and rental yields on other dwellings in most capital cities are now at record lows

Sydney and Melbourne rental markets

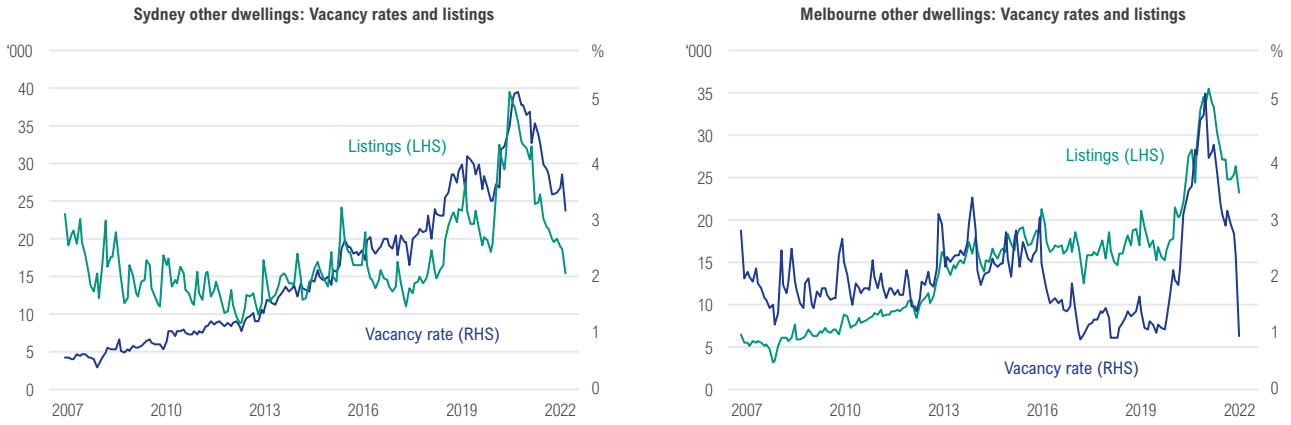
Rental listings in Sydney and Melbourne decreased substantially driving a large fall in vacancy rates during 2021. Many of these properties were likely sold to owner-occupiers and particularly first home buyers.

The number of rental listings in Sydney peaked in mid-2020 with almost 40,000 listings and has since fallen by 40% and back to pre-pandemic levels. Over the same period, the vacancy rate decreased from 5% to be lower than pre-pandemic levels of 2%.

The pandemic had a greater impact on Melbourne's rental market. The vacancy rate rose from 1.9% at the start of 2020 and peaked at 5.2%. Rental listings then declined from 35,000 to 23,000 in Melbourne in response to the sharp rise in the vacancy rate. In Sydney, the vacancy rate fall was mostly due to reduced rental listings. However, in Melbourne, other factors, including a large increase in household formation (not explicitly accounted for in our projections), may also have played a role in driving down the vacancy rate.

Relatively stronger rental demand for other dwellings also seems consistent with the rebound in other dwelling prices. Rents should continue to rise in the near-term as international borders open, particularly to international students.

Figure 1.10: Sydney and Melbourne other dwellings: Vacancy rates and rental listings

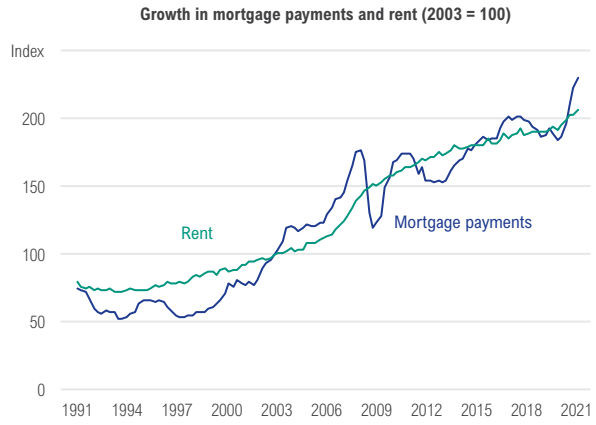


Source: CoreLogic

The long-run relationship between the growth in rents and the growth in mortgage payments suggests that the cost of housing increases at the same rate, regardless of whether a property is owner-occupied or rented. Over the long run, household formation and other factors, such as growth in construction and maintenance costs, increase the cost of housing. New supply is also closely linked to price growth and interest rates in the short term, with implications for the supply of properties available for rent.

Mortgage payments increased strongly from mid-2020 on the back of the property price increases. Mortgage rates were cut in response to the pandemic, but this didn't offset the impact on mortgage payments from rising prices. However, savings also increased during this time, as households stayed home more and consumed less. Rents also increased, albeit at a slower rate.

Figure 1.11: Growth in mortgage payments and rent



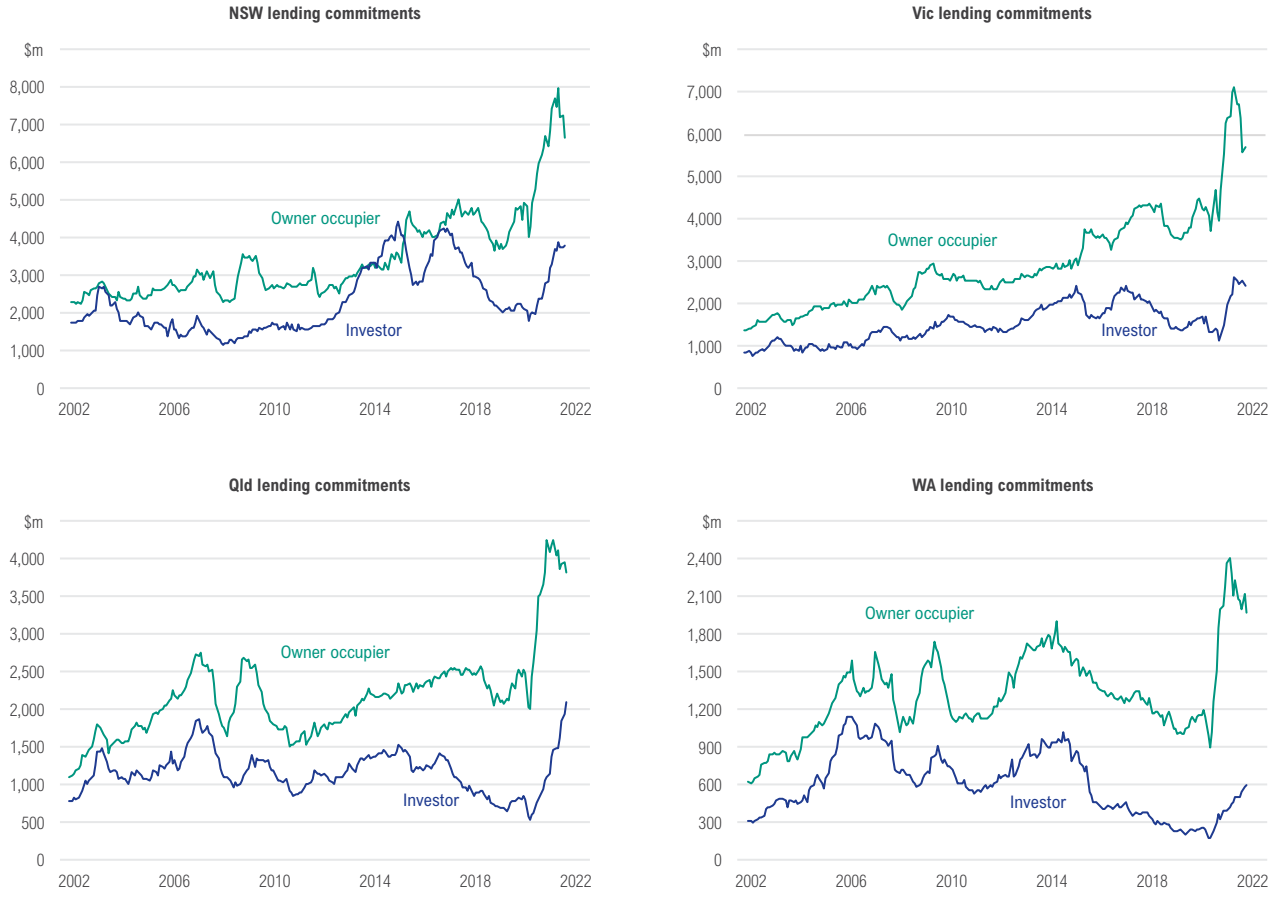
Source: REIA, RBA, NHFIC. Mortgage payments are calculated using median house prices of the capital cities. Rent is the median rent in each capital city for a 3-bedroom house. Each capital city median price and rent is weighted by respective state final demand. Mortgage payments are calculated on the median price using the banks' standard variable mortgage rate.

Finance and credit

Across the states, the value of new owner occupier lending commitments declined in the first few months of the pandemic but began increasing strongly in the second half of 2020. The value of owner-occupier lending commitments during the 12 months ending in June 2021 grew by 70%, on average, across the states. They more than doubled for WA, while NSW, Vic and Qld recorded growth of between 70% to 80%. In recent months, the value of owner occupier lending commitments has declined with the largest falls seen in the ACT (-31%) and NT (-27%), followed by Vic (-20%) and NSW (-17%)

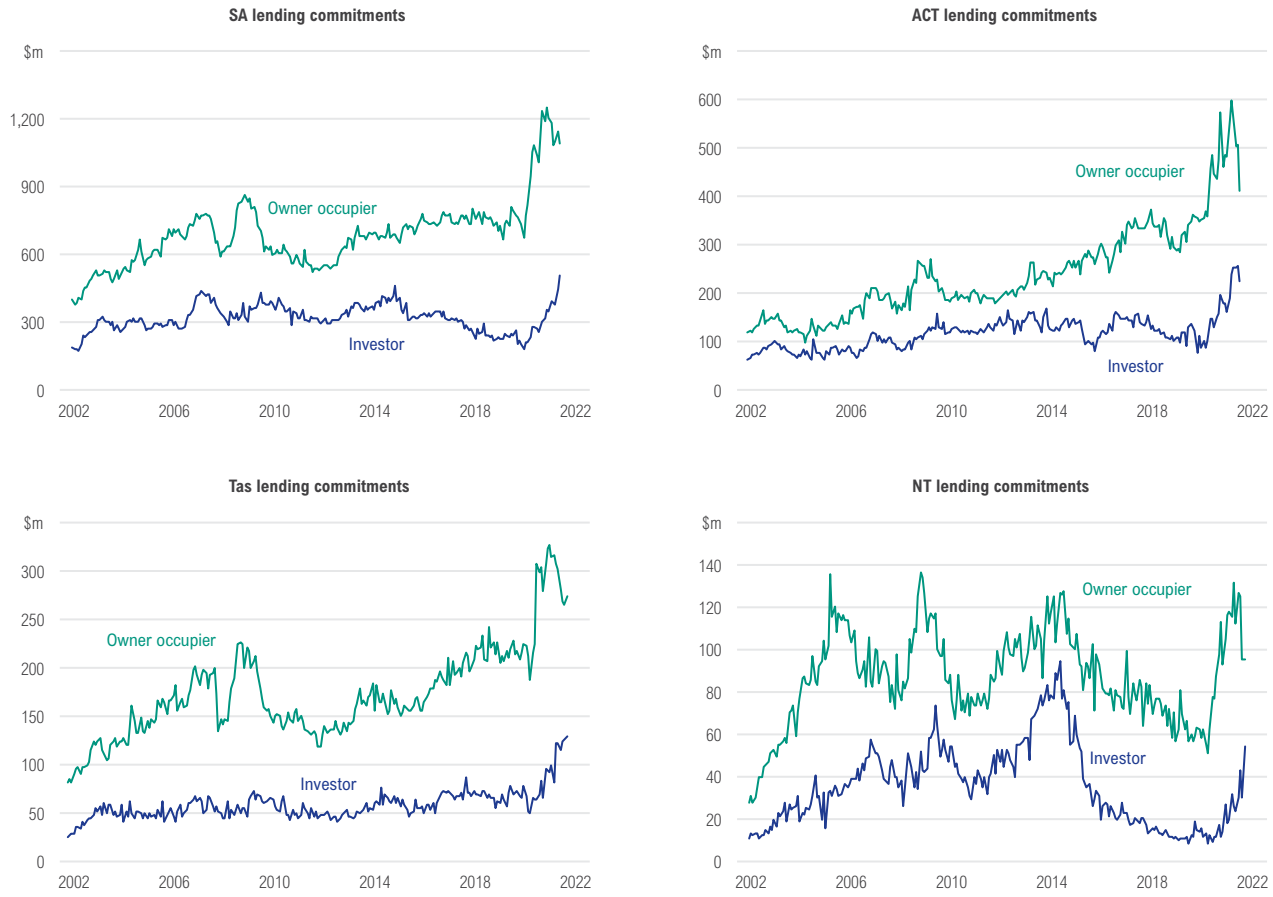
The value of investor lending commitments rose strongly in Vic, Qld, SA, the ACT and Tas. Lending commitments also increased in WA and the NT but growth was relatively weak.

Figure 1.12: Lending commitments by state and borrower type



Source: ABS Cat 5601.0

Figure 1.13: Lending commitments by state and borrower type

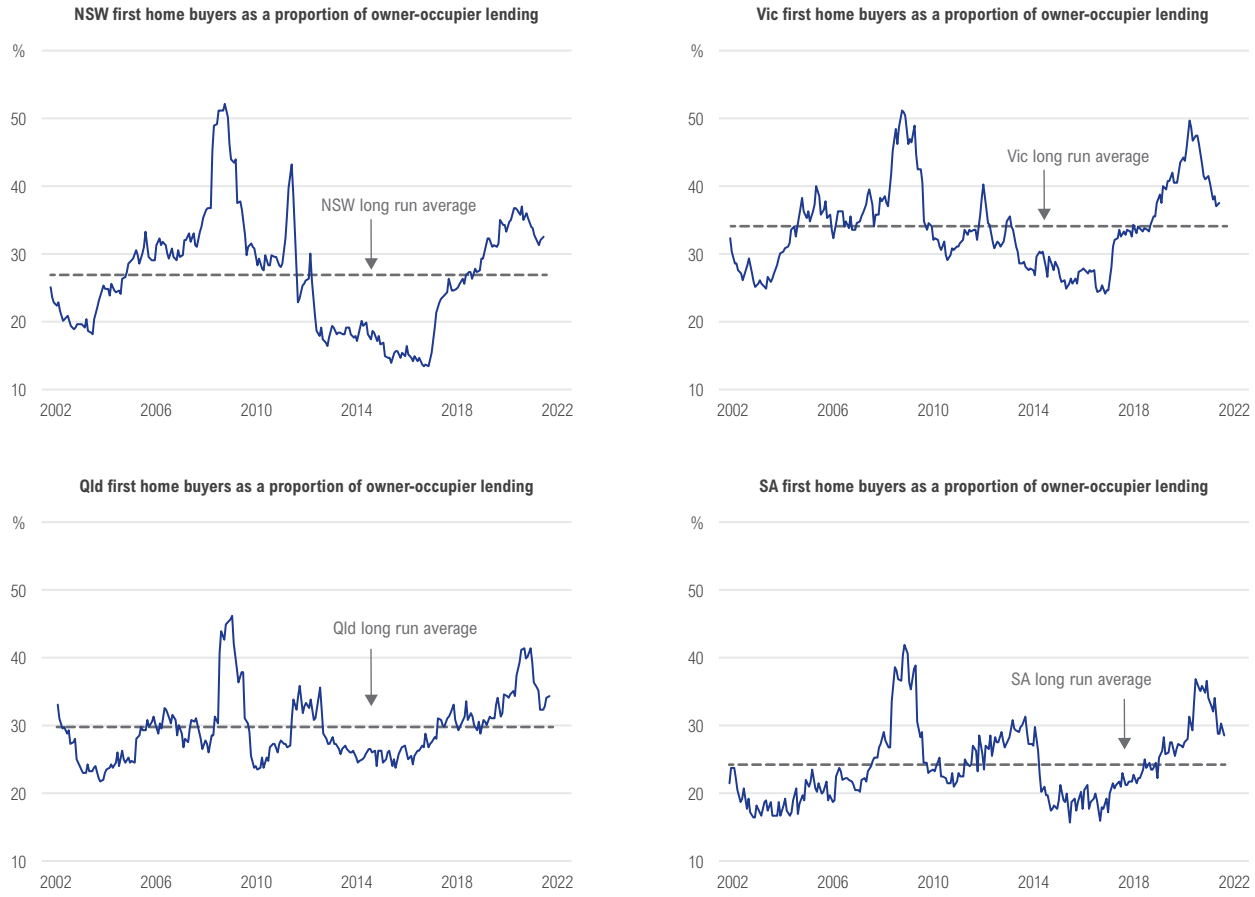


Source: ABS Cat 5601.0

The easing of home lending since mid-2021 was mostly due to a slowdown in first home buyer demand. The proportion of owner-occupier loans that went to first home buyers fell back to pre-pandemic levels, after increasing by 5 percentage points on average over 2020. This also coincided with state government fiscal stimulus being removed in many markets, tighter lending restrictions and higher fixed mortgage rates.

First home buyer participation remains above long-run averages, but deteriorating affordability means first home buyer demand is unlikely to restrengthen in the coming months.

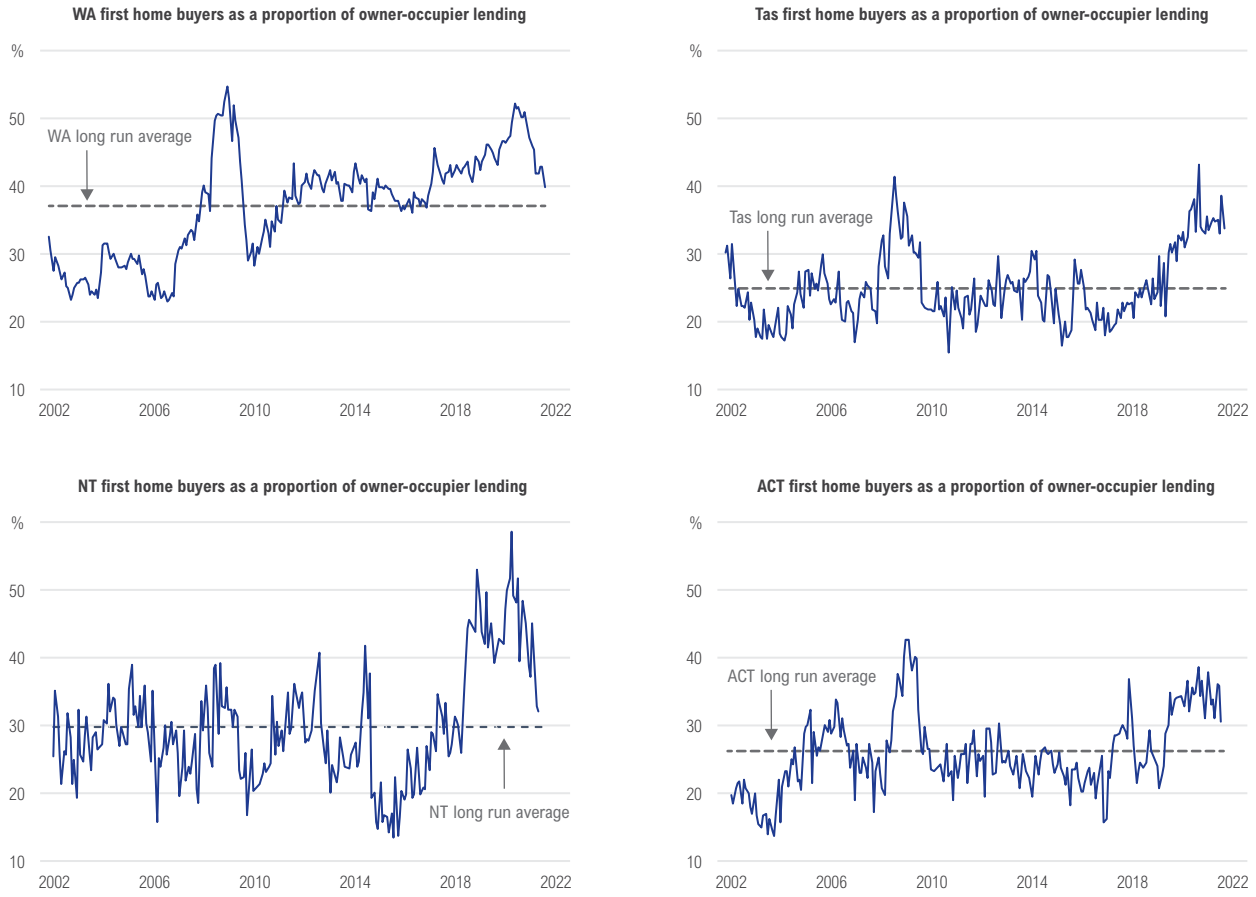
Figure 1.14: First home buyers as a proportion of total owner-occupier lending



Source: ABS Cat 5601.0

The percentage of first home buyers borrowing during the global financial crisis (GFC) rose strongly due to the monetary and fiscal response. However, it fell back below the long-run average as this stimulus was withdrawn and affordability deteriorated. In the early months of the COVID-19 pandemic, the percentage of first home buyers borrowing rose to be close to or even higher than during the GFC in Vic, Tas, WA and the NT.

Figure 1.15: First home buyers as a proportion of total owner-occupier lending



Source: ABS Cat 5601.0

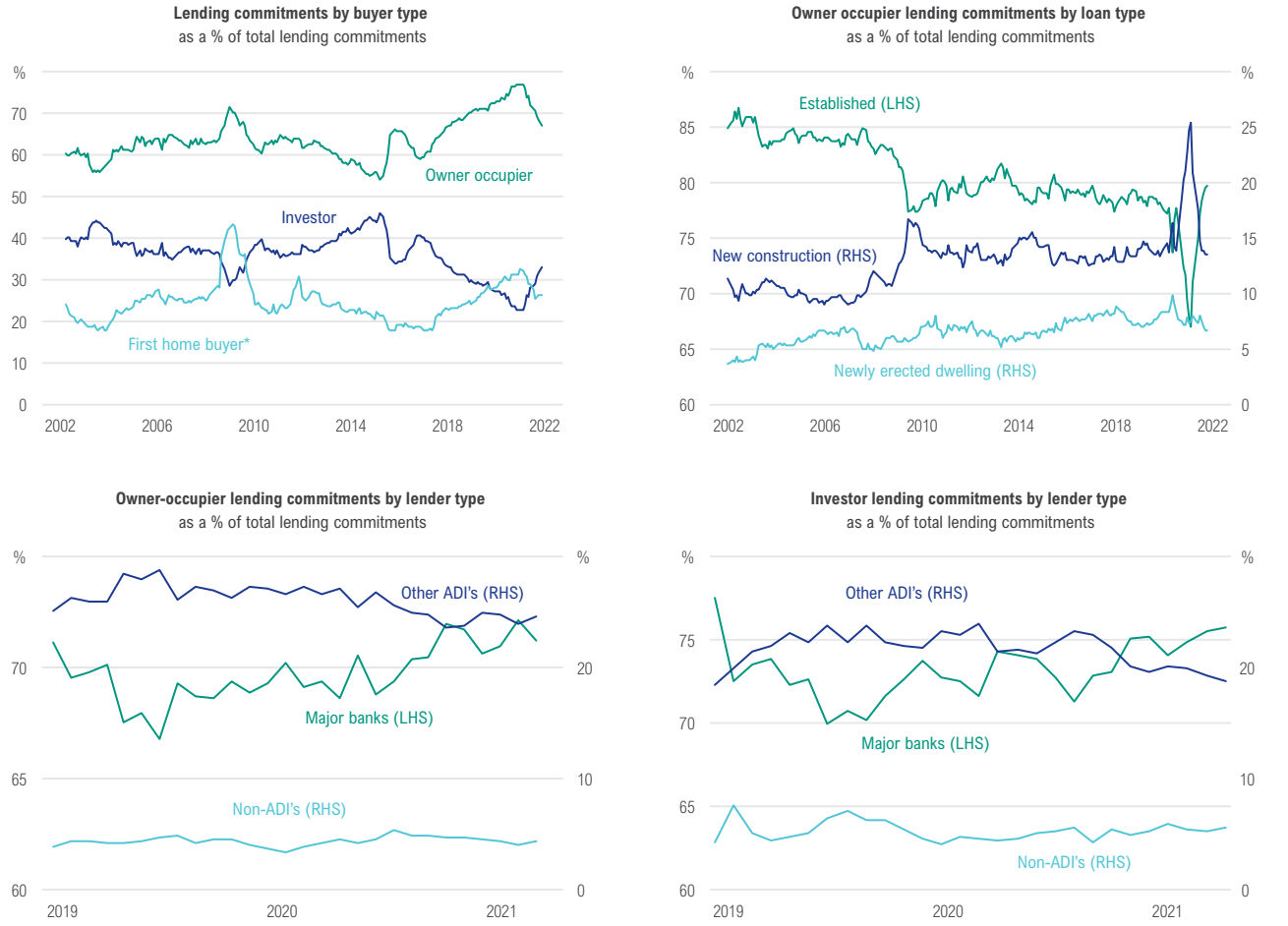
The HomeBuilder program, which provided owner-occupiers, including first home buyers, with a grant[2] to build a new home, substantially renovate an existing home, or buy a new home, was a key driver behind the surge in owner-occupier lending. Loans for new construction peaked in early 2021 to a quarter of all owner-occupier lending commitments, before dropping back to pre-pandemic levels (14%) after HomeBuilder was withdrawn.

The rise in first home buyer lending commitments during 2020 squeezed out investors. But this trend reversed in 2021 as investor demand increased in response to improved fundamentals in the rental market.

Around 70% of owner-occupier loans and 75% of investor loans continue to originate mostly from the major banks, with the share of loans from other authorised deposit-taking institutions gradually decreasing.

2 HomeBuilder provides a $15,000 grant for eligible contracts entered into on or after 1 January 2021 until 31 March 2021 (inclusive). A $25,000 grant is available for eligible contracts entered into on or after 4 June 2020 up to and including 31 December 2020.

Figure 1.16: Household lending commitments



Source: ABS, NHFIC.

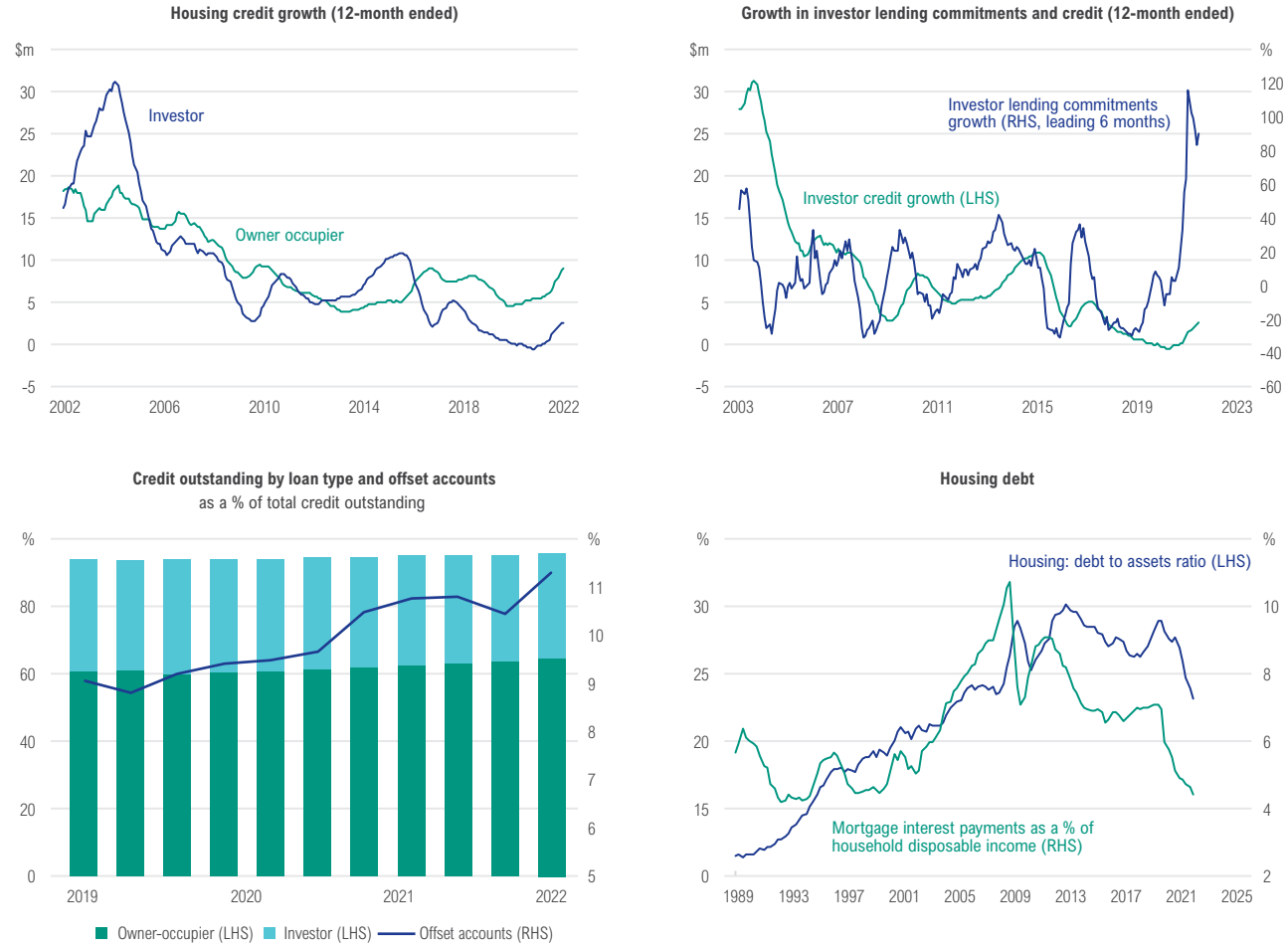
Despite strong property price appreciation, credit growth increased only at a modest pace during 2021. Nevertheless, when prices are rising rapidly and expected to continue to do so, borrowers may become overstretched, threatening the economy's overall financial stability.

Mindful of this risk, policymakers and regulators are closely monitoring developments in the housing and credit markets.[3] In October 2021, APRA increased the minimum interest rate buffer it expects banks to use when assessing serviceability of home loan applications from 2.5% to 3.0%.

In another sign of emerging risks, growth in investor lending – an indicator of more speculative activity in the housing market – accelerated during 2021, albeit from an exceptionally slow pace of growth. Investors are being attracted by rising prices and positive rental market fundamentals. If, as seems likely, growth continues over the coming months, regulators may step in to restrict some lending activity. However, at this stage, growth in investor lending is still significantly slower than the pace seen in 2014 when APRA capped lending to these borrowers.

3 https://www.rba.gov.au/speeches/2021/sp-ag-2021-09-22.html

Figure 1.17: Credit growth and housing debt



Source: RBA, ABS, NHFIC.

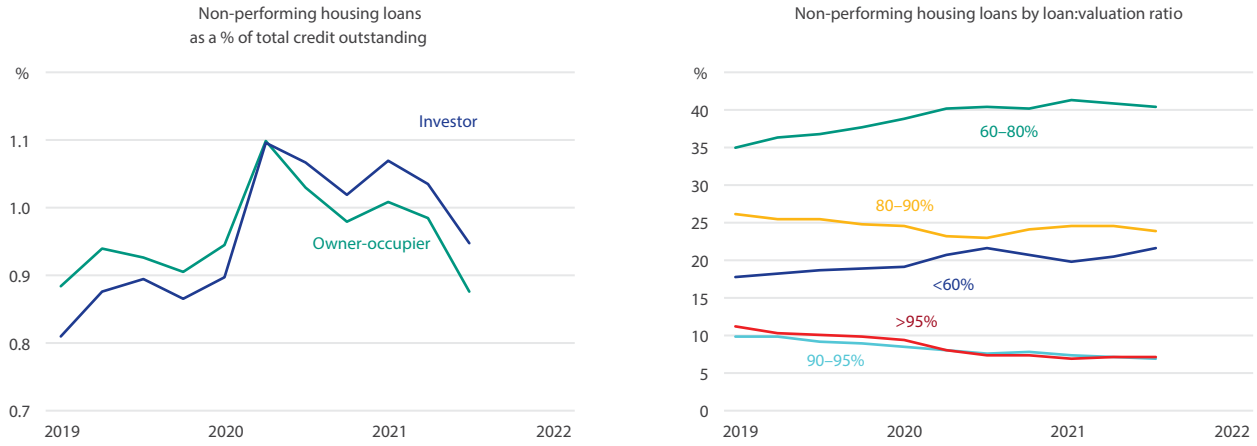
Despite the rise in property prices, low mortgage rates meant debt servicing costs continued to decrease as a share of household income. Households were also supported by low unemployment and high levels of savings, as evidenced by the strong growth in offset account balances. Unprecedented levels of government assistance through JobKeeper and JobSeeker payments also helped to support households through the pandemic.

Banks and the supply of credit

Non-performing loans for investors overtook non-performing loans for owner-occupiers as a share of total credit outstanding from 2020, probably due to the shock to the rental market during the early stages of the pandemic when borders closed. This deterioration in fundamentals may have led to many investment properties being sold to owner-occupiers and removed from the rental market.

Most non-performing housing loans have Loan-to-Value Ratios (LVRs) between 60 to 80%. These loans are not necessarily mature loans and may have been written just before or during the pandemic because house prices have risen strongly since then. It is also possible that some of these loans are older and were set on higher rates.

Figure 1.18: Authorised deposit-taking institutions non-performing loans

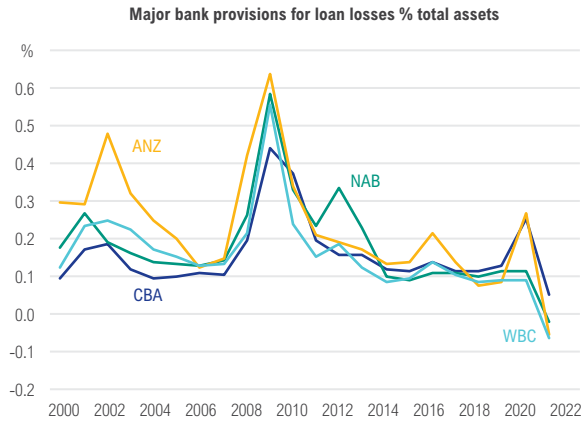


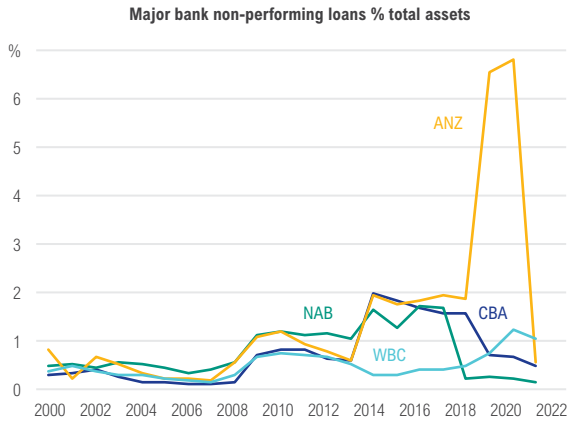
Source: APRA, NHFIC.

In the first year of the pandemic, provisions for loan losses remained stable for NAB and Westpac but rose for ANZ and CBA, Australia's largest home loan lender.

However, in its full year results in August 2021, CBA reported a substantial fall in provisions from the previous year. The bank also reported that actual loan losses declined in both 2020 and 2021.

Figure 1.19: Authorised deposit-taking institutions provisioning for loan losses

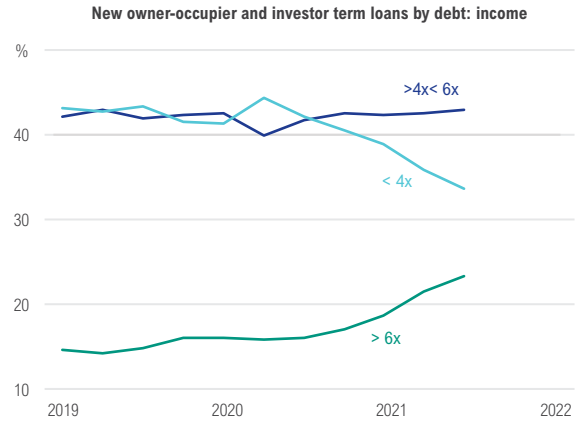




Source: Refinitiv, NHFIC.

Over 2021, the proportion of loans greater than 6 times the applicant's income increased rapidly while the proportion of loans less than 4 times income fell. Weighted average mortgage rates used in serviceability assessments also declined.

Figure 1.20: New lending ratios



Source: APRA, NHFIC.

Lending for interest-only loans to owner-occupiers increased during 2020 as prices surged and borrowers found it more difficult to finance property purchase with a principal and interest loan. The share of new interest-only loans has since grown as investors return to the market.

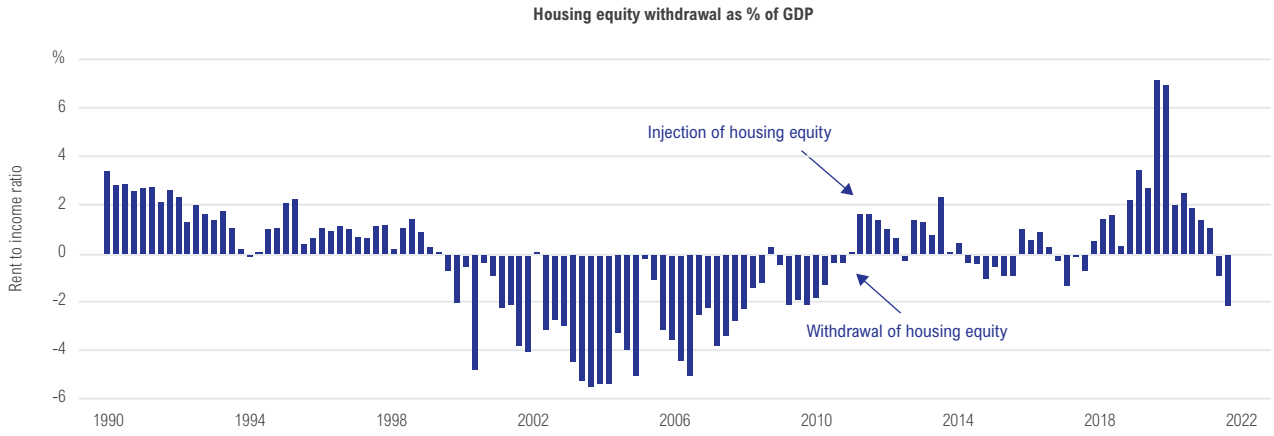
Exceptions and waivers to the serviceability policy increased in 2021.

Figure 1.21: New lending by selected loan type

Source: APRA, NHFIC.

Households continued to inject equity into the housing stock through to the first few months of 2021, despite the low interest rate environment, although the rate of injection has been slowing over the past few years. More recently, household equity withdrawal has increased as households unlock the equity in their properties following strong price growth.

Figure 1.22: Housing equity withdrawal*



Source: ABS, RBA, NHFIC.

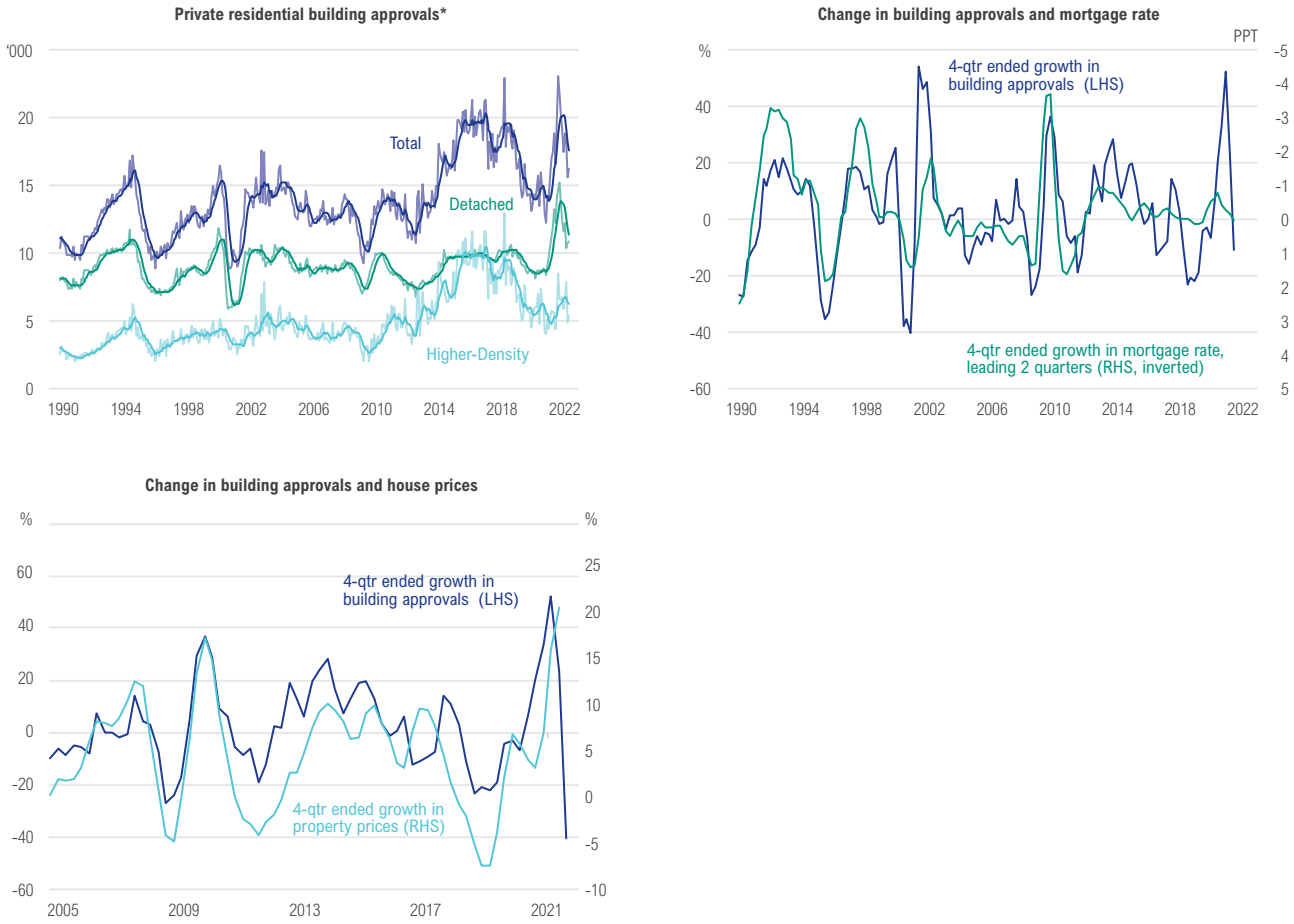
*Housing equity withdrawal is the change in housing credit less nominal dwelling investment, divided by nominal GDP. A break occurs in July 2019, the June quarter 2019 and December quarter 2019 observations are averaged.

Construction activity

The HomeBuilder program, along with other state-based schemes, has been a key support for detached dwelling construction during the pandemic. Building approvals for this dwelling type reached a record high in the first half of 2021 after rising by 60% over the year to May 2021.

Approvals fell after HomeBuilder ended, but have remained at relatively high levels on the back of low mortgage rates and rising house prices. Dwelling prices and mortgage rates have a strong relationship with construction activity.

Figure 1.23: Building approvals, interest rates and house prices



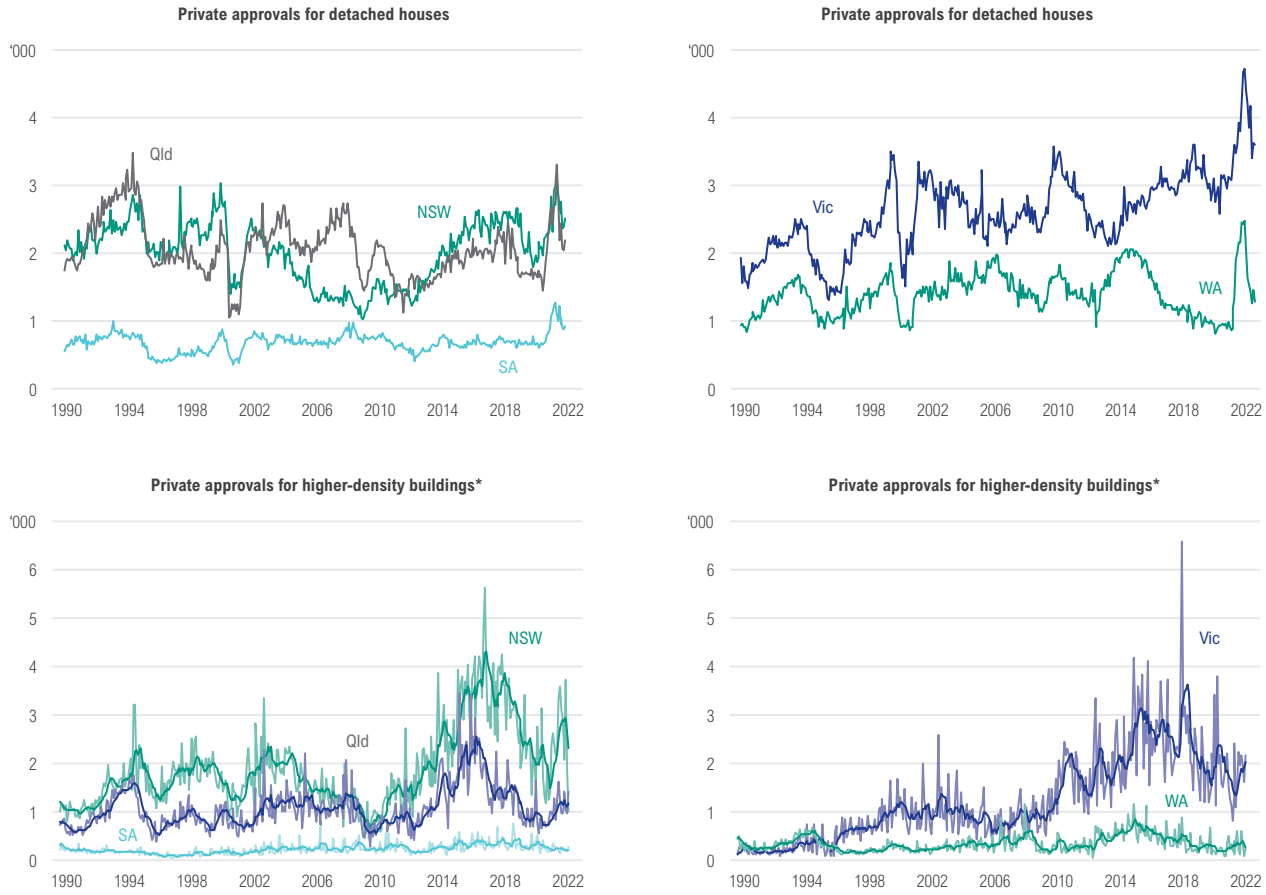
Source: ABS, CoreLogic *Smoothed trend lines indicate 6-month moving average

Early 2021 saw a broad-based surge in detached building approvals. WA had the strongest growth in approvals, up 154% over the year to April 2021. The subsequent decline in approvals since Home Builder ended has been most notable in WA, Qld and Vic.

Building approval growth in multi-density and apartment buildings was weaker than approvals for detached homes because HomeBuilder primarily supported the detached dwelling and renovation markets. Approval for multi-density dwellings was stronger in NSW, which recorded a 30% increase in 2021.

Given international borders are gradually reopening and demand in the rental market is picking up, shortages of other dwellings for rent can be expected over the next few years, because Homebuilder primarily supported the detached dwelling and renovation markets.

Figure 1.24: Private residential building approvals

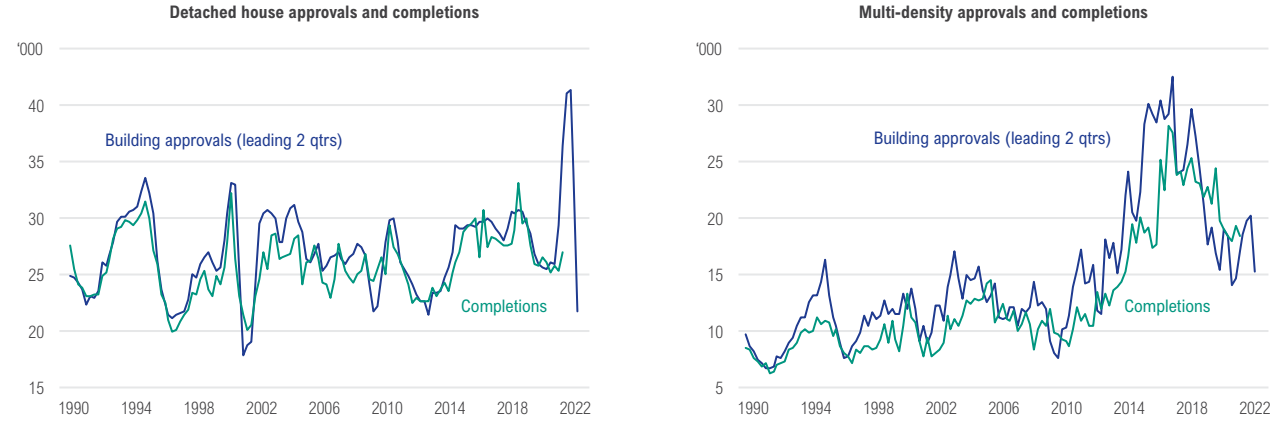


*Trend lines are calculated using a 6-month moving average
Source: ABS Cat 8731.0, ABS 5206.0, NHFIC.

Although the number of detached home building approvals have fallen after the end of HomeBuilder, the number of completions has remained low. While this is normal at turning points in the cycle, it could also be due to construction industry constraints in labour and materials.

Multi-density and apartment approvals have fallen but remain at relatively high levels and will likely remain around 15,000 per quarter for the next 6 months or so.

Figure 1.25: Building approvals and completions

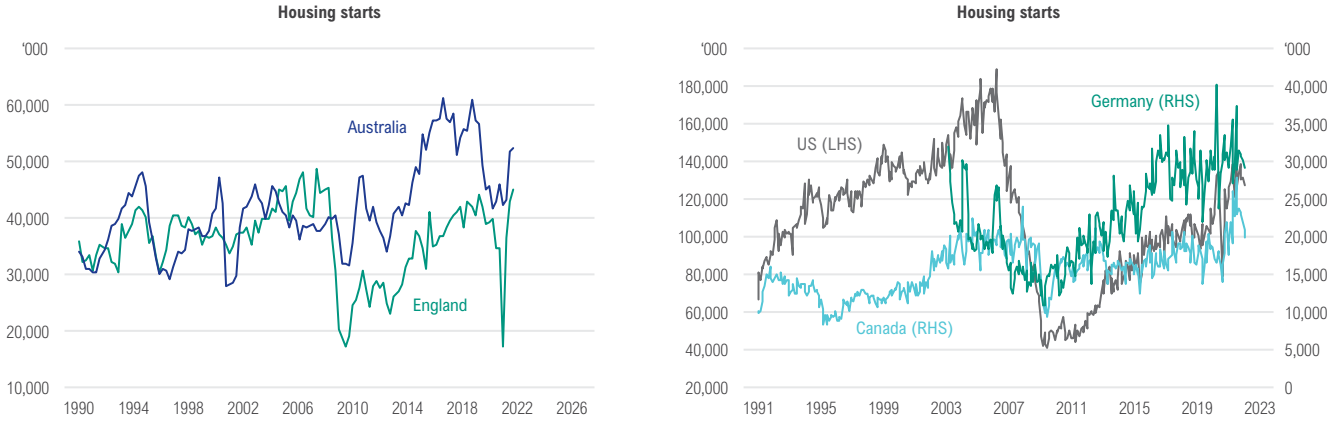


Source: ABS Cat 8752.0, ABS Cat 8731.0

International construction indicators

Internationally, housing commencements increased steadily during the pandemic. COVID-related restrictions impacted housing starts in 2020 in the US, Canada and the UK, but had minimal effect in Australia. The UK recorded a strong recovery in housing starts once restrictions were eased.

Figure 1.26: International housing commencements



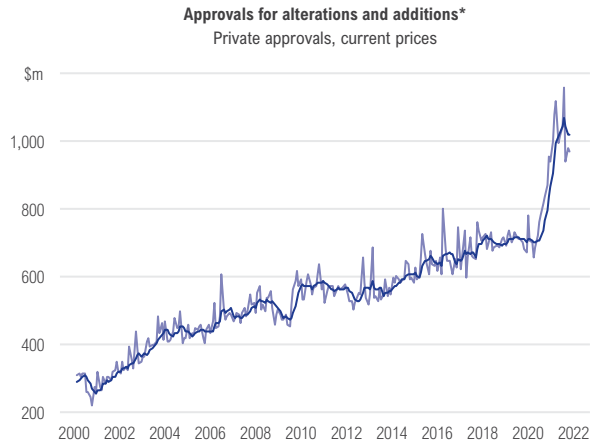
Source: Refinitiv, NHFIC.

Renovation activity

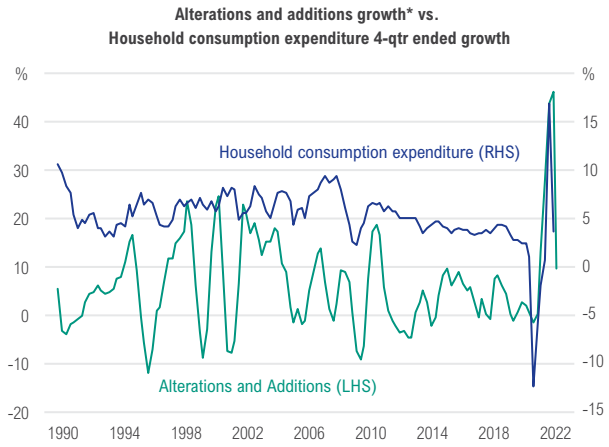
Strong growth in income, low interest rates, fiscal support policy support (including HomeBuilder) and strong growth in housing prices have all supported a rise in alterations and additions. The unique circumstances of the pandemic, with households spending more time at home, has probably also provided a strong support for investment in alterations and additions. Lending commitments for alterations and additions rose by around 85% over the year to April 2021 and a further 41% from then until November.[4] The data shows the alterations and additions market has been resilient to the end of HomeBuilder.

As the pandemic forced lower household consumption of services such as travel and hospitality, households have diverted their spending towards goods. Spending on home renovations has also benefitted, with households finding it more attractive, or cost-effective, to renovate an existing home rather than borrow to move or upsize. Transaction costs, such as stamp duty, are a major impediment to households moving to a more appropriate property.

Figure 1.27: Alterations and additions



*Trend line is calculated using a 6-month moving average



*4-qtr growth derived from 6-month moving average

Source: ABS Cat 8731.0, ABS 5206.0, NHFIC.

4 Using seasonally adjusted lending commitments for alterations and additions by value.

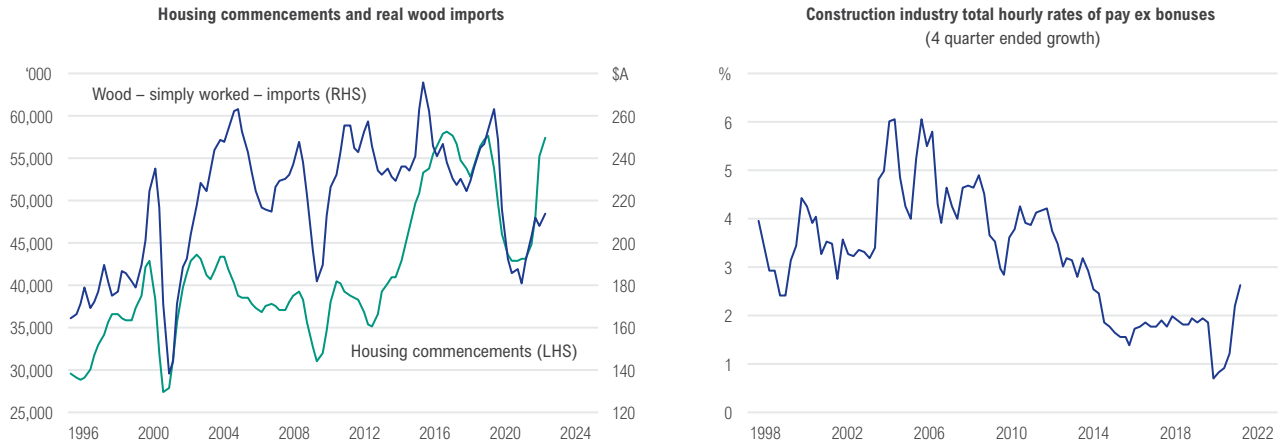
Supply-side constraints in the construction industry

The surge in demand for new construction and global disruptions to manufacturing related to the pandemic has contributed to strong upwards pressure on building material costs. Global supply chains have been affected by COVID restrictions, particularly in those countries such as China, which supply materials to the Australian construction industry. The bottlenecks have been particularly notable at ports and manufacturing facilities.

State and international border closures within Australia have also led to labour shortages. Although this is yet to translate into a stronger rise in wages, the effects on material costs and supply have been more dramatic. For example, costs for wood imports grew 15% over the year in 2021, while wage growth remained modest at around 2.6%.

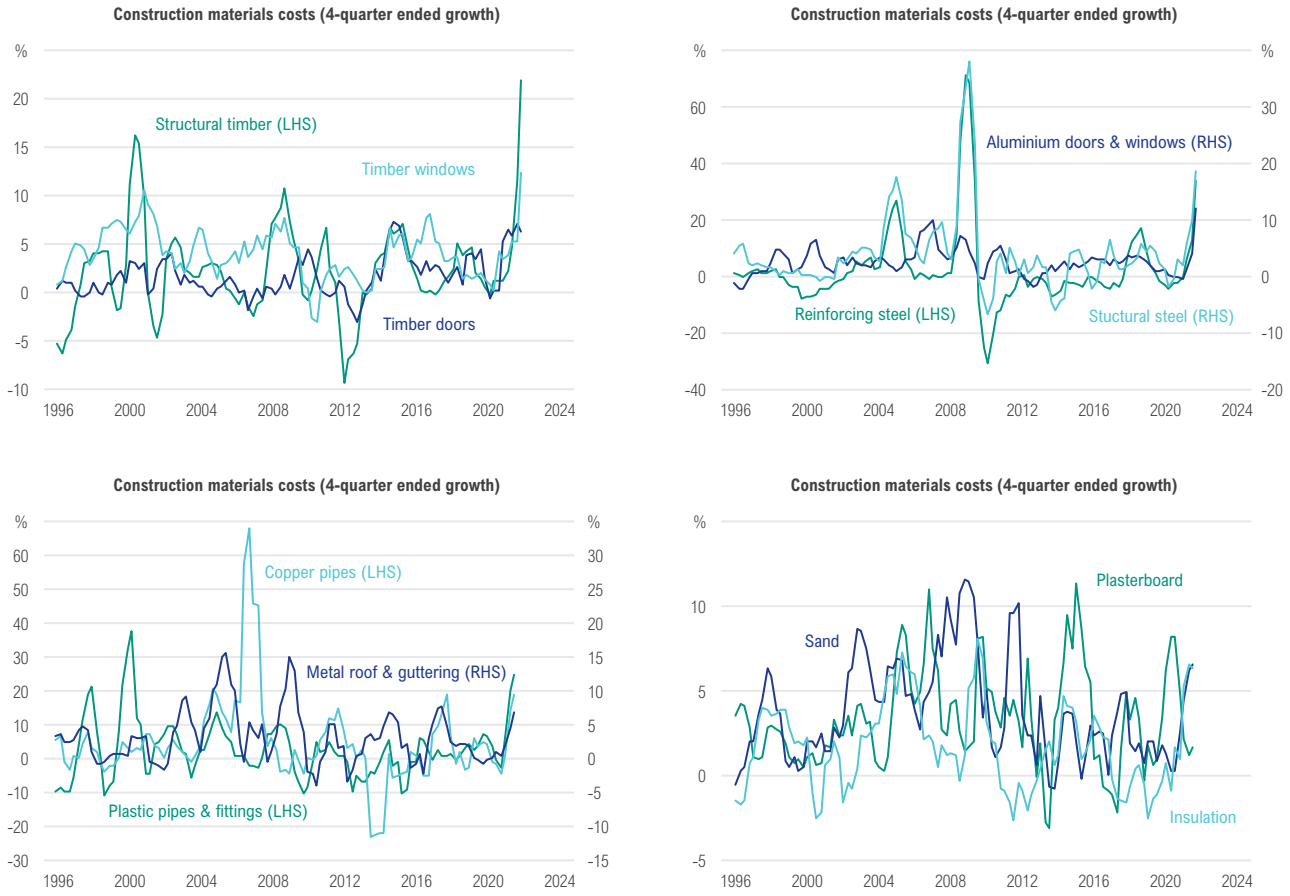
The cost of structural timber, timber windows, board and joinery, aluminium windows and doors, steel products, plastic and copper pipes and fittings, and electrical cable and conduit experienced 4 quarter-ended growth of 12-25% in 2021. The cost of reinforcing steel increased the most, with 4 quarter-ended growth of 34%.

Figure 1.28: Construction material imports and wages growth (4 quarter-ended growth)



Source: ABS Cat 53020 and ABS Cat 87520

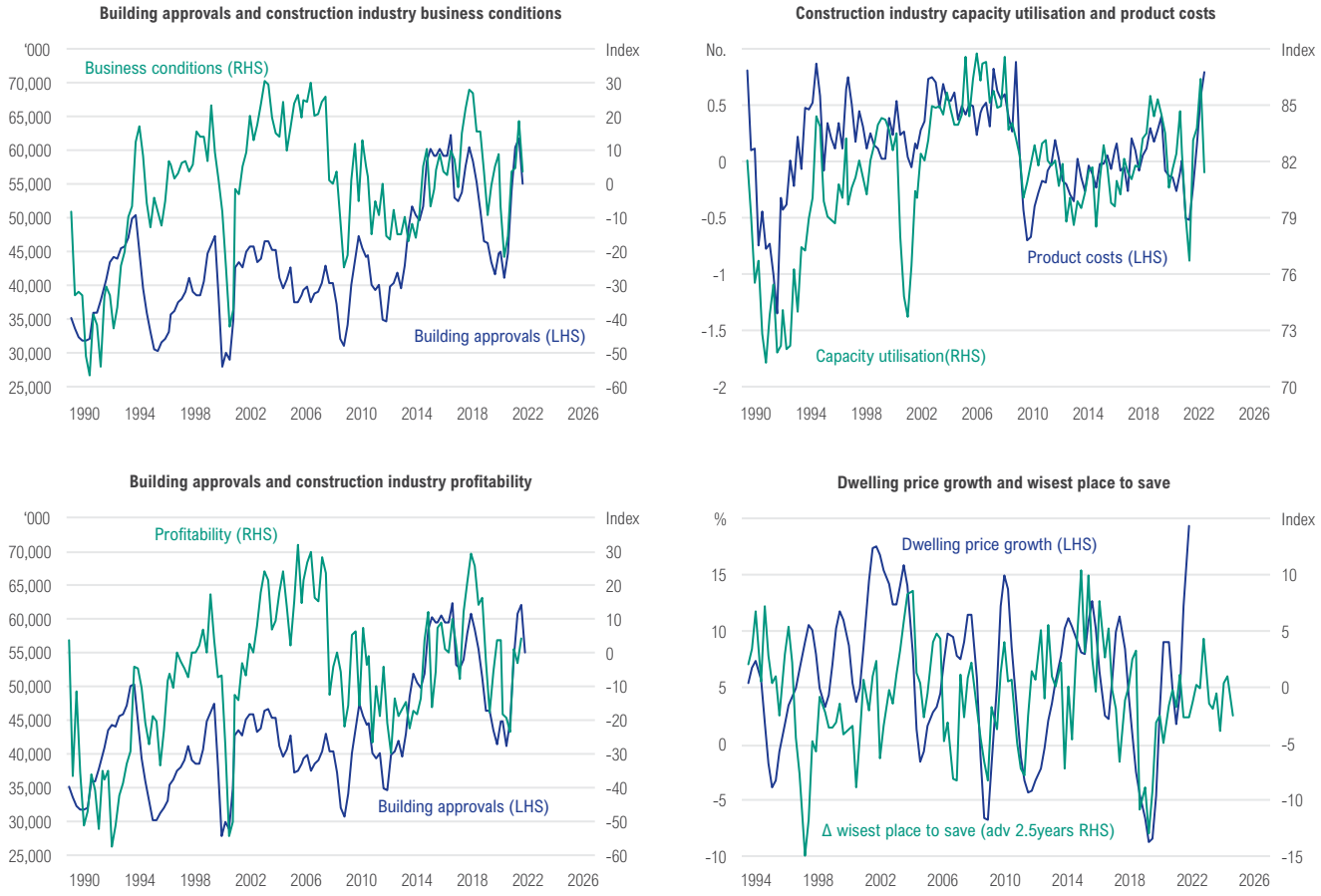
Figure 1.29: Construction material costs (quarter-ended growth)*



Source: ABS Cat 64270.0. *Weighted average of 6 capital cities.

Increased construction demand meant business conditions and profitability in the construction industry greatly improved and should remain strong while business conditions are favourable.

Figure 1.30: Housing sentiment



Source: Refinitiv, CoreLogic, NHFIC.

The surge in demand for new construction and global disruptions to manufacturing related to the pandemic has contributed to strong upwards pressure on building material costs... State and international border closures within Australia have also led to labour shortages.

State of household formation

State of the Nation's Housing 2021–22

State of household formation

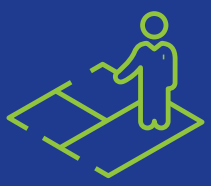
-41k

Hit to annual net overseas migration (NOM) in 2021–22

due to closed borders, low arrivals, and continued departures of residents

1.7m

Net new households by 2032



Big is back

Households preferred larger houses with more bedrooms and space during the pandemic, especially in regional and coastal towns

KEY POINTS

- With international borders reopening and stronger economic activity anticipated after a period of prolonged pandemic-related restrictions, new household formation is expected to recover strongly over the next few years.
- During 2020–21, population growth remained weak on the back of negative NOM. NOM is expected to remain weak in 2021–22 (at -41,000) but thereafter is expected to recover to 180,000 in 2022–23 and then 213,000 in 2023–24.
- The relaxing of international border restrictions and expected recovery in NOM and broader economic recovery is expected to underpin more than 1.7 million net new households forming across Australia from 2022 to 2032. On the back of an expected recovery in NOM, average household growth of 175,000 is expected annually over the 10 years to 2032.
- By household type, the strongest growth in new households is expected from lone person households (around 595,000 or 35% of total), then couple families without children (488,000 or 29% of total), then couple families with children (361,000 or 21% of total).
- The impact of the population shock has been felt differently across regional and city housing markets. Inner areas of major cities have borne the brunt of negative NOM (in particular the drop in international students), with outer areas of major cities and regional areas seeing stronger than normal household formation.
- The pandemic induced shock and lower household formation caused rental vacancies to rise sharply and rents to decline in 2020, particularly in Sydney and Melbourne. But vacancy rates are now back to pre-pandemic levels in these cities. This suggests some latent household formation may be occurring that isn't explicitly accounted for in our projections.
- The pandemic introduced stronger preferences for larger dwellings and for living in wide-open spaces, such as in regional and coastal towns. It will take some time and better data to determine whether these behaviours are distinct from pre-pandemic urban-regional trends.
- While there is considerable uncertainty, household formation rates could increase quickly as international borders reopen. Given vacancy rates are already back at (or close to) pre-pandemic levels, delays in getting new housing stock to market in a timely way will have adverse consequences for affordability, particularly for renters.

Introduction

This chapter provides projections of new household formation

It outlines the factors that drive new household formation (as distinct from housing demand, which is more a reflection of the state of the market and the amount of transacting in the market – see Box 1), while also assessing the current and future state of household formation in the context of Australia's economic reopening and the likely return of strong population growth.

COVID-19 precipitated Australia's largest population shock in a century – the biggest fall in NOM since records began, substantially reducing the rate of new household formation. But now international borders restrictions are being relaxed, together with a strengthening economy, rates of new household formation are likely rebound strongly over the coming years.

The population shock has led to highly uneven outcomes across cities and regions, and different housing segments. Fewer people have left regions seeking work in the cities and many people migrated (at least temporarily) to regional and coastal areas during the pandemic to escape pandemic restrictions. The ability to work from home has helped exacerbate this behaviour, which is putting pressure on certain (particularly regional) housing markets around the country.

Household formation rates are expected to increase quickly as international borders reopen. Given the lead times for new housing developments, planning authorities should start acting now to facilitate adequate supply to market in a timely way. Otherwise, Australia's already poor housing affordability is likely to worsen over the coming years – particularly for the nation's renters.

Box 1: Defining household formation

Housing demand and household formation

New household formation measures the number of households expected to form based on assumptions about population growth, living preferences of different age groups and the state of the economy.

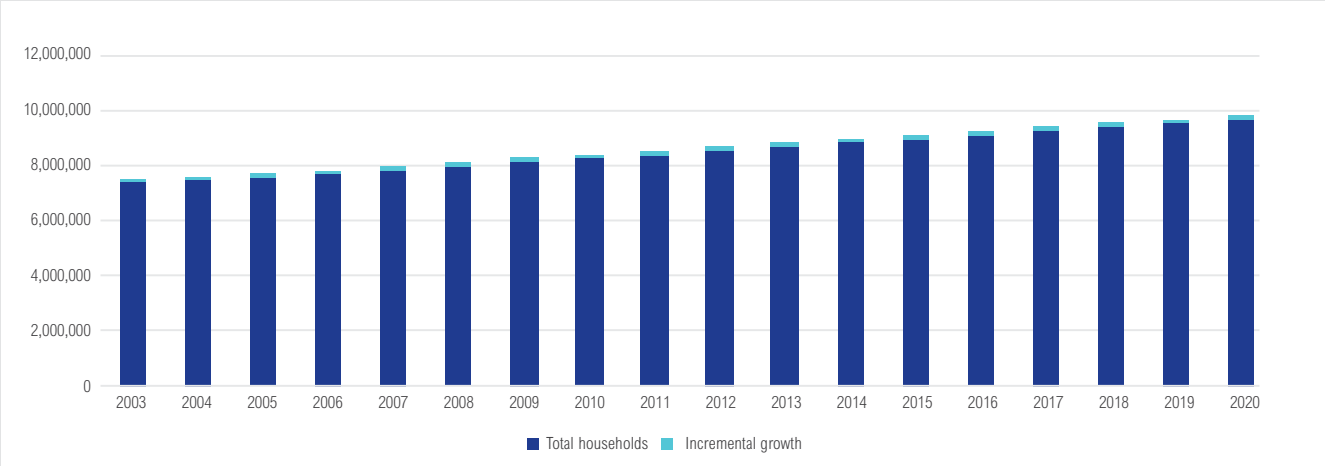
Australia has close to 10 million households, with new household formation amounting to around 1–2% of total households each year.

New household formation is distinct from observed market demand, which is reflected in transaction volumes, clearance rates and prices. New household formation is a relatively small component of overall market demand as it measures the *incremental* change in number of households (Figure 2.1).

Tracking household formation is important because when the number of new households forming over time is greater than the new supply coming into the market (net of demolitions) it can reduce vacancy rates and feed through to higher rental costs, with adverse consequences for affordability. In the short term, new household formation rarely coincides with housing market cycles.

In 2020–21, new household formation was affected by the sharp falls in NOM. But demand was supported by substantial fiscal and monetary stimulus. As a result, NHFIC's industry liaison suggests demand for detached housing continues to outstrip supply in many areas across Australia, including Sydney (see table 2.1).

Figure 2.1: Incremental growth in households relative to total stock of households



Source: ABS, NHFIC

New household formation is a relatively small component of overall market demand as it measures the *incremental* change in number of households

The central projections in this chapter measure new household formation. They not only account for population growth and demographic factors but also adjust for a broader suite of economic factors, which impact on living arrangements – and hence household size – over the short and long term. The central projections do not indicate the strength of demand in the market.

Note: NHFIC's first State of the Nation's Housing report used a concept called 'adjusted underlying demand', which was another name for new household formation. In this report, to improve understanding, we refer only to household formation.

Table 2.1: Demand outpacing supply in Sydney greenfield areas

Estate	Timing	Size of Lot Release	Amount of Release Sold	Level of Interest	Developer
Catherine Park	Early October	10	100%	700 calls within 5 minutes	Harrington Estates
Catherine Park	Mid October	30	100%	Over 700 expressions of interest, sold by ballot	Harrington Estates
Gregory Hills	Mid October	4	100%	1,200 real estate agent page views	Dartwest
The Gables	Mid October	30	100%	1,400 requests for appointments	Stockland
Rosella Rise	September	11	100%	All lots secured within 2 minutes	AVJennings
Multiple Estates	Mid October	66	99%	140 clients actively waiting for further releases	Anvest Holdings

Source: UDIA

Factors affecting new household formation

This section briefly discusses the main factors that drive household formation and the unusual factors at play during the pandemic affecting household growth.

Generally, new household formation is driven by a range of factors, but the main considerations are population, demographic and ageing factors, economic variables, and housing preferences.

Population

The key driver of new household formation (and dissolution) is population growth, which is driven by natural increase (births and deaths) and NOM.

Natural increase is not a significant predictor of household formation: births rarely trigger the creation of a new household (as most just add an additional resident to an existing household); and only lone person deaths reduce the total number of households.

In our State of the Nation's Housing 2020 report, NOM was projected to come in at around -72,000 people for 2020–21. In the year ending June 2021, NOM was -88,800.

Australia's population growth is typically dominated by the flow of more than 200,000 temporary and permanent migrants looking to study or to work. Due to closed borders during the pandemic, overseas migration has been running at around -90,000 (annually) – a net change of around 300,000 – due to very low levels of arrivals, while departures of temporary residents have continued.

The Centre for Population estimates that NOM will recover slowly in 2021–22 to around -41,000, but then more strongly in 2022–23 to 180,000.

The age structure of the population also influences new household formation. People have different propensities to form new households depending on their age and social and economic circumstances. Compared with decades ago, people tend to form households later in life due to studying longer and having families later.

Demographic and ageing factors

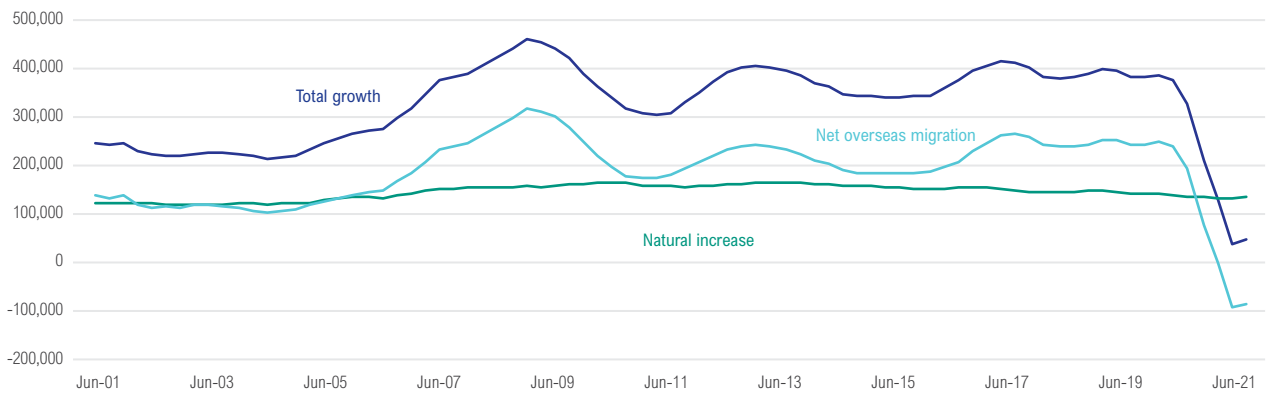
Household formation increases due to lifecycle changes, such as young adults leaving the family home or couple families divorcing. Likewise, household formation decreases due to lifecycle changes, such as lone person households forming couple families, ageing (as older residents move into non-private dwellings, such as residential aged care) or death of a lone-person household. Births have a negligible effect on household formation.

Economic variables

The state of the economy also effects the rate of household formation. When people have jobs and are earning income it increases their ability to move out of their parents' homes and either move in with friends/partner or live alone. Conversely, when people lose jobs and have limited income earning capacity they tend to move back with their parents or look for cheaper shared living arrangements.

Anecdotal evidence suggests that, at the beginning of the pandemic, hundreds of thousands of (mostly younger) Australians moved back in with their parents after losing their jobs. But given the relative strength of the economy compared to the outlook in our first report, household formation is likely to have turned around in some areas as people regained employment.

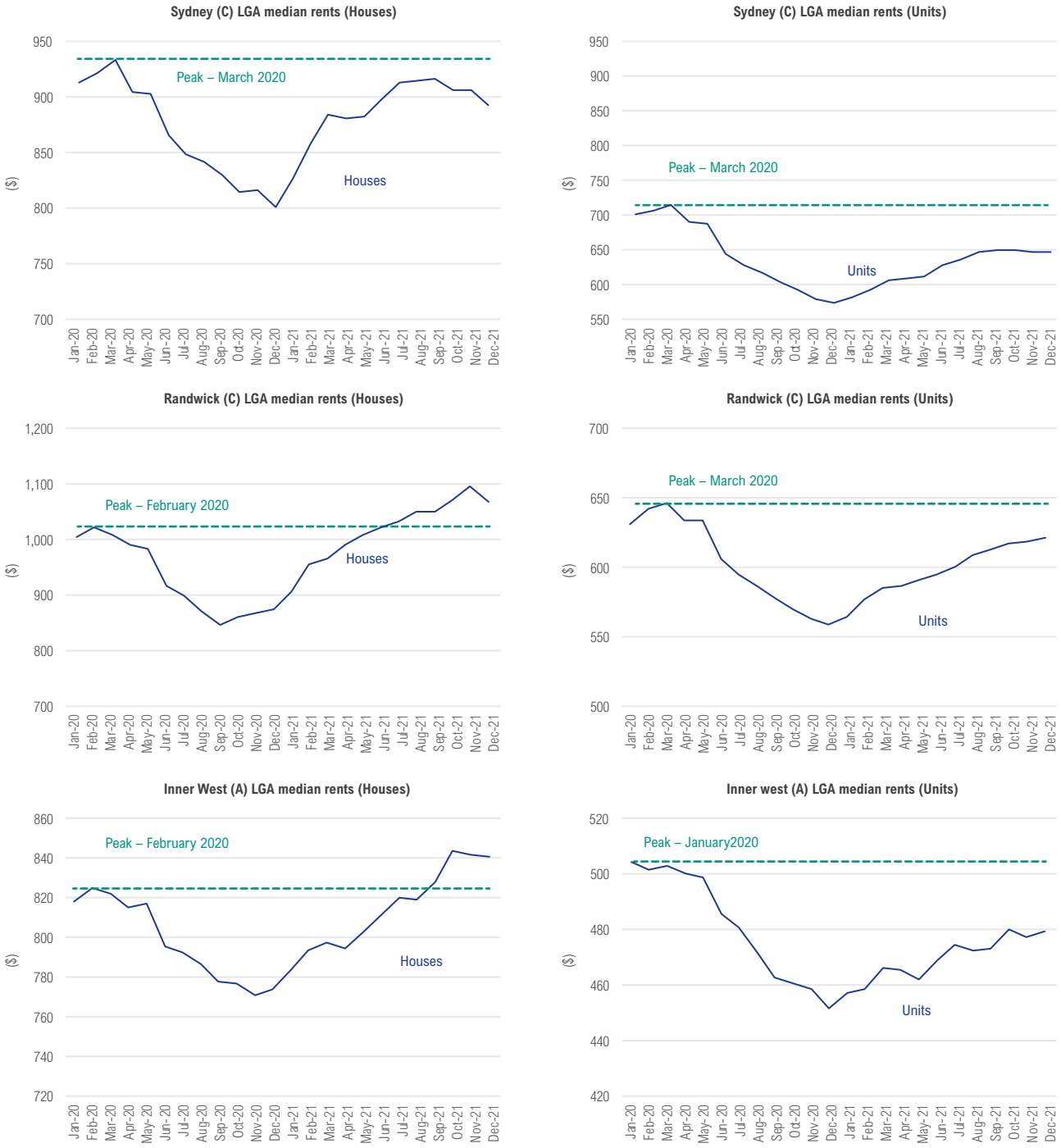
Figure 2.2: Key components of population growth (actuals)



Source: ABS, NHFIC

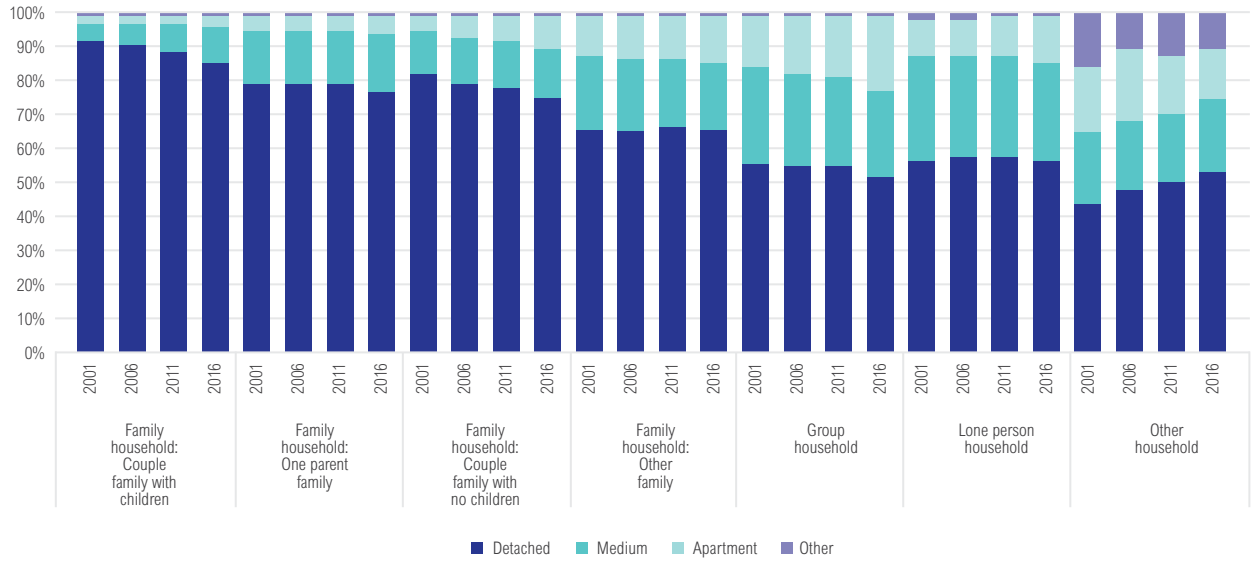
Other economic variables, such as rents, can also affect the rate of household formation. If rents are falling, it increases the purchasing power of incomes for housing services. This allows more people to live on their own, decreasing average household size. Conversely, if rents are rising, fewer people are able to form new households. Inner city areas in Sydney and Melbourne, which are close to universities, saw large falls in asking rents following the onset of COVID-19 and the fall in NOM. But this has now reversed somewhat, suggesting the improved rental affordability and possible attractiveness of smaller household size during the pandemic has attracted some people back into the market (see Figure 2.3). It might also suggest some latent household formation (see below). As outlined in the 'State of the housing markets' chapter, the fall in vacancy rates (and rent increases) has also been driven by a withdrawal in rental listings.

Figure 2.3: Rents in Greater Sydney LGAs close to major universities



Source: CoreLogic, NHFIC

Figure 2.4: Household and family type by dwelling structure, 2001–2016 – Australia



Source: ABS, NHFIC

Housing preferences

As people move through life they have different preferences for different types of living arrangements.

Australia continues to be one of the least densely populated countries in the world. More than 80% of couples with children around Australia live in separate houses and detached dwellings.

However, in recent decades preferences have shifted as higher density living has increased in Australia's major cities. The last few Censuses to 2016 show the most significant shift in dwelling demand has been toward semi-detached and low-rise apartment dwellings.

Household preferences are also affected by affordability and supply factors. The trend shown in Figure 2.4 reflects a combined supply and demand response: the combined expectation of residential developers with the preferences of the buyer/renter market.

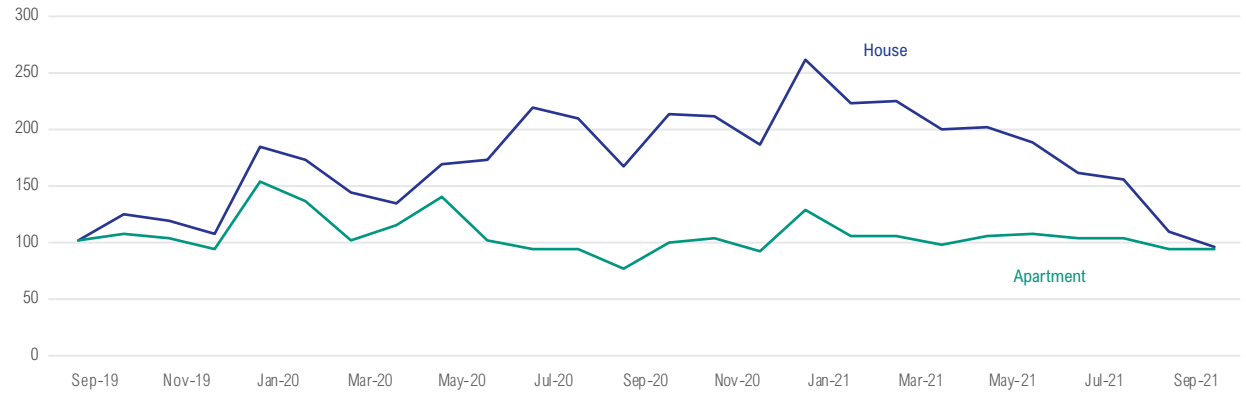
A longstanding problem in Australia has been the mismatch between housing preferences and where housing is located. Housing is often concentrated in city outer rings, away from CBDs where most of the jobs are.

For example, the NSW Productivity Commission has noted that several of the innermost Sydney LGAs, including Woollahra, Randwick, and Mosman, which are close to the CBD are less dense than middle-ring areas such as Burwood and Canada Bay. The report notes only 20 per cent of new dwellings will be built in LGAs within 10 kilometres of the Central Business District[5]. This is despite research suggesting there's an excess demand for higher density housing in inner Sydney[6].

The pandemic has likely had an unusually large impact on housing preferences, given targeted stimulus primarily supported detached dwellings, the move towards lower density housing and (relatively inexpensive) properties in regional areas, together with cheaper inner city rental stock.

5 NSW Productivity Commission White Paper, page 269
6 The Apartment Shortage, RBA Research discussion paper, Tulip & Jenner

Figure 2.5: Changing housing search preferences before and during the pandemic



Source: Domain

Many people have been able to work from home, which has led to a stronger preference for larger houses with more bedrooms and more space (Figure 2.5). That said, early indications suggest some of these behaviours may be temporary.

NHFIC liaison also suggests there has been a marked change in preference for larger apartments up the eastern coastal seaboard, including people amalgamating two apartments for more space.

The pandemic has certainly produced a larger than usual increase in people preferring to live in less densely populated areas. A recent NAB survey suggests that up to 85% of people now see consideration of a move to a regional area an important factor when buying a home.[7]

This change in preferences is not unique to Australia. In other OECD countries, the pandemic also increased demand for houses located in areas with larger detached dwellings and more outdoor space.[8]

The stronger desire to live outside major cities has, in turn, likely opened up some more affordable rental stock in inner metropolitan areas. Given the falls in rents, this could have underpinned smaller household sizes in some areas. The 'State of the regions during COVID-19' chapter discusses these issues further.

Many people have been able to work from home, which has led to a stronger preference for larger houses with more bedrooms and more space.

7 https://www.news.com.au/finance/real-estate/buying/covid19-pandemic-causes-big-changes-in-house-hunters-preferences-nab-data-reveals/news-story/8c06ee791d8ba22120b8bf6e474e6b14

8 https://ideas.repec.org/p/bdi/opques/qef_627_21.html

Box 2:

Latent household formation

Our State of the Nation's Housing 2020 report showed the falls in NOM due to closed borders generated spikes in vacancy rates and large falls in rents in inner city Sydney and Melbourne.

For example, rents in Sydney fell back to 2014 levels. But over the course of 2021 this was reversing, despite international borders remaining closed. Vacancy rates are now back to pre-pandemic levels in Sydney and Melbourne and rents are experiencing some upward pressure again (albeit off lower levels).

If the new supply coming into the market is outstripping new household formation, all other things begin equal, vacancy rates typically remain elevated and rents fall. Conversely, when household formation is stronger than new supply, vacancy rates tend to fall and rents tend to rise.

As Figure 1.10 shows, some vacancy rate falls can be attributed to fewer rental listings, likely due to investors selling properties to first home buyers and other owner occupiers. But this is unlikely to explain all of these changes. The data suggests some latent pre-pandemic household formation could have been occurring over the course of the last year as rents in Sydney and Melbourne became more affordable.

Given latent household growth is difficult to measure, the sharply falling vacancy rates could mean that NHFIC's projections are underestimating recent household formation.

Household formation during the pandemic

The current rate of household formation is difficult to assess. New household formation continues to be significantly affected by the lack of NOM since the beginning of the pandemic. A range of factors could also have affected the rate of new household formation over the course of 2020–21 and into 2021–22 (see Table 2.2).

- **Second homes** – Largely anecdotal evidence suggests more people have purchased second homes, but, putting a figure on the quantum – and establishing its materiality – is difficult to gauge. If more people buy second homes and leave city dwellings unoccupied it means more households are more spread over the existing housing stock.
- **Renovations** – The pandemic produced an unusually high degree of renovation activity (see 'State of the housing market' chapter). NHFIC liaison suggests that some people are renting second properties for the duration of the renovation, making vacancy rates lower than they otherwise would be.
- **Latent household formation** – Given borders were closed over most of 2020–21 through to late 2021, sharply falling vacancy rates across Sydney and Melbourne suggest some latent household formation could have occurred (see Box 2).

Table 2.2: Positive and negative influences on new household formation since 2020 report

Factor	Positive	Negative
Population growth and NOM	-	✔✔
Preference for living in open spaces during pandemic, including second properties	✔	-
Preference for smaller household size during pandemic	✔	-
Latent household formation due to improved rental affordability	✔	-
Lower rents	✔	-
Lower unemployment rate	✔	-
House prices	-	✔

✔✔ Strong ✔ Less strong or unknown impact

Forecast methodology

Definitions

This report uses the ABS definitions of dwelling type as the basis for its analysis, as detailed in Table 2.3.

Table 2.3: Household formation categories

Housing category	ABS structure dwelling types
Detached	Separate house
Medium	Semi-detached, row or terrace house, townhouse etc. with one storey
	Semi-detached, row or terrace house, townhouse etc. with 2 or more storeys
	Flat or apartment in a 1- or 2-storey block
	Flat or apartment attached to a house
Apartment	Flat or apartment in a 3-storey block
	Flat or apartment in a 4 or more storey block

Source: NHFIC, ABS. Non-private dwellings and other residential buildings have been excluded from the analysis. Non-private dwelling types include hotels, staff quarters, hospitals, hostels, nursing homes, certain types of welfare accommodation (i.e. group homes) and prisons. Other residential dwellings include caravans, houseboats and dwellings attached to commercial buildings.

Estimates for each housing type are then prepared at the national and state level, along with each state and the NT. Capital city forecasts are also produced, but Canberra and the ACT are grouped together.

Table 2.4: Household formation locations

Capital cities	Rest of state
Greater Sydney	NSW
Greater Melbourne	Vic
Greater Brisbane	Qld
Greater Adelaide	SA
Greater Perth	WA
Greater Hobart	Tas
Greater Darwin	NT
Canberra/ACT	

Source: NHFIC

Household formation model

The household formation forecasts are based on estimating the total number of households by type for each year of the projections and for each geographic area, to accommodate the resident demographic. Like population forecasts, they are estimated as of 30 June each year.

The model is not a measure of observed transactions in the market in any one year. In the current period of low population growth, positive market sentiment and considerable home purchases could support higher levels of actual demand for new housing.

Given recent falls in vacancy rates, the model suggests some latent household formation could have occurred after the shock in 2020. However, this is difficult to assess until the 2021 Census data are released. Nonetheless, the household formation approach developed here is of benefit because it incorporates the impacts of some key macroeconomic variables on demand and builds on the work of the former Housing Supply Council.

Methodology for projecting new household formation

- Population projections are based on data provided by the Centre for Population and are consistent with the population figures in the 2021 Population Statement.
- These projections allocate the forecast population by 5-year age group into family and household living arrangements. This allocation is based on long-term drivers, namely population growth and broader demographic changes. This allocation is done with regard to the past demographic trend identified through Census and calibrated to the Australian Bureau of Statistics' Household and Family Projections, Australia 2016 to 2041 Series I ratios for future living arrangements (which is based on living arrangements fixed to the 2016 Census ratios).
- From the Census data, the ABS provides estimates of propensity for each of the age cohorts in the resident population to form, or belong to, a family or non-family household, or to live in a non-private dwelling. These living arrangements are applied at the state, capital city and regional level to the changing population size and age profile to estimate the number of households each year.
- The number of households by type includes estimates for family households, such as couples with children, couples without children, sole parents and other family households. The number of group households and lone person households is also estimated. The changing trends in the preferences of different household types are applied to provide estimates of trends in demand by dwelling type.

- Finally, the number of dwellings demanded is estimated for each state, capital city and regional area, including by type of dwelling, and aggregated to the national level over the projection period.

Importantly, the model takes into account far more than population forecasts. It considers:

- Changes due to the ageing population, changing average number of children per family household and other compositional changes in the ways people form various living arrangements
- The impact that economic factors can have on people's living conditions including the effect of changes to incomes, rents and unemployment
- An allowance for vacant and unoccupied dwellings due to dwellings that are temporarily vacant, holiday homes, permanently vacant (including abandoned) and used by temporary visitors rather than 'residents'.

NOM and household formation

The most consequential assumptions for household formation in the model are NOM and the changing age structure of the existing resident population. NOM figures provided by the Centre for Population have been downgraded in the short term but upgraded from 2022–23. These expectations of NOM have worsened/improved since our State of the Nation's Housing 2020 report (Table 2.5).

Impact of economic variables on household formation

The household formation projections are adjusted by drawing on empirical assessments of how key macroeconomic variables – unemployment, income and rents – affect living arrangements and demand for dwellings.

The following assumptions have been made to estimate household formation and are broadly in line with the Mid-Year Economic and Fiscal Outlook (MYEFO) budget estimates:

- The unemployment rate was expected to be at 7.25% in June 2021, before steadily falling to a plateau of 5% in June 2026 in our last report. But with unemployment now around 4.25% – much lower than anticipated – and projected to remain at this level by 2023, this will provide a more substantial boost to household formation in the short term.
- Following the significant boost to incomes from JobKeeper in 2019–20, in 2020–21 and 2021–22 the boost to income reverses. From 2022–23 it returns to growth and, compared with our last report and reflecting lower unemployment (stronger demand for labour), wages and incomes are now projected to show higher growth in real terms.
- Rents fell sharply in real terms in 2020–21 but, while the story is quite varied across markets, in line with stronger economic conditions and reflecting internal migration in response to COVID, rents have returned to positive growth in 2021–22 (on average). Going forward, rents are expected to continue showing rises broadly in line with historical trends but, with incomes also rising, affordability could improve modestly (on average) which would be positive for household formation.

Table 2.5: NOM – 2020 versus 2021 assumptions

	2020 report	2021 report	Change
2020–21	-72,000	-100,500	-28,500
2021–22	-22,000	-40,900	-18,900
2022–23	95,900	180,100	84,100
2023–24	201,100	212,600	11,500

Source: NHFIC, Centre for Population

Household formation projections

The population shock is still influencing rates of new household formation, but this is expected to reverse strongly over the course of the next few years. New household formation is expected to remain low at around 60,000 in 2021–22, but then rise strongly to 182,000 in 2024–25 and then settle at around 175,000 to 180,000 new households a year.

As international borders reopen and NOM resumes, new household formation will recover over the coming years, climbing back towards pre-pandemic levels.

The fall in NOM had a stronger adverse effect on the multi-unit market given the drop off in migrants and students. As NOM rebounds, new household formation for multi-unit dwellings is expected to get back to close to pre-pandemic levels over the next 3 years.

When assessing these projections, it is important to distinguish between expected household formation and demand. People typically purchase detached dwellings when they are already renting, which means most purchases of new detached stock do not necessarily result in a new additional household forming. While household formation for detached dwellings is expected to gradually recover after falling to 26,000 dwellings in 2021–22, given the current low interest rates, demand for (particularly detached) dwellings is likely to remain strong.

The household formation projections also include a breakdown of dwellings by household and family group. This shows that of the 1.7 million plus new households expected to form from 2022 to 2032, the strongest growth is expected to be from lone person households at 595,000 (or over a third of all new households) (See appendix).

Table 2.6 Expected household formation

	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26
2020–21 forecasts	54,200	91,600	144,700	178,800	175,300	na
2021–22 forecasts	103,300	60,400	158,600	166,600	181,500	177,800

Source: Macroplan, NHFIC. (e) net estimate using actual completions less estimated demolitions.

Table 2.7 Expected household formation by dwelling type

	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26
Detached	56,100	25,900	92,100	95,100	105,200	100,900
Medium density and apartments	49,400	37,200	68,600	73,900	78,500	79,100
Other	-2,200	-2,700	-2,100	-2,400	-2,200	-2,200
Total	**103,300**	**60,400**	**158,600**	**166,600**	**181,500**	**177,800**

Source: Macroplan, NHFIC. (e) net estimate using actual completions less estimated demolitions.
NB: Numbers may not add due to rounding

Sensitivity analysis

Table 2.8: New household formation

	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26
Net Overseas Migration (NOM base)	-100,500	-40,900	180,100	212,600	235,000	235,000
Household formation (central forecast)	103,300	60,400	158,600	166,600	181,500	177,800
Net Overseas Migration (upside scenario)	-100,500	78,500	235,000	235,000	235,000	235,000
Impact on household formation (relative to base)	-	50,600	24,600	11,300	2,700	2,400
Net Overseas Migration (downside scenario)	-100,500	-77,400	95,900	201,100	235,000	235,000
Impact on household formation (relative to base)	-	-15,500	-35,900	-6,300	-1,800	-1,300

Source: Macroplan, NHFIC.

The Centre for Population has updated its NOM forecast by 132,000 from 2022 to 2024 due to high vaccination take up rates and a substantial relaxation of international border restrictions earlier and faster than envisaged at the 2021–22 Budget.

But the pace of the recovery of NOM will remain highly uncertain due to the unpredictability of COVID-19 and measures to contain it, together with the desire of people migrating as international borders are relaxed. Given this uncertainty, additional household formation scenarios are provided based on the Centre for Population's NOM upside and downside case scenarios.

The scenarios show that under an upside NOM scenario, its expected net new household formation would be 92,000 higher to 2025–26 relative to the central forecast. Under a downside scenario, its expected household formation would be 61,000 lower to 2025–26 relative to the central forecast.

State of housing supply

State of the Nation's Housing 2021–22

State of housing supply

550k+

net new dwelling completions

FORECAST BY 2024, EXCEEDING NEW HOUSEHOLD FORMATION

60% upswing

detached dwelling construction

IN THE YEAR TO MAY 2021, AIDED BY HOMEBUILDER

Up to 6 years

between development application and completion

in some areas, constraining the property industry's ability to meet future demand

KEY POINTS

- Record low interest rates combined with state and federal government stimulus continue to drive a strong upswing in construction activity, with net completions across the country expected to average 183,700 over the next 3 years.
- Detached dwellings are leading the cycle, aided by the temporary boost from HomeBuilder and other state support. In 2021–22 and 2022–23, detached net completions are expected to average 118,300. Medium-density dwellings didn't benefit as much from HomeBuilder, but net completions are still expected to average 66,600 during these years.
- At some point, a downswing will take hold likely driven by higher interest rates. The timing is uncertain, but the RBA's guidance at the time of writing is that the cash rate will remain at its current level until 2024. Financial markets expect the cash rate to increase much sooner. RBA forward guidance at the time of writing is used in our modelling, with the downturn in construction beginning in 2024 and net completions falling from 194,100 in 2022–23 to 127,100 in 2026–27.
- Household formation drives the long-term forecasts. After the trough in 2026–27, completions are expected to gradually increase to 186,000 in 2031–32. The COVID-cycle is expected to be over by 2024–25. By 2024–25, household formation and demand for vacant dwellings is expected to slightly exceed construction activity, which looks likely to remain the status quo until 2030–31.
- Industry liaison indicates serviced and development-ready greenfield land supply remains a significant constraint in key markets, such as Sydney and SE Qld. This could limit the development industry's ability to meet future demand. Industry liaison also indicates the development approval process is long and cumbersome. In some instances, it takes 6 years from when a medium-density and apartment development application is first lodged to when construction is completed.
- During the next 3 years, 167,400 net completions are expected in Vic, while 147,400 are expected in NSW and 111,200 in Qld. SA (32,000), WA (67,500), Tas (10,100), NT (2,300) and the ACT (13,000) make up the remainder of the forecast net completions across the country during this period.

Introduction

Economic conditions are favourable for new housing supply to remain at high levels. Interest rates are at all-time lows and housing prices are rising.

The HomeBuilder stimulus program primarily supported detached construction and alterations and additions over medium-density and apartment construction. Consequently, the pipeline of work in detached dwelling construction is strong. Since the end of March, lead indicators such as building approvals have declined in response to the end of the program.

First home buyers have been supported by low interest rates, the Federal Government's HomeBuilder program and First Home Loan Deposit Scheme, and state government stamp duty relief.

Medium-density and apartment construction, while well below the peak levels seen in 2017, is starting to increase. NSW is more advanced in the cycle than the other states. The 'State of the housing market' chapter shows that listings fell substantially in the medium-density and apartment rental markets of both Sydney and Melbourne due to international border closures. Many of the properties withdrawn from the rental market were likely sold to owner-occupiers – particularly first home buyers. This helped to clear these rental markets, creating favourable conditions for construction activity.

The emergence of the Delta variant removed any chance of the RBA withdrawing stimulus before vaccination targets were met, pushing out the timing of the downturn in construction activity. As a result, new housing supply will likely exceed new household formation for a few more years.

The new detached home and alterations and additions part of the construction industry is near full capacity. Although wages growth remains modest, the industry is experiencing bottlenecks in the supply of imported materials, such as framing timber, PVC piping and reinforcing steel, putting upward pressure on construction costs.

At this stage, the aggregate data is not showing delayed commencements or completions, but these are expected in the months ahead. If supply constraints remain persistent over the long term, construction activity will likely remain at high levels for longer than forecast.

The cyclical upswing

Dwelling approvals in the current cycle have been driven by rising prices and low mortgage rates. Fiscal policy has also played a role, with state government transfer duty concessions for first home buyers, NHFIC's First Home Loan Deposit Scheme and the Federal Government's HomeBuilder program adding stimulus.

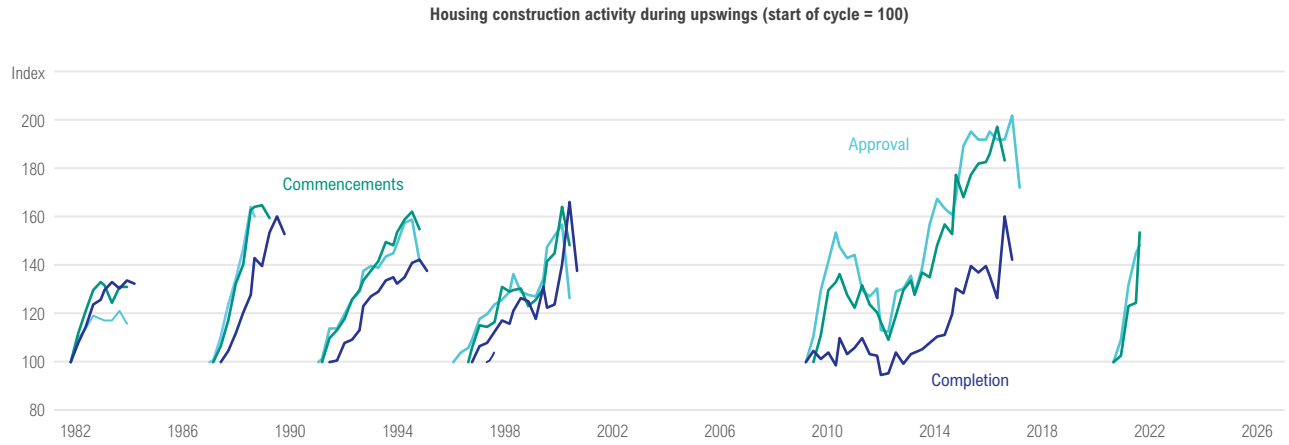
Dwelling approvals have increased rapidly, suggesting commencements and completions have significant upside from current levels (Figure 3.1). Since HomeBuilder ended in March 2021, detached dwelling approvals have begun to slow. However, the other stimulus remains in place leaving near-term upside risk to our forecasts.

Interestingly, the lag between approval and commencement, and commencement to completion seems similar to past cycles. This suggests that, at the macro level, development and construction constraints remain relatively unchanged over the longer-term. That said, constraints may exist at the state, capital city or regional level.

In past cycles, the growth in completions has generally been less than growth in both approvals and commencements. The main exception being the 1982 cycle where the growth in commencements and completions exceeded approvals.

In the cycle that began after the GFC, both approvals and commencements rose strongly, but initially completions were sluggish. This probably reflects the nature of the GFC downturn, which hit the economy quickly, leaving a significant pipeline of projects approved and commenced, but not completed.

Figure 3.1: Housing construction activity (start of cycle = 100)



Source: ABS Cat 87520, NHFIC

Factors affecting supply

At the economy-wide level, a long-run and relatively stable relationship exists between construction activity, and interest rates and dwelling prices. Given most new dwelling construction and purchases are made by borrowing, there is a strong relationship between these factors and the cost of debt in the short run.

Fiscal policy also plays a role. The HomeBuilder program and First Home Loan Deposit Scheme assisted construction activity during the pandemic. State governments provided support, such as first home buyer grants and transfer duty concessions. Some state governments such as WA and Tas provided direct grants for new construction.

Over the long run, movements in household formation anchor the *number* of dwellings constructed. While changing household preferences and affordability impact the composition of new dwelling construction.

Table 3.2 shows the support now in place from both the Federal Government and the RBA.

State governments have also played a significant role in providing fiscal support to the housing market during the COVID-19 recession. Some of the stimulus has been recently withdrawn, with NSW reducing the size of its first home buyer stamp duty concession in August 2021. The land tax and rent support packages put in place during the early stages of the pandemic have also been removed in most states and territories.

However, the additional $30,000 pandemic-related concession for first home buyers who purchase or build a new home in Tas has been extended to 30 June 2022.

Table 3.2: Federal Government fiscal and monetary stimulus

RBA	• Target cash rate was cut to 10 basis points at the November 2020 board meeting, and the RBA has indicated it will not increase the cash rate until late 2023. In a speech on 16 November 2021, Governor Lowe said the RBA was unlikely the cash rate target would rise in 2022. • Term funding facility was set up to provide low-cost funding to authorised deposit-taking institutions lending to households and small and medium-sized businesses. The interest rate on the facility is 0.1%. It is now closed to new drawdowns, although the RBA expects the facility will remain in place until mid-2024. • Interest on exchange settlement balances were cut to 10 basis points at the 18 March 2020 board meeting and further cut to 0 basis points at the November 2020 board meeting. • Purchase government securities at the rate of $4 billion a week until at least mid-February 2022. As part of its initial response to the pandemic, the RBA purchased $200 billion of government bonds.
Federal Government	• The First Home Loan Deposit Scheme was extended to June 2022, with an extra 10,000 places available. The scheme allows first home buyers to borrow up to an LVR of 95%, without needing to pay lenders mortgage insurance.

Source: RBA, the Treasury

Table 3.3: HomeBuilder applications up to June 2021

Jurisdiction	% total*	% new construction	% private detached dwelling approvals
NSW	15.7	67.1	79.1
Vic	29.9	83.5	78.3
Qld	21.8	83.2	92.3
WA	16.6	92.1	84.7
SA	10.5	82.7	111.8
Tas	3.0	83.7	92.2
ACT	2.2	77.4	207.3
NT	0.4	89.1	80.3

Source: the Treasury, ABS Cat No. 8731
*percentage of the total number of applications for the program in Australia

The Federal Government's HomeBuilder program

HomeBuilder was a key initiative designed to support new construction for owner occupiers, including first home buyers, during the early stages of the pandemic.

Demand for the program was particularly strong in both Vic and Qld, which accounted for 51% of all applications received (Table 3.3).

The program was introduced in 2 phases:

1. A grant of $25,000 for eligible contracts to build or buy a new home or substantially renovate an existing home entered into between 4 June 2020 and 31 December 2020
2. A grant of $15,000 for eligible contracts to build or buy a new home or substantially renovate an existing home entered into between 1 January 2021 and 31 March 2021.

Around 70% to 90% of all applications were for new construction, with the remainder for major home renovation. NHFIC has also calculated the ratio of HomeBuilder applications to new approvals to illustrate the relative strength of the program in each state. The use of the program in kicking off new construction varied between jurisdictions, with applications of 78.3% of private house approvals in Vic versus 207.3% in ACT.

In WA, not all of the new construction projects approved were started, given the downturn that gripped that state in the years just prior to the pandemic. In NSW, the number of HomeBuilder applications for new construction accounted for 79.1% of total private detached dwelling approvals.

Land availability

The process of creating a pipeline of suitable land for residential development involves state government agencies and private sector developers working together.

State governments determine where and when new greenfield land is rezoned and how this land will be connected to existing infrastructure. They attempt to strike a balance between supporting growth and protecting public interest.

Developers, on the other hand, seek to maximise profit while working within state and local government regulations. They subdivide the zoned land, construct dwellings and services within new subdivisions. Some developers subdivide the zoned land and then sell the land directly to the public. Developers are also the conduit by which infrastructure is funded. They pay infrastructure charges and either back pass these costs onto landowners, if they are just developing land; or property buyers, if their business model includes dwelling construction.

In the urban infill, local government has a larger role to play than it does in greenfield areas and development is done on a relatively ad-hoc basis. State government land rezoning is also important in land supply process in the urban infill.

Cities with topographical constraints that restrict or limit the direction of expansion of the urban fringe, such as Adelaide and Sydney, have policies that favour greater infill development. In Sydney, a clear state government policy restricts development in the rural areas within the Sydney metropolitan area. In contrast, cities such as Brisbane, Melbourne, and Perth, which have less constrained topographies, are continuing to see a higher share of expansion by land release on the urban fringe.

Table 3.4: ABS proposed indicators by primary data source

	Characteristics of urban land	Characteristics of regulation	Supply outcomes
Indicators	Lot characteristics	General regulatory system features	New approvals/completions
	Modelled permitted dwellings	Analysis of instrument content	Price changes/supply elasticities
	Modelled infill potential	Planning system performance metrics	
Data	Cadastral maps	Planning instruments	Building development and demolition approvals
	Urban land datasets	Surveys	Property transaction
		Development application information	

Source: ABS

NHFIC industry liaison

NHFIC liaison indicates that Sydney is the main market where land availability is a significant constraint on housing supply.

Developers report the following issues are limiting their ability to deliver new supply:

- Lack of zoned land serviced with infrastructure. Utility providers in some jurisdictions are unable to deliver services in a timely manner that allows subdivided land to be prepared for dwelling construction. This problem is more apparent in medium-density and apartments rather than the detached dwelling market.
- Many investors are building land banks and not putting land onto the market for development.
- Builders are entering the development market and purchasing land that would normally be purchased by large developers.
- Land supply in Sydney is likely to be exhausted within 12 months.
- In the Green Square development precinct in Sydney only 40% of projects were completed within a 5-year period after development applications were lodged. The remaining 60% of stock was completed more than 5 years after the development application was first lodged.
- In the Canada Bay development precinct, the time from initial site identification to completion is 4.6 years for projects less than 100 dwellings. For projects larger than 100 dwellings, this period extends to around 6.5 years.

Optimistic expectations for supply over the next few years shouldn't create complacency in state or local government planning authorities. They should now be planning to have land available for development in the next cycle. This brings even more urgency as international border reopening will put additional pressure on supply over the next few years.

Data

The publicly available detailed data on land supply is extremely limited. The ABS publishes the value of residential land by state and territory in the Annual National Accounts, but there is little more detailed consistently measured information. Consistently measured publicly available information on the future supply of land by characteristics such as its degree of servicing, whether it is subdivided or not, and what amount of land in greenfield areas has been rezoned residential would be useful for all stakeholders in land supply.

However, new initiatives should improve this situation. The National Housing and Homelessness Agreement (NHHA) (2018) plans to use 14 indicators to help meet its objectives (Table 3.4). In July 2021, the ABS began collecting data to estimate the number of dwellings permitted by zoning in cities or urban areas.

Regional Qld

The Qld Government's statistician publishes quarterly data on land supply. The latest data shows the state has 150,291 hectares of greenfield and brownfield land available for residential development, with most in the Toowoomba and Darling Downs region (Table 3.5). SE Queensland and Wide Bay also have relatively large areas of land for residential development.

However, development data on its own does not indicate the number of dwellings that could be produced. For example, the yield on land in SE Queensland is more than twice that of the second largest high yield region (N Qld) and almost triple that of Toowoomba and the Darling Downs.

Greenfield development goes through several stages after rezoning. Once lots are approved, developers seek approval to connect utilities with existing networks. In SE Queensland, the number of approvals for utility connection is around 80% of lots approved for subdivision, suggesting that connections don't keep up with lot development (Figure 3.2 – LHS).

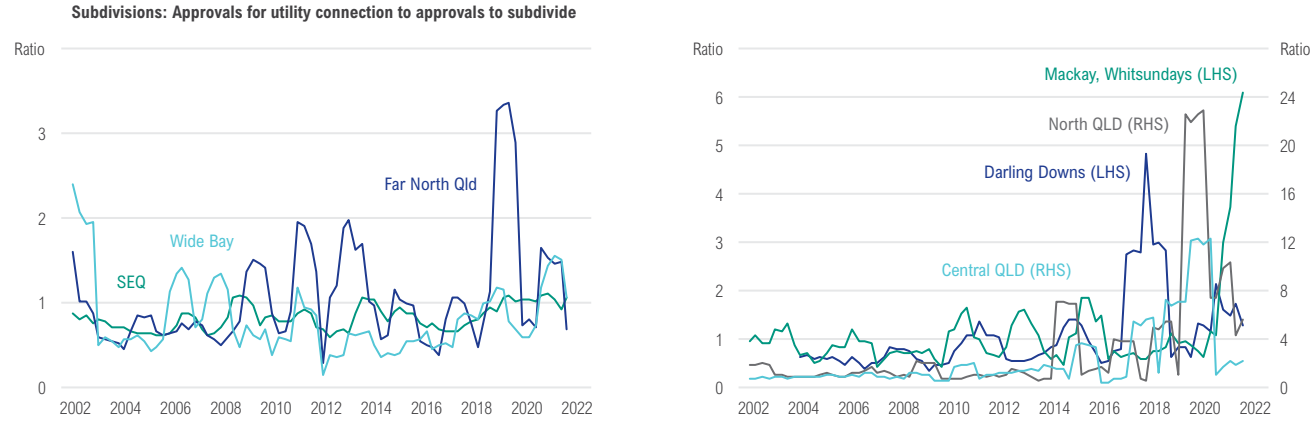
In the smaller regions, the relationship between approval for connection and approval for subdivision is more volatile: the number of approvals for connection can sometimes be 6 times the number of approvals for subdivision (Figure 3.2 – RHS). A large positive ratio could be due to previously approved projects receiving approval for connection. However, it could also simply reflect a fall in the number of projects approved for development.

Table 3.5: Qld regional broadacre land supply and yield (September 2021)

Region	Land area (hectares)	Estimated yield (dwellings)	Yield per hectare (dwellings/ hectare)
SE Qld	30,623	408,504	13.3
Toowoomba & Darling Downs	6,054	28,040	4.6
Wide Bay	31,3486	60,736	1.9
Central Qld	4,057	19,374	4.8
Mackay, Isaac & Whitsunday	5,507	32,063	5.8
Far N Qld	6,345	35,221	5.6
N Qld	7,332	47,887	6.5
Qld	87,887	614,299	7.0

Source: Qld Government statistician

Figure 3.2: Qld lots approved for utility connection as a ratio of total lots approved for development



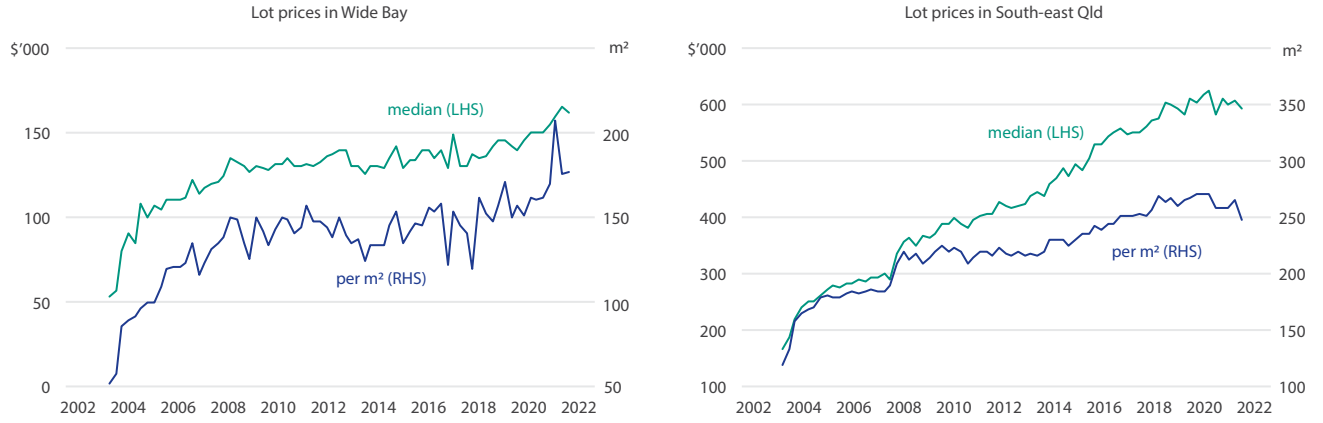
Source: Qld Government statistician

The sluggishness of fully serviced land to respond to stronger demand in the SE Queensland market appears to have added some upward pressure on land prices, with the median price in this market increasing by 50% between 2010 and 2018 (Figure 3.3). However, since then prices have remained around $600,000, coinciding with approved serviced land increasing at the same pace as development approval. The ratio has slowed a little in the past year, likely putting upward pressure on land prices again.

In SE Queensland, developers have responded to the strong growth in median prices by reducing lot sizes to make home and land packages affordable. Land prices per square metre increased by only 20% between 2010 and 2018.

In other regional areas of Qld, affordability is also an important consideration for developers. The large increase in the median land price during the pandemic has been matched by a large reduction in lot size that has kept the unit lot price around $150/m^2.

Figure 3.3: Regional Qld land prices



Source: Qld Government statistician

Metropolitan Sydney

The NSW Department of Planning, Industry and Environment estimates there is enough rezoned land to develop 118,484 dwellings in the north west and south west regions of Greater Sydney (Table 3.6). The Department estimates suggest the amount of land released land is equivalent to 141,990 dwellings.

Land further down the development pipeline is significantly less than the potential land supply, with only 6,410 lots approved and waiting for sale and dwelling construction. However, an estimated 14,968 lots are one step back in the development process at subdivision approval.

Land sales in Sydney, which have accelerated in response to low interest rates and fiscal stimulus, are now back to 2017 levels. However, given the average determination time of both residential and subdivision development applications has been increasing since 2015, this puts a brake on the amount of supply that can be bought to market. It now takes, on average, 130 days for subdivision approval and 65 days for all residential dwelling development approval.

Table 3.6: Greater Sydney potential greenfield lots (March 2021)

Region	Released	Rezoned
North west	84,161	73,461
South west	57,829	45,023
Total	**141,990**	**118,484**

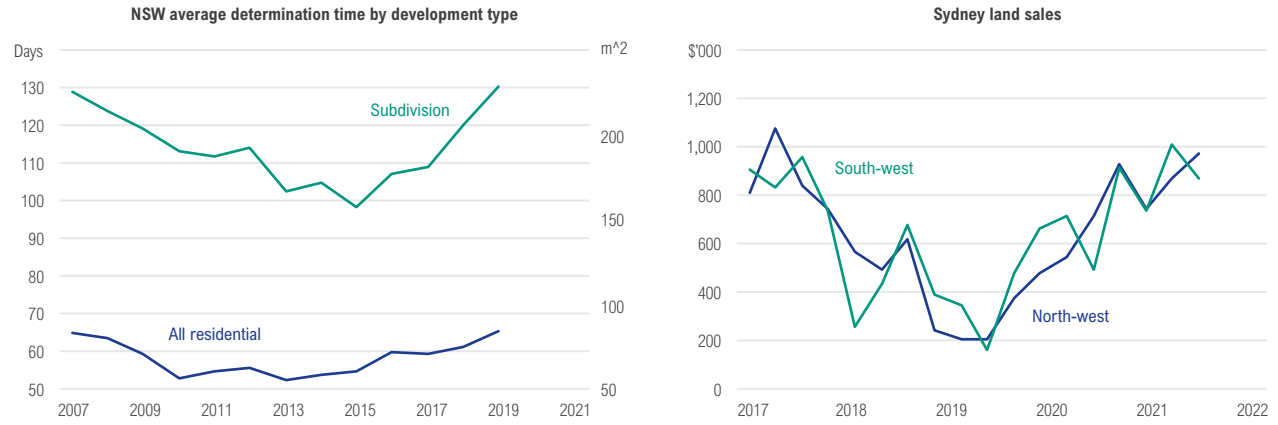
Source: NSW Department of Planning, Industry and Environment

Table 3.7: Greater Sydney greenfield land supply (Lots, June 2021)

Region	Subdivision assessment	Subdivision approved	Lot approved (vacant)
Wilton	292	696	181
South-west	2,820	6,126	2,444
North-west	1,432	7,741	3,785
Macarthur	1,389	405	0
Total	**4,943**	**14,968**	**6,410**

Source: NSW Department of Planning, Industry and Environment

Figure 3.4: Average determination time and land sales, NSW and Greater Sydney



Source: NSW Department of Planning, Industry and Environment

Metropolitan Melbourne

The Vic Department of Environment, Land, Water and Planning reports 352,441 englobo lots are either zoned or unzoned in 2020 – a number that has been steadily declining since 2015.

Table 3.8: Zoned and unzoned residential land, Greater Melbourne

Year	Broadacre lots unzoned englobo*	Broadacre lots zoned englobo	Total
2013	154,031	266,777	420,808
2014	na	na	na
2015	154,438	202,589	357,027
2016	145,764	207,834	353,598
2017	129,845	206,530	336,375
2018	128,086	249,606	377,692
2019	133,244	234,993	368,237
2020	125,450	226,991	352,441

Source: Vic Department of Environment, Land, Water and Planning. Land is either zoned or unzoned undeveloped, unserviced and zoned to be subdivided.
*Englogo land is a large parcel of land that can be subdivided into at several (at least 6) lots.

Supply forecasts

Definitions

This report uses the ABS definitions of dwelling type as the basis for its analysis, as detailed in Table 3.9.

Estimates for each housing type are then prepared at the national and state/territory level. Capital city forecasts are also produced, but Canberra and ACT are grouped together. Rest of state forecasts are the state forecasts minus the capital city forecasts.

Table 3.9: Dwelling supply categories

Dwelling category	ABS structure dwelling types
Detached	Separate house
Medium	Semi-detached, row or terrace house, townhouse etc. with one storey
	Semi-detached, row or terrace house, townhouse etc. with 2 or more storeys
	Flat or apartment in a 1– or 2–storey block
	Flat or apartment attached to a house
Apartment	Flat or apartment in a 3–storey block
	Flat or apartment in a 4 or more storey block

Source: SGS Economics, ABS. Non-private dwellings and other residential buildings have been excluded from the analysis. Non-private dwelling types include hotels, staff quarters, hospitals, hostels, nursing homes, certain types of welfare accommodation (i.e. group homes) and prisons. Other residential dwellings include caravans, houseboats and dwellings attached to commercial buildings.

Top-down forecasts

2021–22 to 2024–25

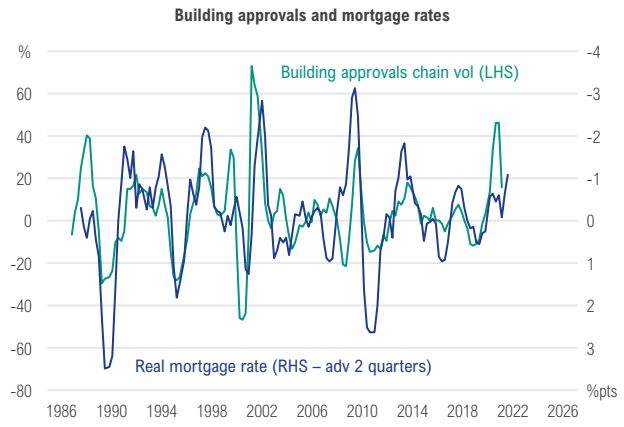
We use a top-down approach to forecast dwelling completions for both detached dwellings and medium-density and apartments at the national level over the next 4 years. Over the remaining years of the forecast period from 2026 to 2032, we assume new supply slowly adjusts back to the levels implied by household formation.

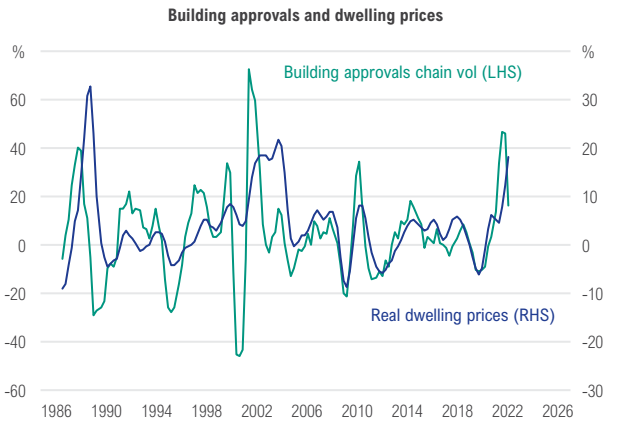
Our model uses the well-recognised relationship between macroeconomic variables, such as house prices, interest rates, household disposable income and construction activity. This approach reflects more certainty about the near-term macroeconomic backdrop and the long-term relationship between household formation and dwelling supply.

Figure 3.5 shows the well-established relationship between building approvals and both dwelling prices and interest rates.

We then estimate the relevant equations in the model of the Australian housing market developed at the RBA by Peter Tulip and Trent Saunders for both detached dwellings and medium-density and apartments.[9]

Figure 3.5: Dwelling completions, house prices and interest rates





Source: ABS, RBA, NHFIC. House prices are the ABS established median house price. The mortgage rate is the average banks' standard variable mortgage rate.

9 Trent Saunders and Peter Tulip, "A Model of the Australian Housing Market", RDP 2019-01, Reserve Bank of Australia, March 2019.

The steps are outlined below and shown in more detail in the Appendix of this chapter.

- Estimate the equation for chain volume building approvals for each dwelling type.
- Convert the chain volume estimate of building approvals into a building approvals number by estimating dwelling quality.
- Estimate the equation for dwelling commencements by each dwelling type.
- Estimate the equation for dwelling completions for each dwelling type.

Estimates for demolitions by dwelling type over the 4-year forecast period were made using the ABS data on approval for demolitions. During the forecast period, a rolling 2-year average was used with 70% weight on the previous year and a 30% weight on the year prior to that. This approach puts less weight on the demolitions approved during the 2014 to 2017 apartment boom.

The estimates for net completions were calculated as gross completions less demolitions.

NHFIC then provided Macroplan with an estimate for net dwelling completions by dwelling type at the national level and these forecasts were then distributed around capital city and rest of state markets.

In forecasting dwelling completions, we make the following macroeconomic assumptions:

- Nominal household disposable income is 4.25% at the end of 2021–22, reflecting a rebound from Australia's second wave of COVID-19, and more moderate growth of 3.5% at the end of 2022–23 and throughout 2023–24 and 2024–25.
- In forecasting interest rates, we use implicit RBA guidance and build in a model increase in mortgages rates. The mortgage rate remains unchanged in 2021–22 and 2022–23. In 2023–24 the mortgage increases by 50bp then a further 100bp in 2024–25.
- We assume dwelling price growth is relatively consistent with the projections of interest rates. We assume dwelling price growth is 15% at the end of 2021–22. At the end of 2022–23, price growth moderates to 7% and by the end of 2023–24 price growth is -5%. At the end of 2024–25 price growth is -10%.

Near-term projections for completions produced by the model are adjusted for the latest building approvals data.

Saunders and Tulip found that 83% of detached dwellings and 61% of medium-density and apartments are completed one year after approval (Table 3.10). A further 12% of detached dwellings and 24% of other dwellings are completed over the longer term. Overall, on average, 95% of detached dwellings that have building approval are completed. By comparison, 85% of medium-density and apartments are completed.

Table 3.10: Building approvals: Percentage completed

	Detached	Medium-density and apartments
1 year after approval	83	61
Longer term	95	85

Source: RBA

2021–22 to 2024–25

The ABS building approvals data provides a reliable estimate for completions over the year following approval (2021–22) and we apply the approval: completion rate outlined in Table 3.10. We also assume those dwellings approved and not yet built in the year after approval are built in the second year after approval (2022–23).

Between 2022–23 and 2024–25 we use the top-down forecasts for each dwelling type and consider a range of factors to distribute the net number of completions.

- The historical proportion of construction activity by building type in each state and capital city. The ABS provides data on gross completions and demolitions by building type at the state level.
- At the capital city level, liaison with industry provides a good guide on the capacity of the industry to provide new supply, particularly in the capital city markets. We consider industry body projections and information provided during our liaison with developers as inputs into the capital city forecasts.
- The household formation projections from the 'State of household formation' chapter are then used to anchor the long-term outlook. This approach is consistent with the methodology used to develop the top-down forecasts.
- Estimates of the gross vacant stock to total stock (gross vacancy ratio) use the estimates in the 'State of household formation' chapter, which are also considered when finetuning our forecasts. In particular, the long-term outlook for the gross vacancy rate is considered relative to its history.

Estimates of the gross vacancy rate show a higher rate in the regions relative to the capital cities. The ratio is significantly more cyclical in the capital cities due to the stronger link to NOM.

2025–26 to 2031–32

The projections between 2025–26 and 2031–32 begin at the forecast at the end of 2024–25, aiming to gradually bring new supply back to the forecast rate of household formation for each dwelling type by the end of the forecast period. This adjustment is made to recognise the fact that supply should be consistent with household formation over the long term. The level of vacant stock is also an important consideration in forecasting new long-term supply.

The starting point for forecasting over this period is the:

- Estimates for household formation and net new stock in 2024–25
- Ratio of gross vacant stock to total stock (gross vacancy ratio) in 2024–25 relative to its historical trend

Generally, the high projected growth in new supply between 2021–22 and 2024–25 means the gross vacancy ratio for most markets in Australia in 2025 will be well above average.

The increase in net additions is calculated as a percentage of projected household growth (including vacant stock). The vacancy factor is the vacant housing stock, including rental and owner-occupier housing, divided by the estimated total housing stock.

For example, in NSW, in 2025–26 and 2026–27, net additions are 85% of the household increase including vacant households.

This adjustment brings the vacancy factor back towards, but not completely back to, the long-term average over several years. In the case of NSW, for example, we adjust it back to about 7.7% which is still above the 7.1% long-term average.

We have 2 reasons for not sharply adjusting lower the supply pipeline to force down the vacancy rate:

1. The supply response to household formation can take many years. In the 2010s, supply was generally playing catch-up in a period when NOM drove strong growth in household formation. During this period, the vacancy factor was under downward pressure.
2. In less supply-responsive markets, such as Sydney, vacancy rates face underlying downward pressure.

More recently, other factors may have changed household formation. COVID-19 may have encouraged a change in preference to smaller households – a phenomenon that may be temporary. If so, our estimates of household formation may be understated and the rise in the vacancy rate may be overstated. Furthermore, more households may have decided to invest in a second home, increasing the stock of vacant dwellings.

State, capital city and rest of state forecasts

A model using macroeconomic variables for short to medium-term forecasting works well at the aggregate level, but it is less reliable at the state, capital city and rest of state levels. We therefore use the forecasts for each building type at the macro level and attempt to distribute the supply around the states, capital cities and regions.

The data shows that construction activity in the regions is less cyclical than in the capital cities, apart from Qld where the major markets of the Gold Coast and Sunshine Coast are comparable to capital city markets. This implies that regional Qld and Brisbane growth rates might both experience similar magnitudes of cycles. In Tas, Launceston and the other northern towns are similar in size to Hobart, so the markets might also be expected to respond similarly to the factors driving supply.

The major regional markets of NSW, such as Newcastle and Wollongong, see a larger cycle that is similar to Sydney, but other regions in NSW see less cyclicality.

The regions also have a larger share of detached dwellings – a dwelling type that tends to be less cyclical than medium-density and apartments. Medium-density and apartments typically have a larger share of investors, which means construction activity for this dwelling type depends on a larger number of factors, such as conditions in the rental market, price expectations and developer credit availability.

Another issue is the large increase in construction activity in the regions close to capital cities during the pandemic. This may reverse as the pandemic ends and people migrate back to the cities, resulting in less household formation in the regions and relatively less construction activity.

Supply projections

Our top-down forecasts show a rise in completions, reflecting the interest rate cycle and fiscal stimulus. As the economy recovers and stimulus is withdrawn, we expect construction activity to begin a cyclical decline in 2023–24 (Table 3.11). Net completions are expected to fall by 8% in 2020–21 before rising by 11% in 2021–22.

Table 3.11: Net additions to the Australian housing market

Forecast	2019–20 (e)	2020–21 (e)	2021–22	2022–23	2023–24	2024–25	2025–26
2020	170,000	180,900	159,800	120,700	128,300	148,400	na
2021	172,100	157,600	175,700	194,100	181,300	163,200	134,100

Source: Macroplan, NHFIC. (e) net estimate using actual completions less estimated demolitions. ABS demolition approvals are used in 2018–19 to 2020–21.

Our forecast indicates the recovery will be led by detached dwellings, with net completions in this building type increasing from 80,600 in 2020–21 to 119,300, in 2022–23 (Table 3.12). We also expect 2023–24 to be a solid year with 101,700 detached dwellings added to the housing stock. Medium-density and apartment net additions are expected to fall by approximately 18,700 in 2021–22 and then rebound by 16,400 in 2022–23.

The medium-density and apartment markets are more exposed to the closure of international borders to NOM and particularly international students. Whereas the detached dwelling market is more likely to benefit from stimulus programs, such as HomeBuilder or state government building grants.

The permanently lower rate of population growth that underpins the demand forecasts feed into the long-term outlook and has severe consequences for the medium-density and apartment market. In 2025–26, we expect net additions to the medium-density and apartment market to be a third lower than pre-pandemic recession levels, before a very modest recovery that still leaves them 15% below this benchmark in 2030–31.

The outlook over the next 5 years should also be put into a long-term context. We estimate that, at the peak of the apartment boom in 2017, a net 106,100 medium-density and apartment dwellings were added to the housing stock compared to 88,300 in 2019–20, just after the beginning of the COVID-19 recession. In other words, net additions to the medium-density and apartment market were already 17% below their peak as the recession began.

Table 3.12: Net additions to the Australian housing market by dwelling type

Dwelling type	2019–20 (e)	2020–21 (e)	2021–22	2022–23	2023–24	2024–25	2025–26
Detached	83,700	80,600	117,300	119,300	101,700	79,200	69,500
Medium density and apartments	88,300	77,100	58,400	74,800	79,500	84,000	64,600
Total	**172,100**	**157,600**	**175,700**	**194,100**	**181,300**	**163,200**	**134,100**

Source: Macroplan, NHFIC. (e) net estimate using actual completions less estimated demolitions. Totals may not add up as other dwellings are excluded from this table.

State of housing supply-household formation balance

State of the Nation's Housing 2021–22

State of housing supply-household formation balance

KEY POINTS

- New household formation is projected to dramatically recover over the next few years with the gap between new supply and new household formation expected to narrow. As the economy strengthens and NOM recovers back to close to pre-pandemic levels, new household formation is expected to run ahead of new supply beyond 2024 for most of the years to 2032.
- NHFIC projections suggest new net supply additions will outpace new household formation by 115,300 in 2022 and 35,500 in 2023 before the recovery in household formation and supply downturn results in a cumulative 163,400 supply shortfall from 2025 to 2032.
- Once NOM has fully recovered, new household formation is expected to exceed new housing supply beyond 2024 by 163,400 dwellings cumulatively, or 20,400 dwellings on average per year.
- By dwelling type, new detached dwelling additions are expected to exceed the number of households forming by around 91,400 in 2022. At the same time, new multi-unit dwellings are expected to exceed the number of households forming by 21,200 dwellings. Household formation projections recover to exceed new detached dwelling supply levels in 2025 and new multi-unit dwelling supply levels in 2026 for much of the period to 2032.
- In Sydney, supply is expected to exceed new household formation by around 12,500 dwellings on average each year from 2022 to 2024, with Sydney's new household formation to exceed supply from 2025 to 2031 by an average of 5,900 dwellings annually.
- In Melbourne, household formation bounces back even more strongly to exceed supply from 2024 to 2030 by an average of 10,100 dwellings annually.
- In Brisbane, supply is expected to exceed new household formation by 4,700 dwellings in 2022. A supply downturn from 2023 results in a peak shortfall of 5,100 dwellings in 2028 before supply recovers.
- In Perth, supply rises strongly to exceed household formation by 6,600 dwellings in 2022. Supply and household formation then follow a similar trajectory to Brisbane, with a peak shortfall of 4,900 dwellings in 2027.
- In Adelaide, supply is expected to exceed new household formation in 2022 by around 4,900 dwellings. The imbalance is reduced over the next couple years, before widening again as supply declines and results in an average annual supply shortfall of 1,300 dwellings from 2025 to 2030.

2022-24

Supply exceeds household formation

Housing supply will outpace household formation by 115,300 dwellings in 2022 and 35,500 dwellings in 2023 before the gap narrows

2025-32

Supply shortfall

Household formation is expected to exceed supply by 163,400 dwellings cumulatively

Affordability beyond 2024

when NOM has recovered, could worsen unless developers are able to get new stock to market in a timely fashion

- In the ACT, supply exceeds household formation by an average of 1,750 dwellings each year from 2022 to 2027, with supply to fall below household formation by an average of 1,100 dwellings from 2028 to the end of the projection period.
- Beyond 2024, new household formation is typically expected to exceed new supply across most jurisdictions. Unless developers are able to get new stock to market in a timely fashion, this could contribute to worsening affordability.

Introduction

Evaluating the future balance of supply and household formation can provide critical evidence on whether future housing supply will be adequate to meet future need.

A prolonged imbalance between the flow of supply and household formation could affect housing affordability, although it is not unusual for one to exceed the other for an extended period.

This chapter assesses the future balance of supply and household formation nationally, by greater capital city regions and rest of state and territory areas, and by dwelling type between 2021 and 2032.

As outlined in the 'State of household formation' chapter, household formation is not a measure of observed market transactions. In a period of low population growth, and therefore low household formation, positive market sentiment could still lead to materially higher levels of actual market demand for housing. Additionally, falling vacancy rates suggest household formation could be stronger than expected over the course of 2021.

National supply-household formation balance

The population growth shock from closing our international borders is driving the projected disconnect between new dwelling supply and household formation. NHFIC expects supply to exceed new household formation by around 54,300 in 2021 and up to a peak of 115,300 in 2022, before the gap narrows.

A sharp recovery in household formation is projected over 2023 and 2024 following the return to pre-COVID NOM. At the same time, dwelling supply enters a cyclical downturn from 2023 to 2027. These changes in household formation and supply results in household formation exceeding supply from 2025 to 2030, with new household formation and supply to be broadly in balance by the end of the projection period.

Figure 4.1: Annual change in household formation and supply and supply-household formation balance
Source: Macroplan, NHFIC

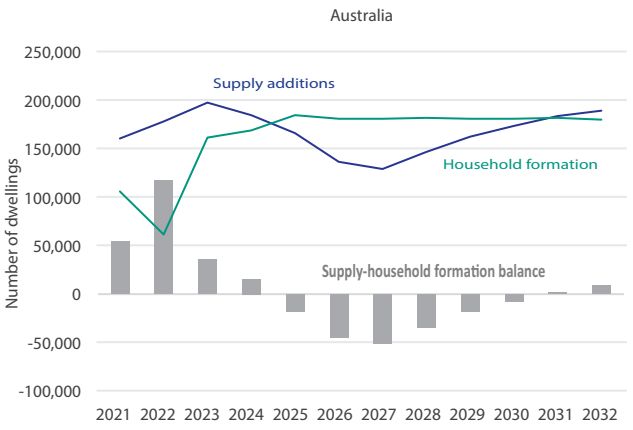


Table 4.1: Annual change in household formation and supply and supply-household formation balance

	Australia		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	157,600	103,300	54,300
2022	175,700	60,400	115,300
2023	194,100	158,600	35,500
2024	181,300	166,600	14,700
2025	163,200	181,500	-18,300
2026	134,100	177,800	-43,700
2027	127,100	178,200	-51,100
2028	144,500	179,000	-34,500
2029	159,700	177,900	-18,200
2030	170,600	178,200	-7,600
2031	180,600	179,100	1,500
2032	185,900	177,400	8,500

Source: Macroplan, NHFIC

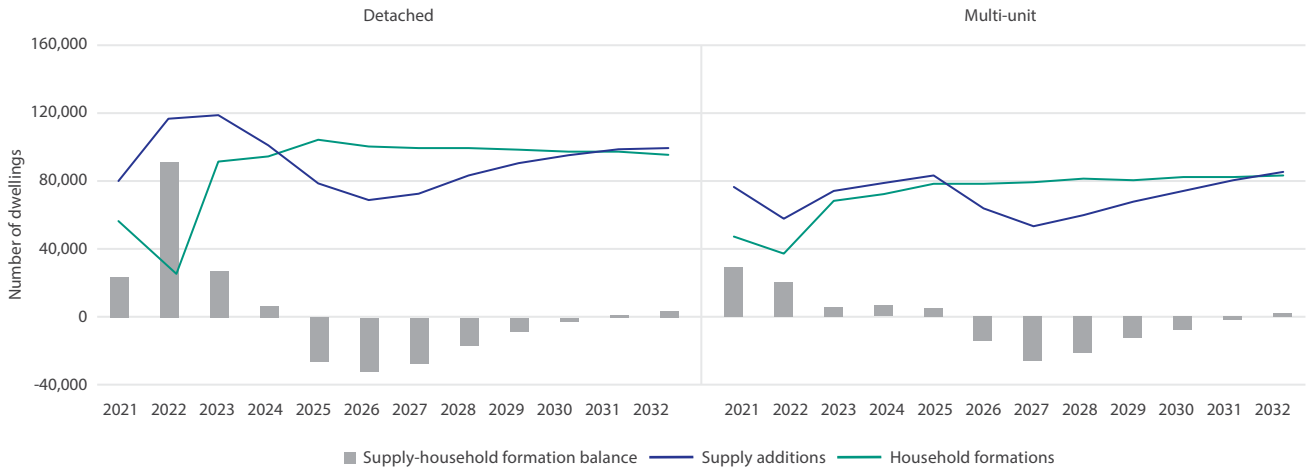
Detached housing supply-household formation balance

In Figure 4.2, supply-household formation balance numbers are disaggregated between detached housing and multi-unit dwellings. New household formation in detached housing is expected to be weak in 2022, but strong levels of stimulus-driven demand for detached housing completions will continue to drive supply higher. This results in supply exceeding household formation by around 91,400 detached dwellings in 2022. However, household formation bounces back strongly and gets back close to pre-pandemic levels in 2024, largely driven by the return of NOM. In the meantime, detached housing supply is expected to decline from its peak in 2023 and fall under household formation levels in 2025. Household formation exceeds supply over the following 5 years to 2031.

Multi-unit dwelling supply-household formation balance

Household formation also bottoms out in 2022 for multi-unit dwellings, but supply also declines from the previous year, resulting in supply exceeding household formation by 21,200 dwellings. Household formation rises the following year but does not reach pre-pandemic levels until 2025. Supply also rises in 2023 and modestly exceeds household formation until 2026 before dropping below household formation levels, leading to a supply shortfall of 26,300 dwellings in 2027. Supply then recovers and but remains below household formation each year out to 2031.

Figure 4.2: Supply-household formation balance by dwelling type[10]



Source: Macroplan, NHFIC

Table 4.2: Supply-household formation balance by dwelling type[10]

	Detached dwellings			Multi-unit dwellings		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	80,600	56,100	24,500	77,100	49,400	27,700
2022	117,300	25,900	91,400	58,400	37,200	21,200
2023	119,300	92,100	27,200	74,800	68,600	6,200
2024	101,700	95,100	6,600	79,500	73,900	5,600
2025	79,200	105,200	-26,000	84,000	78,500	5,500
2026	69,500	100,900	-31,400	64,600	79,100	-14,500
2027	73,200	100,200	-27,000	54,000	80,300	-26,300
2028	84,000	99,900	-15,900	60,600	81,400	-20,800
2029	91,100	98,600	-7,500	68,500	81,600	-13,100
2030	95,700	98,400	-2,700	74,900	82,300	-7,400
2031	99,400	98,000	1,400	81,200	83,700	-2,500
2032	99,900	96,000	3,900	86,100	84,200	1,900

Source: Macroplan, NHFIC

10 Multi-unit dwellings include apartments, townhouses, and duplexes. This does not include other dwellings as defined in the 'state of household formation' and 'state of housing supply' chapters (i.e. other residential dwellings including caravans, houseboats and dwellings attached to commercial buildings).

Capital city supply-household formation balances

NHFIC also estimates supply and household formation balances across the greater capital city regions. Sydney and Melbourne are most reliant on international students in the long-term rental market, so household formation in these cities is expected to increase more strongly relative to other capital cities from 2022 to 2023 as international borders reopen. But despite this strong rebound in household formation, supply is still expected to be higher by an average of 18,600 dwellings each year in Sydney and 24,900 in Melbourne over that period.

In Sydney, Melbourne, Brisbane and Perth, supply trends downwards from 2023 to 2027 while household formation returns to pre-pandemic levels and remains relatively consistent each year.

The downturn in supply, along with the recovery in household formation, results in household formation exceeding supply in each of these capital cities from around 2025 to the later years of the projection period.

In Sydney, the supply shortfall reaches 10,600 dwellings in 2027, while in Melbourne the shortfall peaks at 18,800 dwellings in 2026.

In Brisbane and Perth, the peak shortfall is around 5,000 dwellings. The supply shortfall is then reduced as supply increases from around 2027 and marginally exceeds household formation by the end of the projection period.

Figure 4.3: Annual change in household formation and supply and supply-household formation balances by city – Sydney, Melbourne, Brisbane and Perth

Source: Macroplan, NHFIC

Similar to the above cities, Adelaide's household formation falls to a trough in 2022 before rising again the following year and remaining consistent each year through to the end of the projection period. Meanwhile, supply declines from 2023 to 2027, before recovering to meet household formation levels again in 2031.

Hobart's household formation does not decline but steadily increases until 2025 where it remains stable each year, while supply bottoms out in 2025 and recovers by 2028.

In the ACT, supply remains consistent up to 2025 before falling rapidly to 2029, minimising the supply-household formation gap from a peak of 3,400 dwellings in 2021. Household formation recovers by 2023 and remains steady each year onwards. It exceeds supply from 2028 onwards. In the last 4 years of the projection period, there is an annual shortfall of 1,300 dwellings.

In Darwin, household formation exceeds supply until 2029. The rise in supply combined with the stability in household formation then results in supply and household formation moving largely in tandem.

Figure 4.4: Annual change in household formation and supply and supply-household formation balances by city – Adelaide, Hobart, Darwin and Australian Capital Territory and Darwin

Source: Macroplan, NHFIC

Table 4.3: Supply-household formation balances

	Sydney		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	33,100	11,500	21,600
2022	30,800	3,200	27,600
2023	35,700	26,100	9,600
2024	33,100	32,700	400
2025	31,500	34,100	-2,600
2026	25,800	33,300	-7,500
2027	22,600	33,200	-10,600
2028	24,700	33,400	-8,700
2029	26,300	32,900	-6,600
2030	29,000	33,000	-4,000
2031	32,100	33,100	-1,000
2032	35,000	32,900	2,100

	Melbourne		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	52,900	3,600	49,300
2022	40,600	-1,700	42,300
2023	43,000	35,600	7,400
2024	38,600	45,300	-6,700
2025	35,500	49,600	-14,100
2026	30,000	48,800	-18,800
2027	32,500	48,800	-16,300
2028	38,400	49,000	-10,600
2029	45,100	48,700	-3,600
2030	48,000	48,700	-700
2031	49,800	48,800	1,000
2032	50,700	48,600	2,100

	Brisbane		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	15,900	16,600	-700
2022	17,200	12,500	4,700
2023	22,200	19,900	2,300
2024	21,500	18,100	3,400
2025	19,700	19,500	200
2026	16,900	19,300	-2,400
2027	14,200	19,100	-4,900
2028	14,000	19,100	-5,100
2029	15,700	19,000	-3,300
2030	17,600	19,000	-1,400
2031	19,500	19,000	500
2032	20,100	18,700	1,400

	Perth		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	8,200	13,700	-5,500
2022	16,900	10,300	6,600
2023	20,600	15,200	5,400
2024	20,100	14,700	5,400
2025	17,200	15,700	1,500
2026	12,600	15,700	-3,100
2027	10,800	15,700	-4,900
2028	12,700	15,900	-3,200
2029	13,600	15,700	-2,100
2030	14,800	15,900	-1,100
2031	15,700	16,000	-300
2032	16,500	15,900	600

Source: Macroplan, NHFIC

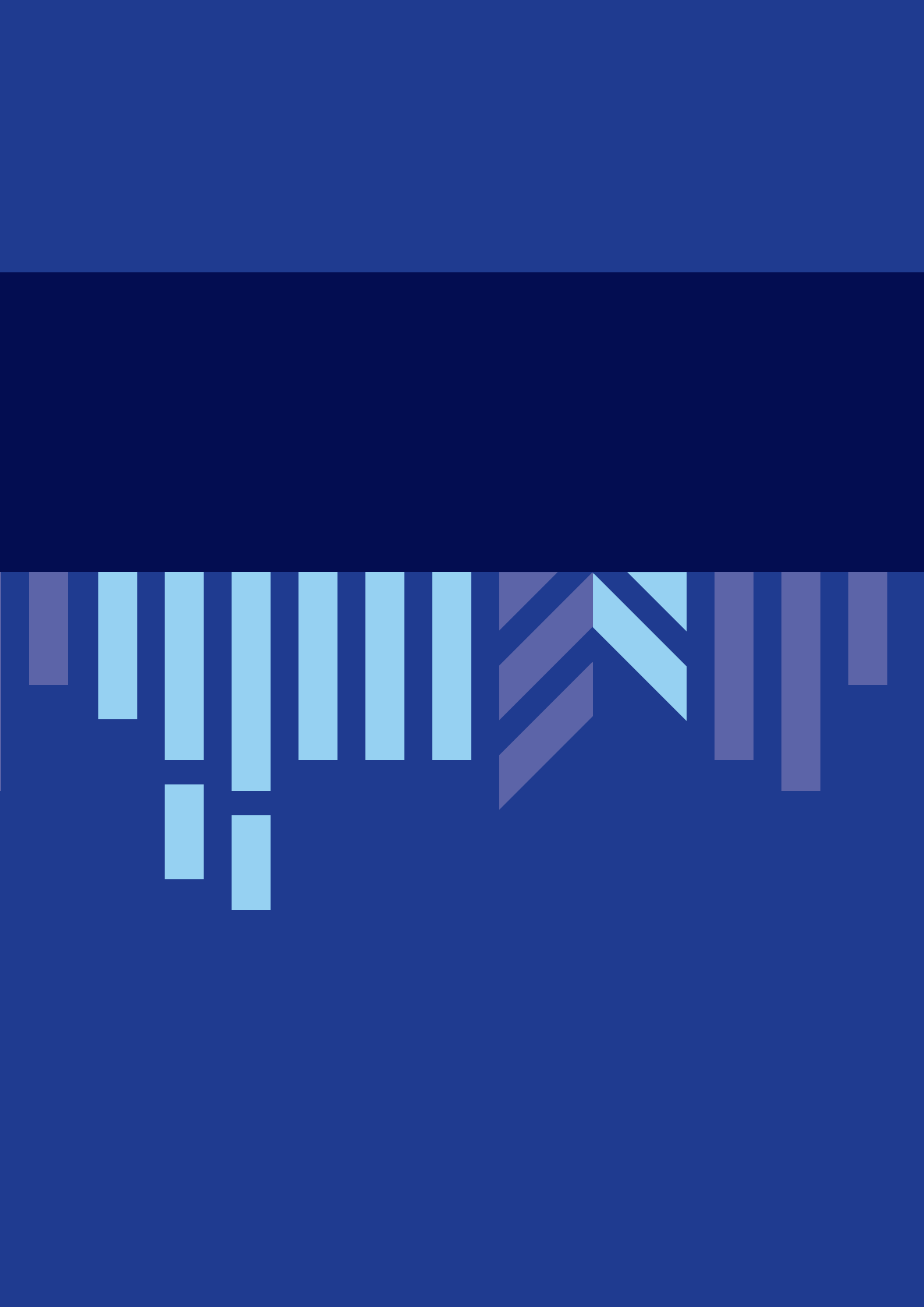
	Adelaide		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	7,400	8,300	-900
2022	9,100	4,200	4,900
2023	8,700	8,500	200
2024	7,800	6,700	1,100
2025	6,600	7,500	-900
2026	5,700	7,200	-1,500
2027	4,900	7,200	-2,300
2028	5,600	7,200	-1,600
2029	6,100	7,200	-1,100
2030	6,800	7,100	-300
2031	7,000	7,000	0
2032	7,300	7,000	300

	Hobart		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	1,400	700	700
2022	1,800	1,200	600
2023	1,400	1,300	100
2024	1,300	1,500	-200
2025	1,000	1,600	-600
2026	1,100	1,600	-500
2027	1,400	1,600	-200
2028	1,700	1,600	100
2029	1,700	1,600	100
2030	1,600	1,500	100
2031	1,700	1,500	200
2032	1,600	1,500	100

	ACT		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	4,300	900	3,400
2022	4,100	1,100	3,000
2023	4,600	2,400	2,200
2024	4,300	2,200	2,100
2025	4,600	2,600	2,000
2026	3,200	2,500	700
2027	3,000	2,500	500
2028	2,100	2,600	-500
2029	1,300	2,600	-1,300
2030	1,400	2,700	-1,300
2031	1,400	2,700	-1,300
2032	1,400	2,600	-1,200

	Darwin		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	500	700	-200
2022	600	600	0
2023	400	900	-500
2024	500	600	-100
2025	400	700	-300
2026	400	700	-300
2027	500	700	-200
2028	700	800	-100
2029	800	700	100
2030	800	800	0
2031	800	800	0
2032	900	800	100

Source: Macroplan, NHFIC



State of cities and regions – impact of COVID-19

State of the Nation's Housing 2021–22

State of cities and regions – impact of COVID-19

26% increase

in regional dwelling prices

Cities to regions

COVID and greater workplace flexibility drove people to move and stay in regions, esp in NSW and Vic

4 in 10 wfh

38% of Australians worked from home

KEY POINTS

- The pandemic has led to unusually high housing demand in regional housing markets across Australia. Harsher lockdown restrictions in big cities and a desire for more open spaces, together with work from home arrangements has helped underpin this demand putting pressure on regional housing markets.
- Regional rents grew more strongly than capital cities in Tas, NSW, Vic, Qld and SA in the two-year period ending December 2021. Rents in Victorian regional areas are now at their highest levels relative to rents in Melbourne since at least as far back as 2004.
- Dwelling prices also rose strongly in regional areas compared to capital cities, particularly in 2021, with dwelling prices growing 26% in regional areas, compared to 21% in capital cities in the year-ending December 2021. For example, over 2020 and 2021, regional VIC saw price rises more than double that seen in Melbourne.
- The strong rent and price rises in the regions have been driven by a large population movement from cities and more people choosing to stay in the regions during the pandemic. This reduced affordability in many regional areas, particularly for renters on lower incomes.
- Within the two largest capital cities, there has also been unusually large population movements from inner to outer suburbs. The net movement of people from Sydney to nearby regional areas, such as the Blue Mountains and Central Coast, following a large spike in movements in mid-2020, remains at elevated levels compared to immediately before the pandemic.
- The effect of population movements has been experienced differently across Australia. In some Local Government Areas (LGAs), particularly in popular coastal and regional areas, population has been growing for some time, with this trend continuing throughout the pandemic. Other LGAs experienced a significant increase on pre-COVID levels. Many of these areas with strong growth in population have seen strong rental and price increases since the start of the pandemic. There has also been reports of a significant reduction in rental listings in selected regional areas.
- In 2020–21, Australian households moved from capital cities to the regions in significant numbers – notably in Vic and NSW, although this trend is being offset by increasing movements from the regions in Vic. Temporary moves from the capital cities to the regions also appear to be declining, potentially providing some respite for renters in regional areas.

Introduction

This chapter explores in detail how recent demographic and social trends, instigated or accelerated by COVID-19, have affected Australia's housing market.

This will include analysis of the changes in house prices and rents in regional areas and cities during this time, as well as population movements and changing housing preferences associated with working from and being at home more.

Regional and city housing markets in Australia since the onset of COVID-19

Since the onset of COVID-19, housing costs (prices and rents) have increased in many rest of state areas relative to their respective capital cities. This has narrowed the gap between capital city and regional housing markets in some jurisdictions.

In the year ending December 2021, dwelling prices grew 25.9% in regional areas, compared to 21.0% in capital cities.[11]

Dwelling price growth in the regions was also stronger in 2020, although at much lower levels (6.9% in the regions and 2.0% in capital cities).[12] Regional price growth was particularly strong (relative to the respective capital city) in Tas, NSW and Vic in this period (see Table 5.1). However, dwelling prices grew more strongly in the capital cities in SA and the NT. Growth in rents in rest of state areas have exceeded growth in rents in capital cities in all states and territories except the NT and WA (see Table 5.2).

Table 5.1: Change in dwelling prices, Greater capital cities statistical area (GCCSA) and Rest of state, January 2020 to December 2021

State/Territory	Greater capital cities statistical area	Rest of state
NSW	27.2%	40.1%
Vic	12.2%	29.9%
Qld	31.4%	32.8%
SA	30.1%	26.6%
WA	20.9%	22.8%
Tas	34.7%	43.0%
NT	25.0%	6.8%
ACT	34.0%	

Source: CoreLogic Hedonic Home Value Index

Table 5.2: Change in dwelling rents, Greater capital cities statistical area (GCCSA) and Rest of state, January 2020 to December 2021

State/Territory	Greater capital cities statistical area	Rest of state
NSW	5.2%	22.2%
Vic	-0.4%	17.6%
Qld	15.1%	20.5%
SA	13.6%	16.3%
WA	24.1%	22.0%
Tas	10.8%	21.0%
NT	25.3%	8.7%
ACT	17.1%	

Source: CoreLogic Median Rental AVM

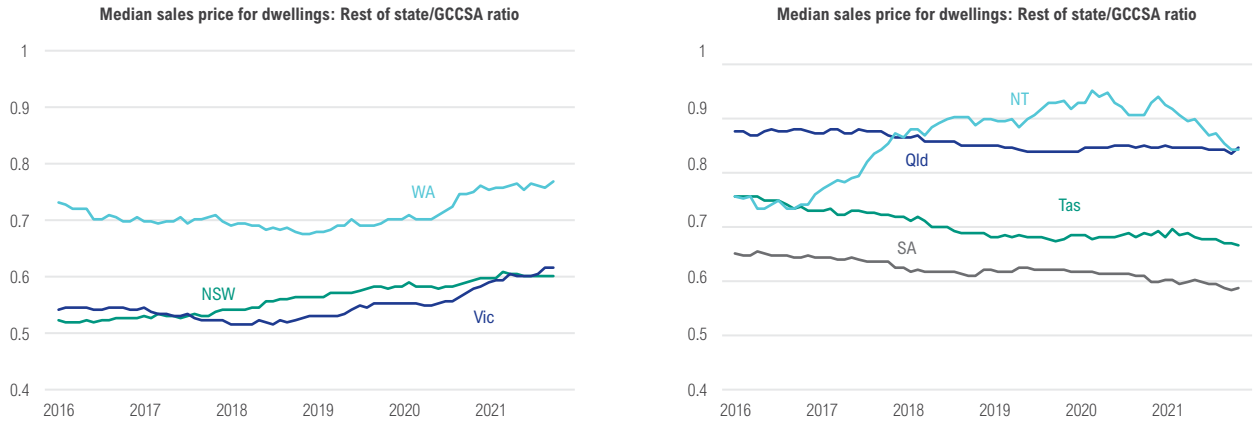
11 CoreLogic, Hedonic Home Value Index, 4 January 2022, Annual change in dwelling values.
12 CoreLogic, Hedonic Home Value Index, 4 January 2021, Annual change in dwelling values.

Figure 5.1 shows the ratio of dwelling prices in rest of state areas to dwelling prices in capital cities. Ratios were higher in December 2021 compared with January 2020 in NSW, Vic and WA, indicating lessening affordability in the regions compared to capital cities in these states. Strongly growing dwelling costs in the regions (relative to the cities) is likely to exacerbate housing affordability for first home buyers looking to enter the market in regional areas. People in these areas are typically on lower incomes, with total average incomes of $68,000 in capital cities in 2017–18 compared with $56,000 in rest of state areas.[13]

Figure 5.2 illustrates the ratio for rents in rest of state areas compared to rents in capital cities. The ratio was higher in December 2021 compared to January 2020 in NSW, Vic, Qld, SA and Tas. Rents in Victorian regional areas are now at the highest levels relative to rents in Melbourne since at least 2004, likely reflecting the stronger interstate and intrastate migration to the regions during the pandemic and a fall in demand for inner city properties.[14]

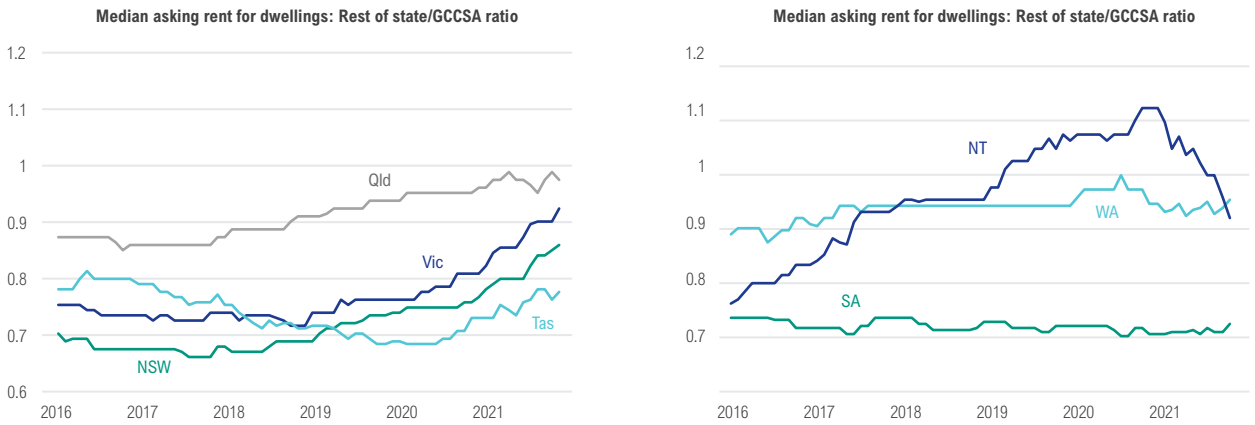
The RBA suggests that this trend in the more populous states is likely to adversely affect low-income households in regional areas around Australia's largest cities, assuming that rents on lower-end properties are moving in the same direction as median rents in the same area.[15] Notably, the share of regional areas where low-income households can rent a median advertised dwelling for less than 30% of their income has declined in recent years.[16]

Figure 5.1: Median sales price for dwellings: Rest of state/GCCSA ratio



Source: CoreLogic, Median sales price (12 months)

Figure 5.2: Median asking rent for dwellings: Rest of state/GCCSA ratio



Source: CoreLogic, Median asking rent (12 months)

13 ABS, Personal Income in Australia, December 2020 release, Table 1.1. This data is based on personal income tax returns, and does not include certain groups who are not required to submit tax returns (such as those that receive income below a certain level). Median personal income data is not published in aggregate at a GCCSA/rest of state level. However, median income data also suggests higher incomes in capital cities. (e.g. $53,000 in Greater Sydney vs $46,000 in rest of state NSW.)

14 CoreLogic, Median asking rents (12 months).

15 RBA, Submission into the Inquiry into Housing Affordability and Supply in Australia, September 2021, pp. 10–11.

16 RBA, Submission into the Inquiry into Housing Affordability and Supply in Australia, September 2021, pp. 11–12.

Factors affecting prices and rents since the onset of COVID-19

COVID-19 has accelerated a move to greater workplace flexibility. Shut-down orders have forced Australians in many states and territories to work from home for extended periods, with up to 40% of Australians estimated to be working from home during 2020 and 38% in 2021.[17] The OECD, using ABS data, also reports strong growth in the intensity of Australians working from home during 2020. The ~12% of adults working from home on all or most days before March 2020 increased to 30% by September 2020.[18]

The loosening connection between workers and their physical place of work has allowed them to move to the outskirts of cities, or potentially to regional towns. [19] Harsher lockdown restrictions in bigger cities and a desire to be in areas with fewer virus cases likely also encouraged demand for housing in the regions, putting pressure on regional markets. In the short run, these factors appear to have elevated prices and rents in regional areas. Given that full-time office-based workers, typically on higher incomes, have the greatest potential to work from home, this has also likely put upward pressure on housing costs in the regions.[20]

A reduction in the number of people moving from regional areas to capital cities, likely arising from the economic, health and social uncertainty associated with COVID-19, has also exacerbated housing affordability concerns in the regions.

Whether these factors have a long run effect on Australia's housing market is yet to be established. Theoretically, prices and rents are usually highest near the CBD (due to lower travel costs and time, as well as access to amenities) and fall as the distance from the CBD increases. But eliminating the need to travel to work may change this relationship. As yet, the long-term impact of increased flexible working arrangements is unclear.[21]

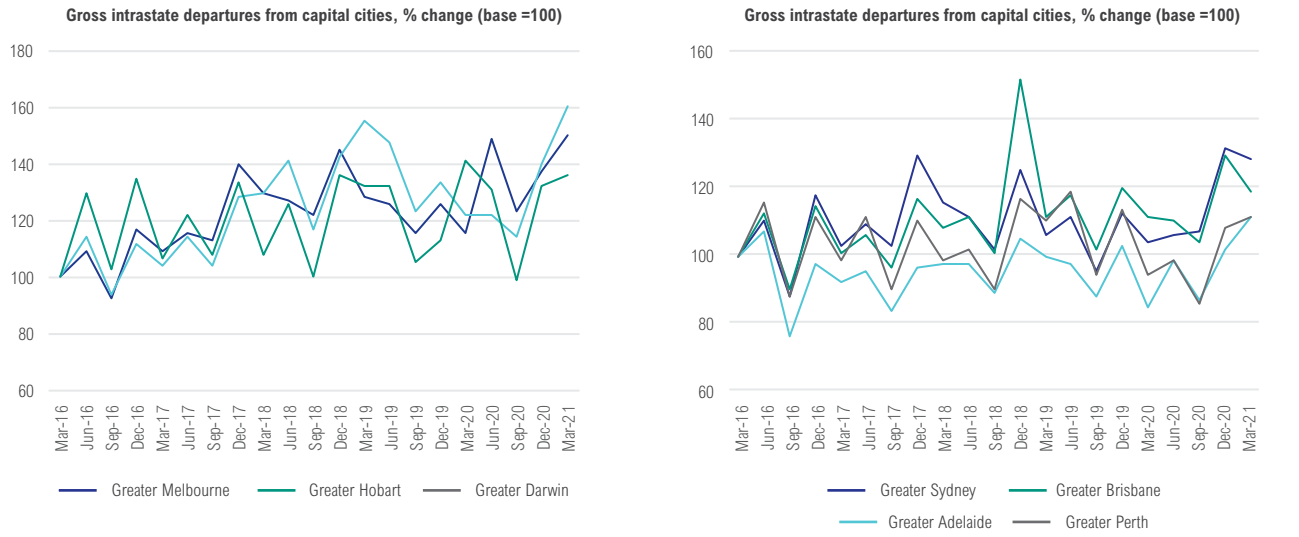
Movement between cities and regions

Domestic departures from capital cities continued to exceed domestic arrivals in 2020 and early 2021. In the year ending March 2021 approximately 45,000 more people left greater capital cities for the regions than arrived, compared to 24,000 in the previous year.[22] In Greater Melbourne, net losses in the year ending March 2021 were significantly higher, growing to 32,000 from 3,000 in the prior year. This reflects an increase in people moving from the capital cities to the regions, as well as a decline in people moving from the regions to capital cities during the pandemic. In the year ending March 2021, total departures from capital cities to the regions grew to nearly 244,000 compared to 230,000 in the previous year. In contrast, in the year ending March 2021, total departures from the regions to capital cities fell to 199,000 from 206,000 in the previous year.

Australia Post data[23] on net movements between capital cities and regions in 2020 and 2021 indicates that movements from the capital cities to the regions continue to strongly exceed movements from the regions to the capital cities in NSW and Vic, although the level declined in Vic in 2021.[24] In Qld, movements from the capital cities continue to exceed movements from the regions, although at much lower levels than NSW and Vic. In WA, SA and Tas; net movements between capital cities and regions are reasonably level.[25]

17 Productivity Commission, Working from home, Research Paper, September 2021, p. 11.
18 OECD Digital Economy Papers, Measuring telework in the COVID-19 pandemic, July 2021, no. 314, p. 18.
19 The RBA noted in September 2021 that the ability to work from home for some households has increased the relative attractiveness of regional areas and neighbourhoods that are distant from city centres. RBA, Submission to the Inquiry into Housing Affordability and Supply in Australia, September 2021, p. 20.
20 Productivity Commission, Working from home, Research Paper, September 2021, p. 2.
21 Nygaard and Parkinson (2021) discuss the various approaches to urban development in the context of COVID-19. They suggest that on a systemic level, the impact of the pandemic on urban development and population may be transient, although the picture may differ for micro-geographies within cities and for towns and regional centres. See C.A Nygaard and S. Parkinson, Urban Transitions and Urban Regional Dynamics, Analysing the impact of COVID-19 on urban transitions and urban-regional dynamics in Australia, *Australian Journal of Agricultural and Resource Economics*, 59, 2021, pp. 1–22.
22 ABS, Regional Internal Migration Estimates, Provisional, March 2021.
23 This anonymised data set is an administrative by-product of Australia Post's mail redirection service. If a person is in the process of changing addresses, he or she may fill out an application and—usually for a small fee, but for no charge in certain circumstances—Australia Post will redirect eligible mail and parcels for up to 12 months. Only private residential redirection services were included in this data set. This data obviously has its limitations – not least that only a selection of those moving use redirection services. Nonetheless, it provides some timely insights into population trends during COVID-19.
24 The Centre for Population's Population Statement (December 2021) states that: "Melbourne and Sydney are forecast to experience negative population growth in 2020–21 and 2021–22, owing to restrictions on international and domestic movements that are assumed to dampen overseas and internal migration." (p. 23)
25 Due to very small figures for NT, it was not included in this analysis.

Figure 5.3: Internal migration – gross intrastate departures



Source: ABS, Regional Internal Migration Estimates, Provisional, March 2021

Figure 5.3 shows the change in gross monthly departures from each of the capital cities to their rest of state areas and the significant upwards trend in early to mid-2020. In the year ending March 2021, gross intrastate departures in Sydney rose by more than 5,000 (from 43,000 to 48,000) and in Melbourne by more than 6,000 (from 38,000 to 44,000). Greater Brisbane, Adelaide, Hobart and Darwin also saw gross intrastate increases in the period, although not as significant.[26]

According to Australia Post redirections data, annual gross movements from capital cities to their respective regions increased in 2020 in most states and territories compared to 2019 levels, the exception being Tas with very low levels of movement recorded.[27] In 2021, annual gross movements from capital cities to the regions continued to increase in NSW, Qld and WA; fell slightly in Vic and SA; and rose in Tas.[28]

Movements from state and territory regions to their respective capital cities declined overall during the pandemic. The strongest absolute decline was in Victoria, where total intrastate movement from regional areas declined 2,400 in the year ending March 2021, compared to the previous year.[29] More recent Australia Post data indicates that movements from the regions to their respective capital cities have increased in nearly all states in 2021 compared to 2020, except for NSW, where movements from the regions to Sydney declined.[30]

Australia Post redirection data indicates that those LGAs with the highest (absolute) numbers of net movements in the 21 months since March 2020 were in Qld and Vic, with the Sunshine Coast and Gold Coast topping the list (see Table 5.3). Net migration had already been strong in many of these LGAs, with the pandemic continuing this trend. However, in the Central Coast of NSW, net migration increased 91% on the 21 months prior to COVID-19, while on the Mid-Coast of NSW (around Taree and Forster-Tuncurry) net movement increased 50%.

26 The ABS has advised that the June 2021 quarter of Provisional Regional Internal Migration Estimates, advertised for release on 28 October 2021, has been cancelled due to data quality concerns.

27 This anonymised data set is an administrative by-product of Australia Post's mail redirection service. If a person is in the process of changing addresses, he or she may fill out an application and—usually for a small fee, but for no charge in certain circumstances—Australia Post will redirect eligible mail and parcels for up to 12 months. Only private residential redirection services were included in this data set. This data obviously has its limitations – not least that only a selection of those moving use redirection services. Nonetheless, it provides some timely insights into population trends during COVID-19.

28 Due to very small figures for NT, it was not included in this analysis.

29 ABS, Regional Internal Migration Estimates, Provisional, March 2021

30 Due to very small figures for NT, it was not included in this analysis.

Table 5.3: Highest level of net movements to LGAs after the onset of COVID-19

Local Government Area (State/Territory)	Pre-COVID	From April 2020 (onset of COVID-19)
Sunshine Coast (Qld)	7,936	8,591
Gold Coast (Qld)	6,852	7,091
Moreton Bay (Qld)	5,457	6,453
Mornington Peninsula (Vic)	3,311	4,595
Greater Geelong (Vic)	3,547	3,778
Fraser Coast (Qld)	2,124	2,988
Central Coast (NSW)	1,430	2,726
Redland (Qld)	2,684	2,610
Mid-Coast (NSW)	1,660	2,483
Camden (NSW)	3,024	2,267

Source: NHFIC analysis of Australia Post re-direction data.
Note: Pre-COVID relates to the 21 months prior to April 2020 (1 July 2018 to 31 March 2020). This is compared to the 21 months after April 2020 (1 April 2020 to 31 December 2021).

Areas with large people inflows are experiencing heightened demand for housing, putting pressure on local supply. However, supply can be less elastic in regional areas, due to larger developers being focused on metropolitan areas and smaller developers unable to respond as quickly to changing demand for housing. These factors have contributed to rents and prices in these areas rising proportionally more than in the larger cities. NHFIC liaison suggest that areas like the Sunshine Coast and Gold Coast (SE Queensland) are struggling to cope with the increased demand for housing from this intrastate and interstate migration and that local planning delays are slowing the supply response and pushing up housing costs, particulary for new detached housing (see 'State of housing supply' chapter for more detail).

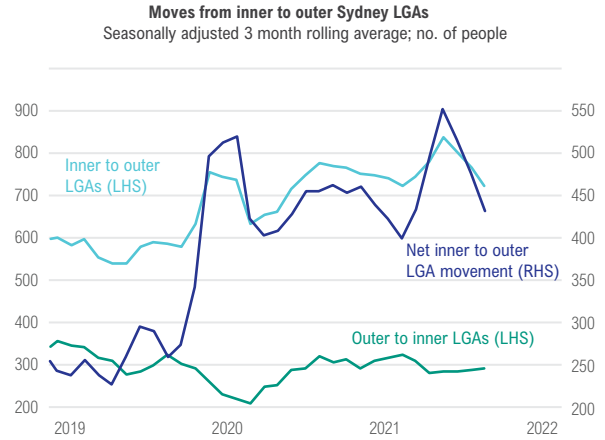
Anecdotally, there are also reports that suggest that the supply of rental properties has declined in absolute terms in some areas throughout the pandemic. Residents in many popular, smaller coastal regions such as Apollo Bay (Vic) and Byron Bay (NSW) are experiencing difficulties in obtaining affordable rental properties due to increased demand for properties from new tenants relocating from the cities, people moving into their holiday houses, as well as the transfer of long-term rental properties to 'Airbnb' homestay properties (associated with higher levels of domestic tourism).[31]

31 Victorian town of Apollo Bay on brink of healthcare crisis due to lack of housing – ABC News (24 April 2021); Struggling renters told to leave Sunshine Coast due to housing crisis in 'heartbreaking' St Vinnies warning – ABC News (20 April 2021); Banning Airbnb and shipping in portable homes considered as housing crisis bites in coastal towns – ABC News (28 August 2021); Byron Bay's rental crisis enters 'uncharted territory' as professionals, volunteers struggle to secure lease – ABC News (1 March 2021).

Movement from inner to outer metropolitan areas

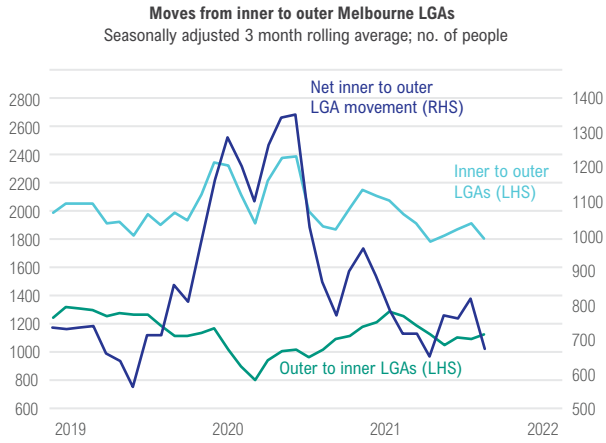
During 2020, mail re-direction data also shows significant population movements from centrally located LGAs in Melbourne and Sydney to those on or towards the edge of these cities. Figures 5.4 and 5.5 show movements from LGAs in central Melbourne to 14 outer LGAs,[32] and from LGAs in central Sydney to 4 outer LGAs (Blue Mountains, Central Coast, Wollondilly and Hawkesbury.) There was a significant net movement in 2020 to these areas, peaking in April 2020 in Sydney and Melbourne, and again in August 2020 in Melbourne. Net movements from inner to outer Sydney remain elevated compared to immediately before the pandemic.

Figure 5.4: Moves from Inner to Outer Sydney LGAs



Source: AusPost, NHFIC

Figure 5.5: Moves from Inner to Outer Melbourne LGAs



Source: AusPost, NHFIC

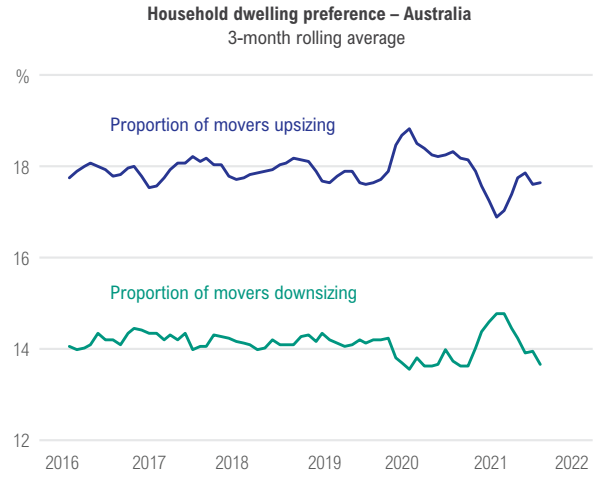
During the period, some regions experienced large increases in rents and/or prices. For example, in the Sydney region, dwelling prices increased 44.2% in the Central Coast and rents 21.9%, while in the Blue Mountains dwelling prices increased 36.7% and rents by 25.0% between January 2020 and December 2021. In the Mornington Peninsula (Vic), dwelling prices increased 39.1% and rents by 28.5%.[33] These increases may at least partially reflect monetary and fiscal policies in place at the time supporting first home buyers.

Density preferences during COVID-19 – upsizing and downsizing

Australia Post data indicates that those moving over the early COVID period tended to upsize rather than downsize their properties.[34] Moves are characterised as either upsizing to a house or downsizing from a house, or 'other'. Australia wide, the proportion of movers upsizing increased slightly in 2020, and the proportion downsizing declined (Figure 5.6).

In 2021, there has been an overall decline in the proportion of movers upsizing in Australia (and increase in the proportion downsizing), potentially due to rising house prices (particularly in the larger capital cities), but also due to a lack of appropriate stock (particularly in smaller regional areas). The level of upsizing and downsizing appears to be returning to historical levels.

Figure 5.6: Household dwelling preference – Australia



Source: AusPost, NHFIC

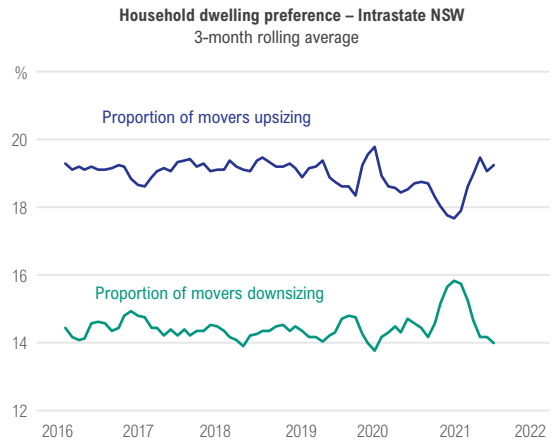
32 Brimbank, Cardinia, Casey, Frankston, Greater Dandenong, Hume, Knox, Maroondah, Melton, Mornington Peninsula, Nillumbik, Whittlesea, Wyndham, Yarra Ranges.

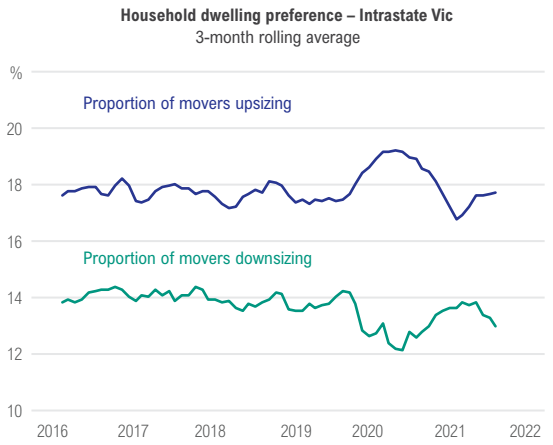
33 CoreLogic, Median Rental AVM and Hedonic Home Value Index.

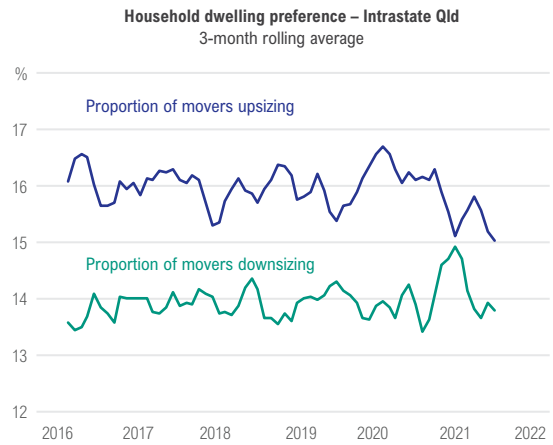
34 The RBA noted in September 2021 that since the onset of the pandemic, growth in advertised rents and in prices for established markets in Australia have been stronger for houses, consistent with people wanting more space as they spend more time at home. RBA, Submission into the Inquiry into Housing Affordability and Supply in Australia, September 2021, p. 21.

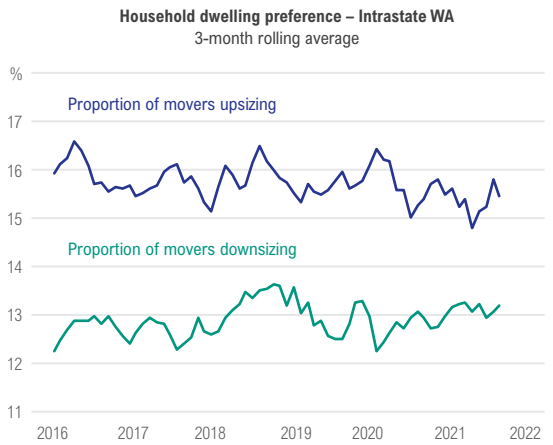
In nearly all states and territories, the proportion of movers 'upsizing' rose during 2020. This increase was particularly strong in Vic and Tas (Figure 5.7).[35] In 2021, the proportion of movers 'upsizing' fell in nearly all states and territories.

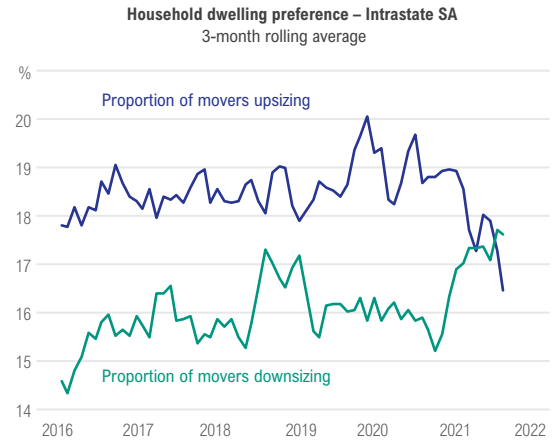
Figure 5.7: Household dwelling preference – Intrastate moves

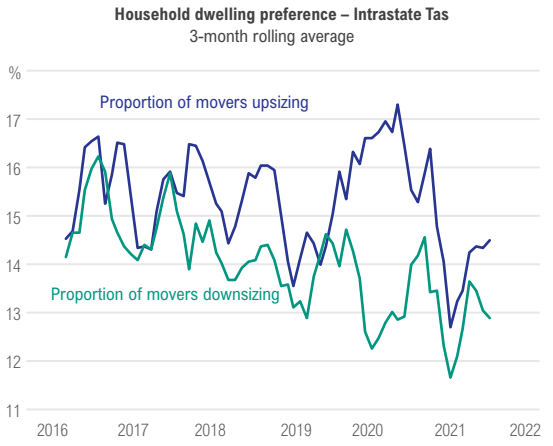










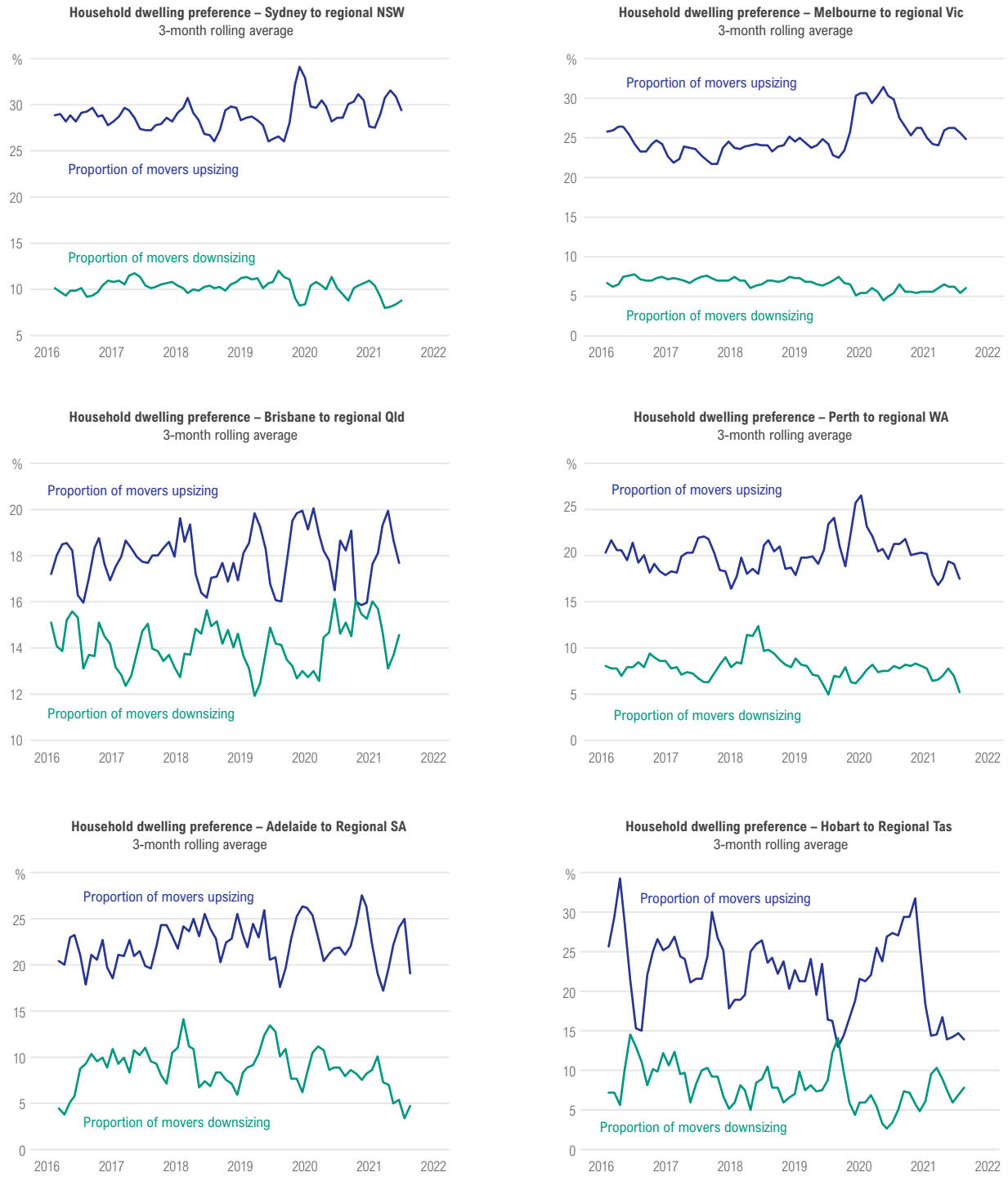


Source: AusPost, NHFIC

35 Due to very small figures for NT, it was not included in this analysis.

These trends can also be discerned by analysing aggregate movements in 'upsizing' from capital cities to regional areas in 2020, most notably in Melbourne to regional Vic, but also Sydney to regional NSW, Perth to regional WA and Hobart to regional Tas (see Figure 5.8). 2021 saw a decline in the proportion of movers 'upsizing' from capital cities to regional areas in all states in comparison to 2020.[36]

Figure 5.8: Household dwelling preference – Capital City to Regional moves



Source: AusPost, NHFIC

36 Due to very small figures for NT, it was not included in this analysis.

Housing demand and pressures in regional areas since COVID-19

Given the outflow of people from capital cities, many regional areas have experienced significant growth since early 2020.[37] Table 5.4 shows the top 5 inner regional areas by percentage growth in redirections (as a proportion of population).

Queenscliffe LGA (Vic) had the biggest increase in population over the COVID-19 period as a proportion of its (small) population. Between January 2020 and December 2021, Queenscliffe LGA saw concurrent increases in rent (24.6%) and dwelling prices (36.1%), higher than increases in regional Victoria more broadly.

Increases in prices and rents in the Bass Coast (Vic) and Wingecaribee (NSW) LGAs were also higher than their regional state averages, with Wingecaribee rents, for example, increasing 35.1% compared to 22.2% in regional NSW more broadly.

Temporary movements during COVID-19

Given the temporary nature of the pandemic and its associated lockdowns, at least some of the moves highlighted in the data above are unlikely to be permanent. According to Australia Post, which asks those seeking redirection services to nominate whether their move is permanent, temporary movements from capital cities to regional areas spiked in April 2020, following the onset of the pandemic (see Figure 5.9).[38] Australia wide, temporary movements increased as a proportion of all capital city to region moves in 2020, but declined to pre-2019 levels in 2021.[39] This suggests that some of the pressure on rents in regional areas may be relieved in coming months.

Table 5.4: Inner regional areas

Local Government Area (State/Territory)	Growth in re-directions from April 2020 (% of pop)	Dwelling rent change Jan 2020 to Dec 2021	Dwelling price change Jan 2020 to Dec 2021
Queenscliffe (Vic): Queenscliff and Point Lonsdale	22.2%	24.6%	36.1%
Bass Coast (Vic): Wonthaggi, Cowes, Inverloch, Grantville	4.7%	21.2%	38.5%
Bridgetown-Greenbushes (WA): Bridgetown, Greenbushes	4.3%	21.0%	30.9%
Chittering (WA): Bindoon, Muchea, Wannamal	4.0%	14.5%	26.7%
Wingecarribee (NSW): Bowral, Moss Vale, Mittagong	3.3%	35.1%	47.2%

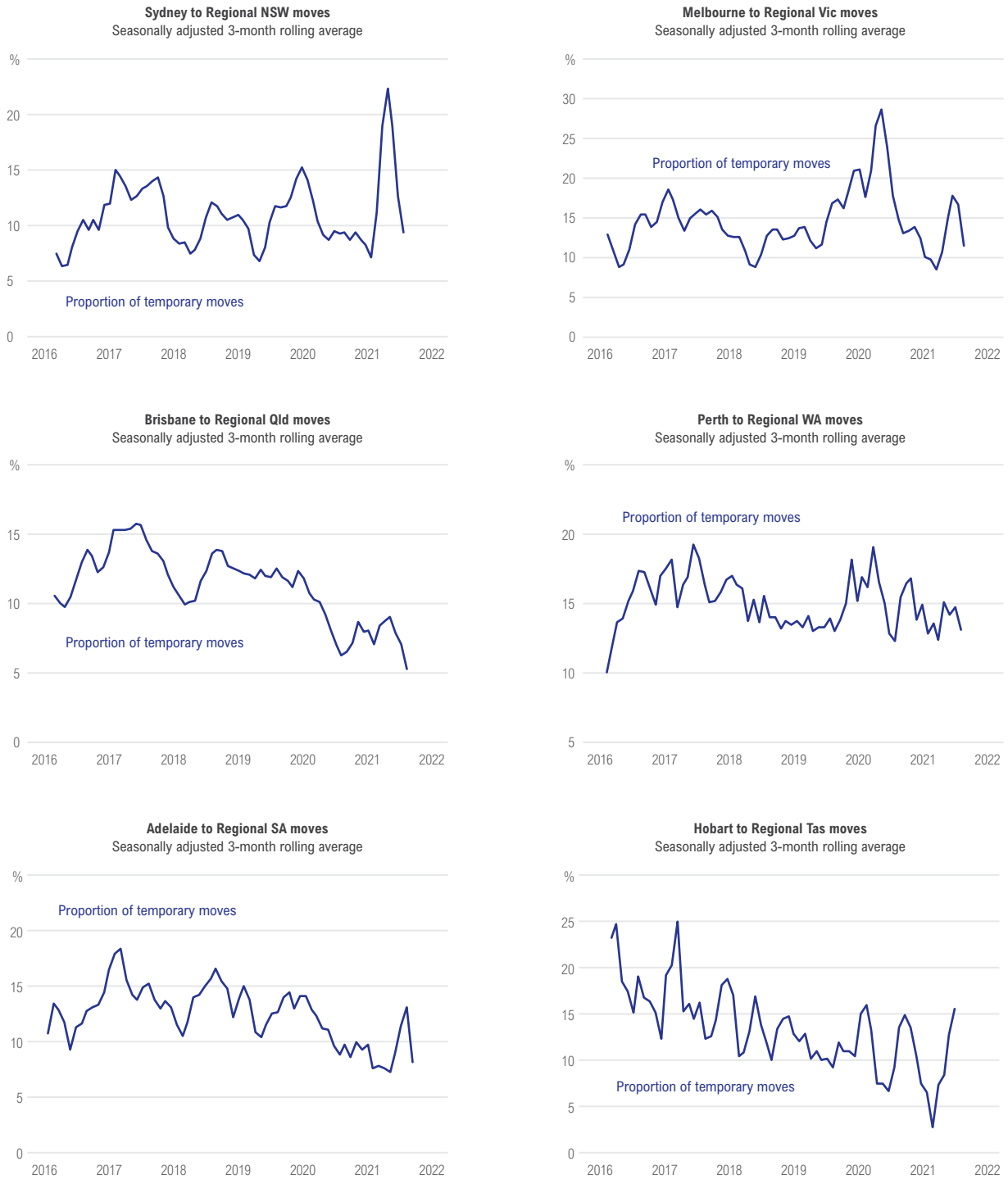
Source: AusPost and CoreLogic (Hedonic Home Value Index and Median Rental AVM)

37 To determine those areas which have experienced the greatest increase in population (and potentially declines in affordability) NHFIC has conducted an analysis of Australia Post data on movements to regional Local Government Areas during COVID-19, using the ABS' Australian Statistical Geography Standard (ASGS) Remoteness Areas. This divides geographical regions into 5 classes of relative remoteness across Australia: Major Cities of Australia; Inner Regional Australia; Outer Regional Australia; Remote Australia; and Very Remote Australia.

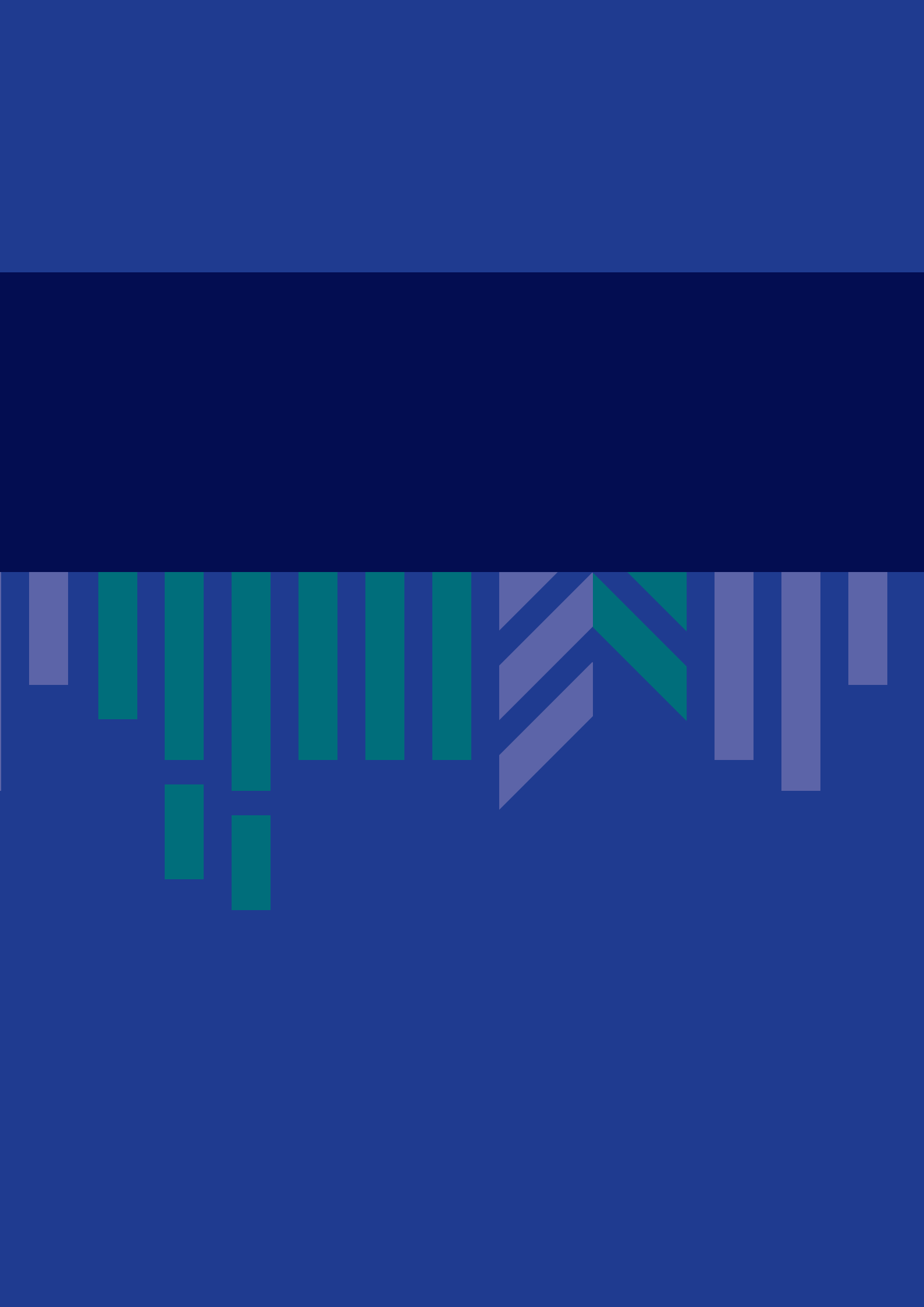
38 This aligns with analysis done by the Harvard Joint Centre for Housing Studies, which found that temporary moves spiked in March and April 2020 in the United States.

39 Due to very small figures for NT, it was not included in this analysis.

Figure 5.9: Proportion of capital city to regional moves that are temporary



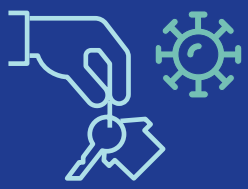
Source: AusPost, NHFIC



State of housing affordability

State of the Nation's Housing 2021–22

State of housing affordability



Affordability **deteriorated**

for renters and and first home buyers

ESPECIALLY IN REGIONAL NSW, VIC AND TAS

Less than **10%** of properties

ARE AFFORDABLE FOR THE BOTTOM 60% OF SYDNEY AND HOBART LOWER INCOME HOUSEHOLDS

$460k

The average first home buyer debt

UP $50K FROM LAST YEAR, A FIGURE THAT HAS TRIPLED SINCE THE EARLY 2000S

KEY POINTS

- The pandemic is having highly uneven impacts on housing affordability across Australia, with outcomes mixed across different locations, incomes and housing segments.
- Housing affordability for first home buyers was already highly challenged, but has deteriorated further over the last year across many cities and regional areas, on the back of strongly rising house prices. First home buyer participation in the market was high over the last year, on the back of monetary and fiscal stimulus, but is now declining.
- Affordability for the nation's renters remains an acute problem for those on low to moderate incomes. Renters on low and/or moderate incomes experienced a deterioration in affordability in many regional areas as people sought refuge from the pandemic. Renters in some of Australia's largest cities (Sydney and Melbourne) saw a modest improvement, but rental pressures are now growing.
- Strongly rising house prices do not necessarily lead to worse affordability outcomes. Despite the substantial increase in property prices during 2020–21, the cost of servicing a mortgage for homeowners has managed to remain on par with the cost of renting. Affordability challenges primarily burden prospective first home buyers, as increases in property prices make it more difficult to save for a deposit. Renters in the lowest quintile are especially affected as they have the least capacity to absorb increased costs.
- Affordability for those looking to transition into home ownership remains highly challenged in cities like Sydney and has deteriorated even further. For example, households in the bottom 60% of income earners can afford less than 10% of properties in the market in Sydney and Hobart, making them the most unaffordable cities for those trying to transition into home ownership.
- Affordability in many regions became more acute for renters and first home buyers during the pandemic, as people sought to upsize or move to lower density living to support work from home arrangements. The deterioration in affordability in the period 2020–21 for first home buyers has been particularly pronounced in regional NSW, Vic and Tas.
- As borders reopen, demand for rental properties is likely to increase sharply and quickly in some major cities. Affordability for renters could worsen over the medium term if the housing pipeline doesn't remain strong enough to match anticipated new household formation.

Introduction

Housing affordability has important social and economic implications

It is defined as the relationship between housing costs, such as mortgage repayments or rent, and household incomes. When housing is affordable, households can access an adequate standard of housing without unduly compromising their other needs.

This chapter builds on the measures of assessing housing affordability used in our State of the Nation's Housing 2020 report for renters and first home buyers. We also discuss measures to help estimate the need for social and affordable housing.

Consistent with our 2020 report, we assess affordability for public renters, private renters and prospective first home buyers. Public and private renters are typically on low to moderate incomes, which means their housing security is more vulnerable to changes in affordability. Assessing affordability for prospective first home buyers is important because these people are marginal buyers facing the greatest hurdles getting into the property market.

Some affordability measures do not adequately account for the distribution of housing outcomes. However, given research suggests groups most affected by high housing costs are low-income households, we incorporate income metrics in our affordability measures to provide insights into these specific market segments.

5.5% p.a. growth

in social housing stock needed

MUCH HIGHER THAN RECENT AVERAGE ANNUAL GROWTH OF 0.4% FROM 2011 TO 2020

727k

Additional social and affordable dwellings

REQUIRED BETWEEN 2016-2036 TO MEET THIS DEMAND

Private rental

Rental affordability has become more important as the share of Australians in the private rental market has increased steadily since 2011 to around 30%.[40]

This indicator is even more crucial at the lower end of the income scale, where there has been a large reduction in home ownership rates since the late 1980s.[41]

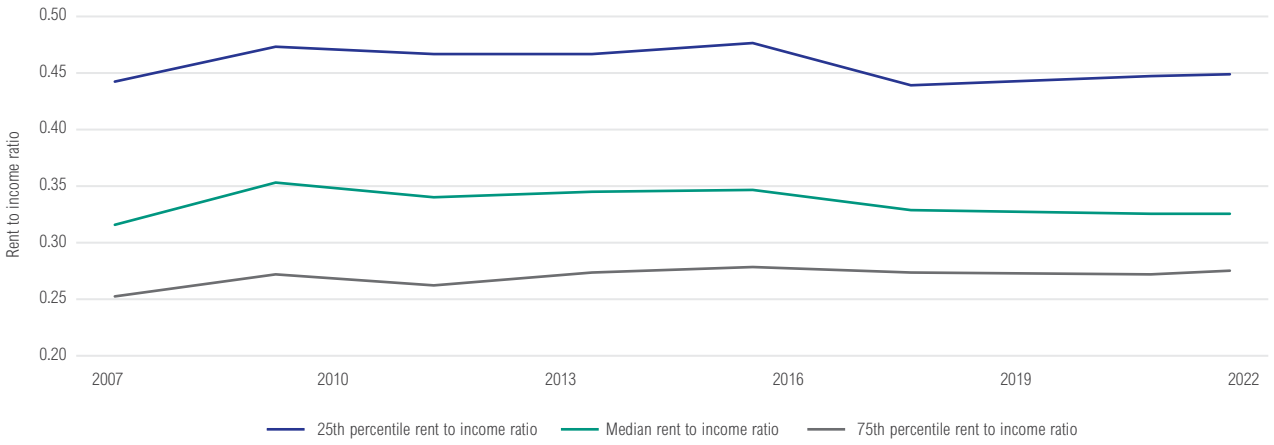
Unfortunately, there is no single 'catch-all' metric for housing affordability in the private rental market. A residual approach is often adopted, which involves measuring whether a household's income, after subtracting housing costs, is sufficient to cover a minimum basket of non-housing expenses,[42] or above or below an adjusted poverty line.[43] However, as discussed in last year's report, these metrics are not without their weaknesses.

In the more widely used metric, a household's housing costs are simply compared with its income. Where this ratio exceeds a specified baseline (usually 30%[44]) housing costs are deemed unaffordable. This approach is not without its problems either, largely stemming from its arbitrariness and simplicity.[45]

Using this latter approach, renters earning incomes up to the median are paying more than 30% of their income on rent. Assuming renters in the 25th percentile of income are also paying the 25th percentile of rent, the rent-to-income ratio suggests that these households are now paying 45% of their income on rent. This ratio peaked in 2015 and has since declined slightly, before rising a little in 2021 (Figure 6.1). This shows in recent years, household income growth has largely kept pace with the buoyancy in the rental market. Nevertheless, the ratios for these renter cohorts still remain above the 30% baseline.

This growth has been driven by a combination of slowing household income growth, largely due to sluggish wages growth and greater buoyancy in the rental market. The resulting decline in affordability has been particularly acute over the latest financial year, with growth in median rents (5.9%) more than doubling growth in median disposable income (2.9%).

Figure 6.1: Rental payment-to-income ratio



Source: CoreLogic, ABS, ANU, NHFIC

40 AIHW (30 June 2021) '*Home ownership and housing tenure*', Australia's welfare 2021.
41 Hall A (28 June 2017) *Trends in home ownership in Australia: a quick guide*, Parliament of Australia.
42 Stone M (31 August 2006) '*A Housing Affordability Standard for the UK*', Housing Studies, 1(4):453–476.
43 Kutty N (31 March 2010) '*A new measure of housing affordability: Estimates and analytical results*', Housing Policy Debate, 16(1): 113–142.
44 Herbert C, Alexander H and McCue D (September 2018) *Measuring Housing Affordability: Assessing the 30 Percent of Income Standard*, Joint Center For Housing Studies
45 Kutty N (31 March 2010) '*A new measure of housing affordability: Estimates and analytical results*', Housing Policy Debate, 16(1): 113–142.

Figure 6.2a: Distribution of affordable rental dwellings by income quintile – Australia, Jun 2020 to Sept 2021

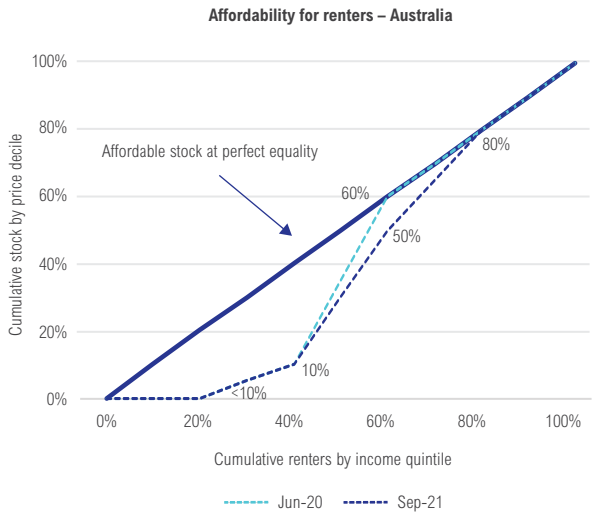
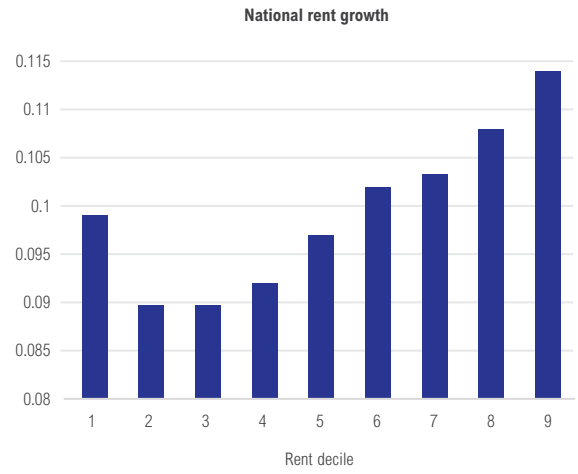


Figure 6.2b: Rent growth by decile – 2020 to 2021



Source: Income data from ANU, ABS; Rent data from CoreLogic

To further illustrate the distribution of affordability outcomes for renters, we repeated our Lorenz curve analysis conducted in last year's report. Lorenz curves are useful for assessing affordability because they graphically demonstrate what proportion of housing services or stock are affordable for households at each income level.

For the Lorenz curve analysis in this report, if there was perfect equality, those in the lowest income quintile could afford up to 20% of dwellings, those in the second lowest income quintile could afford up to 40% 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.

Figure 6.2 and Figure 6.3 illustrate the proportion of rental properties people could potentially afford at each income quintile across Australia, the capital cities and regional areas of each state. To get a sense of what's changed, the graphs also compare the distribution of affordability outcomes in June 2020 to the distribution in September 2021. For the graphs below, 'affordable' is deemed to be if people spend less than or equal to 30% of their income on housing services.

The graphs show that rental affordability across the nation was slightly worse in September 2021 compared with June 2020. The change was mostly felt by renters in the middle-income quintile. Up to 50% of rental dwellings were considered affordable for this cohort but they were previously able to afford up to 60% of rental dwellings. Rising rents resulted in 10% of rental dwellings becoming unaffordable for middle income renters.

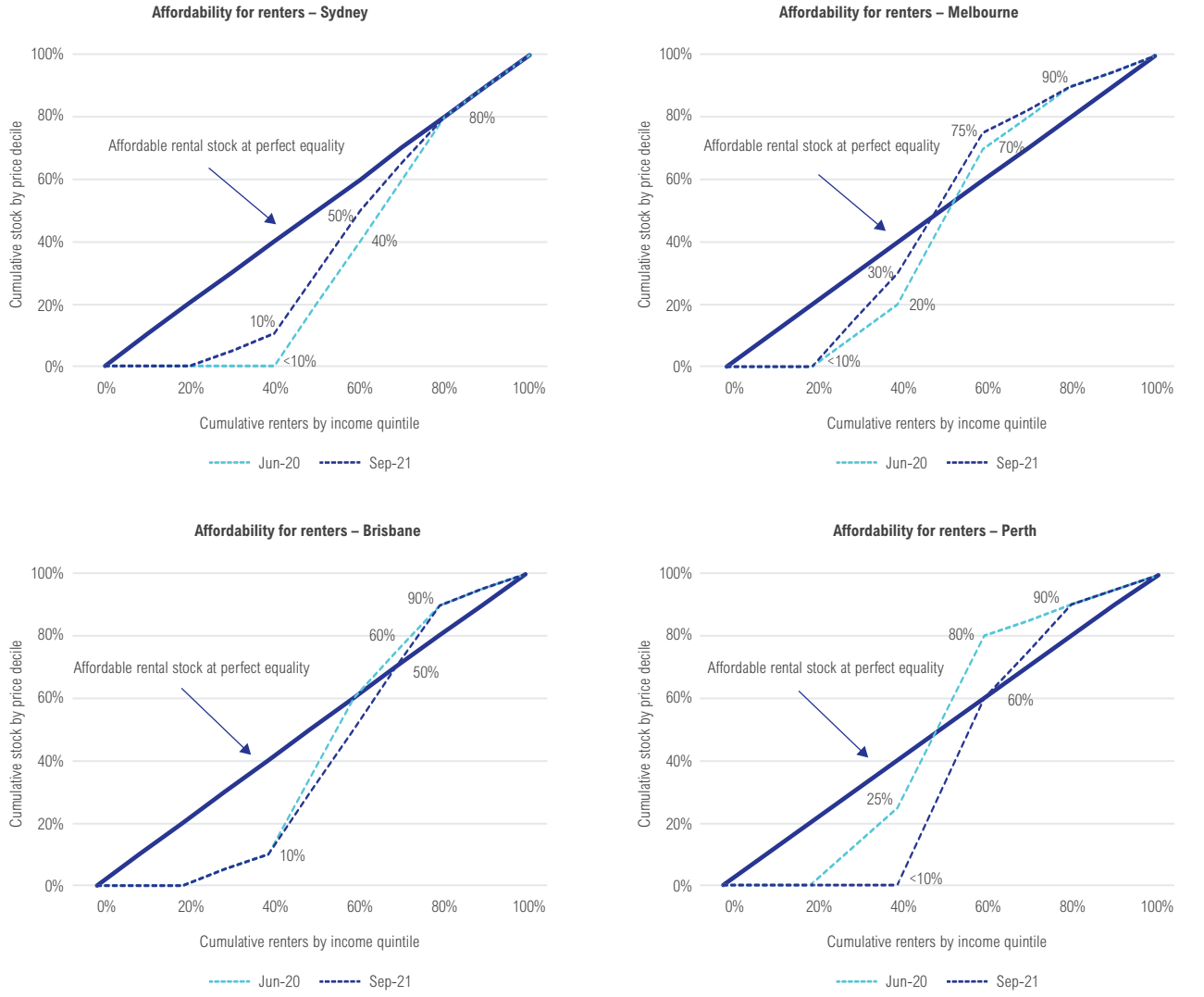
Affordability changes differed in each capital city. Rental affordability in Sydney improved, albeit marginally, for renters in the second-lowest and middle income quintiles as incomes rose slightly faster than rents. Sydney and Melbourne were most impacted by closure of international borders and where reduction in overseas students had a discernible impact on rental demand.

Melbourne also recorded a small improvement in affordability for renters in the second-lowest and middle income quintiles due to modest growth in rents and rising incomes. Melbourne continues to be more affordable than Sydney, with renters on median incomes able to afford up to 75% of rental stock as opposed to 50%. However, if rental listings are withdrawn and sold off to owner-occupiers, this could lead to a tighter rental market and worsening affordability.

Renters in Brisbane and Adelaide in the middle to second highest income quintiles faced more affordability pressure, with up to 10% of rental dwellings becoming unaffordable as rents appreciated strongly.

Rental affordability deteriorated significantly in Perth for those on low incomes. Renters in the second-lowest income quintile could previously afford up to 25% of rental stock, but less than 10% a year later. Renters in the middle income quintile could afford up to 80% of rental stock in 2020, but up to 60% is now considered affordable. This means roughly 20% fewer rental dwellings are regarded as affordable for renters in the middle-income quintile. The sharp falls in rental affordability in Perth is a result of a record surge in rents, which recorded double-digit growth over the year as a result of strong demand and tight rental supply.

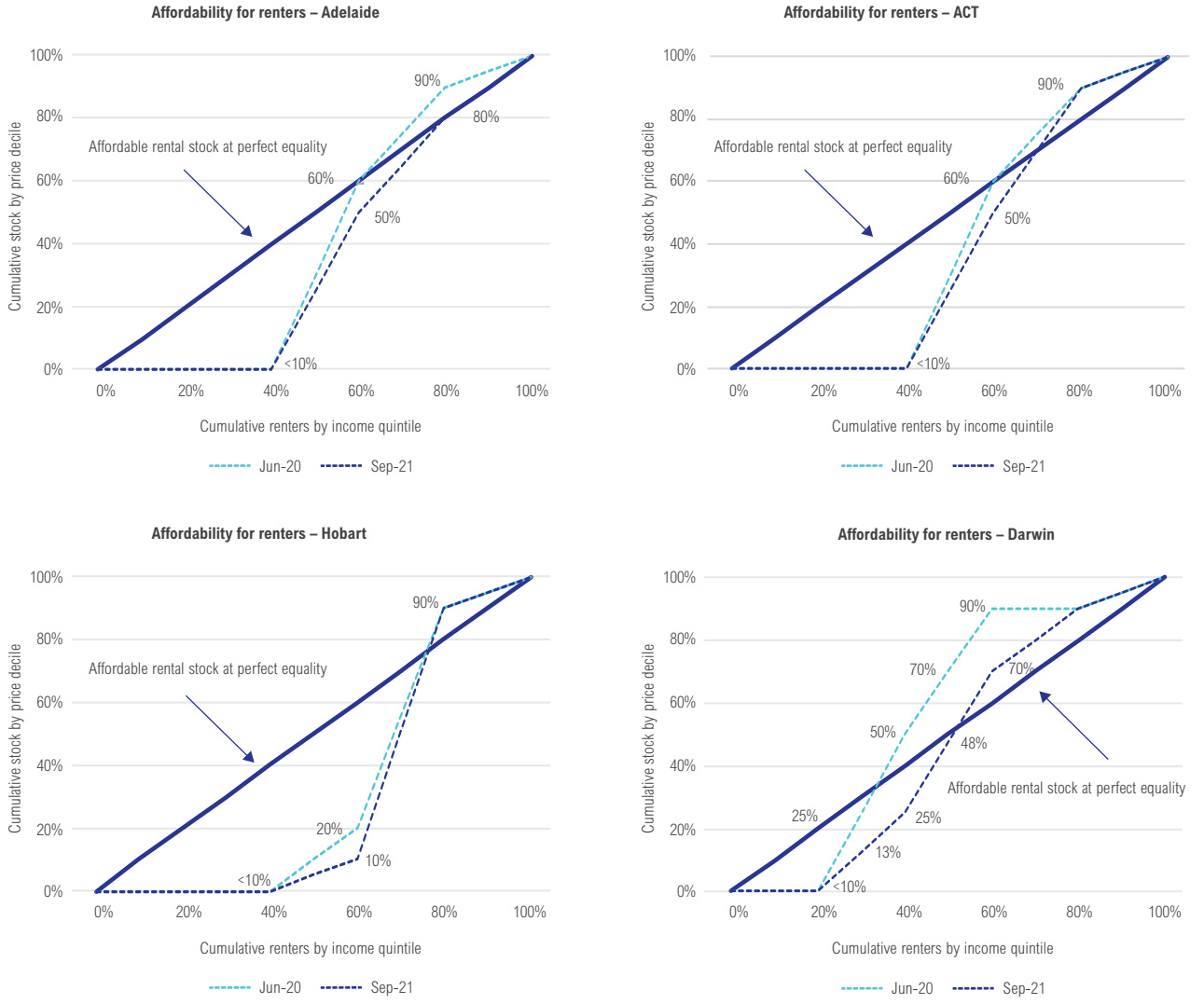
Figure 6.3: Distribution of affordable rental dwellings by income quintile – Capital cities, Jun 2020 to Sept 2021



Hobart continued to be a landlords' market, with low vacancy rates and increased interstate population growth resulting in affordability for renters in the middle-income quintile worsening to the point that just up to 10% of dwellings are considered affordable.

Lorenz curves are useful for assessing affordability because they graphically demonstrate what proportion of housing services or stock are affordable for households at each income level

Figure 6.3: Distribution of affordable rental dwellings by income quintile – Capital cities, Jun 2020 to Sept 2021 (continued)



Source: Income data from ANU, ABS; Rent data from CoreLogic

Table 6.1: Affordability changes for renters – Capital cities, Jun 2020 to Sept 2021

	Income quintile				
Region	**20th percentile**	**40th percentile**	**60th percentile**	**80th percentile**	**100th percentile**
Australia	-	-	▼10%	-	-
Sydney	-	▲10%	▲10%	-	-
Melbourne	-	▲10%	▲5%	-	-
Brisbane	-	-	▼10%	-	-
Perth	-	▼25 %	▼20%	-	-
Adelaide	-	-	▼10%	▼10%	-
Hobart	-	-	▼10%	-	-

Source: Income data from ANU, ABS; Rent data from CoreLogic, NHFIC

As regional and coastal lifestyle areas became more popular amid pandemic uncertainty, the increased demand and low rental supply saw record growth in rents. This worsened affordability in all regional markets. Although some, such as SA, were impacted less than others. Affordability has worsened more for those in regional markets compared to capital cities.

Research strongly suggests renters on the lowest incomes are crowded out by competition for affordable rentals from those higher up the income scale

Regional NSW and regional Vic saw renters in the middle-income quintile hit hardest by the surge in rents.

For instance, in both these regions, renters in the middle-income quintile could previously afford up to 50% of rental dwellings but can now afford just up to 30% of rental dwellings. Rents in regional NSW grew slightly more than rents in regional Vic over the year, especially for more expensive dwellings (Figure 6.4). This could explain why affordability worsened even for renters on the upper end of the income scale in regional NSW, while remaining largely unchanged in regional Vic.

Regional Qld has one of the most unaffordable rental markets of all the regional areas, with no income quintile experiencing affordable rental stock at perfect equality of distribution. While rents appreciated more in regional Qld compared to regional NSW and regional Vic (Figure 6.4), affordability didn't decline as much. For renters in all three middle-income quintiles, 10% of rentals became unaffordable.

In regional WA, renters in the middle-income quintile were most affected by the strong growth in rents. For renters in that quintile, 15% of dwellings became unaffordable compared to 2020.

In regional Tas, solid growth in rents and tight supply caused deterioration in affordability for those in all three middle-income quintiles, with up to 20% fewer dwellings classified as affordable for these renters.

Importantly, renters' incomes may not be perfectly matched to rental prices. For instance, renters in the middle-income quintile may not necessarily be renting stock from the middle price quintile.

Research strongly suggests renters on the lowest incomes are crowded out by competition for affordable rentals from those higher up the income scale.[46] The implication is that, even when overall supply is sufficient to meet demand, sufficient affordable housing supply may not be available to meet the needs of those in the bottom two quintiles. There could potentially be households facing more affordability constraints than is suggested in the Lorenz curves.

Figure 6.4: Rent growth in regional areas, Oct 2020 to Oct 2021

Source: CoreLogic

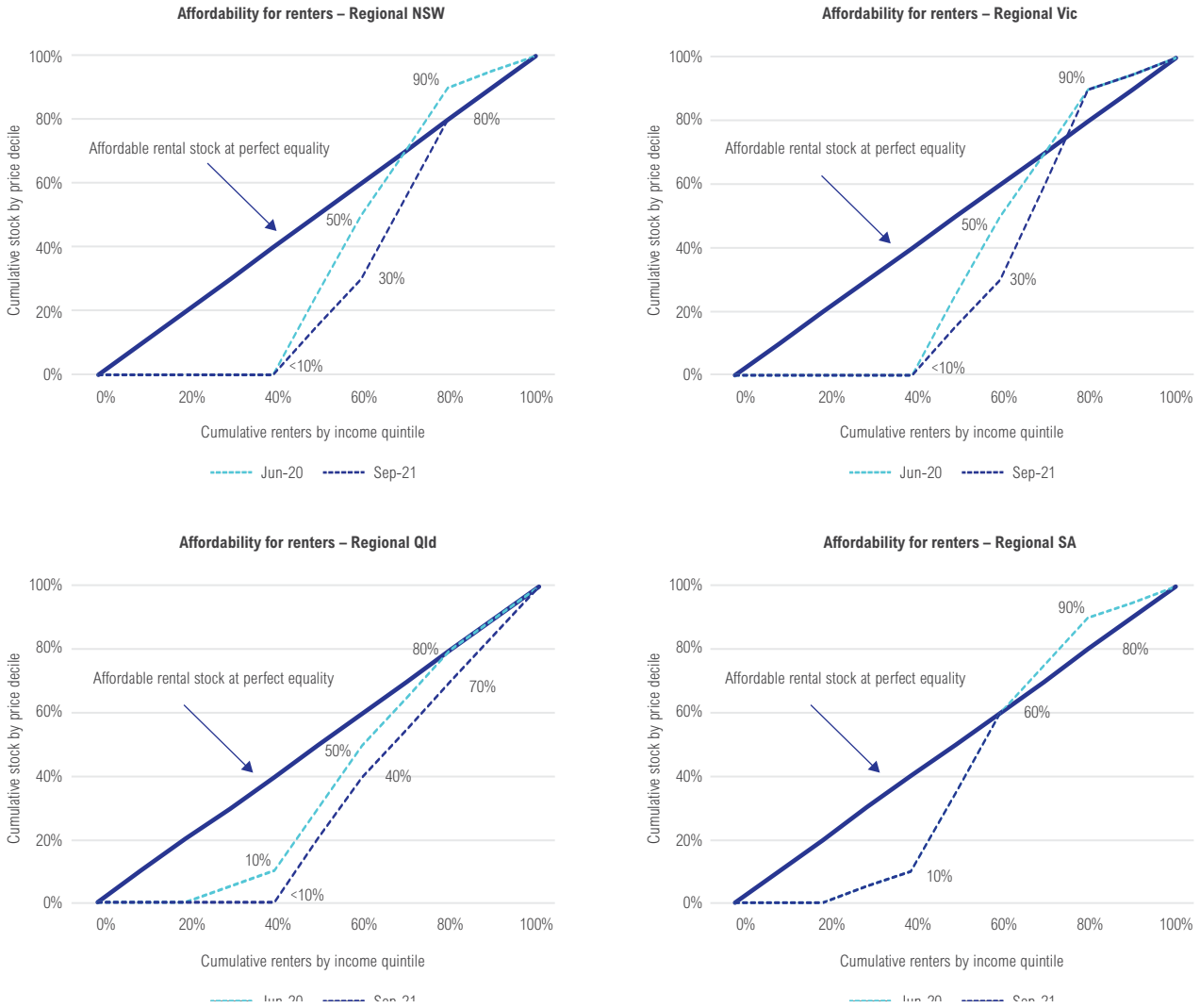
46 https://www.ahuri.edu.au/sites/default/files/migration/documents/AHURI_Final_Report_No241_Supply-shortages-and-affordability-outcomes-in-the-private-rental-sector-short-and-longer-term-trends.pdf

Table 6.2: Affordability changes for renters – Regional (rest of state) areas, Jun 2020 to Sept 2021

	Income quintile				
Region	**20th percentile**	**40th percentile**	**60th percentile**	**80th percentile**	**100th percentile**
Regional NSW	-	-	▼20%	▼10%	-
Regional Vic	-	-	▼20%	-	-
Regional Qld	-	▼10%	▼10%	▼10%	-
Regional WA	-	▼10%	▼15%	-	-
Regional SA	-	-	-	▼10%	-
Regional Tas	-	▼10%	▼20%	▼10%	-

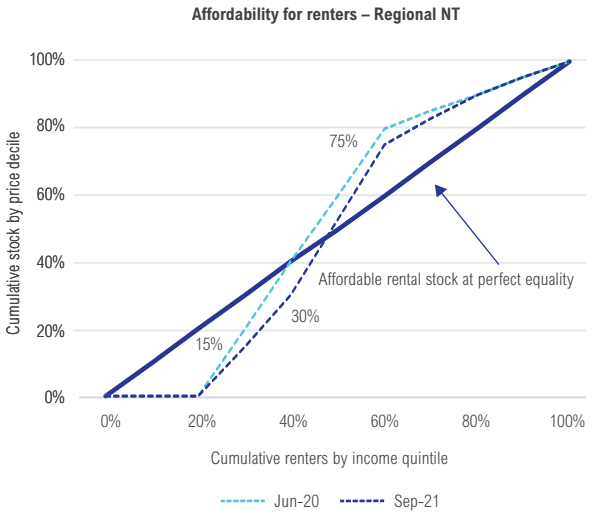
Source: Income data from ANU, ABS; Rent data from CoreLogic, NHFIC

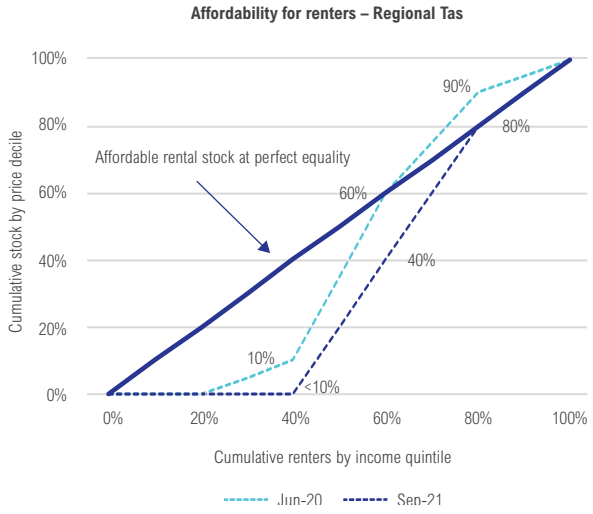
Figure 6.5: Distribution of affordable rental dwellings by income quintile – Regional (rest of state) areas, Jun 2020 to Sept 2021



One factor to consider is that our analysis in regional markets is based on the incomes of renters from that regional area. It does not account for the typically higher incomes of city workers now renting in regional areas. Affordability may not be as significant an issue for city workers moving into regional and coastal lifestyle markets. But locals are facing worsening affordability outcomes because they are now competing with higher paid city workers.

Figure 6.5: Distribution of affordable rental dwellings by income quintile – Regional (rest of state) areas, Jun 2020 to Sept 2021 (continued)





Source: Income data from ANU, ABS; Rent data from CoreLogic

First home buyers

Affordability for prospective first home buyers has declined as property prices recorded double digit growth.

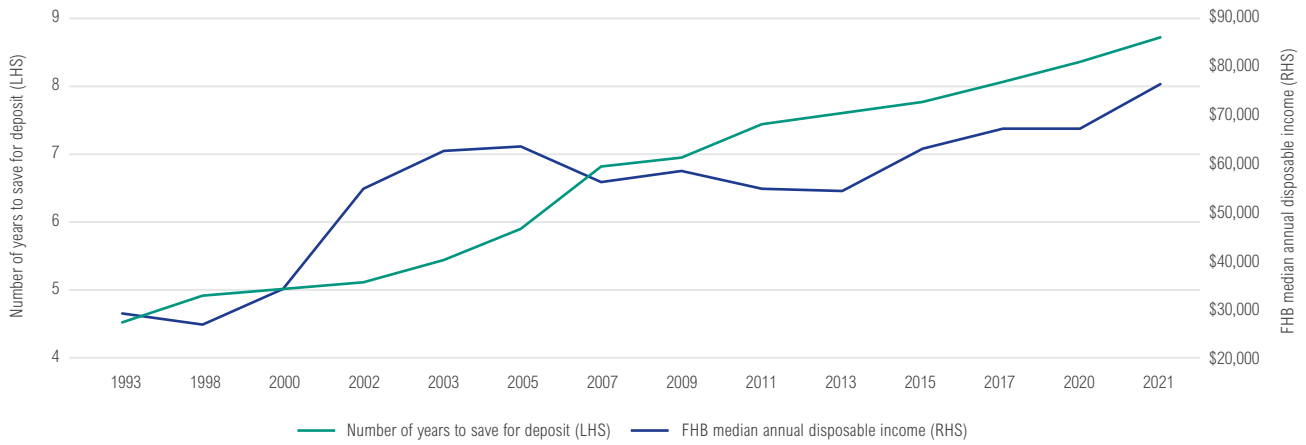
Prospective first home buyers have been identified as those currently renting with a household head aged between 25 and 39 years old.[47]

Saving up for a deposit is the biggest challenge first home buyers face when it comes to purchasing property. Compared with last year, strong growth in property prices means first home buyers need to save for another year on average to secure a 20% deposit, despite median incomes rising steadily (Figure 6.6). The time required to save for this deposit has doubled since the early 1990s from around 4 to 8 years, while the size of the upfront deposit required has increased more than fivefold to be almost $130,000.

Several government schemes aim to help first home buyers get a foot in the property market sooner. These include:

- First Home Loan Deposit Scheme – supports first home buyers to buy a home sooner with a deposit as little as 5%.
- New Home Guarantee – supports first home buyers to build or buy a new home, with higher property price caps available in selected areas.
- Family Home Guarantee – supports eligible single parents with at least one dependent child in purchasing a family home with a deposit as little as 2%, regardless of whether they are a first home buyer or a previous homeowner.
- First Home Super Saver Scheme – first home buyers can use voluntary super contributions of up to $15,000 each financial year to assist with the purchase of their first home.
- First Home Owner Grant Scheme – a one-off grant payable to first home buyers if they satisfy eligibility criteria. For instance, in NSW, $10,000 is available if they buy or build their first home with a purchase price of under $600,000 (or under $750,000 if purchasing vacant land and building a home).
- Transfer duty exemptions or concessions in some states and territories.

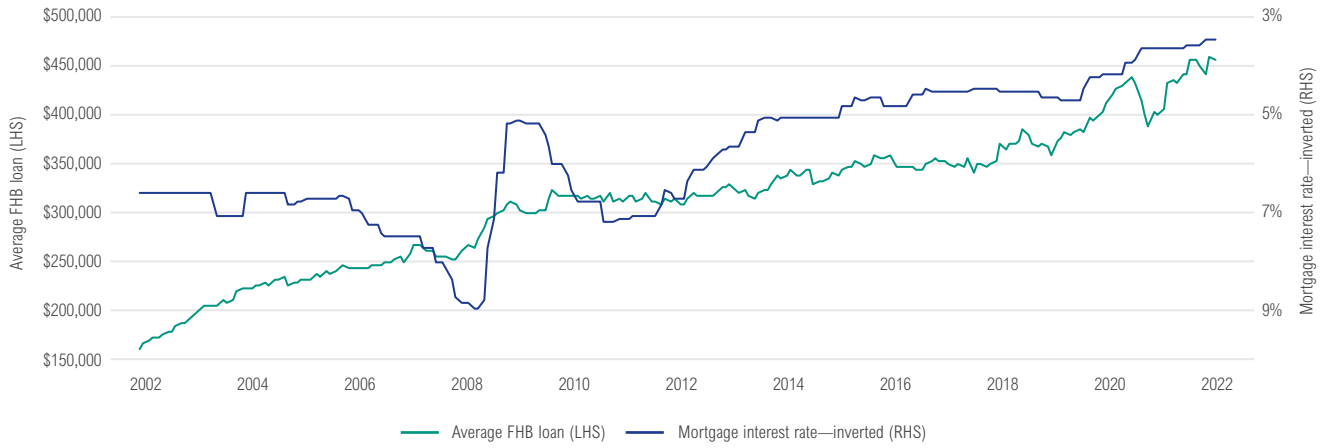
Figure 6.6: Time required to save 20% deposit for prospective first home buyer



Source: CoreLogic, ABS, RBA, NHFIC

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

Figure 6.7: First home buyer debt relative to discounted mortgage interest rate, 2002–2021



Source: ABS, RBA, NHFIC

The increase in deposits has been accompanied by the growing amount of debt that first home buyers take on. Figure 6.7 shows average first home buyer debt rose around $50,000 from last year to a total of almost $460,000, spurred on by record low mortgage lending rates. This is triple the debt first home buyers took on in the early 2000s.

However, once the deposit has been paid and the home loan secured, affordability pressures generally decrease as the decline in mortgage lending rates has helped mortgage serviceability in recent years.

Figure 6.8: Monthly mortgage-repayments-to-rent ratio, Australia

Source: CoreLogic, ABS, RBA, NHFIC

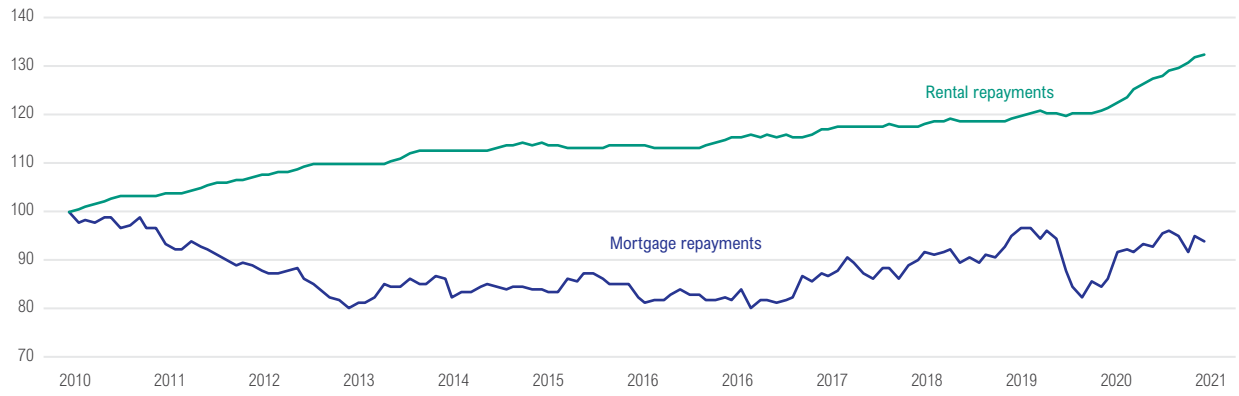
We can compare differences in affordability pressures for prospective first home buyers and first homeowners by comparing the cost of renting with the cost of servicing a mortgage.

Figure 6.8 shows the ratio of first home buyers' mortgage-repayments-to-rent has fallen over time, with mortgage repayments being on par and even slightly less than rental repayments late last year and from the middle of this year. On average, the cost of servicing a mortgage has remained on par with the cost of renting over recent years.

This is largely attributable to ultra-low mortgage rates, which has made larger loans more affordable. But stronger growth in rents has also helped balance these costs out as rents increased more than mortgage repayments (Figure 6.9).

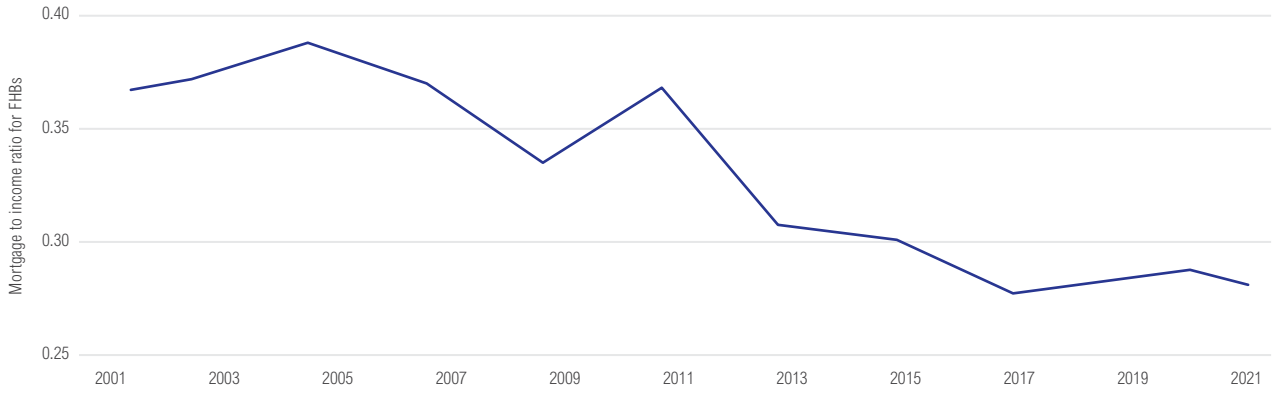
High rental costs are also a key reason behind why prospective first home buyers struggle to save up for a deposit. As Figure 6.1 shows, households on median incomes were paying over 30% of their income on rent and cost of living increases have further slowed their progress to home ownership.

Figure 6.9: Mortgage repayment vs rental repayment growth, Australia – (indexed, base of 100 = December 2010)



Source: CoreLogic, ABS, RBA, NHFIC

Figure 6.10: Minimum mortgage-repayment-to-income ratio for prospective first home buyers



Source: ABS, ANU, RBA, NHFIC

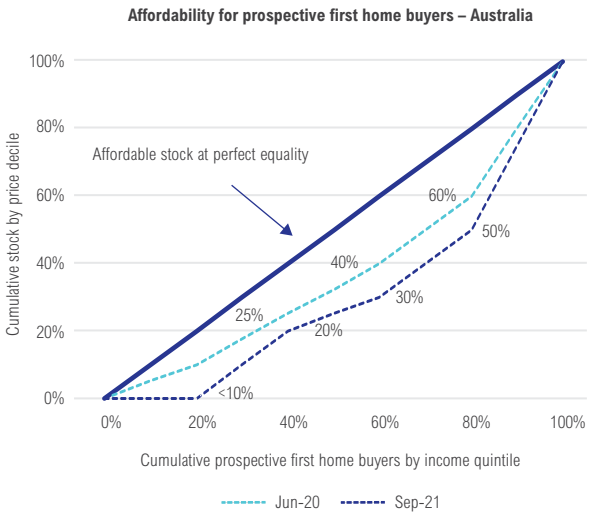
Another way of assessing affordability of servicing a mortgage is by comparing mortgage repayments to income. This ratio remains below 30% (Figure 6.10). As discussed above, housing costs are generally deemed affordable if they make up 30% or less of disposable household income. This further highlights how the greatest affordability challenges for prospective first home buyers are related to saving up for a deposit rather than servicing the mortgage once they secure a home.

Mortgage serviceability could decline if interest rates increase on the back of a strengthening post-pandemic economy. However, APRA recently increased the minimum interest rate buffer on home loan applications from 2.5 to 3 percentage points. This could help support mortgage serviceability of new loans by limiting the size of the total loan. However, it could also risk pushing first home buyers out of the market. APRA estimates the rule change will reduce a household's maximum borrowing capacity by around 5%.

The same Lorenz curve analysis used in Figure 6.2 and Figure 6.3 is used here to illustrate the distribution of affordable dwellings for prospective first home buyers based on different income quintiles. The distribution of dwellings deemed affordable using Lorenz curve analysis for this cohort is based on affordability of mortgage repayments. Mortgage repayments less than or equal to 30% of prospective first home buyer income renders the dwelling price affordable in this analysis. However, as outlined above, it is important to note saving for a deposit is still the key affordability constraint for prospective first home buyers. While the curve connects back to this straight line of equality for first home buyers on the highest incomes (100% income quintile), it should not be interpreted that first home buyers on the highest incomes can afford 100% of dwellings.

Figure 6.11 shows that, at the national level, overall affordability worsened. Just up to 20% of dwellings are considered affordable to buyers in the second lowest income quintile, down from 25% last year. Those in the middle income quintile can only afford up to 30% of dwellings, down from 40% last year.

Figure 6.11a: Distribution of affordable dwellings for prospective first home buyers by income quintile – Australia, Jun 2020 to Sept 2021



Source: Income data from ANU, ABS; Rent data from CoreLogic

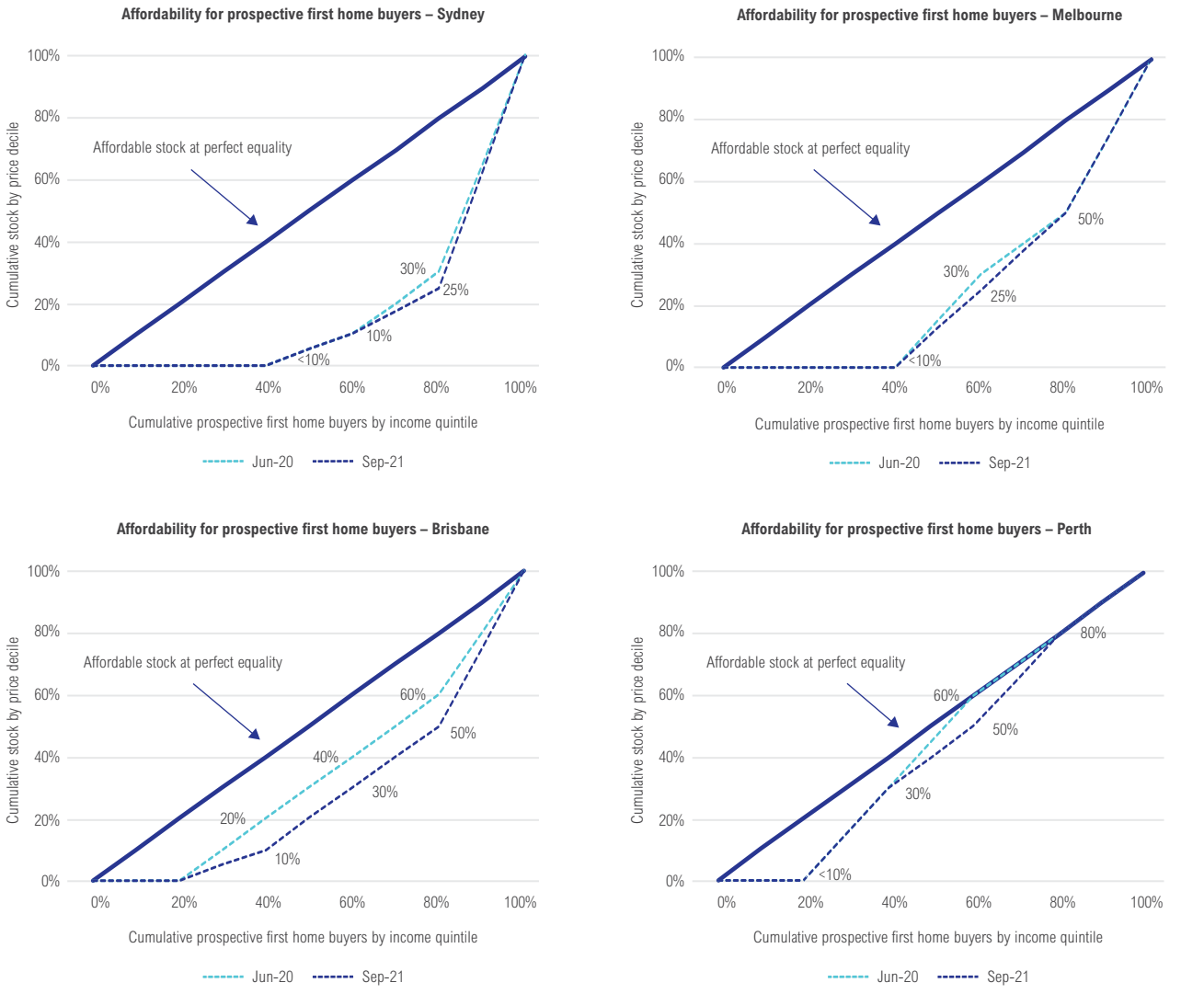
We also repeat our analysis on a capital city and regional basis to cater for the spatial dimensions of affordability.

In Greater Sydney, strong property price growth means Sydney remains largely unaffordable for households in the lower to middle income quintiles looking to transition into home ownership. Even households in the second highest income quintile can only afford up to 25% of dwellings, compared with 30% last year.

In Melbourne, affordability for prospective first home buyers also remains in line with last year's affordability profile despite moderate price increases.

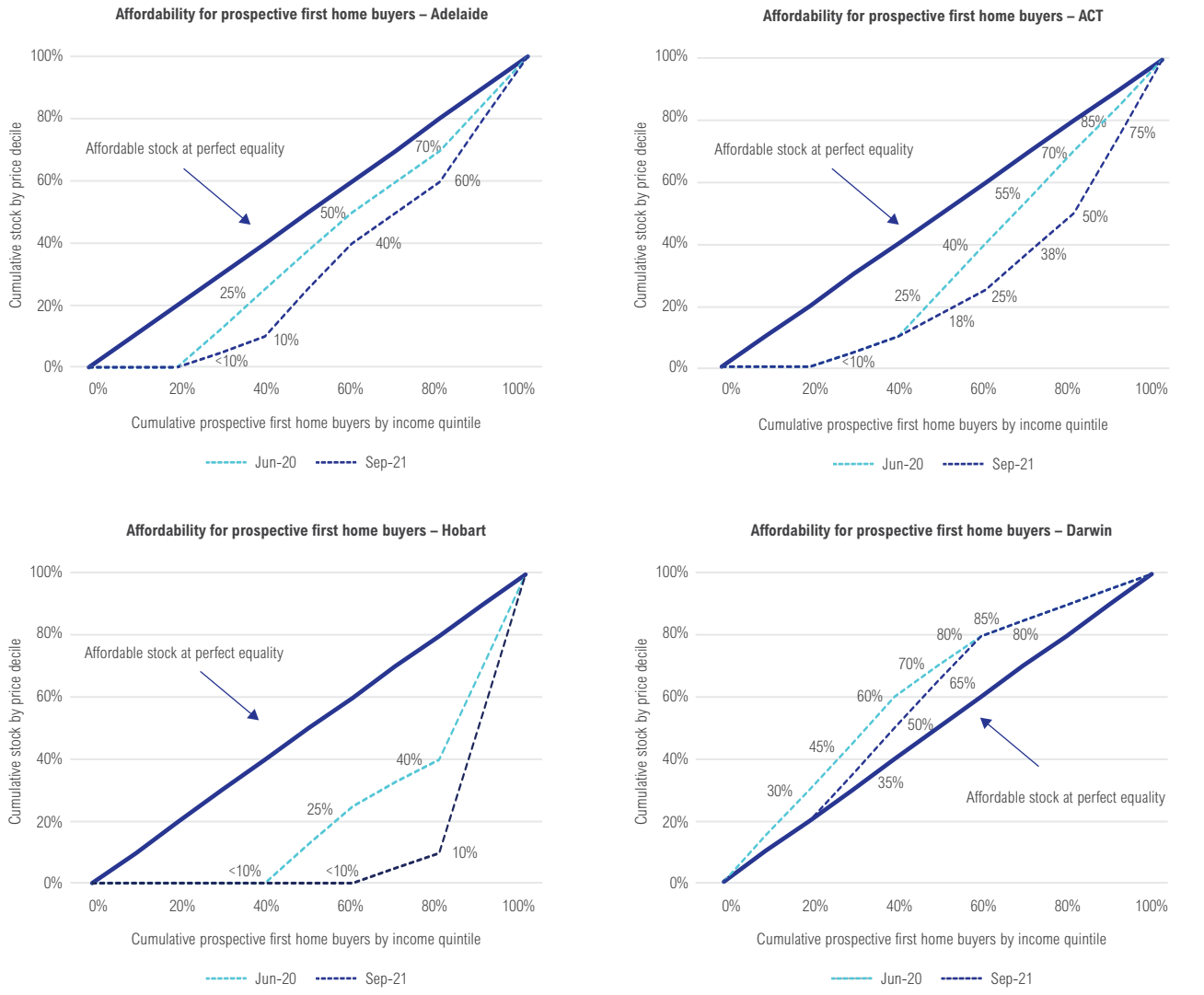
Changes in affordability for prospective first home buyers were more substantial in other capital cities. Strong price growth especially affected those in the lower to middle income quintiles in Brisbane, Perth and Adelaide, with up to 10 to 15% of dwellings becoming unaffordable.

Figure 6.11b: Distribution of affordable dwellings for prospective first home buyers by income quintile – Capital cities, Jun 2020 to Sept 2021



In Hobart, house prices jumped to new records as prices increased steeply. This resulted in affordability deteriorating substantially, pricing prospective first home buyers on incomes up to the middle-income quintile out of the market. Even those on the second highest income quintile could only afford just up to 10% of dwellings.

Figure 6.11b: Distribution of affordable dwellings for prospective first home buyers by income quintile – Capital cities, Jun 2020 to Sept 2021 (continued)



Source: Income data from ANU, ABS; Rent data from CoreLogic

Table 6.3: Affordability changes for prospective first home buyers – Jun 2020 to Sept 2021

	Income quintile				
Region	**20th percentile**	**40th percentile**	**60th percentile**	**80th percentile**	**100th percentile**
Australia	▼10%	▼5%	▼10%	▼10%	-
Sydney	-	-	-	▼5%	-
Melbourne	-	-	▼5%	-	-
Brisbane	-	▼10%	▼10%	▼10%	-
Perth	-	-	▼10%	-	-
Adelaide	-	▼15%	▼10%	▼10%	-
Hobart	-	-	▼25%	▼30%	-

Source: Income data from ANU, ABS; Rent data from CoreLogic, NHFIC

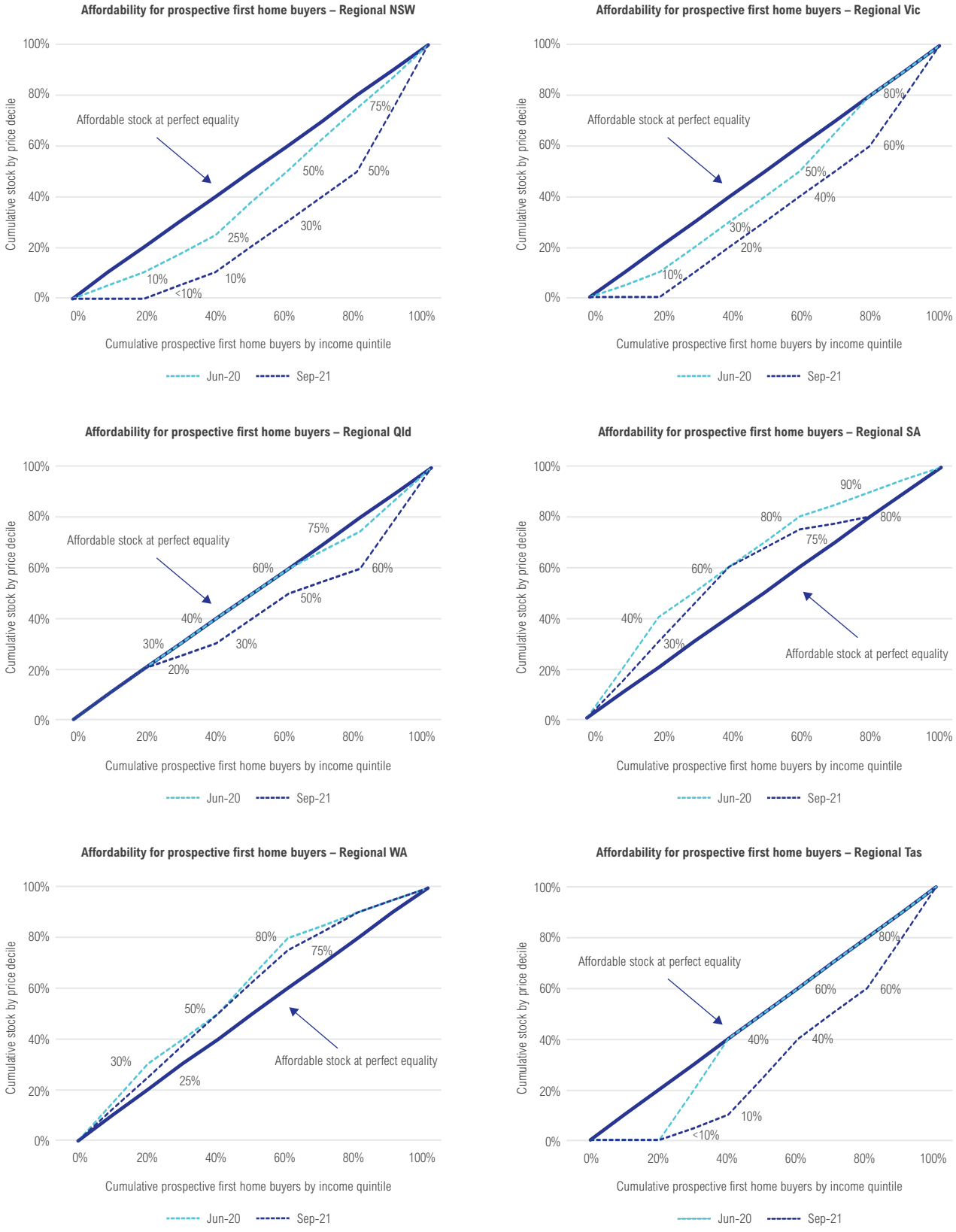
Affordability for those in regional areas looking to achieve home ownership in local markets also fell. In regional NSW, house prices posted record gains. This led to prospective first home buyers in the second lowest and middle-income quintiles being able to afford up to 20% fewer dwellings than a year ago. Price growth was especially strong for more expensive dwellings, likely reflecting the heightened demand for upsizing into more spacious and bigger homes. This led to prospective first home buyers in the second highest income quintile being able to afford 25% fewer dwellings. Affordability in regional Vic also worsened the most for those in the second highest income quintile, but the falls in affordability were less than for regional NSW.

Regional Qld, which is relatively more affordable for prospective first home buyers, experienced similar declines in affordability as regional Vic, with households in most income quintiles finding 10% fewer dwellings to be affordable.

As prices hit record highs in regional Tas, prospective first home buyers in the middle income quintile are finding 20% fewer dwellings to be affordable

In regional SA and regional WA, typically up to 10% of dwellings became unaffordable, with the distribution in affordability outcomes equal to or exceeding the line of perfect equality. This suggests fewer affordability concerns for prospective first home buyers in those markets, particularly compared to renters.

Figure 6.12: Distribution of affordable dwellings for prospective first home buyers by income quintile – Regional (rest of state) areas, Jun 2020 to Sept 2021



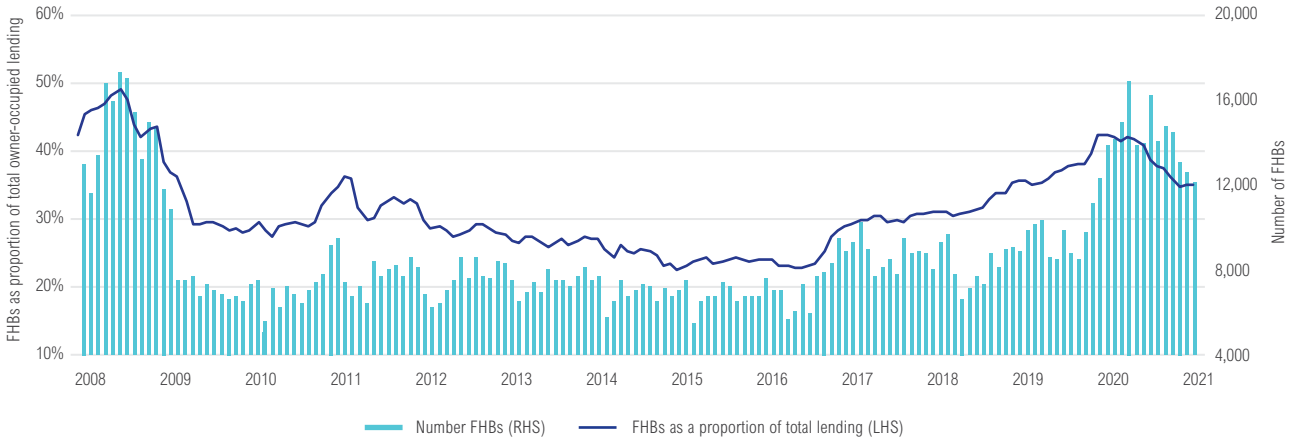
Source: Income data from ANU, ABS; Rent data from CoreLogic

Table 6.4: Affordability changes for prospective first home buyers – Jun 2020 to Sept 2021

	Income quintile				
Region	**20th percentile**	**40th percentile**	**60th percentile**	**80th percentile**	**100th percentile**
Regional NSW	▼10%	▼15%	▼20%	▼25%	-
Regional Vic	▼10%	▼10%	▼10%	▼20%	-
Regional Qld	-	▼10%	▼10%	▼15%	-
Regional WA	▼5%	-	▼5%	-	-
Regional SA	▼10%	-	▼5%	▼10%	-
Regional Tas	-	▼30%	▼20%	▼20%	-

Source: Income data from ANU, ABS; Rent data from CoreLogic, NHFIC

Figure 6.13: First home buyer loan commitments – Australia - Feb 2008 to Sept 2021



Source: ABS, NHFIC

Prospective first home buyers being priced out of the market can also be seen through first home buyer participation. This peaked late last year to 42% of total owner-occupier lending commitments, before subsiding as prices surged to record highs (Figure 6.13). Interest from first home buyers remains above long-run averages, but affordability constraints mean they are likely to be under-represented over coming months.

Estimating the need for social and affordable housing

Low-income households who struggle to afford rent and may be on the brink of homelessness can seek social housing, where rent is typically set at around 25–30% of income.

Affordable housing is available to those on low to moderate incomes who struggle to afford basic living costs. It can include essential workers whose household income is not high enough to pay market rent in the area in which they live or work. Rent for these affordable housing candidates is typically set at 80% of market rent.

Social and affordable housing need assessments are important to inform policy decisions on resource allocation, market monitoring, affordable housing targets, budgeting and planning.

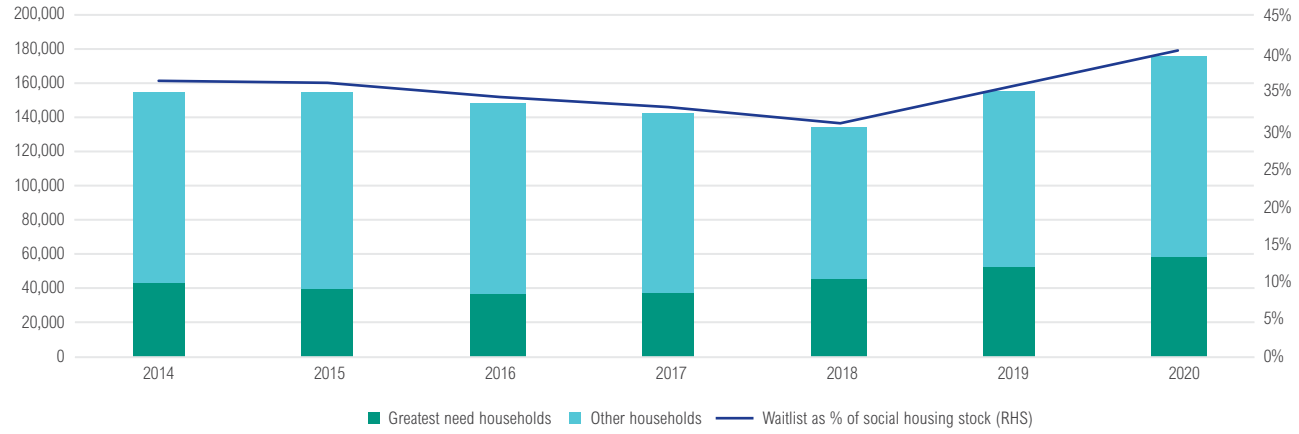
Wait lists and changes in wait lists provides a simple and straight forward indicator of housing need (Figure 6.14).

As of mid–2020, Australia had 436,000 social housing dwellings, with more than 175,000 households on wait lists – 20,000 more than in mid–2019.

More sophisticated affordable housing assessment techniques recognise the distinction between an existing stock of need and future ongoing need.

Table 6.5 summarises more advanced methods used in studies to estimate the need for social and affordable housing (see Appendix for further details). All studies have identified the current share of social housing needs to be expanded to ensure low-income households are not paying unaffordable rents.

Figure 6.14: Public housing waitlist



Source: AIHW, NHFIC

Table 6.5: Estimating social and affordable housing need

Study methodology	Findings
Availability of affordable private rentals to low-income households[48] [49]	National shortfall of affordable private rentals to low-income households was estimated to be around 270,000 in 2011, where affordable is defined as not paying more than 30% of income on rent. Social housing would need to be expanded from 5% to 8.4% of total stock.
Growth required to maintain a certain share of social housing[50] [51]	Using 2016 as a starting point, 2,000 rentals would need to be added annually over a 20-year period (2016 to 2036) to maintain the share of social housing in NSW, totalling to around 40,000 dwellings. More than double the rentals would be needed annually if tenants with unaffordable rental payments were also accounted for, totalling to around 100,000 dwellings. Over the same period, 330,000 additional social housing dwellings would be required to return social housing stock back to a 6% benchmark, which was the level when Australia stopped its public housing construction program in 1996. 580,000 rentals would be needed if affordable housing was factored in.
Simulation model accounting for economic conditions and household formation[52]	Over the period 2017 to 2025, the number of households in housing need due to unaffordable market rent is expected to increase from 1.3 million to 1.7 million (from 14 to 16% of households).
Current and projected housing need[53] [54]	Over the period 2016 to 2036, some 727,300 additional social dwellings would be needed, implying an annual average growth of 5.5% over the existing stock. To simply prevent further deterioration in the current shortfall of social housing, 290,000 homes are required over the projection period, or 15,000 annually. Extending housing need requirements to income quintile 2, total housing required by 2036 is just above one million homes. Around 8–9% of stock would need to be social/affordable housing.

48 Hulse, K., Reynolds, M., Stone, W. and Yates, J. 2015, Supply shortages and affordability outcomes in the private rental sector: short- and longer-term trends, AHURI Final Report No. 241, Australian Housing and Urban Research Institute, Melbourne, https://www.ahuri.edu.au/research/final-reports/241

49 Groenhart, L. and Burke, T. 2014, Thirty years of public housing supply and consumption: 1981–2011, AHURI Final Report No. 231, Australian Housing and Urban Research Institute, Melbourne, https://www.ahuri.edu.au/research/final-reports/231.

50 Yates, J. 2018, Social and Affordable Housing Projections for Australia 2016–2026/36, Paper commissioned by Everybody's Home – The National Housing Campaign, http://everybodyshome.com.au/wp-content/uploads/2018/04/EH_researchreport_190418- 1.pdf.

51 Yates, J. 2016, Addressing the housing affordability crisis: Basis for an estimated need of 100,000 dwellings in NSW over the next two decades, NSW Federation of Housing Associations, Sydney, http://www.communityhousing.org.au/index_attachments/NSWFHA%20Need%20for%2010 0,000%20dwellings.pdf

52 Rowley, S., Leishman, C., Baker, E., Bentley, R. and Lester, L. 2017, Modelling housing need in Australia to 2025, AHURI Final Report No. 287, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/287

53 Lawson, J., Pawson, H., Troy, L., van den Nouwelant, R. and Hamilton, C. 2018, Social housing as infrastructure: an investment pathway, AHURI Final Report No. 306, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/306

54 Troy, L., van den Nouwelant, R., Randolph, B. 2019, Estimating need and costs of social and affordable housing delivery, City Futures Research Centre, Sydney, https://cityfutures.be.unsw.edu.au/documents/522/Modelling_costs_of_housing_provision_FINAL.pdf

In Australia, the growth in the community housing sector has been constrained by the funding gap: the difference between the costs of delivering and operating new community housing developments and the comparatively low rental returns. NHFIC modelling has shown contributions of government-owned land, mixed-tenure developments, lower-cost NHFIC finance and additional private sector finance can help narrow the funding gap for community housing.[55] However, liaison with Community Housing Providers (CHPs) suggests there is heightened interest from institutional investors in considering affordable housing as a form of social infrastructure investment at a time when interest rates and investment returns in general are low.

Currently measurements of housing need are also limited.[56] Key issues include:

- **A lack of consistency** among state and territory governments in reporting number of social housing units by provider type and whether affordable housing is included. Different definitions of community housing mean published statistics can be inconsistent with the actual numbers managed by registered CHPs.
- **A lack of statistical data.** For instance, Australia has no official separate source of community housing data, or one that enables the CHP-managed portfolio to be split by provider-owned vs CHP-managed. The extent to which head-leased properties are included in published totals is also unclear. State and territory governments do not routinely publish statistics on construction of social and affordable housing, nor on public housing sales or demolitions. Usually, their pledges for new housing investment programs do not account for sale and demolitions of existing homes.
- **Statistics might not capture the full context.** They are only a point in time analysis. In the case of wait lists, changes may not reflect changes in housing need but could be a product of policy changes or changes in eligibility criteria. Qualitative information, such as quality or appropriateness of the dwelling stock, may not be factored in when examining supply.

Data published on the stock of social housing dwellings for each state by the Australian Institute of Health and Welfare suggests the average growth rate in the number of social housing dwellings for Australia from 2011 to 2020 was about 0.4% per annum. This is a much lower than the current and projected housing need growth rate of 5.5% (Table 6.5). This suggests some reform is needed in current state policy settings to achieve and address necessary housing need outcomes.

Housing need assessments are performed more consistently overseas. The UK government publishes guidance for councils on how to assess their housing needs to help them identify how many homes need to be planned for.[57] The standard method uses a formula to identify the minimum number of homes expected to be planned for, in a way that addresses projected household growth and historic undersupply. The first step involves setting the baseline number of households using national household growth projections for local council area. Using these projections, the average annual household growth is calculated over a 10-year period. The projected household growth figure is then adjusted based on the area's affordability.[58] Next a cap is applied, which limits the increases a council can face, depending on other strategic housing policies.[59] A 35% uplift is then applied to the councils in the top 20 most populated cities or urban centres.

The UK also publishes an annual homelessness monitor, which reports on homelessness statistics, highlights emerging trends, forecasts likely future changes and identifies the developments likely to have the most significant impacts on homelessness.[60] In Australia, Launch Housing also publishes a homelessness monitor, examining changes in the scale and nature of homelessness in Australia, as well as how social, economic and policy drive these changes.[61]

Other UK national housing needs assessments have projected out housing supply requirements for low-income households and homeless people using a model like some used in Australian studies.[62] The model is constructed for different housing markets areas, incorporating the supply process as a function of planning and economic modelling of demographic change. It also links other components, such as income distribution and labour market indicators.

55 https://www.nhfic.gov.au/media/1670/210520-delivering-more-affordable-housing-research-paper.pdf
56 CHIA 2020 – Social and affordable housing provision data – state of play
57 https://www.gov.uk/guidance/housing-and-economic-development-needs-assessments#housing-need
58 These median workplace-based affordability ratios are published by the Office for National Statistics at a local authority level. No adjustment is applied where the ratio is 4 or below. For each 1% the ratio is above 4, the average household growth baseline should be increased by a quarter of a percent. An authority with a ratio of 8 will have a 25% increase on its annual average household growth baseline.
59 Where relevant strategic housing policies were adopted within the last 5 years, the local housing need is capped at 40% above the average annual housing requirement figure set out in existing policies Where these policies were adopted more than 5 years ago, the local housing need figure is capped at 40% above whichever is the higher of the projected household growth identified in the first step, or the average annual housing requirement figure set out in the most recently adopted strategic policies.
60 https://www.crisis.org.uk/media/244703/crisis-england-monitor-executive-summary-2021.pdf
61 https://www.launchhousing.org.au/ending-homelessness/research-hub/australian-homelessness-monitor
62 Bramley, G. (2018) Housing supply requirements across Great Britain: for low-income households and homeless people. London: Crisis and National Housing Federation

Current state policy aims

To meet the increasing demand for social housing, the state and territory governments have announced a number of initiatives since June 2020.[63] [64]

The most notable is the Vic Government's $5.3 billion 'Big Housing Build' package, which aims to provide 9,300 new social housing homes and 2,900 new affordable and low-cost homes.

Other state government social housing initiatives announced since June 2020 include the:

- NSW Government's $812 million COVID-19 social housing stimulus package, which is expected to provide 800 new social housing properties and upgrades to around 16,500 existing properties, and an additional $183 million to fast-track more than 1,400 new homes under the NSW Government's economic recovery strategy.[65]

- Qld Government's $2.9 billion 'Queensland Housing Strategy Action Plan 2021-2025', composed of a $1.9 billion investment to increase the supply of social and affordable housing, including approximately 7,400 new builds over the next four years, and a new $1 billion Housing Investment Fund.[66]

- WA Government's $2.1 billion investment in social housing, including a dedicated $750 million Social Housing Investment Fund, intended to deliver around 3,300 social housing properties and a range of other initiatives to improve existing properties.[67]

- Tas Government's $300 million investment in social housing through 'Tasmania's Affordable Housing Actions' Plan 1 and 2 and 'Community Housing Growth Program', including an expected 2,350 new social housing properties, and an additional $315 million for social and affordable housing and homelessness, intended to deliver another 3,500 properties by 2027.[68]

- ACT Government's $96 million 'Growing and Renewing Public Housing' program, which is expected to provide 400 additional social housing properties and renew another 1,000 existing properties over the next four years, and an additional $80 million earmarked for public housing maintenance over the next three years.[69]

These initiatives represent some catch-up in social housing supply as, for most states and territories, social housing investment has lagged population growth and demand for social housing for a number of years. That said, social housing has long been a conduit for stimulus during economic downturns.[70] While social and affordable housing is typically a responsibility of state governments, the Commonwealth continues to provide support through Commonwealth Rent Assistance and funding through the COAG National Affordable Housing Agreement.

Commonwealth Rent Assistance

Commonwealth Rent Assistance (CRA) is the most common form of housing assistance received by Australian households. It is available to families and individuals who pay or are liable to pay private rent or community housing rent, over specified thresholds and who do not reside in public housing. Tenants receive certain social security payments, in most cases, Newstart Allowance, Disability Support Pension or Age Pension. CRA recipients are typically those in the social and affordable needs group.

CRA considerably reduces rental stress. In 2020, the CRA managed to reduce the percentage of recipients paying more than 30% of income on rent from 55% to 29%.[71] However, around 487,900 income units (individuals or group of related persons) were still left paying more than 30% of income on rent in the private market. The improvement in housing affordability for these tenants was not due to any policy changes related to CRA. The number of CRA recipients has grown from 1.346 million in 2016 to 1.403 million in 2020. Interestingly, the number of CRA recipients aged 75 years or more rose from 120,567 in 2016 to 150,536 in 2020.

63 https://www.corrs.com.au/insights/rebuilding-after-covid-19-state-government-investment-in-social-and-affordable-housing

64 Other social and affordable housing initiatives may be present in each state, such as SA's $550 million 'Our Housing Future 2020-30' initiative to deliver more than 20,000 affordable housing outcomes over the next decade, and the NT's 'Housing Strategy 2020-2025'. This section focuses on initiatives announced from mid-2020, after the onset of COVID-19.

65 https://www.dpie.nsw.gov.au/news-and-events/articles/2021/Social-housing-investment-key-to-recovery-roadmap

66 https://statements.qld.gov.au/statements/92391

67 https://www.mediastatements.wa.gov.au/Pages/McGowan/2021/09/875-million-to-significantly-boost-social-housing-in-WA.aspx

68 https://www.premier.tas.gov.au/budget_2021/budget_releases/building_more_homes_for_tasmanians_in_need_and_more_support_for_home_ownership

69 https://www.cmtedd.act.gov.au/open_government/inform/act_government_media_releases/barr/2021/$100-million-to-grow-and-improve-social-and-affordable-housing

70 https://apo.org.au/sites/default/files/resource-files/2020-11/apo-nid309240_1.pdf

71 https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia/contents/financial-assistance#Stress

Appendix

State of the Nation's Housing 2021–22

Appendix

Household formation

Table #: Number of effective households by type

TOTAL: Family and household groups	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Change (2022 – 2032)	% of total
Couple family with children	3,043,000	3,042,000	3,075,000	3,111,000	3,152,000	3,189,000	3,225,000	3,261,000	3,297,000	3,335,000	3,370,000	3,404,000	361,000	21%
Couple family without children	2,702,000	2,726,000	2,771,000	2,816,000	2,863,000	2,911,000	2,957,000	3,004,000	3,050,000	3,096,000	3,143,000	3,190,000	488,000	29%
Lone parent family	1,107,000	1,110,000	1,125,000	1,141,000	1,159,000	1,176,000	1,194,000	1,211,000	1,229,000	1,246,000	1,263,000	1,280,000	173,000	10%
Other family household	121,000	121,000	122,000	124,000	126,000	128,000	131,000	133,000	136,000	138,000	140,000	142,000	21,000	1%
Group household	443,000	438,000	441,000	446,000	452,000	459,000	467,000	475,000	484,000	492,000	499,000	507,000	64,000	4%
Lone household	2,603,000	2,638,000	2,690,000	2,743,000	2,798,000	2,854,000	2,912,000	2,968,000	3,025,000	3,082,000	3,140,000	3,198,000	595,000	35%
Total households	**10,020,000**	**10,075,000**	**10,224,000**	**10,381,000**	**10,551,000**	**10,718,000**	**10,885,000**	**11,053,000**	**11,220,000**	**11,387,000**	**11,555,000**	**11,722,000**	**1,702,000**	

Note: Total households excludes vacant properties such as household second properties

Supply

We follow the model developed by Tulip and Saunders[72] to estimate building approvals, commencements and completions. Building approvals, commencements, work done, investment and completions have a reasonably stable long-term relationship. As a building approval is required before construction can commence on a new dwelling, we start with estimates of approvals, then map these through to other construction variables.

Building approvals feed into 2 separate chains of variables.

1. Chain volume measures of approvals are used to estimate dwelling investment and the real value of the housing stock.
2. The number of new building approvals is used to estimate completions and the number of dwellings, which in turn, feed into estimates of the rental vacancy rate.

Estimate the equation for chain volume building approvals for each dwelling type

Using a state space model, we worked out an equation for chain volume building approvals for detached housing and higher density dwellings. Inputs include the real mortgage rate, real dwelling price, real HDI, GST indicator and lagged chain volume building approvals.

Convert the chain volume estimate of building approvals into a number of building approvals by estimating dwelling quality

The chain volume building approvals relates to number of approvals by the average quality of new dwellings. We estimate separate equations for the constant price measures and average quality of approvals, then back out the number of approvals using the following identity:

$$APPNO_t = \frac{APP_t}{QUALITY_t}$$

Where *APPNO* is the number of approvals, *APP* is the chain volume measure of approvals and *QUALITY* is the quality, or average volume, of approvals. A key advantage of this approach (relative to directly estimating the number of approvals) is that the quality of approvals is much less volatile than the number of approvals, so it is easier to estimate. Relatedly, the number of approvals drives the cyclical variation in the constant price measures of approvals. Having separate equations for both the number and constant price measure of approvals could result in inconsistent estimates of the housing construction cycle.

Quality of approvals

We assume that the quality (or average volume) of approvals increases in line with real income per capita in the long run.

$$\Delta(quality_t) = -\lambda(quality_{t-1} - hddy\_capita_{t-1} - \theta_t) + \Delta hddy\_capita^*$$

Where quality is the average volume of dwelling approvals, hddy_capita is real household disposable income per adult (15+ years) and Δhddy_capita* is steady-state growth of real income per adult. All variables are in natural logs.

Other ways this equation is presented include:

$$\Delta\, ln(bahouseavol_t) = \lambda_{house} \times \left(\log\left(\frac{bahouseavol_{t-1}}{\left(\frac{rinc_{t-1}}{wap_{t-1}}\right)}\right) - \frac{1}{8}\sum_{i=1}^{8}\log\left(\frac{bahouseavol_{t-1}}{\left(\frac{rinc_{t-1}}{wap_{t-1}}\right)}\right)\right) + ir\_inc\_per\_wap$$

$$\Delta\, ln(bahouseavol_t) = \lambda_{other} \times \left(\log\left(\frac{bahouseavol_{t-1}}{\left(\frac{rinc_{t-1}}{wap_{t-1}}\right)}\right) - \frac{1}{8}\sum_{i=1}^{8}\log\left(\frac{bahouseavol_{t-1}}{\left(\frac{rinc_{t-1}}{wap_{t-1}}\right)}\right)\right) + ir\_inc\_per\_wap$$

Where bahouseavol and baotheravol refers to average quality of building approvals $\left(\frac{\text{chain volume building approvals}}{\text{number of building approvals}}\right)$, for detached and higher density respectively; rinc refers to real household disposable income, wap refers to the population of adults over 15 years of age.

We have used simple assumptions for the 2 parameters l and q.

1. The speed of adjustment coefficient, l, is set equal to the speed of adjustment for the chain volume measure of approvals.
2. q is the steady-state ratio of the average quality of approvals and real income per capita (in logs). We assume q is equal to the average value of this log-ratio in the final 2 years of our sample. We calculate this average over a 2-year period (as opposed to a longer horizon), so that q is fairly responsive to recent data: while real income per adult and the average volume of approvals have grown at a similar rate in the long run, it is not clear that the ratio of these variables should be stationary.

Estimate the equation for dwelling commencements for each dwelling type

We use an error correction model to estimate equation for dwelling commencements for detached housing and higher density dwellings. Inputs include lagged dwelling commencements, building approvals and GST indicator.

Estimate the equation for dwelling completions for each dwelling type

We use an error correction model to estimate equation for dwelling completions for detached housing and higher density dwellings. Inputs include lagged dwelling completions, dwelling commencements and GST indicator.

72 https://www.rba.gov.au/publications/rdp/2019/2019-01/full.html

Income projection methodology

When available, nominal income estimates compiled using microdata from the Survey of Income and Housing (SIH) are used (2017–18 being the latest reference year). These estimates are then projected forward at the national level using per household income indicators by income quintile compiled from ABS national accounts, income and population data.

Nationally, the per household income indicator is sourced from the ABS' gross disposable income growth by income quintile between 2017–18 and 2019–20 financial year (Australian National Accounts: Distribution of Household Income, Consumption and Wealth, 2019–20 financial year). However, where the data set is unavailable, the average per household income indicator is compiled by dividing the household gross disposable income (Australian National Accounts: National Income, Expenditure and Product, June 2021) by its projected number of households under the Series II scenario (Household and Family Projections, Australia, 2016–2041). The disaggregation by income quintile is calculated by carrying forward the variation between income quintiles and the average income growth between 2017–18 and 2019–20, as per the above calculation. A key assumption in this methodology is that income has increased consistently across the income quintiles.

The method for projecting the income estimates has been updated since the previous publication of this report. A linear trend technique was employed in last year's report but has now been replaced with a method that should more accurately capture the effects of the unusually weak economic conditions and sluggishness in population growth since early 2020. Both methods were tested for accuracy, by analysing how well they would have anticipated previous SIH figures, with the new method generally proving more accurate.

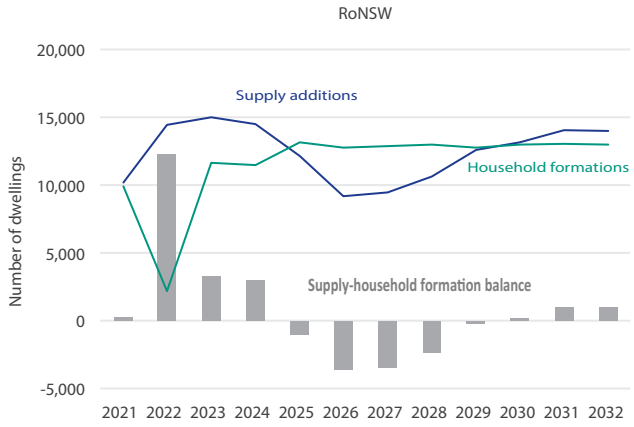
The change in income projection methodology resulted in minor adjustments to some of the 2020 Lorenz curves compared to the 2020 Lorenz curves published in the previous report, for both renters and prospective first home buyers.

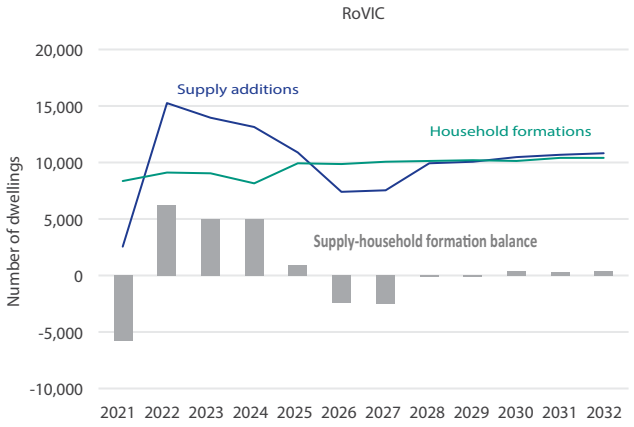
Perth's rental affordability curves showed a noticeable difference. We had indicated renters across all income quintiles could afford proportionately much more stock than their corresponding income quintile (indicated by the curve being above the line of perfect equality). The downwards revision in incomes means that is no longer the case, with renters in the lowest and second lowest income quintiles being able to afford just up to a quarter of rental stock. Adelaide's rental affordability distribution also changed. The proportion of stock that renters earning up to median income could afford used to be under the line of perfect equality, now the proportion of stock that renters earning up to the second highest income quintile are under this line.

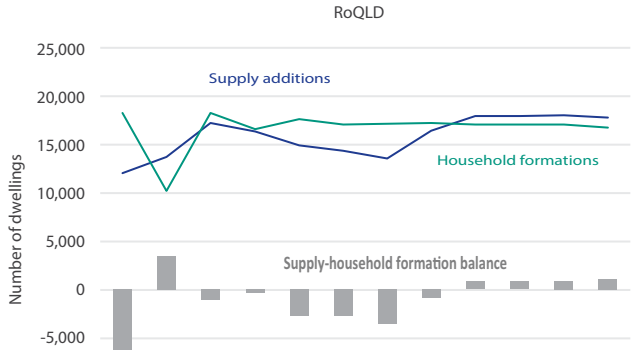
With regards to prospective first home buyer curves, the most evident change was for Brisbane's affordability distribution. Previously, we showed the curve for households earning up to the middle-income quintile was above the line of perfect equality, but they were revised to be under this line, resulting in a 20% reduction in affordability on average.

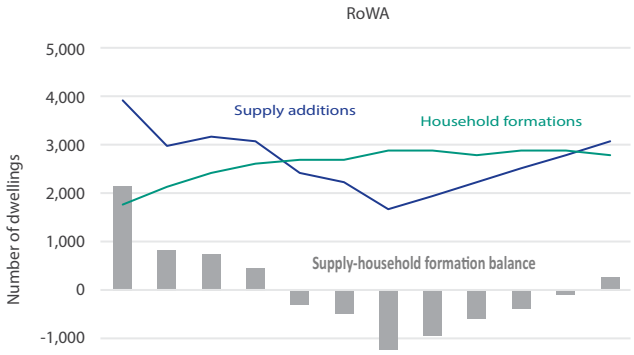
Supply-household formation balances

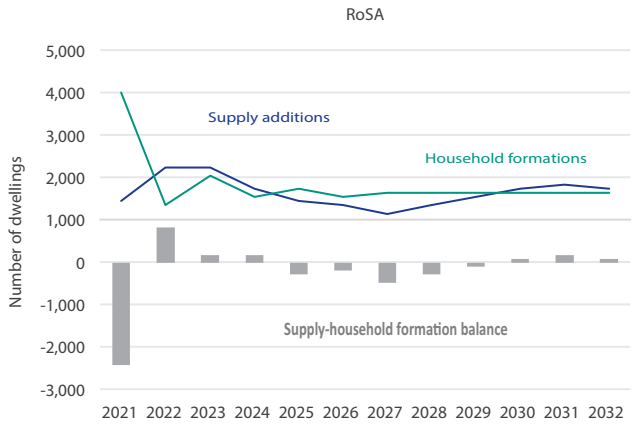
Annual change in household formation and supply and supply-household formation balances by regional area

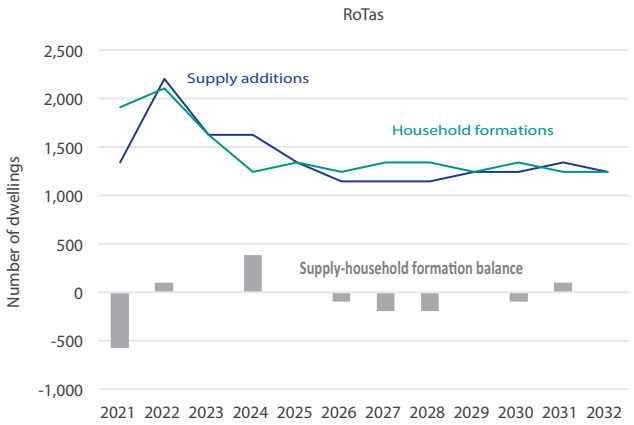


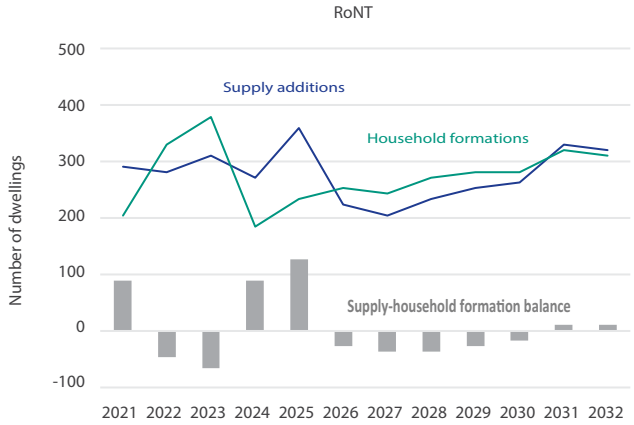












Annual change in household formation and supply and supply-household formation balance by regional area

	RoNSW		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	11,100	10,800	300
2022	15,700	2,400	13,300
2023	16,300	12,700	3,600
2024	15,800	12,500	3,300
2025	13,200	14,300	-1,100
2026	10,000	13,900	-3,900
2027	10,300	14,000	-3,700
2028	11,600	14,100	-2,500
2029	13,700	13,900	-200
2030	14,300	14,100	200
2031	15,300	14,200	1,100
2032	15,200	14,100	1,100

	RoVIC		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	2,700	8,900	-6,200
2022	16,300	9,700	6,600
2023	14,900	9,600	5,300
2024	14,000	8,700	5,300
2025	11,600	10,600	1,000
2026	7,900	10,500	-2,600
2027	8,000	10,700	-2,700
2028	10,600	10,800	-200
2029	10,700	10,900	-200
2030	11,200	10,800	400
2031	11,400	11,100	300
2032	11,500	11,100	400

	RoQLD		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	12,800	19,500	-6,700
2022	14,600	10,900	3,700
2023	18,400	19,500	-1,100
2024	17,400	17,700	-300
2025	15,900	18,800	-2,900
2026	15,300	18,200	-2,900
2027	14,500	18,300	-3,800
2028	17,500	18,400	-900
2029	19,100	18,200	900
2030	19,100	18,200	900
2031	19,200	18,200	1,000
2032	19,000	17,900	1,100

	RoWA		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	4,200	1,900	2,300
2022	3,200	2,300	900
2023	3,400	2,600	800
2024	3,300	2,800	500
2025	2,600	2,900	-300
2026	2,400	2,900	-500
2027	1,800	3,100	-1,300
2028	2,100	3,100	-1,000
2029	2,400	3,000	-600
2030	2,700	3,100	-400
2031	3,000	3,100	-100
2032	3,300	3,000	300

Source: Macroplan, NHFIC

	RoSA		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	1,500	4,100	-2,600
2022	2,300	1,400	900
2023	2,300	2,100	200
2024	1,800	1,600	200
2025	1,500	1,800	-300
2026	1,400	1,600	-200
2027	1,200	1,700	-500
2028	1,400	1,700	-300
2029	1,600	1,700	-100
2030	1,800	1,700	100
2031	1,900	1,700	200
2032	1,800	1,700	100

	RoTas		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	1,400	2,000	-600
2022	2,300	2,200	100
2023	1,700	1,700	0
2024	1,700	1,300	400
2025	1,400	1,400	0
2026	1,200	1,300	-100
2027	1,200	1,400	-200
2028	1,200	1,400	-200
2029	1,300	1,300	0
2030	1,300	1,400	-100
2031	1,400	1,300	100
2032	1,300	1,300	0

	RoNT		
Year	New net annual dwelling supply	New net annual household formation	Supply-household formation balance
2021	300	210	90
2022	290	340	-50
2023	320	390	-70
2024	280	190	90
2025	370	240	130
2026	230	260	-30
2027	210	250	-40
2028	240	280	-40
2029	260	290	-30
2030	270	290	-20
2031	340	330	10
2032	330	320	10

Estimating the need for social housing

Metric	Description	Findings	Limitations
Statistical data	Includes survey and census statistics on supply (e.g. number of social housing dwellings), demand (e.g. wait lists, household affordability stress, homelessness), and efficiency (e.g. time taken to receive public housing).	The Australian Institute of Health and Welfare (AIHW) compiles a data repository on public and community housing.[73] As of June 2020, Australia had 436,000 social housing dwellings. The total number of households on waiting lists has increased recently to over 175,000 households as at June 2020, up from 155,000 in 2019.[74] Among newly allocated households, three-quarters received public housing within a year of being on the waiting list, 42% spent less than 3 months waiting.[75] ABS data[76] shows the annual number of dwelling unit completions by the non-private sector peaked in 2011 at almost 12,000 completions but plateaued after the GFC social housing stimulus program ended and then steadily declined to be around 3,000 completions a year. But these numbers do not account for demolitions.	State and territory governments lack consistency in reporting number of social housing units by provider type (e.g. public, community housing).[77] In some states, affordable housing is included. Community housing is also defined differently and the AIHW totals are sometimes inconsistent with numbers managed by registered Community Housing Providers. Australia has no separate source of community housing data. Even within the national regulatory system, each state and territory can specify which organisations are required to register. No official source enables the CHP-managed portfolio to be split by provider-owned vs. CHP-managed. The extent to which head-leased properties included in published stock totals is also unclear. No state or territory government routinely publishes statistics on the construction of new social and affordable housing, nor on public housing sales or demolitions. It is unclear if CHP construction is captured under the ABS housing construction statistics. Often when state governments pledge new social and affordable housing investment programs, they are often in little detail and do not account for sales and demolitions of existing homes. Statistics reflect a point in time analysis, are updated infrequently, and cannot accurately distinguish between chronic homelessness and those whose lack of accommodation is more temporary. Changes in the waiting list numbers are not necessarily reflective of changes in underlying demand for social housing. Policy changes and eligibility criteria can affect the waiting list length. Some may not apply due to long waiting times.

73 https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia/contents/summary
74 AIHW Data Tables: Social housing households 2019–20
75 https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia/contents/entries-exits-transfers-and-wait-times
76 ABS Cat 8752.0 Table 37, Number of dwelling unit completions by sector, Australia.
77 CHIA 2020 – Social and affordable housing provision data – state of play

Metric	Description	Findings	Limitations
Availability of affordable private rentals to low-income households	Low-income households are classified as those with a gross household income within the first or second quintile, according to the national Census. Affordable housing is defined as housing costs being no more than 30% of gross household income. The metric derives the shortfall in the number of private rentals available and affordable to low-income renters. This follows a methodology developed by the US Housing and Urban Development Department in the 1990s, and later used by the National Housing Supply Council.	The national shortfall was estimated to be 150,000 in 1996 and nearly doubled to 270,000 in 2011.[78] National social housing as a proportion of total housing stock would need to be expanded from 5% to 8.4% to accommodate low-income renters eligible for social housing whose rental payments were currently deemed unaffordable.[79]	The metric relies on census data and is therefore an infrequent point in time analysis. Given this metric is focusing on historical data, it is not able to accurately project the changing scale of the future shortfall. It also does not factor in the appropriateness of the low-cost dwelling stock, such as building quality or overcrowding.
Growth required to maintain current share of social housing	This is a state-based approach and involves taking the current social housing stock as a proportion of total stock as a starting point, and then estimating the additional number of social housing dwellings required to maintain the current share. The metric will account for projected household growth.	For NSW and using 2016 as a starting point, 2,000 rentals would need to be added each year over a 20–year projection period.[80] Accounting for the additional social housing supply required to rehome tenants with unaffordable rental payments resulted in 4,900 rentals required each year, totalling around 100,000 between 2016 and 2036. To return the national social housing stock to a 6% benchmark, which was the level when Australia stopped its routine public housing construction program in 1996, 330,000 additional social housing dwellings are required over the 20-year period.[81] Factoring in affordable housing resulted in an estimated dwelling deficit of 580,000.	The approach assumes the share of social housing in the base year is adequate. Also assumes no further change in incidence of housing stress (paying more than 30% of income on rent) over the projection period

78 Hulse, K., Reynolds, M., Stone, W. and Yates, J. 2015, Supply shortages and affordability outcomes in the private rental sector: short- and longer-term trends, AHURI Final Report No. 241, Australian Housing and Urban Research Institute, Melbourne, https://www.ahuri.edu.au/research/final-reports/241.

79 Groenhart, L. and Burke, T. 2014, Thirty years of public housing supply and consumption: 1981–2011, AHURI Final Report No. 231, Australian Housing and Urban Research Institute, Melbourne, https://www.ahuri.edu.au/research/final-reports/231.

80 Yates, J. 2016, Addressing the housing affordability crisis: Basis for an estimated need of 100,000 dwellings in NSW over the next two decades, NSW Federation of Housing Associations, Sydney, http://www.communityhousing.org.au/index_attachments/NSWFHA%20Need%20for%2010 0,000%20dwellings.pdf

81 Yates, J. 2018, Social and Affordable Housing Projections for Australia 2016–2026/36, Paper commissioned by Everybody's Home – The National Housing Campaign, http://everybodyshome.com.au/wp-content/uploads/2018/04/EH_researchreport_190418- 1.pdf.

Metric	Description	Findings	Limitations
Simulation model	AHURI[82] developed a simulation model to measure the housing supply required to meet affordable housing demand during the period 2017–2025. The simulation factors in housing market conditions, labour market, labour market earnings, household formation, and tenure choice to generate estimates of newly arising need.[83] The user can estimate housing need under a range of economic and housing supply scenarios. Housing need is defined as the number of households unable to access housing at market prices or require some form of assistance in the private rental market to avoid rental stress.	Using 2017 as the base year, the model projects 527,000 potential households unable to meet housing need via market options. In addition, the model estimates 806,000 private tenants required financial assistance to avoid rental stress. Over the period 2017–2025, the model forecasts the number of households in housing need would increase from 1.3 million in 2017 to 1.7 million in 2025 (from 14 to 16% of households, respectively). This scenario assumes population will rise at a steady rate. The incidence of housing need varies across states. It falls in Qld and WA, while the percentage rate of need remains steady in SA, Tas, ACT and NT. In Vic and NSW, large increases of households in need are projected.	Interactions between labour and housing systems should not be used at a state level, because datasets like HILDA are designed to be representative at a national level. There is no readily available data that could be used to model demographic or labour market conditions at a local government level.

82 Rowley, S., Leishman, C., Baker, E., Bentley, R. and Lester, L. 2017, Modelling housing need in Australia to 2025, AHURI Final Report No. 287, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/287

83 Using Household, Income and Labour Dynamics in Australia (HILDA) dataset, ABS population and household formation projections (state and LGA), ABS labour market data, ABS time series modellers' database, SIRCA-CoreLogic RPData on LGA monthly median house prices and rents.

Metric	Description	Findings	Limitations
Current and projected housing need	An AHURI report[84] incorporated current and projected housing need from 2016–2036 to estimate the number of dwellings required from 3 segments of the population amongst households in income quintile 1. **Currently met need** a. Existing social housing tenants, projected forward as a share of households[85] **Manifest need[86]** a. Homeless persons, and projected forward based on household growth formation **Evident need[87]** a. Low-income households paying more than 30% of income on rent but are not existing social housing tenants nor homeless, also projected forward based on expected household growth formation.	In total, those that fall under the 3 segments accounted for around 9.4% of Australian households in 2016. AHURI calculated that some 727,300 additional social dwellings would be required over a 20-year period, implying an annual average growth of 5.5% over the existing stock. This would mean a more than tenfold increase on recent social housing construction activity. Relative to current supply, Melbourne, Perth and regional Qld would need particularly large additions of stock. Conversely, additional supply needed in Canberra, Darwin and regional SA would be relatively modest. Using this method, the expansion of social housing needed is around twice what Yates (2018) estimated to reach the 6% social housing benchmark. To simply prevent further deterioration in the current shortfall of social housing, 290,000 homes were required over the projection period (manifest need plus evident need), or 15,000 annually. This research was extended to households in income quintile 2 in another report.[88] It identified total housing required by 2036 as being just above one million homes by 2036. This translates to around 8–9% of Australia's dwellings being social or affordable housing.	In terms of newly arising need over the period to 2036, the analysis uses pre-pandemic population growth projections which are now out-dated. **Currently met need:** The approach does not account for the potential to better utilise existing social housing stock, such as empty or under-occupied homes. This risks potentially overestimating the need for new dwellings. There is no allowance for necessary demolition and replacement of existing social housing stock at the start of the projection period. **Manifest need:** Homelessness relates to severely crowded dwellings in 2016 estimates. This approach assumes all occupants require new dwellings, however, only some occupants would need to be rehoused to resolve overcrowding. There is also potential for manifest and evident need households to be double-counted, as the counts are taken from different sources. **Evident need:** It may not be appropriate to assume current levels of rental stress applies over a 20–year horizon. For instance, if affordability improves, then there is an overestimate of need, and vice versa if affordability deteriorates.

84 Lawson, J., Pawson, H., Troy, L., van den Nouwelant, R. and Hamilton, C. 2018, Social housing as infrastructure: an investment pathway, AHURI Final Report No. 306, Australian Housing and Urban Research Institute Limited, Melbourne, https://www.ahuri.edu.au/research/final-reports/306

85 Projected need to maintain the social rent share = Share of households with currently met need in social housing (census data) x 20-year growth rate in households (estimates provided in ABS 3236.0 Household and Family projections), Average annual construction = Projected need to maintain the social rent share ÷ 20 years

86 Current manifest need = Number of homeless persons (ABS 2049.0 Census of Population and Housing) ÷ average household size of 2.5 persons. Average annual construction = (Current manifest need + (Current manifest need x 20-year growth rate in households)) ÷ 20 years

87 Derive number of low-income households who are in approx. the bottom quintile for single, adult group, family households (census data).
Derive number of households in rental stress based on combination of reported household income bracket and rental payment bracket
Rental stress rate = Number of low-income households in rent stress ÷ Number of households in private rental with known income and rent (census data)
Current evident need = (Total no. of households x No. of households in private rental x Rental stress rate) ÷ No. of households with known tenure (census data)
Average annual construction = (Current evident need + (Current evident need x 20-year growth rate in households)) ÷ 20 years

88 Troy, L., van den Nouwelant, R., Randolph, B. 2019, Estimating need and costs of social and affordable housing delivery, City Futures Research Centre, Sydney, https://cityfutures.be.unsw.edu.au/documents/522/Modelling_costs_of_housing_provision_FINAL.pdf