

HOUSING PULSE NOVEMBER 2022.

WESTPAC INSTITUTIONAL BANK



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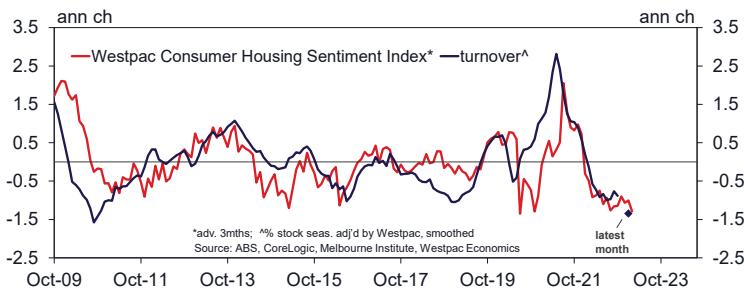
Australia's housing correction is showing no signs of letting up, prices and turnover again moving lower since our last report and declines spreading to more sub-markets.

Rising interest rates are dominating and both rates and the wider macro-economic context are set to continue dominating over the next few years. Housing is now hostage to the policy and economic cycle - how these play out will shape market outcomes from here. Two specific factors stand out: 1) how the inflation outlook evolves; and 2) how heavily rate rises impact the wider economy. As we discuss in this month's report, past housing corrections have usually followed three distinct phases: an initial decline as rate rises impact; followed by a further fall as continued high rates combine with economic weakening; and then a recovery phase as rate cuts combine with an economic turnaround. Inflation constraints on the RBA, and how its actions impact the economy will be key in 2023-24.

Heading into late 2022, the picture around current conditions and the near term outlook remains bleak. Our Nov **Housing Pulse** finds the correction becoming more firmly entrenched in most markets and in buyer sentiment. Price-driven improvements in affordability are being negated by rising interest rates and deteriorating expectations for prices and labour markets. Our composite **Westpac Consumer Housing Sentiment Index** points to further declines in turnover heading into 2023. With more RBA rate rises between now and mid-2023, the correction looks locked in for some time yet.

While macro drivers are dominating, there are still notable state variations. Corrections are more advanced and deeper in NSW and Vic, and look firmly entrenched. Qld, Tas, the ACT and most regional parts of the major eastern states are now experiencing material price declines as well. WA and SA continue to hold up much better, but are seeing momentum stall and sentiment turn down sharply.

1. Australia: national housing conditions



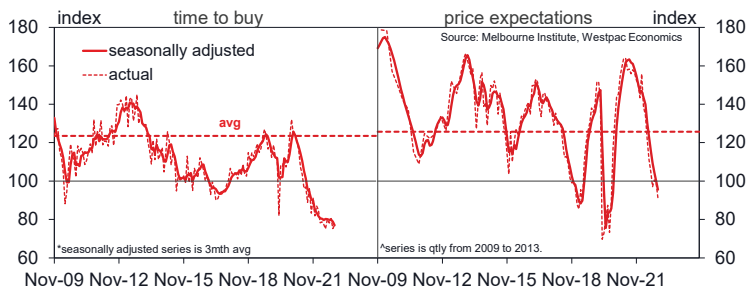
“Housing is now hostage to the policy and economic cycle ...”

*The **Westpac Consumer Housing Sentiment Index** is a composite measure based on four housing-related components of the Westpac Consumer Sentiment survey. See Appendix on 36 for more details.

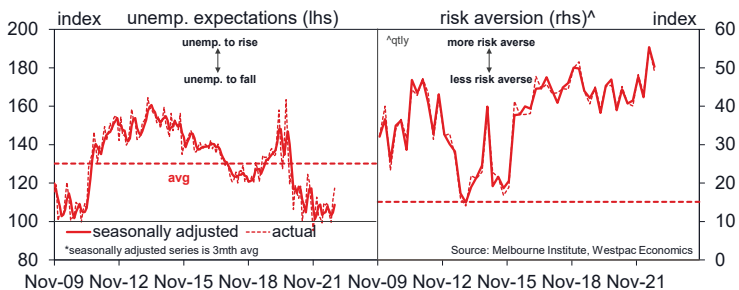
OVERVIEW: correction deepens



2. Consumer sentiment: housing

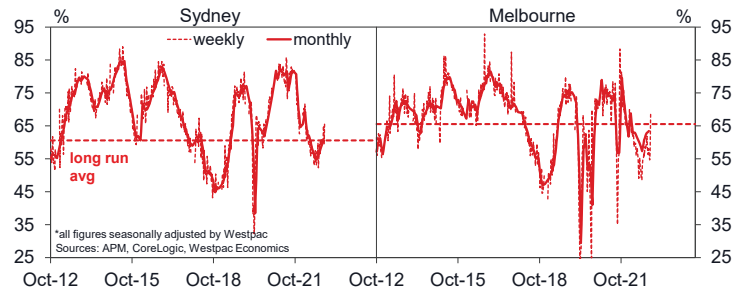


3. Consumer sentiment: jobs & risk aversion

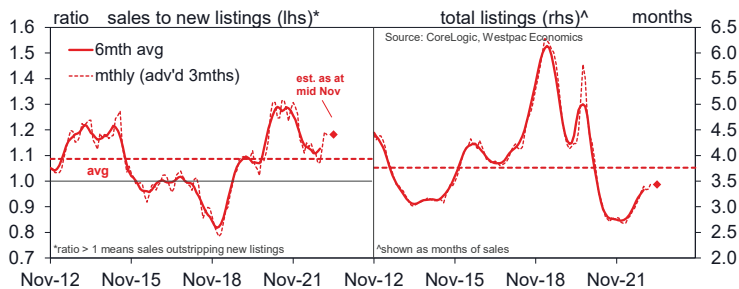


- Australia's housing markets remain in the grips of a material, correction phase that has continued to deepen over the last three months. Nationally, turnover is down 21% from its post-delta highs this time a year ago. Prices across the five major capital cities are now down 7.8% from their peak in Apr with detailed local area markets covering nearly 85% of all dwellings experiencing price declines since mid-year.
- Housing-related sentiment remains extremely weak with signs that a further weakening may be on the way. Assessments of 'time to buy' remain near historic lows, rising interest rates over-riding any price-driven improvements in affordability. Price expectations have continued to slide sharply, the move to outright pessimism in the last few months a sign that price declines are now firmly entrenched. Also notable is what looks to be the beginning of a weakening in confidence around jobs, which had been strongly positive. If price expectations and labour markets continue to head south this could see housing-related sentiment and markets take a new leg lower.
- Despite the bleak situation, auction markets have performed slightly better over the last few months, clearance rates lifting and the rate of pre-auction withdrawals easing back from the extreme highs seen mid-year. Part of this looks to be due to very tight supply - auction volumes are low, comparable to the levels in 2018.
- On-market supply remains relatively tight. New listings have fallen by a third from their late 2021 highs with the number of properties on the market continuing to decline despite the sharp fall in sales. That said, the 'on-market' supply-demand balance varies markedly from market to market.
- As noted, prices have fallen at a rapid pace nationally, down 1.4% in Sep, 1.1% in Oct, and Nov tracking towards a 1% decline that will take annual growth to -5.3%yr.

4. Auction clearances rates



5. Residential property listings



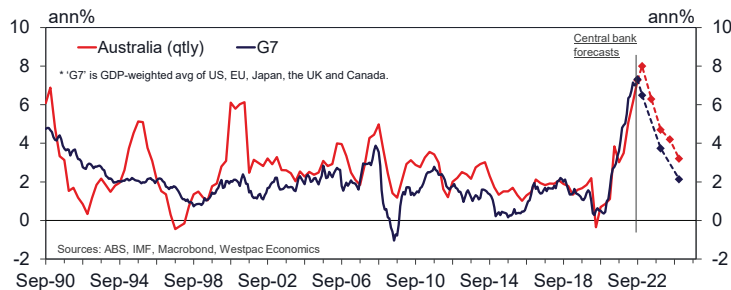
- Nationally, the **Westpac Melbourne Institute 'time to buy a dwelling' index** declined a further 1.4% over the 3mths to Nov. At 77.1, the Index continues to hold around post-GFC lows, albeit a bit above the extreme 70-75 reads in 2008. The Index has been stuck in the 75-80 range since Mar, 40-45% below the most recent peak in Nov 2020.
- Price expectations continue to be scaled back dramatically and are now outright pessimistic. The **Westpac-MI Consumer House Price Expectations Index** fell a further 13% over the 3mths to Nov to a new cycle low of 91.1. While this is still above the weakest reads seen during the initial onset of the pandemic and during the 2018-19 market correction, it marks the first clear move into sub-100 'outright pessimism' territory - consumers expecting house prices to decline now outnumber those expecting them to rise. This will entrench price weakness, with expectations of falls now likely to frame decisions by both buyers and sellers, i.e. encouraging buyers to take their time and sellers to accept low price offers now.
- Consumers are becoming less confident about the jobs outlook. The **Westpac Melbourne Institute Unemployment Expectations Index** jumped 13.4% over the 3mths to Nov (recall that lower reads mean more consumers expect unemployment to fall in the year ahead). While this is coming from a very confident starting point - from an index read of 103.4 to 117.3, both being well below the long run avg of 130 - the shift may prove to be a turning point. If so, and we see similar moves going forward, expectations could be back in line with long run avg levels by early 2023.

- Consumers remain extremely cautious about their finances. The **Westpac Consumer Risk Aversion Index** dipped over the three months to Sep but was coming from a record high in Jun, Sep still being the second highest reading on recordings back to 1974.

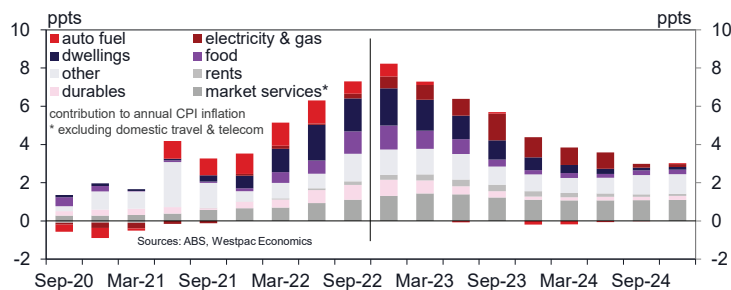
SPECIAL TOPIC: where to from here?



6. CPI inflation: G7 vs Australia

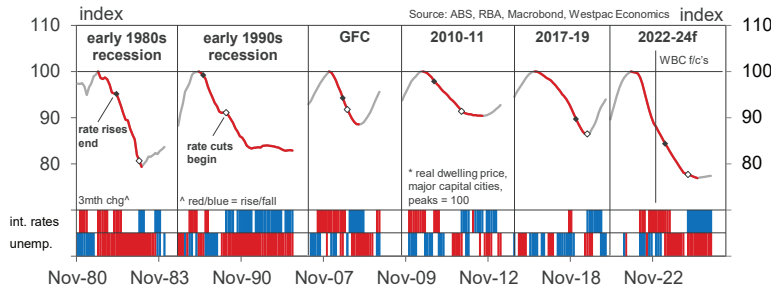


7. Australia: components of inflation



- Australia's housing market correction is now into its seventh month. Interest rate rises remain the dominant driver, a steep 2.75ppt increase in standard variable mortgage rates since Apr sharply curtailing the borrowing power for new buyers. While there are some tentative signs that the pace of price declines may be moderating, we are unlikely to see a stabilisation any time soon.
- Markets are basically hostage to the tightening cycle. This means the course of the correction from here will be determined by two main factors: 1) how the inflation outlook evolves; and 2) how heavily interest rate rises impact on the wider economy, labour markets in particular.
- Inflation remains very high, both globally and in Australia. Across the G7 (covering Australia's major developed economy peers, the US, the EU, Japan, the UK and Canada) headline CPI measures are now running at a touch over 8%yr, ranging up to over 10%yr in Europe. In Australia, headline CPI inflation hit 7.3%yr in Sep 2022 and is now widely expected to reach 8%yr by year-end.
- Most central banks continue to pursue aggressive monetary tightening. Policy rates have been lifted in big increments, coming in 50, 75 and 100bp moves instead of the typical 25bps. Cumulative increase range from 2ppts in the Euro area to 3.75ppts in the US. While markets are looking for a policy 'pivot' to smaller increases in coming months, they are still pricing in a further 1ppt in tightening for the US and Europe.
- The RBA has largely followed suit, albeit moving in smaller 25bp increments since Oct. This partly reflects the Bank's more frequent schedule with 11 decisions a year compared to eight for its G7 peers. That said, the RBA's commentary indicates that it is taking a less 'urgent' approach to tightening, seeking to keep the economy on an 'even keel'

8. Australia: dwelling price corrections



9. Dwelling price forecasts

	avg*	2020	2021	2022	2023	2024	comments
Sydney	7.0	2.7	25	-10	-8	1	Rapid correction underway, more sensitive to rate hikes due to stretched affordability.
Melbourne	5.4	-1.3	15	-8	-10	1	Correction underway, more sensitive to rate hikes and migration slowdown.
Brisbane	5.5	3.6	27	2	-6	3	Prices starting to dip but strong fundamentals should see some resilience.
Perth	1.3	7.3	13	2	-4	3	Stalled but less stretched affordability, tight supply, buoyant mining sector supportive.
Adelaide	5.6	5.9	23	8	-6	3	Still seeing strong sales, price gains – less susceptible to rate hikes but will be impacted.
Hobart	7.1	6.1	28	-6	-8	0	Extremely tight but extremely unaffordable. Latter dominating, correction underway.
Australia	5.6	1.8	21	-6	-8	2	Major 'demand-driven' downturn through 2022-23. Steadying on rate cuts in 2024.

All dwellings, Australia is five major capital cities combined measure; *10yr avg.

Source: CoreLogic, Westpac Economics

- This shows through in the RBA's forecasts. Whereas other inflation-fighting central banks are projecting a return to 2-3% inflation by 2024, the RBA still has it running slightly above 3%.
- In terms of actual inflation, timely measures suggest the initial price pulse has peaked with global freight rates retracing 90% of their 2021-22 surge and war-related commodity price spikes unwinding. Notably, annual US inflation has eased back a touch since mid-year.
- Key for policy will be how quickly inflation dissipates across other parts of the economy. In the case of Australia, the focus will increasingly turn to domestic energy costs, rents and wages, the latter set to be particularly important given latest updates showing a surge in private sector wages growth to 3.4%yr in the Sep quarter. On balance, we expect the RBA to continue raising interest rates, with a further 1ppt in rises between now and mid-2023. Policy easing is expected to come through 2024 but only if a sustained return to 2-3% inflation appears secure.
- For housing, this essentially locks in a further period of correction through 2023 before a recovery in 2024. History shows corrections tend to come in three distinct phases – an initial weakening driven by rate rises; followed by a period in which rates are on hold but at high levels and a weakening economy becomes a more significant drag; and a final phase where rate cuts and stabilising economic conditions generate a recovery (see Chart 8). The current correction will enter 'phase 2' in 2023. The timing of 'phase 3' depends on how readily the RBA can pivot to rate cuts and the extent of the tightening shock to the economy. The last three corrections have been relatively mild, thanks in part to benign inflation backdrop and mild economic contractions. The current correction faces a more difficult combination.

SPECIAL TOPIC: prudential policy update

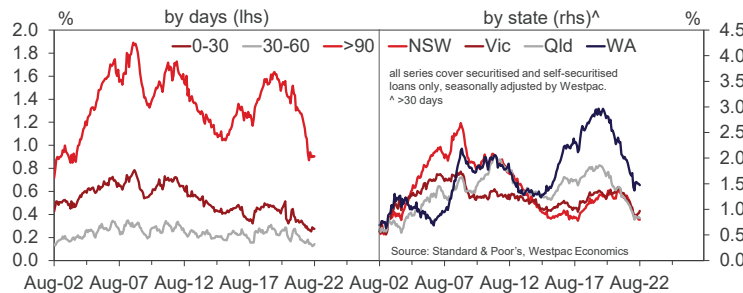


18. Summary of prudential policy measures

	'Macro' prudential	'Micro' prudential
2015	10% limit on investor loan growth	Tightened serviceability guidelines and improved consistency lenders
2016	-	Tightened serviceability guidelines incl. scaling of minimum expenses.
2017	30% limit on 'interest only' loans	Restrictions on high LVR interest only and investor loans.
2018	Investor loan growth limit removed	Improved collection and verification of expenses, income & existing debt.
2019	'Interest only' limit removed	Removal of 7% minimum 'floor rate' on serviceability assessments.
2020	Capital buffers available to draw	COVID repayment holidays; arrears exempted from capital treatment.
2021	-	COVID measures ended. Serviceability buffer increased from 2.5 to 3%
2022	-	-
Potential measures that may come into play in a 'hard landing' scenario		
2023	Ease bank capital requirements.	Easing in interest serviceability buffer used in assessments.

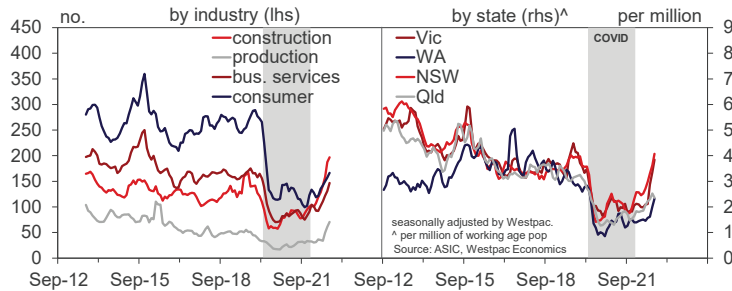
Source: APRA, RBA, Westpac Economics

19. Mortgage arrears

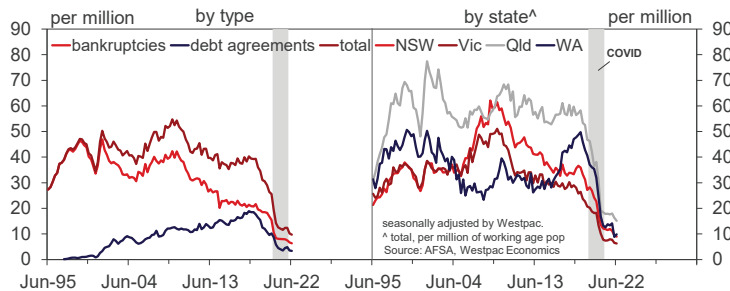


- Interest rate rises have largely sidelined prudential policy measures, which tend to be used at a different stage of the cycle – usually when regulators are concerned about the potential for excessive risk-taking in low rate environment. The latest statement from the Council of Financial Regulators (CFR) shows it is firmly in monitoring mode, the focus being on "trends in borrowing given the economic uncertainties, the high level of household debt, the decline in housing prices and rising interest rates."
- That said, macro-prudential policy does not go into full hibernation during a rate tightening cycle. If for example, a 'hard landing' were to emerge that threatened to impact wider financial stability, there is scope for prudential policy to respond. APRA's [Macropprudential Policy Framework](#) gives a clear picture of objectives and which policy options would be preferred. Specifically: "In considering an appropriate macroprudential response, APRA's primary objective is financial stability. Depending on the risks, certain tools may be more appropriate than others; for example, credit-based measures may be more effective at reducing excessive risk-taking, while capital-based measures would provide greater flexibility in a downturn".
- This suggests that under extreme scenarios – where distress was starting to impact the financial system and/or affect the availability of credit – regulators could respond with an easing in counter-cyclical capital buffers for lenders or even an easing in guidance around lending standards, the interest rate serviceability buffer in particular.
- This is clearly not the situation we are in today. Moreover, if deployed, any prudential easing measures would also need to align closely with monetary policy goals. It would take a rare set of circumstances for an easing in prudential policy to run alongside a monetary tightening.

20. Company insolvencies



21. Personal bankruptcies

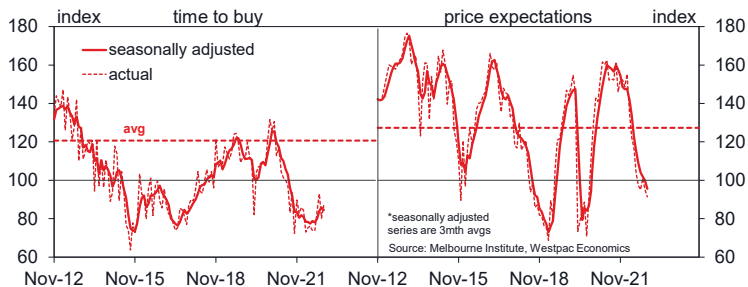


- The RBA's Oct [Financial Stability Review](#) identified three key risk scenarios: 1) tightening financial conditions leading to disorderly declines in asset prices that affects financial system functioning; 2) a turn in the credit cycle as rising debt-servicing are potentially magnified by a sharp increase in unemployment; and 3) a range of external factors including the threat of cyber-attacks and risks associated with geopolitical developments and climate change.
- In terms of the first two risks, Australia is undoubtedly coming from a strong starting point. In aggregate, balance sheets are in good shape with significant buffers built up in recent years, the chief concern being how evenly distributed this is across individual households and businesses.
- The latest data has yet to really capture how financial tightening is impacting. Broad measures of mortgage arrears are only available up to Aug, barely covering the impact of the first few rate hikes. The incidence of mortgages dipping into 0-30 day arrears ticked up very slightly (a touch more in Vic) but is still near multi-year lows in nearly every state (WA still a carrying a notably higher arrears rate than others states).
- Figures on company insolvencies are a little more timely - available up to Sep - and are showing some more specific areas of stress around the construction sector. However, measures are still 'normalising' after various moratoriums were put in place during the COVID period. Notably, the ATO began pursuing unpaid tax debts from around mid-year. The construction sector's relative weakness is clear but the extent to which this is over and above the return to normal operations is unclear. Figures on personal bankruptcies are much less timely, on available to June, and tend to follow the credit cycle with longer lags.

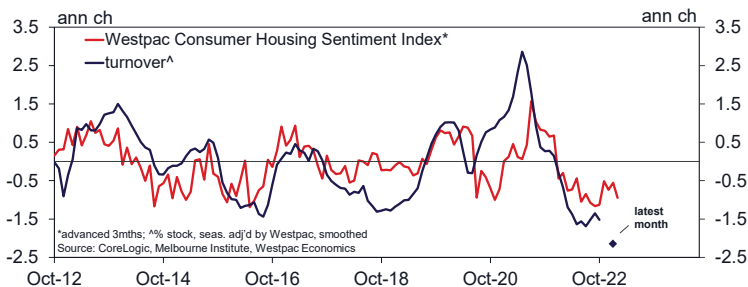
NEW SOUTH WALES: leading the way lower



22. NSW consumer: housing-related sentiment

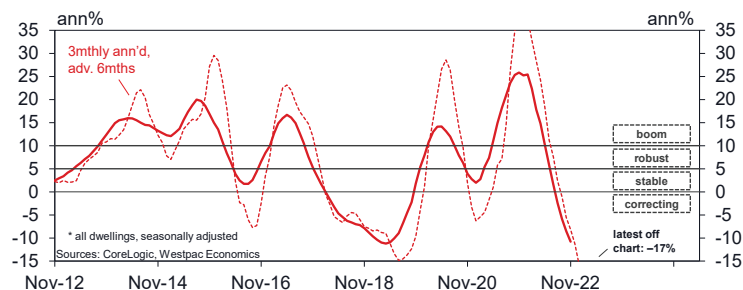


23. NSW housing composite vs turnover



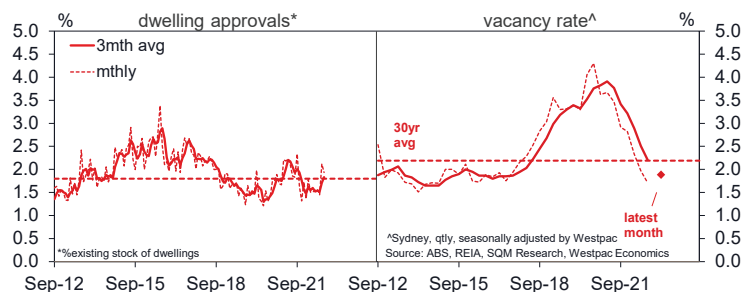
- The housing correction is more advanced in NSW, having started earlier in the piece and run at a faster pace. Sales are down 35%yr with Sydney prices down 10% for the year. Our sentiment-based indicators point to more weakness near term. About the only 'positive' in the mix looks to be an even sharper pull-back in listings. But while the absence of a large overhang of unsold stock will limit some of the downside on prices, its unlikely to stabilise things given momentum and how it is becoming entrenched in expectations.
- To be fair, the tone from recent data has been less dire. Auction clearance rates have lifted, Sydney's clearance rates nudging back above 60% - seen as the 'gain line' for prices. Price declines have also slowed, to 1.1%*mth* from 1.5%*mth* through Q3. That said, both shifts likely reflect the pull-back in sellers. Auction volumes remain low and withdrawals high. This time of year is also prone to seasonal quirks.
- The price detail shows more abrupt turnarounds for houses and 'top tier' segments in Sydney. Prices are reversing more quickly in the Eastern Suburbs, Northern Beaches and North Sydney - which outperformed during the boom - but holding up better in the outer western suburbs which lagged on the upturn. Byron Bay is the stand-out weak spot regionally.
- As noted, new listings are now running more in line with weak sales, by about 8% although the total stock of listings is still a touch above long run averages. Rental vacancy rates have continued to tighten and are now below long run averages.
- The **NSW Consumer Housing Sentiment index** points to a further significant decline in turnover near term (note that in chart 23 and similar charts for other states both the index and turnover are shown in annual change terms rather than levels). Any traction around affordability is being negated by deteriorating expectations for prices and labour markets.

24. Sydney dwelling prices



Population: 8.2mn
Net migration: +7k pa
GSP: \$661bn (31% Aus)
Dwellings: 3.3mn, \$3.9trn
Capital: Sydney

25. NSW: dwelling approvals, vacancy rate



June years	avg*	2020	2021	2022	latest
GSP, ann%	2.3	-0.6	2.6	1.8	n.a.
State final demand, ann%	3.0	-2.0	3.0	3.5	3.5
Employment, ann%	1.7	-5.6	6.3	2.6	9.0
Unemployment rate, %	5.9	6.5	5.2	3.6	3.2
Population, ann%	1.1	0.7	0.3	n.a.	0.6
Dwelling prices, ann%	5.7	13.2	14.9	5.8	-8.5
Rental yield, %	4.6	3.5	3.1	3.7	4.0
Sales/new listings, ratio	1.27	1.20	1.36	1.12	1.08
Total listings, mths sales	2.8	4.0	2.1	3.2	3.8

* avg last 25yrs; # June qtr readings
 Sources: ABS, CoreLogic, REIA, Westpac Economics

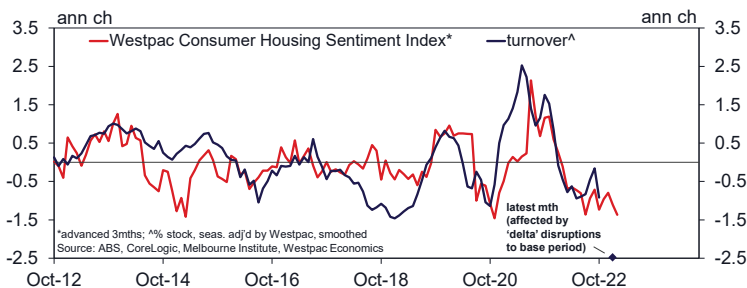
VICTORIA: no let-up in sight



26. Vic consumer: housing-related sentiment

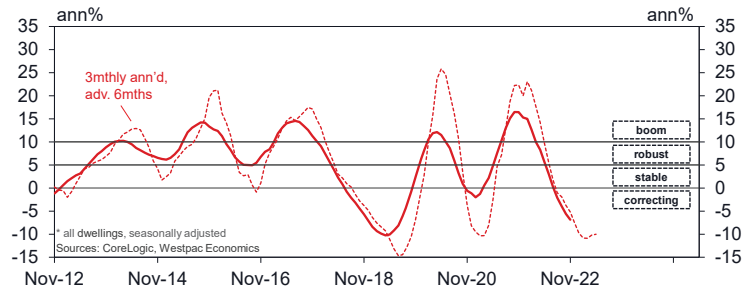


27. Vic housing composite vs turnover

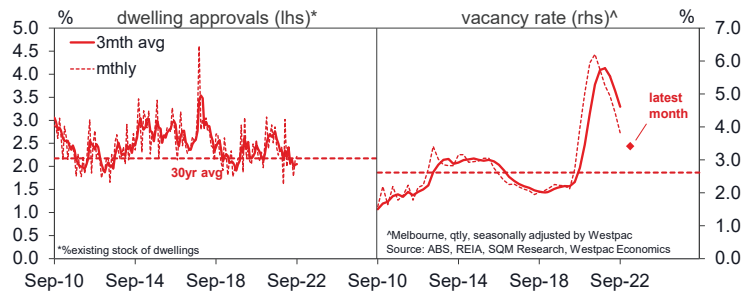


- Vic remains firmly locked in a material housing market correction. Turnover is down 30% from its 2021 high (albeit with declines exaggerated by last year's delta disruptions). Melbourne dwelling prices are down just 7% from their 2022 peak, monthly declines running at a steady pace despite a moderation since mid-year. Sentiment points to more of the same in early 2023. Affordability and the supply-demand balance remain less supportive than in most other markets although the latter is shifting, as the physical demand for housing set to get a big boost as migration inflows return.
- Auction markets have firmed in recent months, Melbourne clearance rates nudging back above 60% and pre-auction withdrawals easing. That said, volumes remain relatively low.
- The price detail continues to show a fairly uniform picture across tiers and sub-regions, the size of price corrections generally mirroring the strength of preceding gains. This is seeing bigger declines for houses vs units and for 'top tier' segments compared to lower tiers. Across sub-regions, Melbourne's North East and Outer East are leading declines, again with both having outperformed during the upturn. Price growth has also turned down sharply in regional areas, Mornington Peninsula and Geelong now seeing big falls.
- The on-market supply-demand balance is looking more evenly poised following a sharp drop-back in new listings. While low, sales are running slightly ahead of new listings meaning the stock on market is holding steady, near long run averages in the case of houses. Melbourne's rental vacancy rate continues to drop but is still above historical averages.
- The **Vic Consumer Housing Sentiment index** points to further declines in turnover heading into 2023. The correction clearly still has some way to run.

28. Melbourne dwelling prices



29. Vic: dwelling approvals, vacancy rate



Population: 6.6mn
Net migration: +16k pa
GSP: \$501bn (23% Aus)
Dwellings: 2.8mn, \$2.7trn
Capital: Melbourne

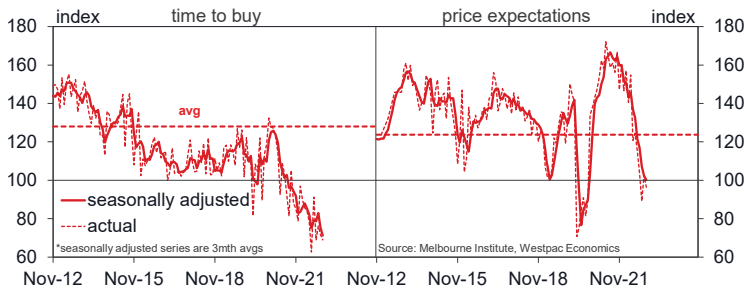
June years	avg*	2020	2021	2022	latest
GSP, ann%	2.9	0.1	-0.3	5.6.	n.a.
State final demand, ann%	3.6	-1.0	-0.6	7.4	7.4
Employment, ann%	2.1	-3.2	4.9	2.9	3.6
Unemployment rate, %	6.4	6.8	4.9	3.7	3.6
Population, ann%	1.5	1.2	-0.6	n.a.	0.7
Dwelling prices, ann%	6.3	10.1	7.5	3.0	-5.6
Rental yield, %	4.7	3.8	3.0	3.6	3.9
Sales/new listings, ratio	1.06	0.89	1.07	0.95	1.08
Total listings, mths sales	3.5	5.7	3.1	3.8	4.3

* avg last 25yrs; # June qtr readings
 Sources: ABS, CoreLogic, REIA, Westpac Economics

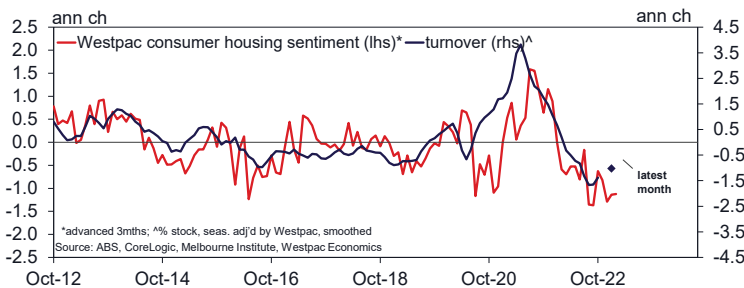
QUEENSLAND: prices drop despite tight supply



30. Qld consumers: housing-related sentiment

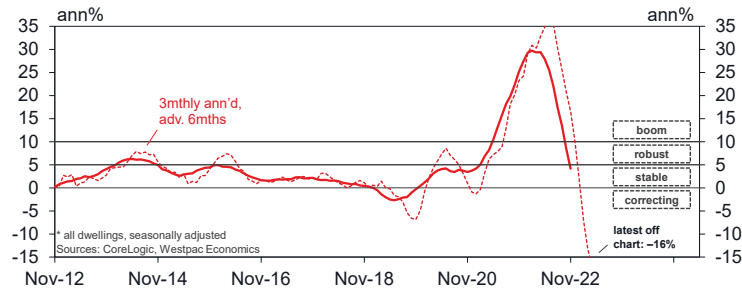


31. Qld housing composite vs turnover



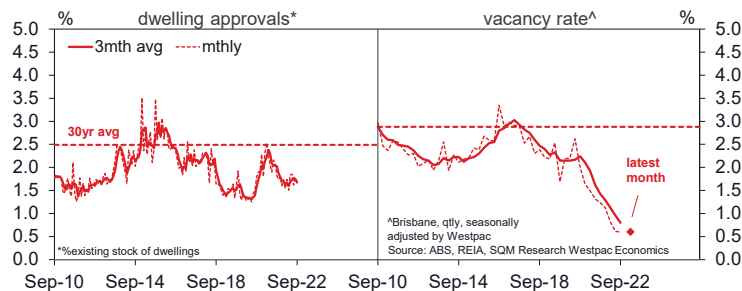
- Qld's housing market has been the big mover this year, switching abruptly from a vigorous boom that was still in full-swing back in Q1 to steep declines in turnover and prices in the second half. Turnover is off 10%, albeit still around long run avg levels. Prices have been much weaker, gapping 5.4% lower in Jul-Oct, having just stalled flat over the previous 3mths. Sentiment has turned sharply weaker as well, although some of this looks to reflect concerns about proposed changes to state government land tax that have now been abandoned. The main tension is between this sharply weaker price and sentiment situation and what still looks to be a super tight supply-demand balance.
- The price detail continues to show weakness centred on houses and 'top tier' segments of the Brisbane market, the resilience of 'units' and lower tier segments suggesting tight supply is supporting demand in more affordable segments. The sub-regional picture points to bigger price hits in Brisbane's North and South, and in the Sunshine and Gold Coasts - all of which outperformed through the upturn. Notably, Brisbane's correction has spread to a much wider range of suburbs.
- As noted, the supply-demand picture remains extremely tight, sales still running well ahead of new listings in Brisbane and the stock of unsold homes very low for both houses and units. Rental vacancy rates remain sub-0.5%, indicating that there is barely a 'frictional' level of rental stock available.
- The **Qld Consumer Housing Sentiment index** suggests the downturn will track a similar pace through Q4 and into early 2023. However, we suspect that supply-demand pressures could come back to the fore quite quickly, especially once the interest rate tightening cycle ends and migration inflows start to add more to the demand side.

32. Brisbane dwelling prices



Population: 5.3mn
Net migration: 66k pa
GSP: \$385bn (18% Aus)
Dwellings: 2.2mn, \$1.7trn
Capital: Brisbane

33. Qld: dwelling approvals, vacancy rate



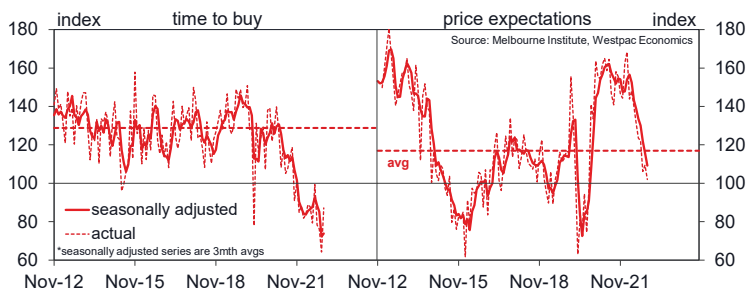
June years	avg*	2020	2021	2022	latest
GSP, ann%	3.6	-0.9	2.9	4.4	n.a.
State final demand, ann%	3.7	-0.1	4.2	5.0	5.0
Employment, ann%	2.4	-4.5	9.9	4.5	4.3
Unemployment rate, %#	6.6	7.6	5.5	4.1	3.4
Population, ann%	1.8	1.6	0.9	n.a.	1.8
Dwelling prices, ann%	5.7	4.2	13.0	25.5	8.5
Rental yield, %#	4.9	5.4	5.1	5.2	5.4
Sales/new listings, ratio#	0.99	1.05	1.33	1.18	1.31
Total listings, mths sales#	4.9	7.1	3.0	2.7	3.0

* avg last 25yrs; # June qtr readings
 Sources: ABS, CoreLogic, REIA, Westpac Economics

WESTERN AUSTRALIA: still holding up well



34. WA consumers: housing-related sentiment



- The WA housing market continues to outperform most others with turnover running at high levels and prices only recording slight declines to date. While our sentiment-based indicators are pointing to weakness ahead, an extremely tight supply-demand balance and firm backdrop for the state economy are providing clear support. These factors and a somewhat milder affordability situation are expected to ensure the price correction phase in the west.

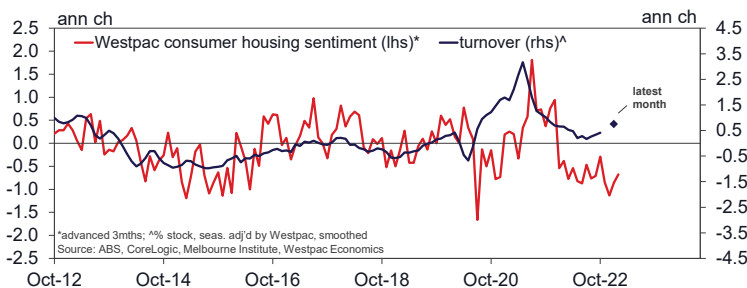
- Turnover has remained remarkably strong through 2022, up about 10%/yr (bearing in mind the base for comparisons in WA are relatively unaffected by COVID disruptions) and in line with long run averages as a share of the total dwelling stock. Prices have essentially stalled flat, dipping only slightly, by just 0.8%, from a peak in Jul.

- The price detail continues to show a very similar pattern across segments and tiers within Perth, units under-performing slightly. The price slowdown has been a little more pronounced in Perth's North East and for Mandurah, just south of the capital. That said, prices in all sub-markets are still up for the 2022 year to date.

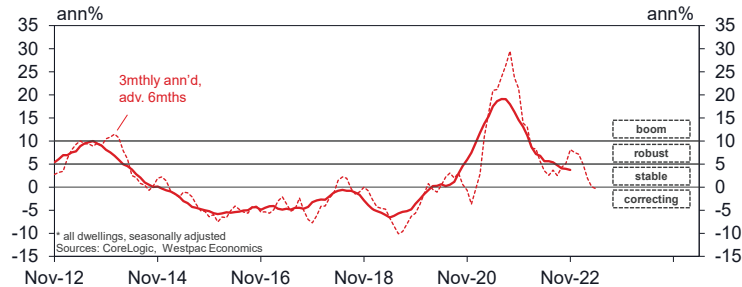
- The supply-demand balance remains extremely tight, sales running nearly 30% of new listings and the stock of unsold dwellings down to just over three months of sales, nearly half the long run avg. Rental markets are as tight as a drum as well, vacancy rates running at less than 0.5%.

- Housing-related sentiment has weakened further despite the WA market's resilient performance. Price expectations have fallen particularly steeply since Aug, albeit holding at better levels than in other states. The **WA Consumer Housing Sentiment index** continues to point to a pull-back in sales near term although the signal has been in place since the start of the year and there has been no drop-off to date.

35. WA housing composite vs turnover

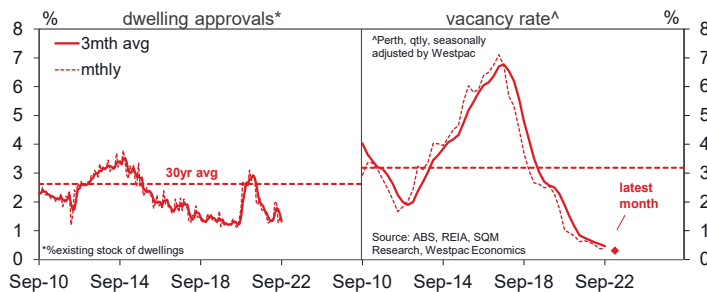


36. Perth dwelling prices



Population: 2.8mn
Net migration: 12k pa
GSP: \$377bn (18% Aus)
Dwellings: 1.1mn, \$0.7trn
Capital: Perth

37. WA: dwelling approvals, vacancy rate



June years	avg*	2020	2021	2022	latest
GSP, ann%	4.0	1.2	3.3	3.1	n.a.
State final demand, ann%	3.6	1.2	4.6	4.9	4.9
Employment, ann%	2.2	-4.1	7.6	5.1	2.6
Unemployment rate, %	5.6	7.5	4.9	3.1	3.4
Population, ann%	1.8	2.0	0.7	n.a.	1.1
Dwelling prices, ann%#	4.7	0.2	18.6	5.6	4.0
Rental yield, %	4.7	5.1	4.9	5.6	6.0
Sales/new listings, ratio	0.91	1.02	1.03	1.12	1.28
Total listings, mths sales	5.8	7.8	4.0	3.3	3.1

* avg last 25yrs; # June qtr readings

Note that WA price data has been suspended due to technical issues and is under review.

Sources: ABS, CoreLogic, REIA, Westpac Economics

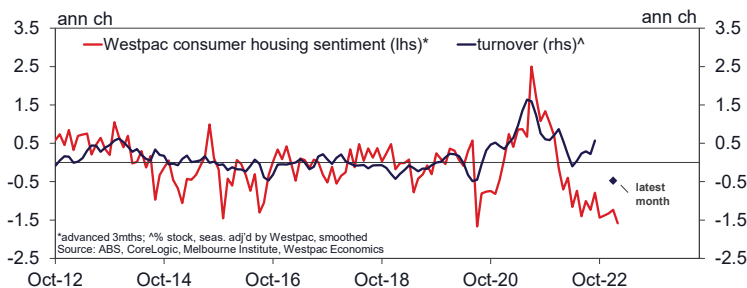
SOUTH AUSTRALIA: stalling but not falling



38. SA consumers: housing-related sentiment

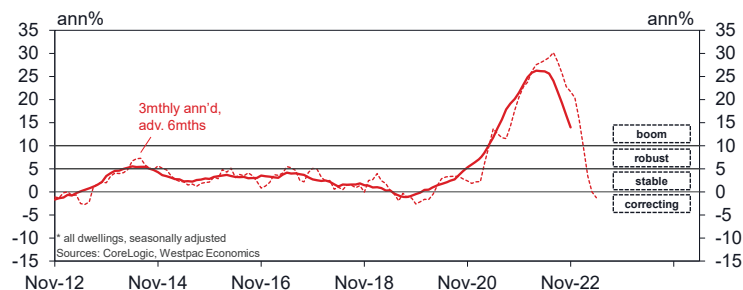


39. SA housing composite vs turnover



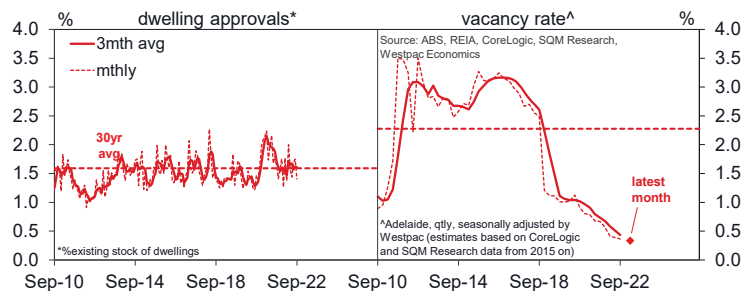
- SA's boom started later and is running longer than other eastern states. Remarkably, barring an extreme weakening in the final months, both turnover and prices are set to finish higher for calendar 2022. That said, momentum is clearly slowing. Prices are now dipping slightly, turnover is flattening at high levels and sentiment has turned down sharply. As noted previously, the SA market looks to have been caught between a large shock from interest rate hikes and what would otherwise have been a strong upturn driven by a very tight supply-demand balance and relatively conducive affordability. We expect the interest rate side to start to dominate in coming months but the fundamentals still point to a milder correction than in most other states.
- Despite recent flattening, turnover is still up over 10% on a year ago. Prices have slipped about 1% since July but are still showing strong double-digit gains over the year to November.
- That said, the price detail shows a significant slowdown in 'top tier' markets and, by region, concentrated in Adelaide's Central & Hills, West and South, the city's Northern suburbs holding up better. Regional parts of SA have also held up better although these tend to be sparsely populated areas outside of the Barossa.
- The supply side remains extremely tight, total on-market listings running at less than two months of sales (1.5 in the case of houses) - the long run average is about four. Rental vacancy rates are also sub-0.5%, effectively zero.
- Buyer sentiment has weakened markedly since mid-year suggesting the softer tone in recent months will gain momentum heading into 2023. The **SA Consumer Housing Sentiment index** points to a significant pull-back in turnover.

40. Adelaide dwelling prices



Population: 1.8mn
Net migration: 9k pa
GSP: \$124bn (6% Aus)
Dwellings: 0.8mn, \$0.5trn
Capital: Adelaide

41. SA: dwelling approvals, vacancy rate



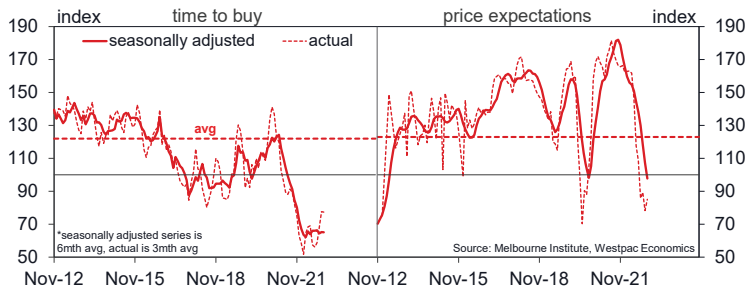
June years	avg*	2020	2021	2022	latest
GSP, ann%	2.3	-1.0	4.7	5.1	n.a.
State final demand, ann%	2.9	-1.7	4.0	5.3	5.3
Employment, ann%	1.2	-4.7	6.0	2.3	2.0
Unemployment rate, %#	6.9	7.9	5.6	4.5	4.1
Population, ann%	0.8	1.3	0.2	n.a.	0.8
Dwelling prices, ann%	6.2	2.0	13.8	25.6	16.6
Rental yield, %#	5.2	5.2	5.6	5.7	5.5
Sales/new listings, ratio#	1.06	1.39	1.42	1.42	1.74
Total listings, mths sales#	3.9	4.5	2.4	2.0	1.7

* avg last 25yrs; # June qtr readings
 Sources: ABS, CoreLogic, REIA, Westpac Economics

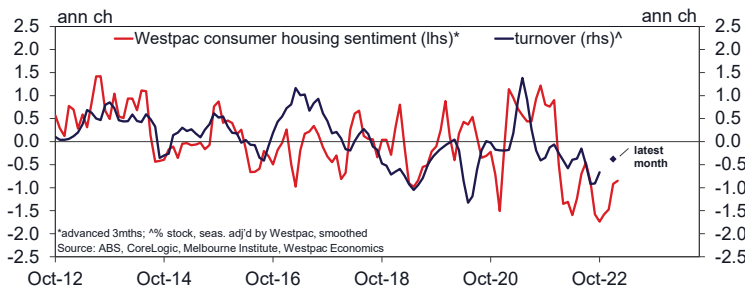
TASMANIA: looking rattled



42. Tas consumers: housing-related sentiment

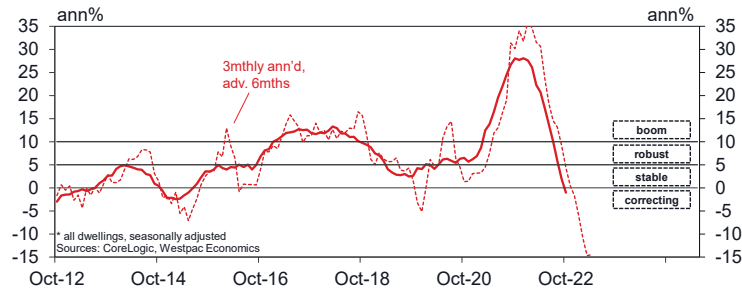


43. Tas housing composite vs turnover



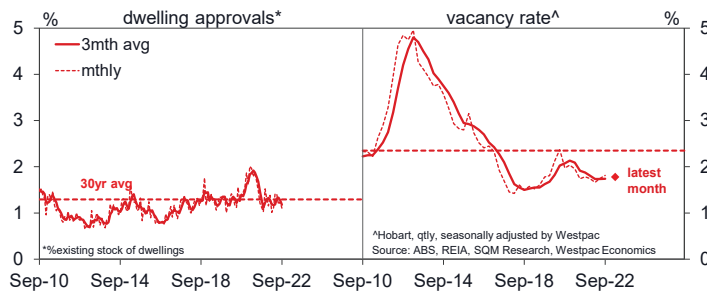
- The Tas housing market correction has deepened over the last three months, turnover continuing to move lower and price declines accelerating and broadening. Performance-wise, the state sits somewhere between the very weak NSW and Vic markets and the milder downturn in Qld. However, like Qld, the pace of the correction looks to be picking up with sentiment now weak.
- For a long time now the state's housing market has wrestled with acute supply shortages, an associated long run of strong price gains leading to very stretched affordability, comparable to that seen in NSW and Vic. Accordingly, rate hikes have triggered a sharp drop back in demand that is playing through quickly to prices. However, supply is still very tight, suggesting that prices could 'yo-yo' again if and when interest rates start to move lower.
- The latest price detail shows a broad-based correction, coming across houses, units and price tiers. By sub-region, Hobart's inner areas continue to see the steepest unwind. Regionally, Launceston is also recording steep falls, the West and North West holding up a little better to be flat rather than down over the last six months.
- There has been relatively little reprieve around supply. Sales are trailing slightly behind new listings but the stock of 'on-market' supply remains very low, at just under four months of sales. While that's better than recent record lows, it's still well below the long run average of just over five. Rental vacancy rates remain stuck below 2%, indicating that the broader physical stock of dwellings is also in short supply.
- The **Tas Consumer Housing Sentiment index** points to further declines in turnover despite moving off recent extreme lows.

44. Hobart dwelling prices



Population: 0.6mn
Net migration: 2k pa
GSP: \$37bn (2% Aus)
Dwellings: 0.3mn, \$174bn
Capital: Hobart

45. Tas: dwelling approvals, vacancy



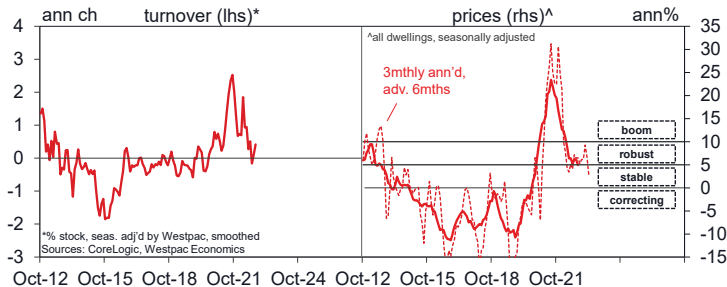
June years	avg*	2020	2021	2022	latest
GSP, ann%	2.3	0.3	5.0	4.3	n.a.
State final demand, ann%	2.7	-0.7	3.6	5.8	5.8
Employment, ann%	1.3	-1.1	5.6	1.7	2.3
Unemployment rate, %#	7.5	6.5	5.6	4.2	4.3
Population, ann%	0.7	2.0	0.1	n.a.	0.5
Dwelling prices, ann%	6.3	6.3	19.6	13.7	2.0
Rental yield, %#	5.8	5.1	4.2	4.1	4.2
Sales/new listings, ratio#	1.03	1.17	1.26	0.94	0.97
Total listings, mths sales#	5.1	3.6	2.1	2.6	3.8

* avg last 25yrs (12yrs for listings); # June qtr readings
 Sources: ABS, CoreLogic, REIA, Westpac Economics

TERRITORIES: NT slowing; ACT prices crack

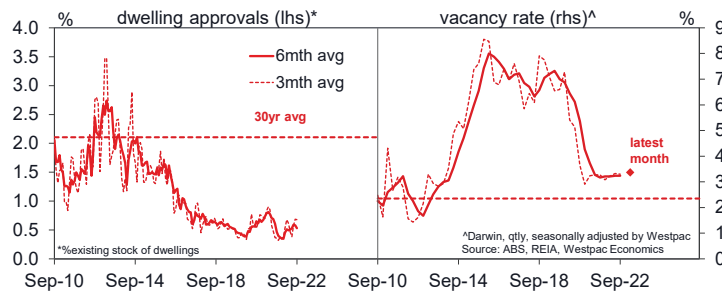


46. NT: turnover, Darwin dwelling prices



Population: 0.2mn
Net migration: -3k pa
GSP: \$26bn (1% Aus)
Dwellings: 0.1mn, \$44bn
Capital: Darwin

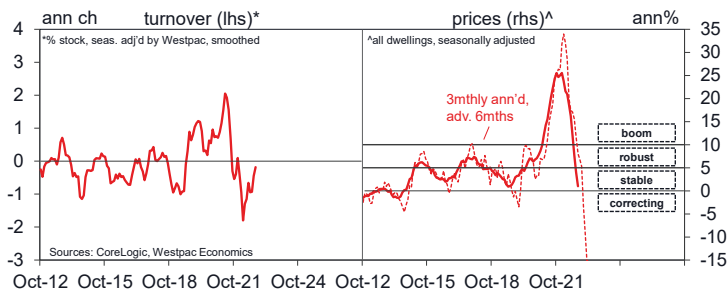
47. NT: dwelling approvals, vacancy rate



June years	avg*	2020	2021	2022	latest
GSP, ann%	3.6	6.0	-1.4	4.7	n.a.
State final demand, ann%	3.4	-5.3	5.9	8.2	8.2
Employment, ann%	1.3	-1.0	3.9	2.1	4.4
Unemployment rate, %	6.6	6.1	5.5	4.1	4.3
Population, ann%	1.2	0.3	-0.1	n.a.	0.3
Dwelling prices, ann%	3.9	-1.6	20.9	6.4	5.4
Sales/new listings, ratio	1.12	1.43	0.96	1.07	1.37
Total listings, mths sales	5.8	8.6	4.5	4.7	3.8

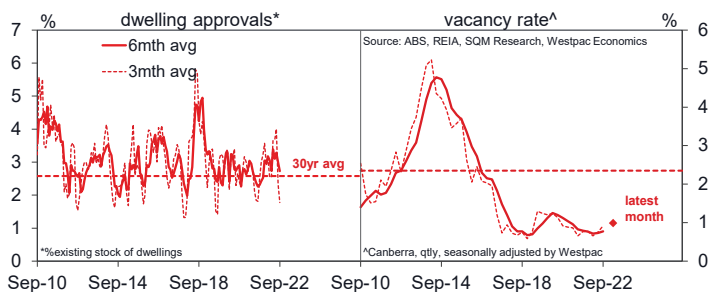
* avg last 25yrs (last 10yrs for listings); # June qtr readings
 Sources: ABS, CoreLogic, Westpac Economics

48. ACT: turnover, Canberra dwelling prices



Population: 0.5mn
Net migration: -3k pa
GSP: \$45bn (2% Aus)
Dwellings: 0.2mn, \$192bn
Capital: Canberra

49. ACT: dwelling approvals, vacancy rate



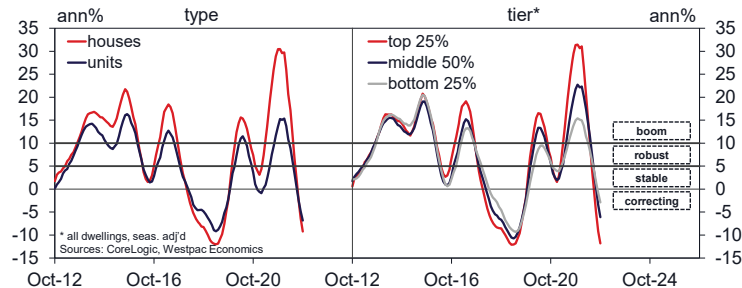
June years	avg*	2020	2021	2022	latest
GSP, ann%	3.7	3.9	3.9	1.9	n.a.
State final demand, ann%	3.9	3.1	3.0	2.9	2.9
Employment, ann%	1.3	-1.1	3.4	1.9	5.2
Unemployment rate, %	6.6	5.5	5.3	3.9	4.0
Population, ann%	1.5	2.1	0.1	n.a.	0.6
Dwelling prices, ann%	6.5	6.1	18.0	16.2	2.1
Sales/new listings, ratio#	1.44	1.50	1.61	1.29	1.28
Total listings, mths sales#	2.5	3.5	1.7	2.1	2.6

* avg last 25yrs (last 10yrs for listings); # June qtr readings
 Sources: ABS, CoreLogic, Westpac Economics

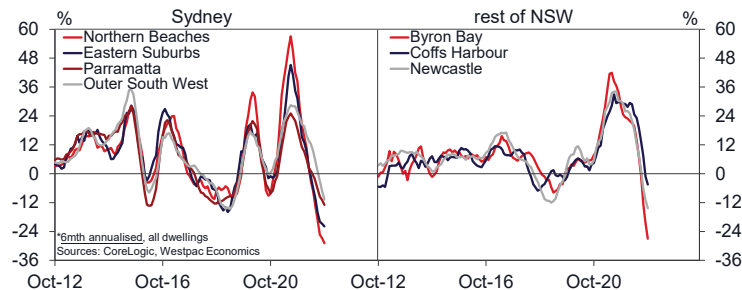
ADDITIONAL MATERIALS: charts and tables



50. NSW: Sydney dwelling prices: by type, tier



51. NSW dwelling prices: selected sub-region

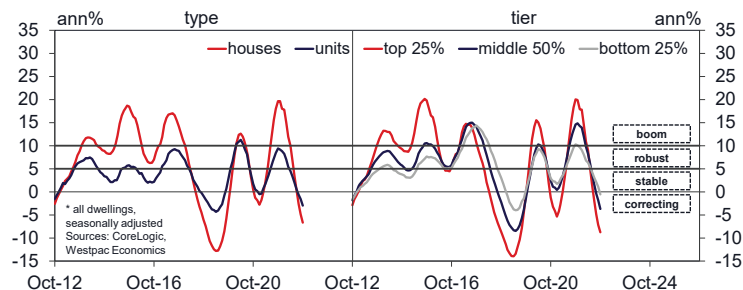


NSW	Sydney	rest of NSW
Population:	5.4mn	2.8mn
Net migration*:	-42k pa	19k pa
Employ (%state):	68%	32%
Dwellings, no.:	2.0mn	1.4mn
Dwellings, value:	\$2.8trn	\$1.1trn

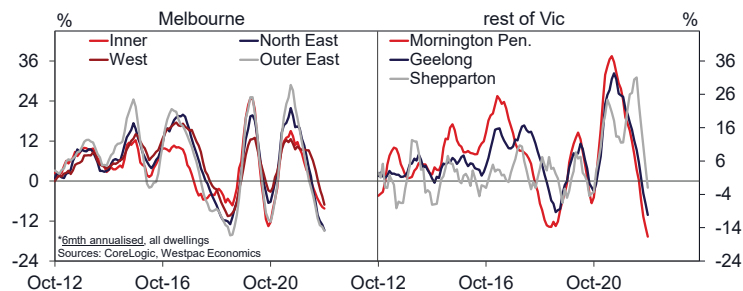
June years	avg [^]	2020	2021	2022	latest
Sydney					
Employment, ann%	1.9	-5.7	6.4	3.2	8.4
Unemployment rate, %	5.3	6.5	5.5	3.5	3.4
Houses - prices, ann%	6.1	14.4	19.3	6.8	-9.2
- sales/new listings, ratio	1.09	1.23	1.28	1.09	1.04
- total listings, mths sales	3.2	3.7	1.9	2.9	3.4
Units - prices, ann%	4.8	10.5	5.1	3.5	-6.8
- sales/new listings, ratio	1.58	1.14	1.49	1.16	1.06
- total listings, mths sales	2.3	4.4	2.3	3.5	4.4
rest of NSW					
Employment, ann%	1.5	-5.3	6.1	1.4	4.0
Unemployment rate, %	7.1	6.4	4.4	3.9	3.2
Dwelling prices, ann%	5.9	3.7	20.9	21.0	5.1

* incl. flows within state, year to Jun 2021; [^]avg last 25yrs (last 10yrs for listings)
Sources: ABS, CoreLogic, Westpac Economics

52. Vic: Melbourne dwelling prices: by type, tier



53. Vic: dwelling prices: selected sub-regions



Vic	Melbourne	rest of Vic
Population:	5.1mn	1.6mn
Net migration*:	-88k pa	13k pa
Employ (%state):	79%	21%
Dwellings, no.:	2mn	0.8mn
Dwellings, value:	\$2.1trn	\$0.5trn

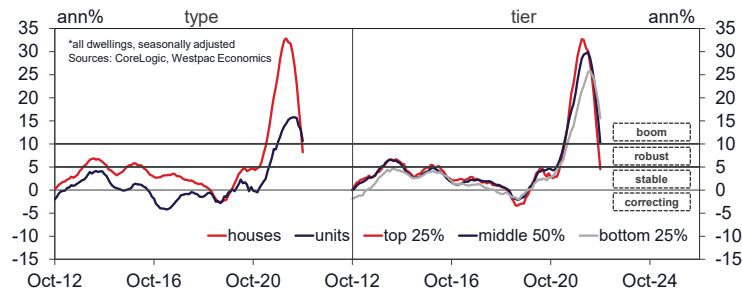
June years	avg [^]	2020	2021	2022	latest
Melbourne					
Employment, ann%	2.3	-4.4	5.3	4.0	3.2
Unemployment rate, %	6.2	7.4	5.3	4.0	3.6
Houses - prices, ann%	6.7	10.5	8.8	3.5	-6.7
- sales/new listings, ratio	1.04	0.97	1.18	1.03	1.14
- total listings, mths sales	3.4	5.1	2.5	3.0	3.5
Units - prices, ann%	5.6	9.2	4.5	2.0	-3.0
- sales/new listings, ratio	1.12	0.81	0.97	0.92	1.05
- total listings, mths sales	3.7	6.8	4.2	5.0	5.1
rest of Vic					
Employment, ann%	1.5	1.2	3.8	-1.1	-0.8
Unemployment rate, %	6.7	4.5	3.9	3.3	3.0
Dwelling prices, ann%	5.5	4.4	15.7	15.1	4.0

* incl. flows within state, year to Jun 2020; [^]avg last 25yrs (last 10yrs for listings)
Sources: ABS, CoreLogic, Westpac Economics

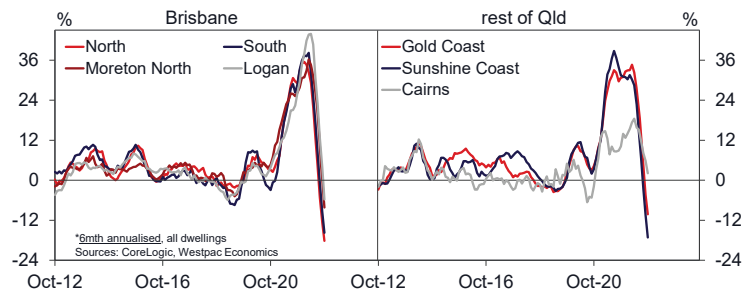
ADDITIONAL MATERIALS: charts and tables, cont.



54. Qld: Brisbane dwelling prices: by type, tier



55. Qld dwelling prices: selected sub-regions

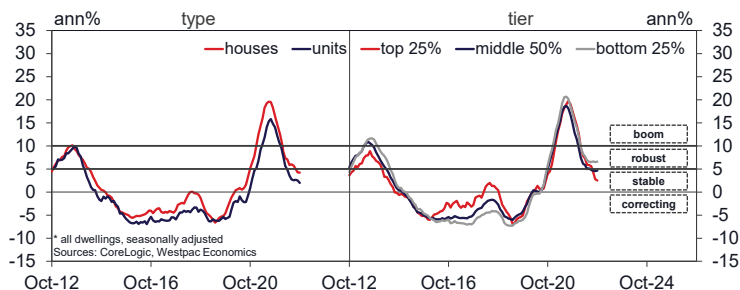


Qld	Brisbane	rest of Qld
Population:	2.6mn	2.6mn
Net migration*:	4k pa	12k pa
Employ (%state):	51%	49%
Dwellings, no.:	1mn	1.2mn
Dwellings, value:	\$0.8trn	\$0.8trn

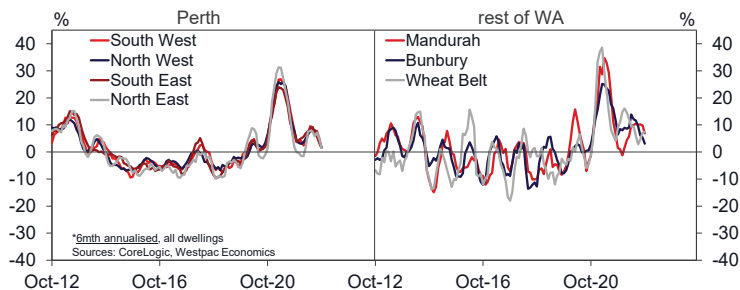
June years	avg [^]	2020	2021	2022	latest
Brisbane					
Employment, ann%	2.6	-5.0	10.9	5.3	4.3
Unemployment rate, %	6.2	7.6	5.8	4.1	4.1
Houses - prices, ann%	6.1	4.7	14.4	27.1	8.2
- sales/new listings, ratio	0.89	1.08	1.30	1.09	1.26
- total listings, mths sales	5.4	6.6	2.7	3.0	3.1
Units - prices, ann%	3.8	1.7	5.6	15.8	10.7
- sales/new listings, ratio	1.49	0.98	1.50	1.52	1.66
- total listings, mths sales	3.8	8.4	3.1	2.2	2.2
rest of Qld					
Employment, ann%	2.3	-4.1	8.8	3.8	4.8
Unemployment rate, %	6.9	7.5	5.2	4.1	3.1
Dwelling prices, ann%	4.8	4.2	16.8	21.8	8.6

* incl. flows within state, year to Jun 2020; [^]avg last 25yrs (last 10yrs for listings)
Sources: ABS, CoreLogic, Westpac Economics

56. WA: Perth dwelling prices: by type, tier



57. WA dwelling prices: selected sub-regions



WA	Perth	rest of WA
Population:	2.1mn	0.5mn
Net migration*:	1k pa	-2k pa
Employ (%state):	81%	19%
Dwellings, no.:	0.9mn	0.3mn
Dwellings, value:	\$0.5trn	\$0.1trn

June years	avg [^]	2020	2021	2022	latest
Perth					
Employment, ann%	2.4	-3.8	8.5	5.0	3.6
Unemployment rate, %	5.8	7.9	5.0	3.2	3.3
Houses - prices, ann%#	4.9	0.5	19.2	6.0	4.2
- sales/new listings, ratio	0.90	1.02	1.11	1.23	1.39
- total listings, mths sales	5.9	7.7	3.5	2.8	2.5
Units - prices, ann%#	3.7	-1.8	14.1	2.7	2.0
- sales/new listings, ratio	0.95	1.01	0.81	0.88	0.92
- total listings, mths sales	5.9	9.6	5.8	5.2	5.0
rest of WA					
Employment, ann%	1.3	-4.5	4.2	5.7	2.3
Unemployment rate, %	5.2	5.4	4.6	3.1	3.3
Dwelling prices, ann%#	3.3	-1.1	18.5	8.7	6.8

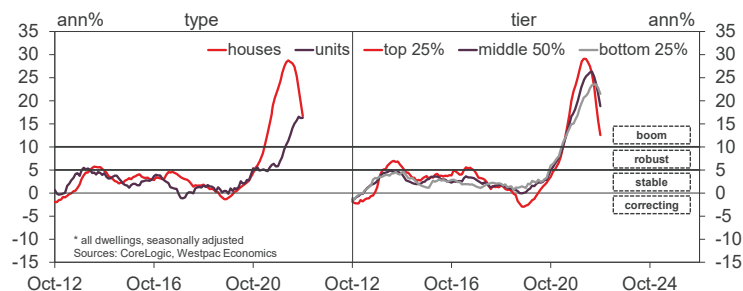
* incl. flows within state, year to Jun 2020; [^]avg last 25yrs (last 10yrs for listings).

Note that WA price data has been suspended due to technical issues and is under review.
Sources: ABS, CoreLogic, Westpac Economics

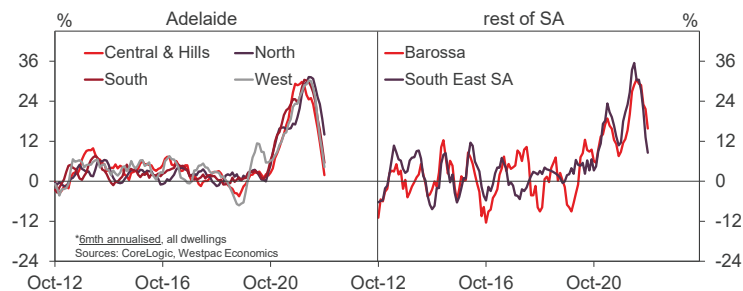
ADDITIONAL MATERIALS: charts and tables, cont.



58. SA: Adelaide dwelling prices: by type, tier



59. SA dwelling prices: selected sub-regions

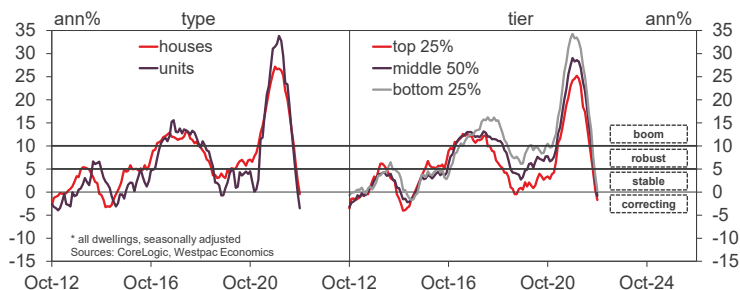


SA	Adelaide	rest of SA
Population:	1.4mn	0.4mn
Net migration*:	-3k pa	1k pa
Employ (%state):	80%	20%
Dwellings, no.:	0.6mn	0.2mn
Dwellings, value:	\$0.4trn	\$0.1trn

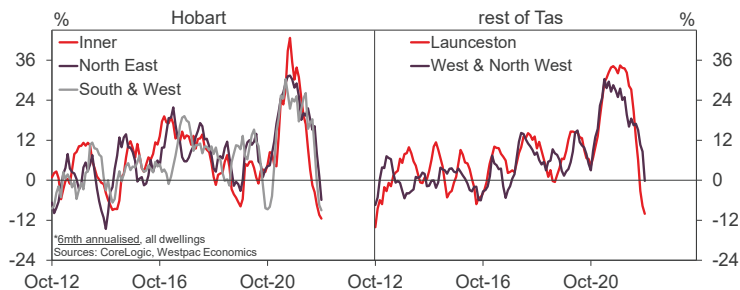
June years	avg [^]	2020	2021	2022	latest
Adelaide					
Employment, ann%	1.5	-5.3	6.8	3.6	3.2
Unemployment rate, %	7.1	7.9	5.5	4.3	4.1
Houses - prices, ann%	6.3	1.9	15.1	27.3	16.7
- sales/new listings, ratio	1.04	1.32	1.40	1.40	1.76
- total listings, mths sales	3.9	4.1	2.2	2.0	1.5
Units - prices, ann%	5.7	2.1	5.6	15.1	16.3
- sales/new listings, ratio	1.15	1.43	1.33	1.52	1.83
- total listings, mths sales	4.2	5.6	3.2	2.2	1.8
rest of SA					
Employment, ann%	0.4	-2.7	3.6	-2.4	-4.6
Unemployment rate, %	6.3	7.0	5.5	4.6	4.3
Dwelling prices, ann%	5.3	2.5	13.6	22.4	20.2

* incl. flows within state, year to Jun 2020; [^]avg last 25yrs (last 10yrs for listings)
Sources: ABS, CoreLogic, Westpac Economics

60. Tas: Hobart dwelling prices: by type, tier



61. Tas dwelling prices: selected sub-regions



Tas	Hobart	rest of Tas
Population:	238k	303k
Net migration*:	-1k pa	1k pa
Employ (%state):	45%	55%
Dwellings, no.:	103k	158k
Dwellings, value:	\$82bn	\$87bn

June years	avg [^]	2020	2021	2022	latest
Hobart					
Employment, ann%	1.4	-1.8	6.9	-0.4	-2.2
Unemployment rate, %	6.9	6.4	5.3	4.1	4.7
Houses - prices, ann%	6.3	7.0	19.2	13.7	-0.4
- sales/new listings, ratio	0.97	1.16	1.30	0.93	0.98
- total listings, mths sales	5.4	3.6	1.9	2.9	3.8
Units - prices, ann%	5.8	3.6	21.1	13.6	-3.5
- sales/new listings, ratio	1.24	1.32	1.28	1.08	1.42
- total listings, mths sales	4.1	3.5	2.1	2.6	3.0
rest of Tas					
Employment, ann%	1.2	-0.5	4.6	3.5	4.6
Unemployment rate, %	8.0	6.5	5.6	4.3	3.9
Dwelling prices, ann%	5.9	10.2	20.6	21.9	7.6

* incl. flows within state, year to Jun 2020; [^]avg last 25yrs (last 10yrs for listings)
Sources: ABS, CoreLogic, Westpac Economics

ECONOMIC and FINANCIAL FORECASTS



Interest rate forecasts

Australia	Latest (18 Nov)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
Cash	2.85	3.10	3.60	3.85	3.85	3.85	3.60	3.35
90 Day BBSW	3.05	3.55	3.97	4.05	4.05	3.97	3.72	3.47
3 Year Bond	3.73	3.90	4.00	3.85	3.70	3.60	3.55	3.50
3 Year Swap	3.23	3.55	3.70	3.60	3.50	3.40	3.35	3.30
10 Year Bond	3.64	3.80	3.80	3.60	3.40	3.20	3.00	2.90
10 Year Spread to US (bps)	-13	-20	-20	-20	-20	-20	-10	0
US								
Fed Funds	3.875	4.375	4.625	4.625	4.625	4.625	4.375	3.875
US 10 Year Bond	3.77	4.00	4.00	3.80	3.60	3.40	3.10	2.90

Exchange rate forecasts

	Latest (18 Nov)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
AUD/USD	0.6709	0.65	0.66	0.67	0.69	0.72	0.73	0.74
NZD/USD	0.6129	0.59	0.60	0.61	0.63	0.65	0.66	0.66
USD/JPY	139.90	147	145	143	140	136	133	130
EUR/USD	1.0369	1.00	1.01	1.02	1.04	1.07	1.09	1.10
GBP/USD	1.1893	1.13	1.14	1.16	1.18	1.20	1.22	1.24
USD/CNY	7.1538	7.20	7.00	6.80	6.60	6.50	6.40	6.30
AUD/NZD	1.0893	1.10	1.10	1.10	1.10	1.11	1.11	1.12

ECONOMIC and FINANCIAL FORECASTS



Australian economic growth forecasts

% change	2021	2022				2023	
	Q4	Q1	Q2	Q3f	Q4f	Q1f	Q2f
GDP % qtr	3.9	0.7	0.9	1.1	0.6	0.3	0.2
%yr end	4.5	3.3	3.6	6.7	3.4	3.0	2.2
Unemployment rate %	4.7	4.0	3.8	3.5	3.3	3.3	3.9
Wages (WPI)	0.7	0.7	0.8	1.0	1.1	1.1	1.1
annual chg	2.3	2.4	2.6	3.1	3.6	4.1	4.4
CPI Headline*	1.3	2.1	1.8	1.8	2.1	1.3	0.8
annual chg*	3.5	5.1	6.1	7.3	8.1	7.2	6.2
Trimmed mean*	1.1	1.5	1.6	1.8	1.8	1.1	1.0
annual chg*	2.6	3.8	4.9	6.1	6.8	6.4	5.8

% change	Calendar years			
	2020	2021	2022f	2023f
GDP % qtr	-	-	-	-
%yr end	-0.7	4.5	3.4	1.0
Unemployment rate %	6.8	4.7	3.3	4.6
Wages (WPI)	-	-	-	-
annual chg	1.4	2.3	3.6	4.5
CPI Headline*	-	-	-	-
annual chg*	0.9	3.5	8.1	4.1
Trimmed mean*	-	-	-	-
annual chg*	1.2	2.6	6.8	3.8

HOUSING MARKET DATA



Consumer sentiment – housing-related measures

index*	2020		2021			2022						
	avg	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Oct	Nov	%mth	%yr
'Time to buy a dwelling'												
Australia	119.4	116.4	96.1	96.7	81.9	78.3	75.1	80.5	75.3	77.1	2.4	-15.4
- New South Wales	115.8	116.9	100.0	94.0	82.7	73.1	73.7	93.0	80.3	86.8	8.2	-3.3
- Victoria	115.5	114.0	86.4	87.3	81.3	80.6	85.2	71.3	78.1	69.4	-11.1	-27.0
- Queensland	128.0	114.2	103.1	105.3	78.9	85.6	62.6	76.2	71.7	68.9	-3.8	-19.2
- Western Australia	128.8	126.2	105.1	118.8	84.8	83.6	79.4	76.2	64.2	87.2	35.8	-13.5
- South Australia	127.9	111.3	83.8	92.2	91.0	64.3	74.8	78.8	71.7	76.6	6.7	-22.2
- Tasmania	122.0	114.0	92.7	86.5	50.3	88.8	54.3	82.2	83.1	66.8	-19.5	-13.9
House price expectations												
Australia	125.7	159.5	157.8	158.0	150.6	139.0	111.1	100.6	99.0	91.1	-8.0	-40.3
- New South Wales	127.3	161.6	152.1	161.0	152.2	135.2	103.8	101.0	95.1	91.4	-3.9	-40.0
- Victoria	127.7	154.2	156.2	154.1	141.4	137.0	101.5	108.0	99.5	89.9	-9.7	-41.6
- Queensland	123.7	162.4	165.2	156.2	160.2	140.5	124.5	89.2	102.6	96.4	-6.0	-34.5
- Western Australia	116.9	161.8	164.4	158.1	144.3	143.8	131.3	106.2	109.4	102.0	-6.8	-30.4
- South Australia	127.6	158.8	158.3	161.5	148.0	138.9	123.9	94.1	96.1	89.3	-7.1	-44.2
- Tasmania	127.6	158.2	183.6	165.8	165.7	167.0	100.9	72.0	89.1	84.0	-5.6	-50.1

*indexes based on net balance of % assessing 'good time to buy'/'house prices to rise' and % assessing 'bad time to buy'/'house prices to decline'
Sources: Melbourne Institute, Westpac Economics

HOUSING MARKET DATA



Consumer sentiment – other components

index*	2021					2022							%mth	%yr
	avg	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Oct	Nov				
Unemp. expectations														
Australia	130.1	112.0	108.4	120.5	104.1	101.8	108.5	99.6	111.3	117.3	5.4	23.2		
- New South Wales	129.6	112.4	98.7	116.9	105.5	101.7	110.3	98.5	105.8	119.8	13.2	32.5		
- Victoria	131.2	113.0	114.7	124.0	98.8	98.0	106.1	99.9	115.8	111.6	-3.6	12.1		
- Queensland	133.2	116.4	113.5	120.8	113.3	105.8	121.9	101.2	117.6	125.0	6.3	38.2		
- Western Australia	128.1	101.6	109.5	112.5	94.8	94.6	87.7	95.1	101.2	116.8	15.5	12.7		
- South Australia	135.3	109.9	114.7	130.8	107.8	123.0	108.0	105.0	122.7	112.9	-8.0	5.7		
- Tasmania	138.3	108.6	118.7	114.4	108.4	109.0	94.3	101.1	89.2	107.2	20.2	-2.6		
Risk aversion											qtr ch	ann ch		
Australia	15.1	44.4	40.7	41.4	47.7	42.3	55.4	50.3	n.a.	n.a.	-5.1	4.7		
- New South Wales	11.7	50.7	36.8	34.3	43.4	38.9	54.4	53.5	n.a.	n.a.	-0.9	13.1		
- Victoria	11.0	40.2	40.6	41.8	50.7	44.0	56.1	51.5	n.a.	n.a.	-4.6	3.8		
- Queensland	12.7	43.7	42.3	50.6	45.3	44.1	52.3	35.3	n.a.	n.a.	-17.0	-11.8		
- Western Australia	7.0	48.2	55.2	49.8	57.9	51.3	57.7	54.7	n.a.	n.a.	-3.0	-0.5		
- South Australia	14.4	29.6	33.7	37.2	47.7	48.1	58.3	60.1	n.a.	n.a.	1.8	15.9		
- Tasmania	15.5	18.6	12.8	49.2	2.6	30.7	39.7	44.1	n.a.	n.a.	4.4	25.9		

*indexes based on net balance of % assessing 'unemployment to rise' and % assessing 'unemployment to fall'; ^measure based on responses to 'wisest place for savings' question.
Sources: Melbourne Institute, Westpac Economics

HOUSING MARKET DATA



Dwelling prices and turnover

	2020			2021			2022					
	avg	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Oct	Nov
Dwelling prices, ann%*												
Australia	5.8	4.9	2.0	4.8	12.4	19.5	21.0	16.3	8.7	-0.7	-3.1	-4.8
- Sydney	5.7	7.7	2.7	5.4	15.0	23.6	25.3	17.7	5.9	-6.0	-8.6	-10.6
- Melbourne	6.3	3.1	-1.3	0.7	7.7	15.0	15.1	9.8	3.1	-3.9	-5.6	-6.8
- Brisbane	5.7	3.8	3.6	6.8	13.2	19.9	27.4	29.3	25.6	13.4	8.4	3.6
- Perth#	4.7	3.0	7.3	13.6	18.8	18.1	13.1	7.0	5.8	4.1	4.0	3.8
- Adelaide	6.2	3.6	5.9	8.6	13.9	19.1	23.2	26.3	25.7	19.2	16.5	13.4
- Hobart	6.3	6.4	6.1	12.5	19.6	26.8	28.1	22.3	13.7	2.0	-1.0	n.a.

Turnover, %stock^

Australia	5.6	4.5	5.2	5.8	5.8	5.6	5.8	5.3	5.0	4.8	4.8	n.a.
- New South Wales	5.8	5.0	5.5	6.1	5.9	5.4	5.7	4.8	4.4	3.9	3.9	n.a.
- Victoria	4.7	2.9	4.7	5.2	5.0	4.1	5.4	4.4	4.2	3.9	3.8	n.a.
- Queensland	6.6	5.5	6.3	6.9	7.3	7.5	7.4	6.6	6.5	6.1	6.1	n.a.
- Western Australia	6.3	4.6	5.3	5.5	5.7	5.8	6.0	6.0	6.0	6.1	6.3	n.a.
- South Australia	4.6	4.0	4.3	4.5	4.8	4.7	5.0	4.7	5.1	5.4	5.4	n.a.
- Tasmania	5.6	4.9	4.7	4.9	4.6	4.5	4.6	4.3	4.3	3.8	3.8	n.a.

* 'all dwellings' measures, ann% ch, latest is month to date

^ % dwelling stock; most recent months are estimates modeled on preliminary data

Note that WA price data has been suspended due to technical issues and is under review.

Sources: CoreLogic, ABS, Westpac Economics

HOUSING MARKET DATA



Residential property listings

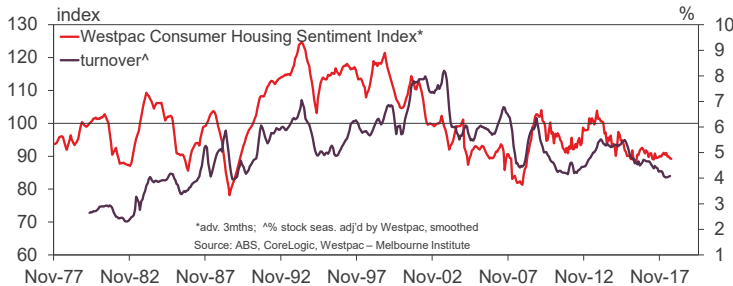
	2020			2021			2022					
	avg	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Oct	Nov
Sales/new listings ratio*												
Australia^	1.09	1.16	1.31	1.31	1.24	1.29	1.14	1.13	1.11	1.14	1.19	1.19
- Sydney	1.27	1.27	1.58	1.59	1.36	1.50	1.21	1.18	1.12	1.10	1.08	1.06
- Melbourne	1.06	1.11	1.16	1.13	1.07	1.08	1.13	0.96	0.95	0.99	1.08	1.15
- Brisbane	0.99	1.10	1.28	1.30	1.33	1.43	1.24	1.20	1.18	1.19	1.31	1.51
- Perth	0.91	0.98	1.22	1.06	1.03	1.09	1.04	1.12	1.12	1.22	1.28	1.33
- Adelaide	1.06	1.33	1.46	1.34	1.42	1.40	1.37	1.40	1.42	1.60	1.74	1.92
- Hobart	1.03	1.23	1.31	1.27	1.26	1.19	1.14	1.15	0.94	0.92	0.97	1.09
Total listings, months of sales*												
Australia^	3.8	4.3	3.3	2.8	2.8	2.8	2.7	2.9	3.2	3.3	3.3	3.4
- Sydney	2.8	3.0	2.4	2.0	2.1	2.2	2.2	2.7	3.2	3.6	3.8	3.8
- Melbourne	3.5	6.3	3.3	3.1	3.1	3.7	2.8	3.5	3.8	4.2	4.3	4.1
- Brisbane	4.9	5.0	3.9	3.2	3.0	2.5	2.3	2.5	2.7	3.1	3.0	2.7
- Perth	5.8	5.5	4.4	4.0	4.0	3.8	3.7	3.5	3.3	3.2	3.1	2.9
- Adelaide	3.9	3.6	3.0	2.8	2.4	2.3	2.1	2.0	2.0	1.9	1.7	1.5
- Hobart	5.1	3.0	2.6	2.2	2.1	2.0	2.2	2.2	2.6	3.8	3.8	3.4

* figures show 3mth avg, readings for most recent months based on sales estimates modeled on preliminary data and latest weekly listings figures.

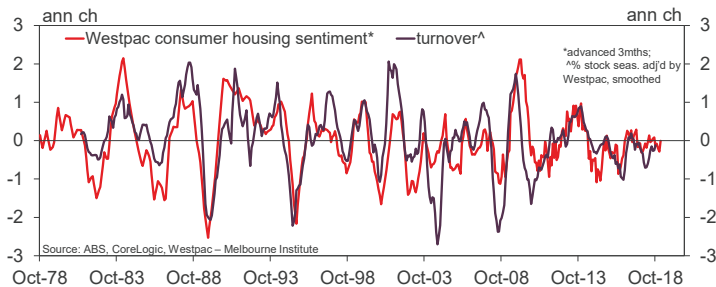
^ avg since 2007

Sources: CoreLogic, Westpac Economics

Westpac Consumer Housing Sentiment Index: full series



Westpac Consumer Housing Sentiment Index: cycles



The **Westpac Consumer Housing Sentiment Indexes** presented in this report are composite measures based on a weighted combination of four indexes from the Westpac-Melbourne Institute Consumer Sentiment survey.

Two of these are 'primary' components with a higher weight that relate directly to consumer perceptions of housing market conditions: the Westpac-Melbourne Institute 'time to buy a dwelling' index and the Westpac-Melbourne Institute House Price Expectations Index. The remaining 'supplementary' components, with lower weights, relate to consumer assessments of job security – the Westpac-Melbourne Institute Unemployment Expectations Index – and risk appetite – the Westpac Risk Aversion Index.

Each of these components is seasonally adjusted, converted to a consistent base and combined using fixed weights determined by historical regression analysis. Note that the house price expectations component is only available from 2009 on – a re-weighted composite based on the remaining measures is used for earlier periods.

The resulting composite measures provide significant insight into housing market conditions both nationally and at the individual state level. The national index has over 40yrs of history and a clear lead indicator relationship with a variety of housing market metrics. The index is particularly good at picking turning points in housing market turnover – correctly anticipating every major upswing and downturn since 1980 with a lead of around three months (four once the timeliness of sentiment updates is included).

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