THE RED BOOK

OCTOBER 2022

WESTPAC INSTITUTIONAL BANK

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The next issue of the **Red Book** will be released on 27 January 2023.

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EXECUTIVE SUMMARY

The **Westpac–Melbourne Institute Consumer Sentiment Index** stabilised at weak levels over the three months to Oct, recording a slight 0.1% dip to 83.7.

The index remains in deeply pessimistic territory at levels only seen during major disruptions to the Australian economy.

A striking aspect of the Oct survey was a marked turnaround in sentiment between those surveyed before and after the RBA's surprise decision to raise rates by only 25bps instead of a widely expected 50bp move. The decision likely averted an extremely weak sentiment result for Oct. That said, a further 'relief rebound' is unlikely given more 25bp rate rises look to be locked in for coming meetings.

Aside from actual and prospective rises in interest rates, weak sentiment also reflects sharp rises in the cost of living and deteriorating financial market conditions.

Consumers remain extremely cautious about their finances. The **Westpac Risk Aversion Index** dipped from 54.6 in Jun to 50.5 in Sep, marking the second highest reading since 1974 after Jun's all time high. The responses to our 'wisest place for savings' question that feed into the measure show capital-protected options, such as bank deposits, and debt repayment continue to be heavily favoured over riskier options such as real estate and shares.

The sentiment mix points to an abrupt slowing in consumer spending. **CSI±**, a modified sentiment indicator that we favour as a guide to actual spending, nudged 0.7% higher to 74 over the 3mths to Oct but remains near record lows, pointing to an abrupt slowing in spending momentum once post-COVID 'normalisation' and saving supports dissipate.

Our latest **Westpac Card Tracker Index** reads show consumer-related card activity is still posting gains but with signs of a gentle slowdown in underlying momentum through the Q3 and early weeks of Q4.

Consumers remain extremely hawkish on the outlook for mortgage interest rates, two thirds expecting a further rise of 1ppt or more, and 25% expecting a rise of 0-1ppt. This is despite some easing in inflation expectations from their mid-year highs. Consumer wage expectations have also eased a touch and remain benign.

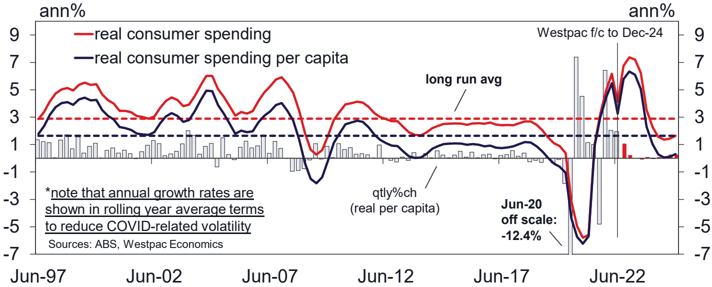
Sharply rising prices continue to put intense pressure on views around major purchase decisions. The **'time to buy a major item'** sub-index fell a further 4.2% to 85.1 in Oct, an extreme low for this measure, mainly reflecting the double-digit price inflation for many items in this category, including housing-related segments.

The survey continues to point to difficult conditions for housing markets. The **'time to buy a dwelling'** index fell a further 6% to 75.3 in Oct, hovering near historic lows.

House price expectations are also moving lower, the **Westpac-Melbourne Institute Consumer House Price Expectations Index** down a further 5.6% to 99, dropping through the 100 'gain line' for the first time since 2020 but still relatively firm compared to previous cycles.

Confidence around jobs remains a stand-out positive, the **Westpac-Melbourne Institute Unemployment Expectations Index** up a touch since July but at 111 still firmly below the long run average of 129 (recall that higher reads mean more consumers expect unemployment to rise). That said, the detail is starting to hint at a cyclical turning in some industry sectors.

Consumer spending: delayed hit



Australian consumers remain under the pump with a continued surge in the cost living, more rapid interest rate rises, financial market turmoil, and declining house prices combining to keep sentiment firmly lodged near historic lows.

That said, as our Oct **Red Book** finds, there is a lot of nuance going on in the sentiment detail. This is perhaps best captured by looking at the main results in 'percentile' terms. Ranked by its own history, the Oct Index read is clearly poor, in the bottom 7% of readings over the last half century.

But component-wise, exceptionally weak reads on 'time to buy a major item' (bottom 2%) and family finances (both in the bottom 5%) are softened by much less dire reads on the economic outlook (bottom 28% for the 12mth view and bottom 47% for the 5yr). So the result reflects a very big actual and expected hit to finances, an aversion to spending due to sharp rises in the cost of major items but what looks to still be a reasonable 'bedrock' of confidence around the economy.

That bedrock shows through most clearly in the ongoing confidence around jobs. In percentile terms, consumer unemployment expectations are still stellar, in the top 16% of readings since 1975.

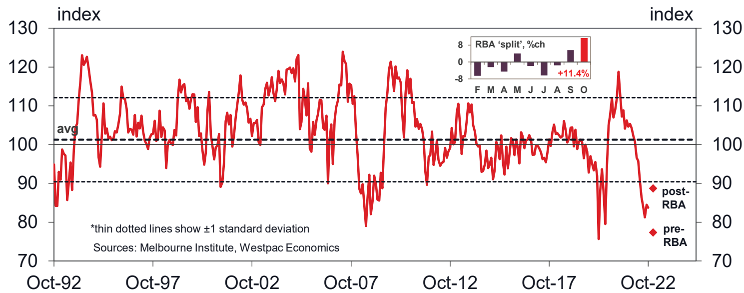
There's a similar perspective to be had around housing. Whereas views on 'time to buy a dwelling' are stuck near historic lows, in the bottom 4% observations since the mid-1970s, house price expectations look surprisingly resilient, only in the bottom 20% (admittedly off a shorter 18yr history).

The general insight here may be around 'tipping points'. We know that interest rate tightening cycles often hit a point where they trigger a sharp 'non linear' response – typically as negative feedback loops start to emerge, especially via labour markets but potentially via other channels. In the current context, rate hikes have delivered a heavy blow to sentiment that will eventually drive a sharp slowing in demand. But judging by the resilience of views on jobs and the economy, rate hikes have not yet tipped wider economic activity into a contraction.

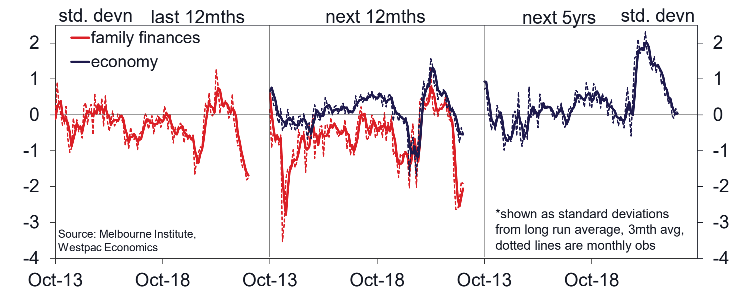
THE CONSUMER MOOD: HOLDING ON

- The **Westpac Melbourne Institute Index of Consumer Sentiment** stabilised over the 3mths to Oct, falling to a new cycle low in Aug but lifting in Sep-Oct to be down just 0.1% since Jul. At 83.7, the Index remains in deeply pessimistic territory at levels only seen during major disruptions to the Australian economy.
- The most striking aspect of survey results in Sep and especially Oct was a marked lift in sentiment amongst those surveyed after the RBA's policy decision – released on the second day of the survey week. While caution should always applied when looking at sub-samples of the survey, both months showed a clear lift in sentiment post-RBA.
- For the Oct survey, the RBA 'split' - the turnaround between pre- and post-RBA – showed a large 11.4% gain, turning what would otherwise have been a very weak sub-80 read into one essentially unchanged for the month. Indeed, if the 88.7 recorded across the post-RBA sample had been for the full sample, the Oct result would have shown a 5% gain.
- The result almost certainly reflects the RBA's surprise move to slow the pace of tightening at its Oct monthly meeting – opting for a 25bp rate increase instead of a widely expected 50bp move. The detail reflects this, the positive 'split' particularly large for 'finances, next 12mths', and housing-related questions.

1. Consumer sentiment: RBA rate 'reprieve'



2. Consumer sentiment: finances, economic conditions



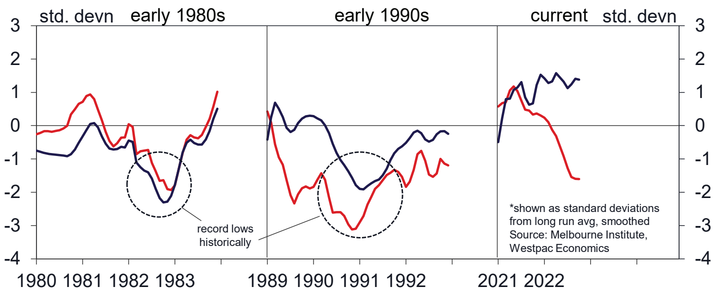
– The post-RBA apparent 'relief rebound' in the Oct survey is unlikely to be repeated. The RBA is still widely expected to continue raising the cash rate: we expect four more 25bp hikes in the next four meetings (Nov, Dec, Feb and Mar, noting that there is no meeting in Jan). While the steps will be smaller, the higher starting point means the pressure on finances will become more intense.

– And sentiment remains extremely weak, the Oct index in the bottom 7% of the nearly 600 readings since the survey began in the early 1970s. Sustained weaker reads have only been seen in the depths of the recessions in the early 1980s and the early 1990s.

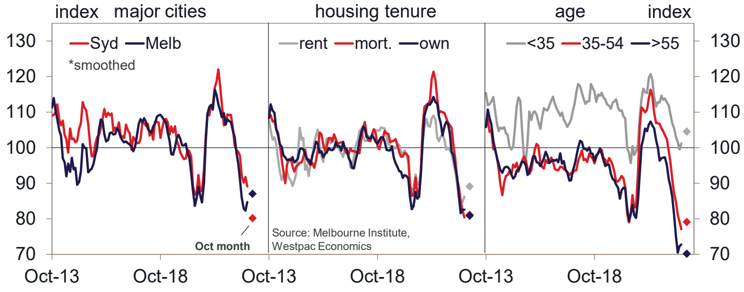
– Looking back at these recession periods highlights an important point of distinction: the labour market. The record lows seen during recessions occurred when contractions were leading to rapid rises in unemployment and sparking intense concerns about job security. This dynamic remains absent in 2022, likely why we have not revisited these levels.

– While interest rates clearly dominated, the Oct detail points to other factors also at work. Sentiment is very weak amongst those on low incomes, in older age groups, and retirees, reflecting cost of living pressures and, for the last two, hits to super and memories of previous episodes of high inflation and high rates.

3. Consumer sentiment: current vs recession lows



4. Consumer sentiment: selected groups



SENTIMENT INDICATORS: SPENDING

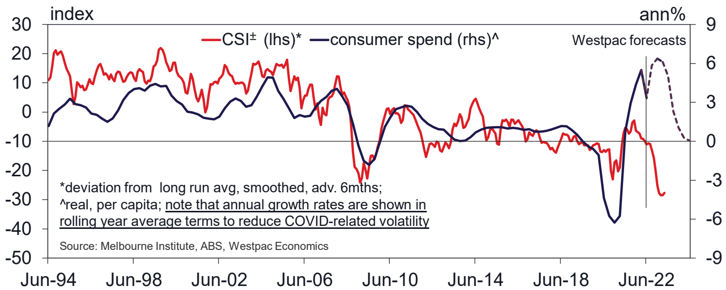
– Our **CSI±** composite combines sub-indexes tracking views on 'family finances' and 'time to buy a major item' with the **Westpac Consumer Risk Aversion Index** and usually provides a good guide to trends in spending over the next 3-6mths.

– Currently, that 3-6mth lag looks to be much bigger due to COVID-related factors – both the direct disruptions of lock-downs and subsequent reopening, and from the additional cushioning effect coming from a large pool of excess savings accumulated through the pandemic period. While highly uncertain, we expect these factors have extended the lag by an additional 3-6mths.

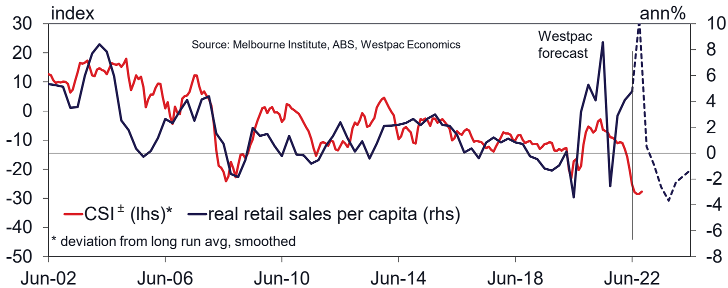
– As noted previously, the presence of uncertain lags between sentiment shifts and spending makes it more difficult to interpret **CSI±** as a guide to point estimates of annual spending growth. Until these issues clear, readings should be viewed as a guide to where per capita spending growth momentum would be in the absence of these disruptions.

– Note that the growth rates in chart 5 are shown in 'rolling annual' terms – i.e. total spending over 12mths vs spending over the previous 12mths, rather than spending in the quarter vs the same quarter a year ago. This dampens the big quarterly swings seen due to COVID restrictions.

5. CSI± vs total consumer spending



6. CSI± vs retail sales



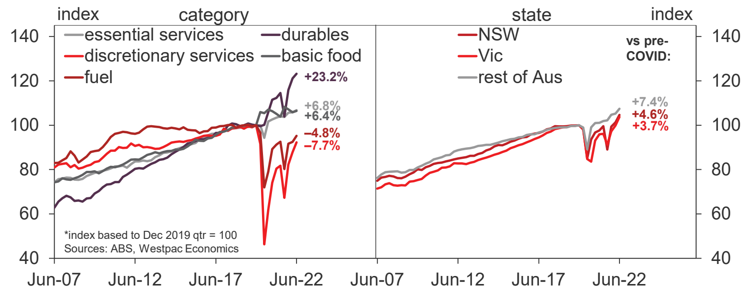
– The last three months has seen **CSI±** stabilise at weak levels with a slight 0.7% gain but still leaving the index at a very weak level, coming off a record low on figures back to 1974. Current reads are consistent with a very sharp contraction in per capita spending, of around 3%yr.

– In practice, such a large outright decline is unlikely given the issues discussed above, especially with continued support coming from labour markets. However, annual growth rates will definitely show a *slowdown* in this order of magnitude. Our forecasts have a 3.5ppt slowdown in spending growth (in annual average %ch terms) between Sep quarter 2022 and Sep quarter 2023.

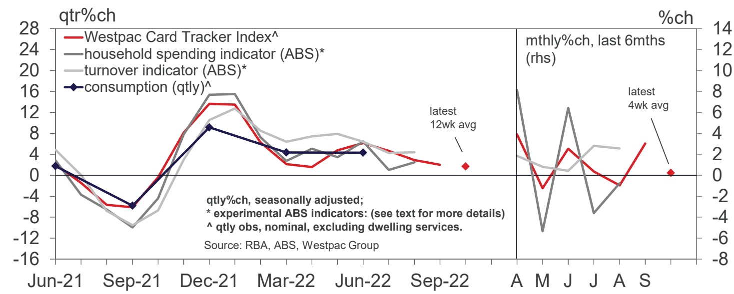
– The official spending data still pre-dates these shifts. The [Q2 national accounts] showed another mostly positive quarter for consumers, reopening dynamics again driving a strong 2.2% gain in spending, and incomes relatively well-supported. The detail also suggested there is still some way to run on post-COVID reopening and normalisation.

– More recent data point to nominal spending growth slowing to 1.-1.5%qtr in Q3, our **Westpac Card Tracker** tentatively pointing to a further slowing to a sub-1% pace in Q4 (see p9-10). Private business survey measures have held at strong levels in Q3 but these include profit and jobs components as well as trading.

7. Consumer spending by broad category and state



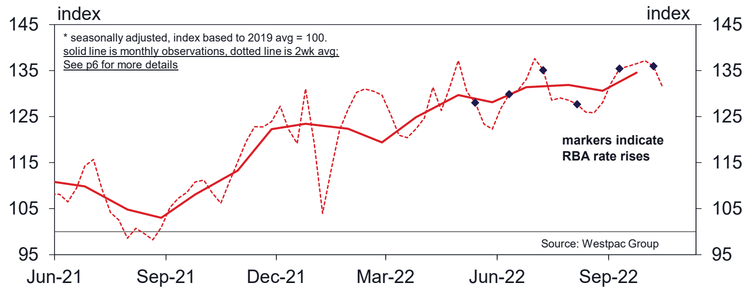
8. Consumer spending vs various lead indicators



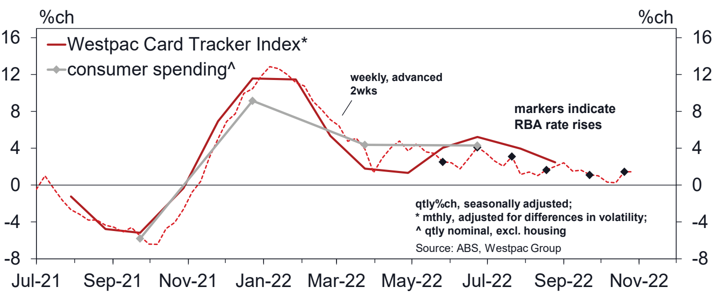
SPECIAL TOPIC: WESTPAC CARD TRACKER

- Our **Westpac Card Tracker Index**, based on weekly credit and debit card activity across the Westpac system, continues to provide a timely gauge of trends in spending. Weekly data available to mid-Oct shows continued gains but with signs of a gentle slowdown in underlying growth momentum.
- Note that we have made significant changes to the index that should make it easier to interpret and to compare both month to month and with official spending measures. A new seasonal adjustment process has allowed us to move to a 'regular' index basis benchmarked to avg levels in 2019 rather than differences in annualised growth rates.
- Our revised index posted a solid rise through the Sep month, dipping back in early Oct to an average index read of 133.9 over the two week to Oct 15. This means card activity is nearly 34% above the average in 2019.
- Despite this high level, the growth pulse is clearly slowing. Chart 10 shows the quarterly pace of gains is consistent with nominal spending growth moderating into the 1-1.5%qtr range in Q3 and to a sub-1% pace heading into Q4. The Q3 estimates suggest there is some downside risk to Westpac's forecasts of a 1.3%qtr gain in real terms in Q3, slowing to 0.5%qtr in Q4, although much hinges on price outcomes over the second half.

9. Westpac Card Tracker Index*

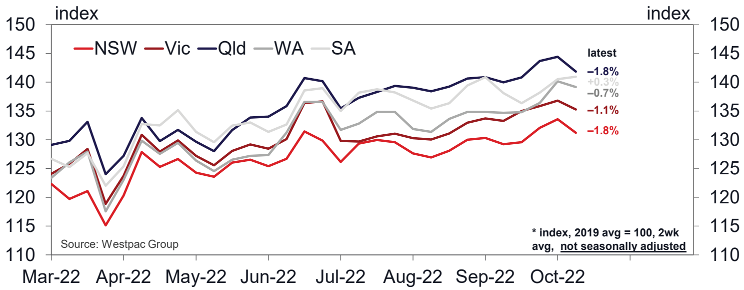


10. Card activity and spending: growth momentum

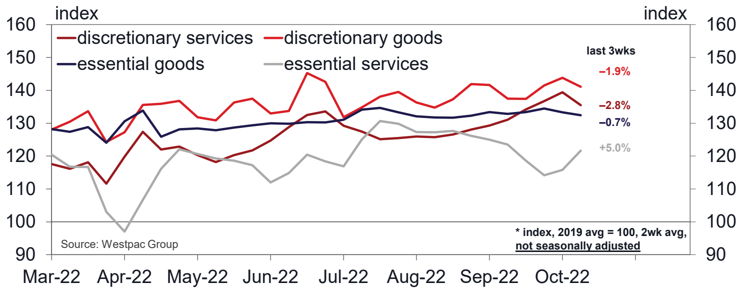


- Chart 8 on p8 compares the **Westpac Card Tracker Index** with two other timely 'experimental' measures now being produced by the ABS – a household spending indicator based on all major bank transactions; and a turnover indicator based on BAS statements. Both of these now have data up to Aug and are showing some moderation as well.
- The detailed Westpac data shows the slowing is more apparent in spending on essentials, particularly essential services, although some of this appears to be due to seasonal fluctuations in education payments (note that it is not yet possible to calculate seasonally adjusted measures at the category level).
- Note that the card activity is in nominal terms. Some of the gains being seen, particularly in discretionary components, likely reflect higher prices and conceal a softening in underlying 'volumes'.
- By state, the major eastern states are all showing the pattern of continued gains with a slowing in growth. WA and SA look to be slight exceptions with somewhat better momentum. In level terms, card activity is still at materially higher levels in Qld, WA and SA, compared to NSW and Vic. As per the category details, the state measures are still on a non seasonally adjusted basis and should also be treated with extra caution.

11. Card activity by major category



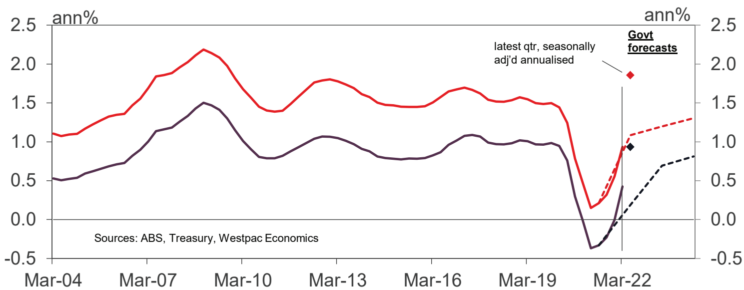
12. Card activity by state



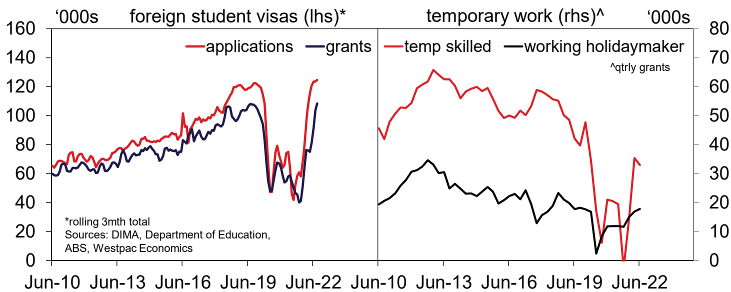
SPECIAL TOPIC: MIGRATION REBOUND

- Our consumer sentiment measures provide a useful gauge to trends in spending on a per capita or per household basis. However, for aggregate, economy-wide spending, what is happening to the denominator – population growth – is also important.
- That is particularly so when population growth is moving through big swings as it is now. Closed external borders saw net migration slump from a strong inflow to a significant outflow that dragged population growth down from 1.5%yr just prior to the pandemic to a low of just 0.2%yr in 2021. Reopening is now seeing a sharp reversal, official estimates showing a strong rebound in Q1.
- Other data suggests the turnaround accelerated through Q2 and into Q3. Most notably, foreign student visa applications surged to be above 2019 COVID levels in Jul-Aug with grants following suit. Temporary skilled visa grants have also shown a meaningful lift, although as at Q2 they were still well below pre-COVID levels.
- If sustained, the rebound in these categories alone could lift annual overseas arrivals by close to 390k a year, taking them from the lows around 145k mid last year back towards the 525-550k range. That is broadly comparable to the pre-COVID pace which was averaging just under 550k a year.

13. Australia: population growth

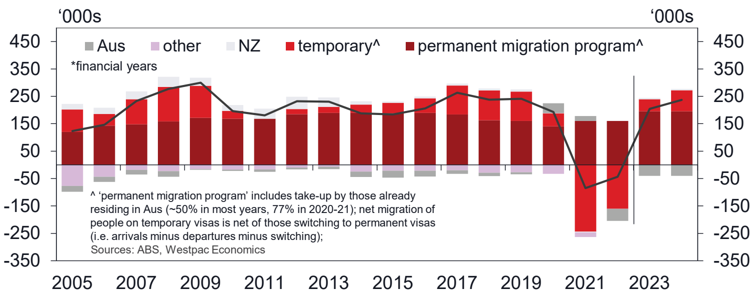


14. Temporary visas: applications and grants

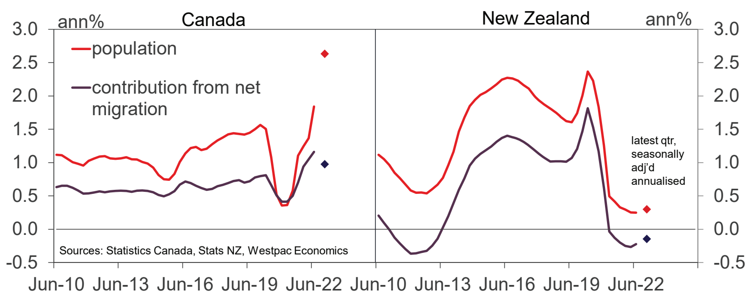


- Of course there are many other moving parts in the net flows. Inbound and outbound migration flows of Australian residents, and of New Zealanders can also have a major impact on the end result.
- Permanent visa arrivals are also an important inflow. However, it should be noted that most of the take-up of permanent visas comes from those already residing in Australia on temporary visas (accounting for 77% of the program in 2020-21). Chart 15 shows how this switching effect concealed a much bigger net outflow of temporary migrants during the COVID period than the total net migration figures indicated.
- The lift showing through in temporary visas is broadly corroborated by monthly arrivals and departures (see here), suggesting other components are not altering the story. This is a very promising picture. If the initial reopening rebound in net migration continues to run this strongly, the Government's most recent forecast of a lift to 1.3% population growth by 2023-24 is likely to come a lot earlier.
- And it could be stronger as well. The recent experience of other countries with similar migration programs to Australia has varied but Canada is a notable one. After easing restrictions in 2021, it is now seeing a 'catch-up' with migration running well ahead of pre-COVID rates.

15. Australia: net migration by major group



16. Population growth: Canada, New Zealand



SENTIMENT INDICATORS: INTEREST RATES

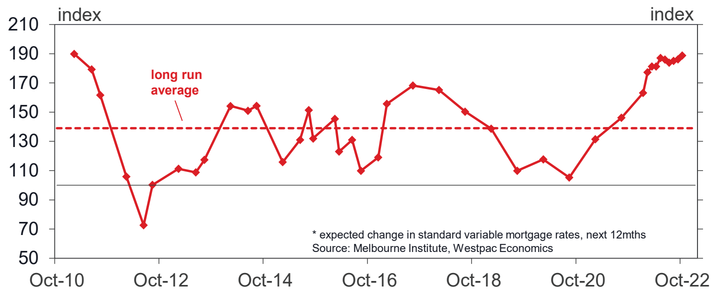
– Consumers remain extremely hawkish on the outlook for mortgage interest rates, most bracing for more significant rises. The **mortgage interest expectations** index, which tracks consumer views on the outlook for variable mortgage rates over the next 12mths, nudged 2.6% higher over the 3mths to Oct, hitting a new cycle high of 188.7, on a par with the highs seen during the 2009-10 tightening cycle. Two thirds of expect rates to rise by 1ppt or more, with a further 25% expecting a rise in the 0-1ppt range.

– Note that index reads are only available from Feb 2010 and have only been produced on a monthly basis since Jan 2022.

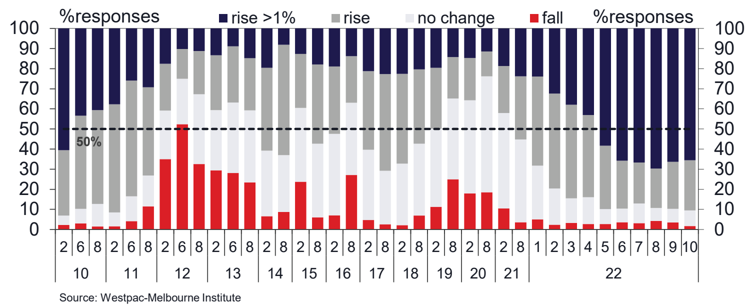
– Mortgage rate expectations eased after the RBA decision, from an index read of 91.8 amongst those surveyed prior to 86.2 across those surveyed post – the 5.5pt dip compares to slight dips around the Sep and Aug meetings and sharp rises around the Jul and Jun meetings.

– The sub-group detail shows the biggest rise in expectations has been amongst typical first home buyer age groups, albeit coming from a low base and with rate expectations still less hawkish across this group. Those in older age groups remain the most more hawkish on the rate outlook again suggesting those with memories of previous cycles are much warier about the outlook.

17. Mortgage interest rate expectations



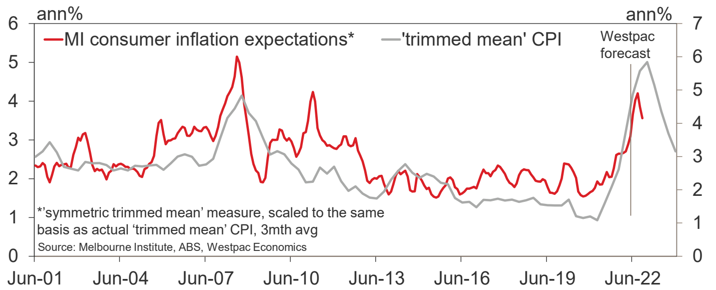
18. Consumer expectations for mortgage rates



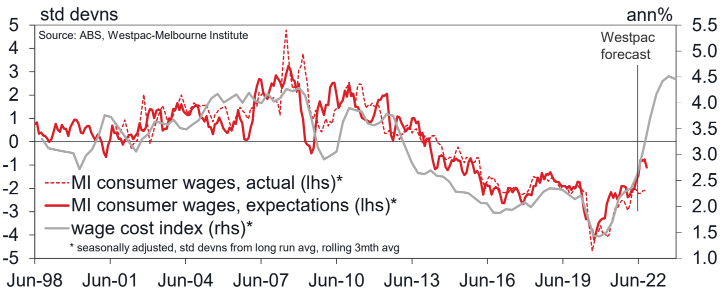
SENTIMENT INDICATORS: INFLATION

- Consumer expectations for inflation and wages growth both retraced a little over the 3mths to Oct. The Melbourne Institute's 'symmetric mean' measure of consumers' year-ahead inflation expectations tracked back from 6.7% in Jun, a 14yr high, to 5.4% in Oct. The Melbourne Institute's 'symmetric mean' measure of consumers' year-ahead wage growth expectations also eased from 1.3% in Jul, an 8½yr high, to 0.9% in Oct.
- Despite the shift, inflation expectations remain elevated, still comparable to the previous peaks in 2011 and 2008. Some of the recent decline may reflect the temporary halving in fuel excise tax that has since expired.
- Official CPI updates due in coming days may also see expectations lift again with annual headline inflation widely expected to push above 6%yr with 'trimmed mean' measures expected to lift to around 5.5%yr.
- Around wages, the consumer view still looks fairly benign. While consumer expectations have lifted, and are running above the highs seen since mid last decade, this was a period of relatively subdued wage growth. Both actual and expected wage growth remains well below the levels seen when wages were rising at a 3-3.5%yr pace, let alone at the 4%yr pace they are expected to rise at in 2023.

19. CPI inflation: actual vs expected



20. Wages growth: actual vs expected



SENTIMENT INDICATORS: DURABLES

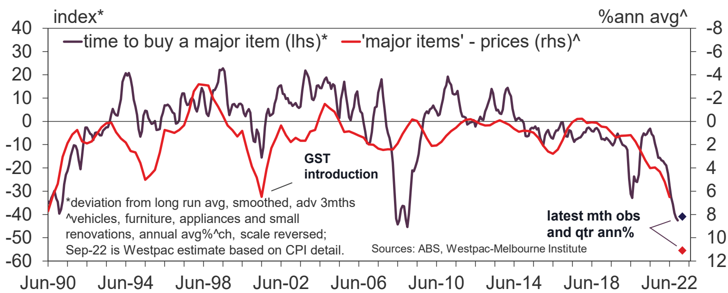
– The **'time to buy a major item'** sub-index has continued to slump towards historic lows, falling a further 4.2% since our last report albeit with a slight rally through Sep-Oct off a sharp fall in Aug. At 85.1, the sub-index is at extreme lows, in the bottom 2% of reads in the last 50yrs. The Aug read of 81.4 was the fourth lowest ever, below the lows seen in the early-1990s and early-1980s recessions, weaker reads only seen briefly during the onset of the COVID pandemic and the GFC.

– The main driver has been the surge in prices, which has been particularly sharp for major renovations and durables. Chart 2 highlights how this factor has been largely absent since the 1990s.

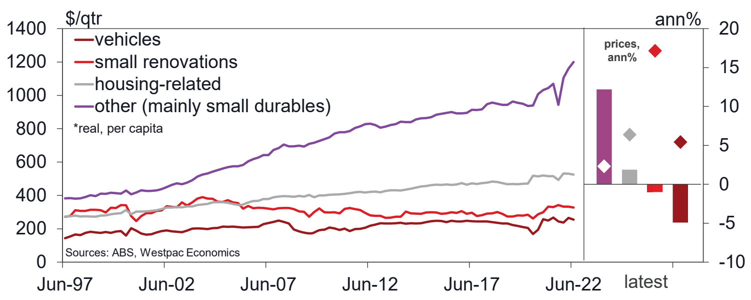
– The Q3 CPI detail is expected to confirm a further intensification of these pressures heading into the second half of 2022 – annual inflation for our 'major items' measure likely rising above 10%yr.

– How this price shock hits demand remains to be seen. While some components – vehicles and small renovations – weakened in Q2 some of this looks to be due to supply disruptions rather than demand weakness. Vehicle sales in particular have showed a strong 9% rebound in Q3. Price pressures have been more acute and may be starting to bite harder for housing-related spend and renovations. The Q3 real retail sales detail, due Nov 4, may confirm this.

21. 'Time to buy major item' vs prices



22. Consumer spending: major items



SENTIMENT INDICATORS: DWELLINGS

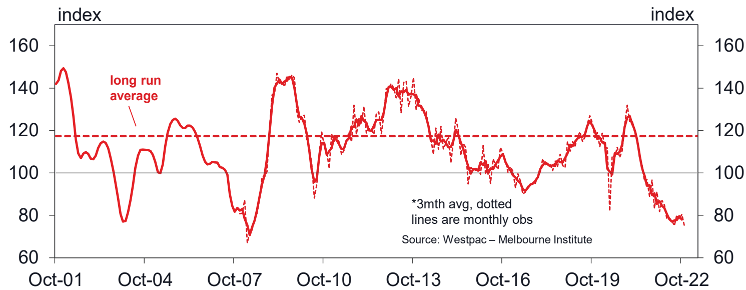
– Consumer house purchase attitudes remain extremely weak. The **'time to buy a dwelling'** index weakened again over the 3mths to July, falling 6% to 75.3 – back near the low end of the 75-80 range seen since the start of the year. Notably, the index read amongst those surveyed prior to the RBA decision came in at just 70.7. Had this been result for the full survey, Oct would have marked a clear break to a new cycle low.

– The detail shows a capitulation in views amongst consumers with investment properties. Back in July, this was the only sub-group still in net positive territory. A 25% drop since then means it is now only slightly above the national read.

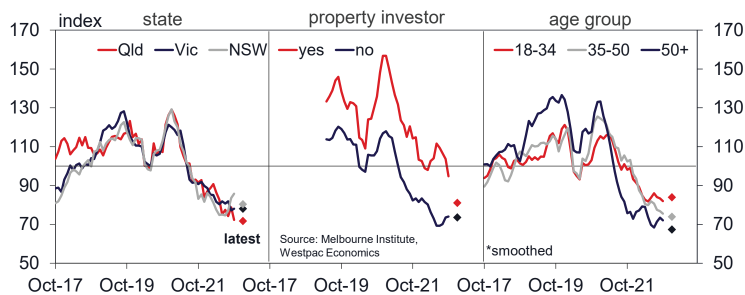
– Pessimism now runs across the entire range of sub-groups but remains most acute amongst those in older age groups, who as noted earlier have fresher memories of periods of high interest rates.

– The state breakdown is becoming particularly interesting. Views are now considerably more pessimistic in Qld, WA and SA, which have seen much milder price corrections to date than NSW, Vic and Tas. The contrast likely reflects two factors: some support to buyer sentiment where prices have seen more material corrections; and concerns that other markets are about to tip into more material price declines discouraging buyers elsewhere.

23. 'Time to buy a dwelling'

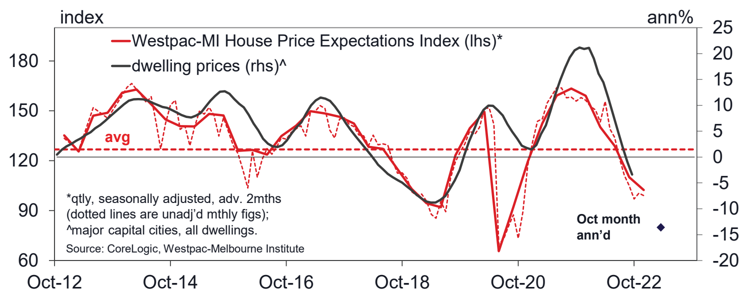


24. 'Time to buy a dwelling': selected sub-groups

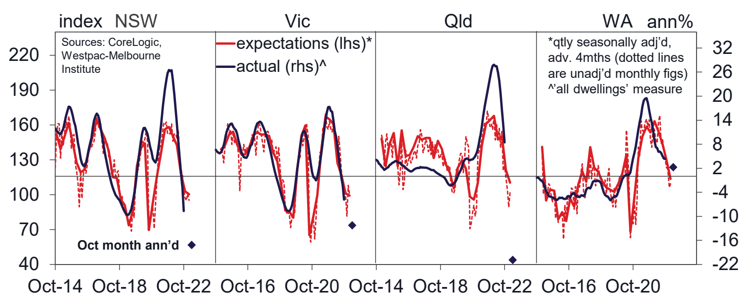


- House price expectations continue to slide, although they are still holding up better than might be expected given the extent and breadth of the price correction. The **Westpac Melbourne Institute House Price Expectations Index** dropped a further 5.6% between Jul and Oct, moving below the 100 'gain-line' for the first time since 2020.
- That said, at 99, the pessimism is much milder than in previous lows – reads were around 80 when the 2020 COVID-19 pandemic hit in 2020, and in the 85-90 range during the 2018-19 price correction (and well below 80 in NSW and Vic, which experienced much larger price corrections during this period).
- Price expectations were 'whipsawed' by the RBA decision with a huge 27% turnaround from a very low 85.9 amongst those surveyed before to a buoyant 109.3 across those surveyed after. The reaction looks overdone – the Bank is still a long way from putting 'rates on hold' let alone an easing cycle – but highlights how well 'primed' price expectations are for any shift in the rate outlook.
- State-wise, expectations posted much sharper falls in Qld, WA and SA, where indexes were coming from higher starting points. In the case of Qld this looks to partly relate to concerns around potential changes to state government land tax rules that have since been abandoned.

25. Westpac-MI House Price Expectations Index



26. Dwelling prices: actual vs expected by state



SENTIMENT INDICATORS: RISK AVERSION

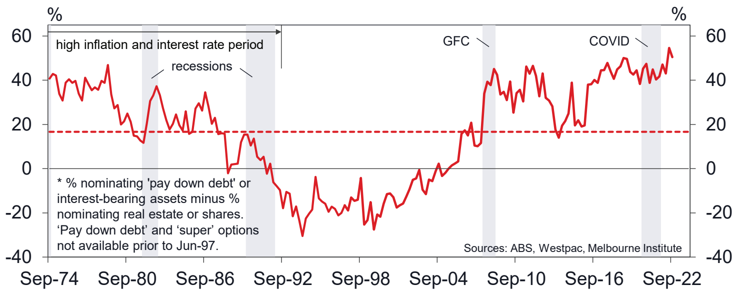
– The Sep survey included an update of the 'wisest place for savings' questions used to construct our **Westpac Consumer Risk Aversion Index**. Responses show little change with risk aversion continuing to hold near record highs.

– Safe or defensive options remain heavily favoured, 31% nominating 'bank deposits', and 23% nominating 'pay down debt'. Meanwhile very few consumers favour riskier options, only 8% nominating 'real estate' and 10% nominating shares. Overall, the **Westpac Risk Aversion Index** dipped from 54.6 in Jun to 50.5 in Sep – marking the second highest reading on records back to 1974, down from the highest.

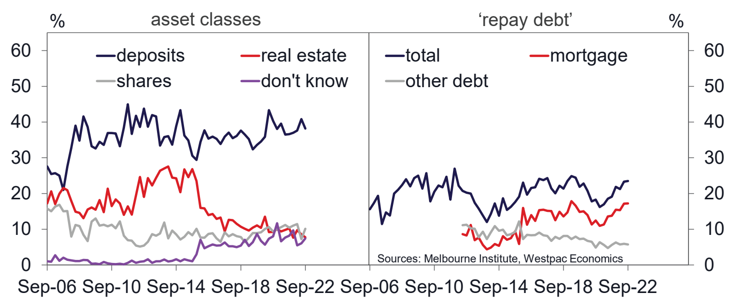
– Chart 23 shows the full history of the measure. Risk aversion rose sharply heading into the recessions in the early 1980s and 1990s, and the GFC but was relatively stable during COVID disruptions. The pattern strongly suggests rising interest rates are a key factor, noting that interest rates fell rather than rose during the COVID period. As such, the latest rise fits the earlier patterns heading into cyclical downturns.

– How this translates into behaviour is unclear, particularly with other big factors influencing the spending/saving mix and balance sheet activity already showing a highly risk averse pattern.

27. Westpac Consumer Risk Aversion Index vs savings rate



28. Consumer: 'wisest place for savings'



SENTIMENT INDICATORS: JOB SECURITY

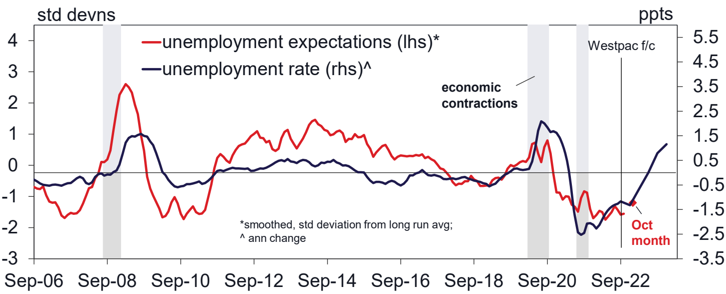
– Despite the very weak reads on sentiment overall, consumers still see the labour market outlook as unthreatening. The **Westpac Melbourne Institute Index of Unemployment Expectations** edged 1.4% higher over the 3mths to Jul but at 111 it is still at a benign level compared to a long run average of 129 (recall that a higher index means more consumers expect unemployment to rise in the year ahead).

– That said, there are some hints of a cyclical shift starting to show through. The Index recorded quite a sharp lift in the Oct month (+11.7%) with a notable weakening in some sub-groups that looks likely to sustain.

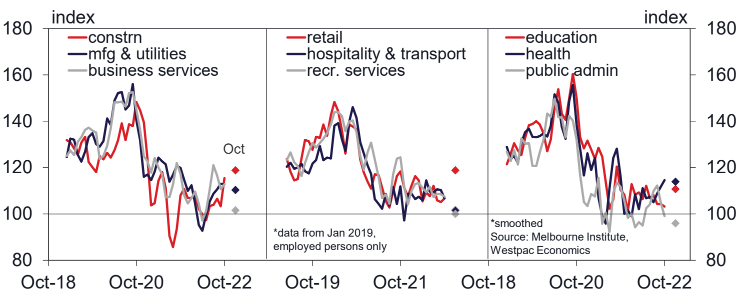
– Unemployment expectations posted a particularly big rise amongst those employed in the construction and retail sectors, and while it improved across the wider 'business services' sector there were some notable pockets of weakness in sub-segments such as real estate and finance (albeit with low sample sizes making these results less reliable).

– Labour markets remain extremely tight. While there has been a moderation in job gains (up just 0.5k between Jun and Sep) and hours worked, unemployment remains near historic lows at 3.5% and job vacancies near record highs (471k in Aug). A lift in net migration may ease some pressures going forward (see p10).

29. Unemployment: actual vs expectations



30. Unemployment expectations by industry



STATE SNAPSHOT: QUEENSLAND

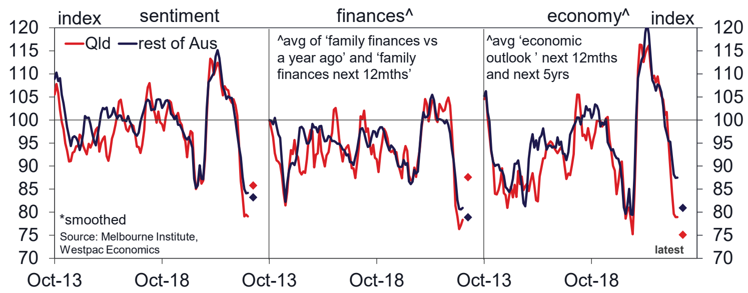
– The last time we profiled consumer sentiment in Qld, a year ago, the mood was a touch firmer than across the rest of Australia, thanks largely to a much milder 'delta' lockdown than in NSW and Vic. That said, Qld was starting to see a rising number of cases that was very unsettling at the time.

– A year on and pandemic concerns have receded but been replaced by new concerns around the surging cost of living and rapidly rising interest rates. The situation looks to have been a little more unsettling for Qlders, sentiment knocked lower through the rapid rate tightenings in May-Sep, showing a more pronounced relief 'pop' in Oct.

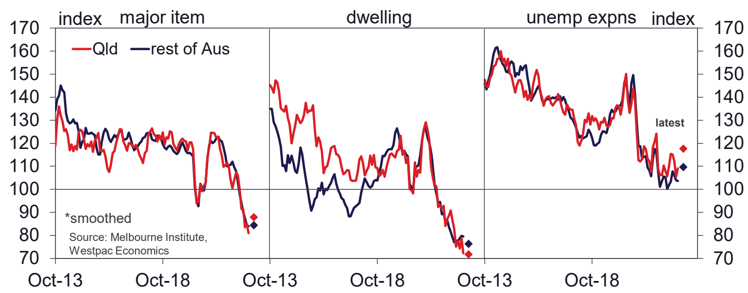
– The detail shows Qld consumers are less fearful around pressures on family finances but are more unsettled about the economic outlook, both near term and five years out, perhaps reflecting some of the structural challenges facing the state's mining and tourism sectors. That seems to be reflected in a less confident view around the outlook for jobs.

– As noted, Qlders have reported a notable weakening in housing-related sentiment, the sharp turnaround in prices in recent months perhaps reviving fears of the deep correction seen during the GFC. That said, consumer risk aversion looks to be a little less intense across the state.

31. Consumer sentiment, finances, economy: Qld vs rest of Aus



32. Consumer 'time to buy', unemp expns: Qld vs rest of Aus



ECONOMIC AND FINANCIAL FORECASTS

Interest rate forecasts

Australia	Latest (21 Oct)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
Cash	2.60	3.10	3.60	3.60	3.60	3.60	3.35	3.10
90 Day BBSW	3.03	3.80	3.80	3.80	3.80	3.63	3.38	3.13
3 Year Swap	4.24	3.75	3.85	3.70	3.55	3.45	3.40	3.35
3 Year Bond	3.69	3.40	3.55	3.45	3.35	3.25	3.20	3.15
10 Year Bond	4.14	3.70	3.50	3.40	3.20	3.00	2.80	2.70
10 Year Spread to US (bps)	-8	-10	-10	-10	-10	-10	-10	0
US								
Fed Funds	3.125	4.375	4.625	4.625	4.625	4.625	4.375	3.875
US 10 Year Bond	4.22	3.80	3.60	3.50	3.30	3.10	2.90	2.70

Exchange rate forecasts

	Latest (21 Oct)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
AUD/USD	0.6266	0.65	0.66	0.67	0.69	0.72	0.73	0.74
NZD/USD	0.5675	0.58	0.59	0.60	0.62	0.65	0.66	0.66
USD/JPY	150.35	143	141	139	137	134	132	130
EUR/USD	0.9771	0.99	0.99	1.02	1.04	1.07	1.09	1.10
GBP/USD	1.1201	1.14	1.14	1.14	1.17	1.20	1.22	1.24
USD/CNY	7.2469	7.00	6.80	6.60	6.40	6.30	6.20	6.15
AUD/NZD	1.1077	1.12	1.12	1.12	1.11	1.11	1.11	1.12

Sources: Bloomberg, Westpac Economics.

Australian economic growth forecasts

	2021	2022				2023	
	Q4	Q1	Q2f	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	3.4	3.8
Wages (WPI)	0.7	0.7	0.7	1.1	1.2	1.1	1.0
annual chg	2.3	2.4	2.6	3.1	3.7	4.2	4.4
CPI Headline	1.3	2.1	1.8	1.1	2.5	0.9	0.8
annual chg	3.5	5.1	6.1	6.5	7.7	6.5	5.4
Trimmed mean	1.0	1.5	1.5	1.5	1.3	0.8	0.7
annual chg	2.6	3.7	4.9	5.6	5.8	5.1	4.4

	Calendar years			
	2021	2021f	2022f	2023f
GDP % yr end	-0.7	4.5	3.4	1.0
Unemployment rate %	6.8	4.7	3.3	4.5
Wages %yr	1.4	2.3	3.7	4.5
CPI Headline %yr	0.9	3.5	7.7	3.5
CPI Trimmed mean %yr	1.2	2.6	5.8	3.2

Calendar year changes are (1) period average for GDP, employment and unemployment, terms of trade (2) through the year for inflation and wages.
* GDP & component forecasts are reviewed following the release of quarterly national accounts.
** Business investment and government spending adjusted to exclude the effect of private sector purchases of public sector assets.

CONSUMER DATA AND FORECASTS

Consumer demand

	2021				2022			
% change	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2f**	**Q3f**	**Q4f**
Total private consumption*	1.2	1.0	-4.7	6.5	2.2	2.2	1.3	0.5
annual chg	0.1	15.1	1.9	3.7	4.8	6.0	12.7	6.3
Real labour income, ann chg	2.7	4.5	2.8	3.0	2.3	2.6	2.6	2.0
Real disposable income, ann chg**	4.6	-0.3	1.3	2.7	1.5	2.1	-4.6	-4.8
Household savings ratio	13.8	11.7	19.8	13.5	11.1	8.7	5.1	3.1
Real retail sales, ann chg	4.2	8.8	-2.2	3.4	4.8	5.5	11.3	1.5
Motor vehicle sales (‘000s)***	800	824	728	673	771	739	808	783
annual chg	9.2	57.3	16.7	-17.8	-3.7	-10.3	10.9	16.5

	Calendar years			
	2020	**2021**	**2022f**	**2023f**
Total private consumption, ann chg*	-5.8	4.9	7.4	2.3
Real labour income, ann chg	1.6	3.2	2.4	2.3
Real disposable income, ann chg**	5.7	2.1	-1.5	-2.7
Household savings ratio, %	17.0	14.7	7.0	2.2
Real retail sales, ann chg	2.7	3.5	5.7	-1.2
Motor vehicle sales (‘000s)	675	756	775	745
annual chg	-15.6	12.1	2.5	-3.9

Notes to pages 25 and 26:
* National accounts definition.
** Labour and non-labour income after tax and interest payments.
*** Passenger vehicles and SUVs, annualised
^ Average over entire history of survey.
^^Seasonally adjusted.
Net % expected rise next 12 months minus % expecting fall (wage expectations is net of % expecting wages to rise and % expecting flat/decline).
Note that questions on mortgage rate, house price and wage expectations have only been surveyed since May 2009.

CONSUMER DATA AND FORECASTS

Consumer sentiment

	2022					
% change	avg^	Jan	Feb	Mar	Apr	May
Westpac–MI Consumer Sentiment Index	101.3	102.2	100.8	96.6	95.8	90.4
family finances vs a year ago	89.1	95.6	86.8	83.3	79.3	79.6
family finances next 12 months	107.3	108.1	106.4	106.0	105.1	93.3
economic conditions next 12 months	91.0	94.8	97.1	90.6	95.9	90.4
economic conditions next 5 years	92.0	103.6	105.2	99.3	100.3	96.2
time to buy major household item	126.0	108.9	108.6	103.7	98.2	92.6
time to buy a dwelling	117.4	87.0	84.9	78.3	78.7	77.5
Westpac–MI Consumer Risk Aversion Index^^	14.8	–	–	43.0	–	–
CSI±	101.4	91.7	89.3	87.5	83.9	78.7
Westpac–MI House Price Expectations Index#	126.8	143.4	155.8	139.0	134.1	121.4
consumer mortgage rate expectations#	40.5	63.1	77.2	81.2	81.2	87.2
Westpac–MI Unemployment Expectations	129.3	112.7	102.8	101.8	99.2	109.6

	2022				
continued	Jun	Jul	Aug	Sep	Oct
Westpac–MI Consumer Sentiment Index	86.4	83.8	81.2	84.4	83.7
family finances vs a year ago	74.0	72.0	72.1	68.6	69.3
family finances next 12 months	86.2	86.2	88.2	92.3	92.0
economic conditions next 12 months	83.8	80.3	73.9	83.2	79.7
economic conditions next 5 years	98.1	91.6	90.7	94.5	92.5
time to buy major household item	89.5	88.8	81.4	83.7	85.1
time to buy a dwelling	75.1	80.1	78.2	80.5	75.3
Westpac–MI Consumer Risk Aversion Index^^	54.6	–	–	50.5	–
CSI±	73.8	73.4	72.4	73.5	74.0
Westpac–MI House Price Expectations Index#	111.1	104.9	97.1	100.6	99.0
consumer mortgage rate expectations#	86.1	83.9	85.0	86.2	88.7
Westpac–MI Unemployment Expectations	108.5	109.8	103.4	99.6	111.3

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