THE RED BOOK

JULY 2022

WESTPAC INSTITUTIONAL BANK

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The next issue of the **Red Book** will be released on 22 October 2022.

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EXECUTIVE SUMMARY

The **Westpac–Melbourne Institute Consumer Sentiment Index** fell steeply over the three months to July, down 12.5% to 83.8, a deeply pessimistic level.

Both the level and the rate of decline are now comparable to readings seen leading into major economic disruptions in the past.

The slump in sentiment is being driven by a major surge in inflation, an associated sharp rise in official interest rates, and a loss of confidence around the economic outlook.

Consumers are becoming extremely cautious about their finances. The **Westpac Risk Aversion Index** rose from 43 in March to 54 in June, a new record 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 are heavily favoured over riskier options such as real estate and shares.

The sentiment mix points to an abrupt slowing in consumer spending. **CSI±**, our modified sentiment indicator that we favour as a guide to actual spending, has dropped a further 12.8% to 73.2, also a record low. Over the very near term, spending will continue to be supported by strong post-COVID reopening dynamics, and the 'pent-up' demand associated with very high savings rates over the last two years. However, momentum is set to slow abruptly once these drivers dissipate.

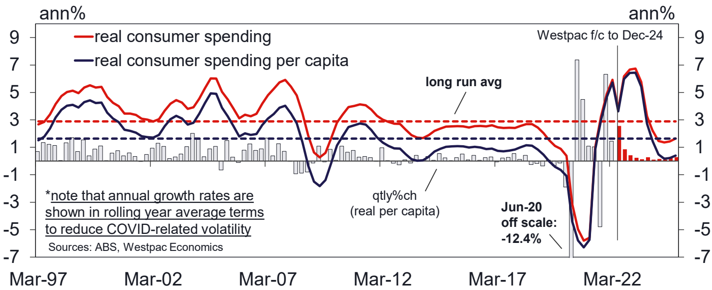
Spending on major durables is likely to come under particular pressure. The **'time to buy a major item'** sub-index has dropped to historic lows, reflecting a 10%+ rise in the cost of many items as supply chain disruptions and rising materials and freight costs have impacted.

The survey continues to point to a material downturn in housing markets. At 80.1, the **'time to buy a dwelling'** index remains near historic lows, despite a slight firming since April. Buyer sentiment remains markedly weaker in Sydney and Melbourne and is showing an alarming deterioration in regional areas

House price expectations are cooling rapidly, the **Westpac-Melbourne Institute Consumer House Price Expectations Index** down a further 21.7% over the three months to July. At 104.9, the index is still in slight positive territory but well below the long run average of 125. With price corrections accelerating in Sydney and Melbourne, and Brisbane prices also beginning to fall, consumer price expectations look likely to fall further in coming months.

Confidence around jobs is the only remaining positive. The **Westpac-Melbourne Institute Unemployment Expectations Index** has deteriorated marginally since April – up 10.6% to 109.8 (recalling that higher reads mean more consumers expect unemployment to rise). However, this is still an upbeat level, much better than the long run average of 129.

Consumer spending: abrupt post-rebound slowdown in 2023



Its been another dramatic three months since our last report. The inflation challenge is looking bigger and meaner, both here and abroad. Central banks are raising rates quickly and aggressively, the RBA moving the cash rate 125bps higher since April and indicating more steep rises ahead.

Our July **Red Book** finds deepening pessimism across Australia's consumers. The surging cost of living and higher debt servicing are already weighing heavily on their finances. With more to come, Australians are unnerved about what this means for the future, both for themselves and the wider economy.

This month's report shows the speed, depth and breadth of weakness is striking. Sentiment overall is tracking a similar path to that seen heading into major disruptions in the past, including COVID, the GFC, and the deep recessions in the early-1990s and early-1980s.

In several areas such as attitudes towards spending, housing markets, and risk, sentiment is at historical extremes.

The one big exception is around jobs. Australia's super tight labour market may be adding to the RBA's challenges but for consumers the associated job security is the main source of comfort right now.

The evolving situation has seen changes to Westpac's forecasts. The RBA is now set for a more rapid and front-loaded tightening, the cash rate forecast to hit 3.35% early next year. That will in turn drive a sharper slowdown, with growth forecast to slow to 1% in 2023, 'stalling speed'.

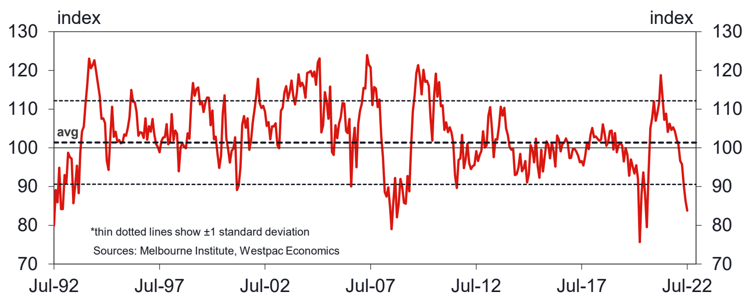
Despite dire sentiment reads, this downturn will be slow to materialise for consumers. Spending continues to be supported by post-COVID reopening dynamics and will be supported by large 'buffers' accumulated over the last two years. However, spending will slow abruptly once these factors start to dissipate.

There are many risks to this outlook. The challenges are formidable and central banks are walking a fine line on policy. The plunge in sentiment already highlights just how difficult this inflation fight could be.

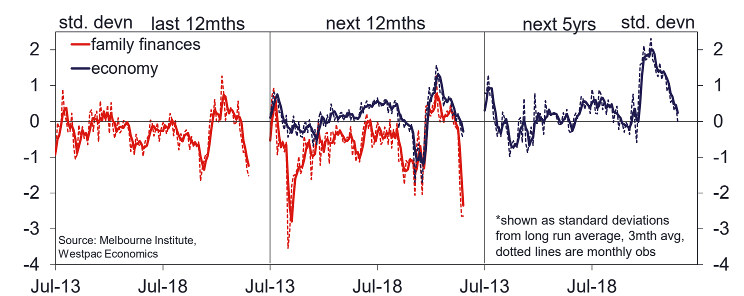
THE CONSUMER MOOD: WHACKED

- The **Westpac Melbourne Institute Index of Consumer Sentiment** fell steeply over the 3mths to July, a 12.5% drop taking the index to 83.8. Sentiment has fallen every month in 2022 to levels that in the past have been associated with major disruptions in the Australian economy.
- Both the level and 18% fall in sentiment over the first half of the year are comparable to readings seen heading into major economic disruptions in the past, including: the COVID pandemic (–21% over two months to 75.6); the GFC (–30% to 79); the onset of the early 1990s recession (–21% to 72.9); the slowdown in the mid-1980s (–24% to 75.7) and the early 1980s recession (–19% to 75.5).
- The latest slump is being driven by a sharp rise in inflation; an associated and equally sharp lift in interest rates; and a loss of confidence around the economic outlook, both here and abroad.
- Annual CPI inflation is set to rise above 6%yr locally and is tracking at 8-9%yr across the major developed economies. Central banks have responded with aggressive interest rate increases, the RBA raising its cash rate target by 1.25ppts in just three months following similarly sharp rises in the US and elsewhere. Meanwhile global growth has started to show signs of faltering as the cost hit to incomes and rapid re-tightening in policy impacts.

1. Consumer sentiment plunges

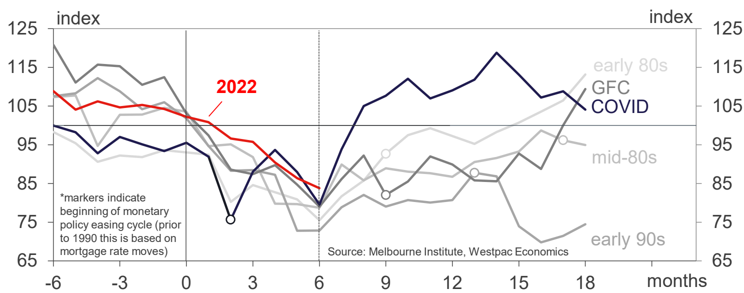


2. Consumer sentiment: finances, economic conditions

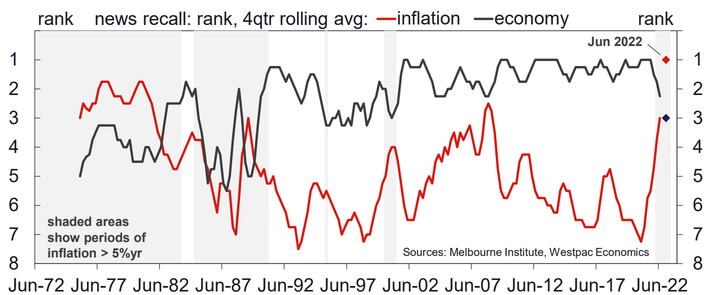


- Much of the survey detail reflects these drivers. Component-wise, the biggest falls have been in near term expectations for family finances (–17.9%) and the economy (–16.2%). Notably, the 'time to buy a major item' sub-index – normally a relatively stable component – has also slumped to historic lows, a direct reflection of the impact of rising prices (see p15).
- Not surprisingly, the geographic and sub-group detail show a broad-based decline with nearly all of the 90-odd segments we track recording falls over the three months to July and all down significantly year to date. Low income households look to be coming under the most pressure financially.
- Sentiment has been surprisingly resilient across the 'mortgage belt' – down only 6.8pts since rate rises began in April and 5pts above sentiment across other groups. This may reflect the increased prevalence of fixed rate loans and the accumulation of excess reserves during COVID. How well it sustains as rates continue to rise will be of great interest.
- Responses to additional questions on news recall, run in the June survey, show the influence of inflation concerns – news on this topic outranking all others in terms of recall level. Chart 4 shows how rare this is historically, save for the sustained high inflation period of the 1970s and a brief period in the late 1980s.

3. Consumer sentiment: historical comparisons



4. Consumer news heard: 'inflation' vs 'economic conditions'



SENTIMENT INDICATORS: SPENDING

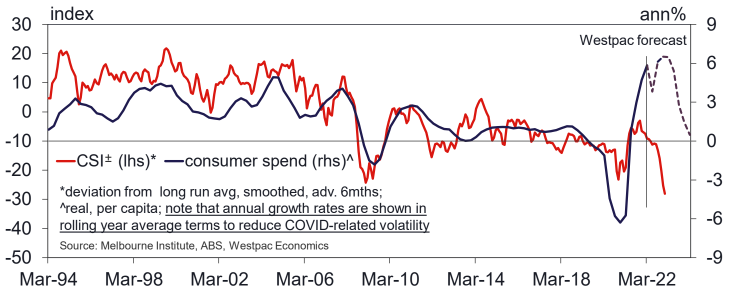
– Our **CSI±** composite combines sub-indexes tracking views on 'family finances' and 'time to buy a major item' with the **Westpac Consumer Risk Aversion Index** and usually provides a good guide to trends in spending over the next 3-6mths.

– As noted in previous reports, the over-riding impact of disruptions from COVID mean **CSI±** has been less useful as a guide to point estimates of annual spending growth. That said, it shows where per capita spending growth momentum would be in the absence of these disruptions. COVID 'noise' is not expected to drop out of annual growth rates until late 2022.

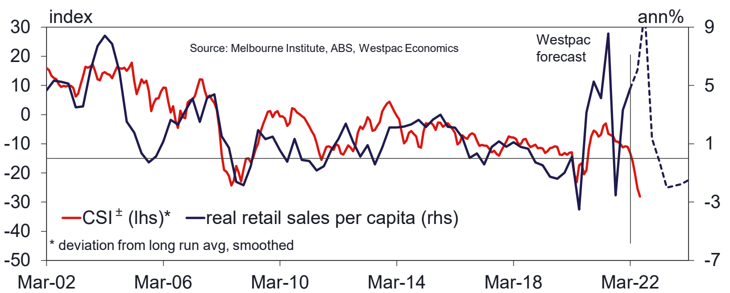
– Note that the growth rates in chart 5 are shown in 'rolling annual' terms – i.e. total spending over 12mths vs spending over the previous 12mths, rather than spending in the quarter vs the same quarter a year ago. This dampens the big quarterly swings seen due to COVID restrictions.

– The last three months has seen another steep fall in **CSI±**, down 12.8% to 73.2 – a record low for this measure in figures back to 1974. That would typically point to a very sharp contraction in per capita spending of over 3%yr. In practice, post-COVID reopening will see near-term gains although a sharp slowing is expected to show through by year end.

5. CSI± vs total consumer spending

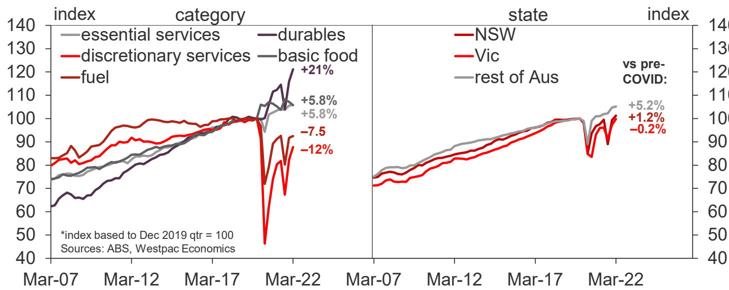


6. CSI± vs retail sales

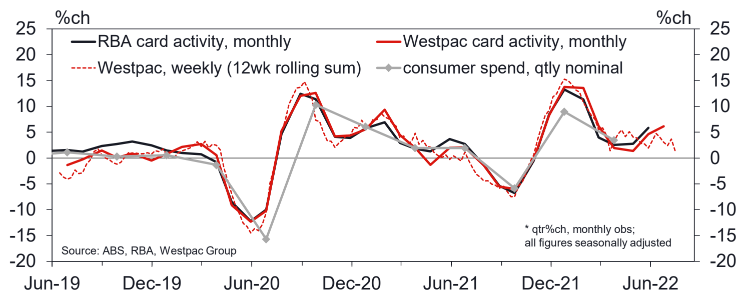


- The latest spending data continues to show post-COVID reopening dynamics dominating. Total spend posted a robust 1.5%qtr gain in the Q1 national accounts, led by a further normalisation in service sectors (transport +60%qtr, hospitality up ~5%qtr), more than offsetting headwinds from omicron and severe weather events. The detail also suggested there is more reopening uplift to come, service sectors still well below par and 'delta' impacted states well behind the rest.
- More recent figures suggest momentum has carried into Q2 – nominal retail sales up 3.2%qtr – albeit with some patchiness, vehicle and fuel sales both down in the quarter.
- Consumer sector responses to private sector business surveys broadly concur – retailers and consumer services firms reporting buoyant conditions through Q2 despite both also registering sharp falls in confidence.
- Timelier data based on Westpac's card transaction activity – available up to mid-July – suggests nominal spending rose over 4% in Q2, a step up on the 3.5% gain in Q1. While a part of that will be due to rising prices, volumes look set to post a robust gain. The same measures suggest rate rises to date (and the slump in consumer sentiment) have only produced a slight moderation in momentum so far.

7. Consumer spending by broad category and state



8. Card activity vs consumer spend



SPECIAL TOPIC: REVISED FORECASTS

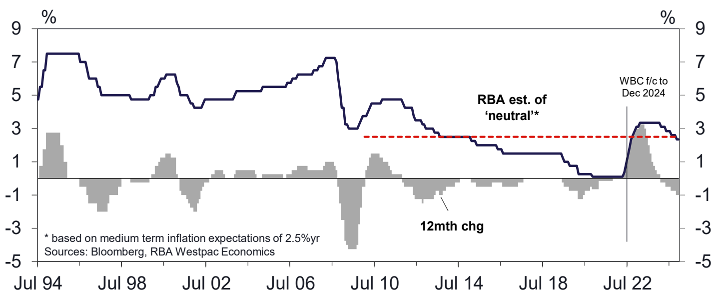
– The inflation and interest rate situation continues to evolve rapidly, the RBA following its surprise 25bp move in May with back to back 50bp increases in June and July, taking the cash rate to 1.35%.

– Rapid as this is, there looks to be much more to come, recent commentary from the Bank indicating that it expects a rate above 2.5% will be required to ensure inflation returns to target medium term. Taking this on board and noting there will be little or no scope for the RBA to pause and assess – given the starting point for rates, the extent of the inflation threat and the tightness of labour markets – we now expect a more aggressive and front-loaded tightening cycle.

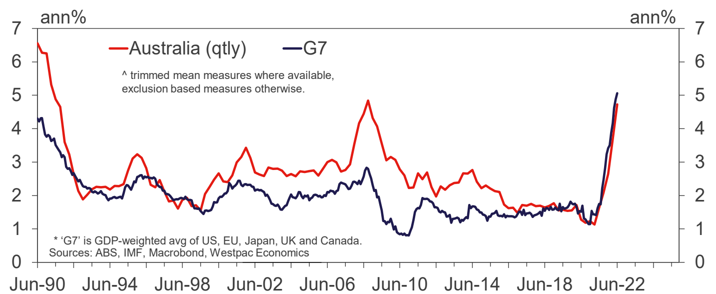
– Specifically, we expect another brace of back-to-back 50bp increases in Aug and Sep followed by 25bp moves in Oct, Nov, Dec and Feb taking the cash rate to a peak of 3.35%. This compares to our previous forecast of a 2.6% peak (see here for the full run-down on forecast changes).

– Importantly, Westpac views 'neutral' – the level at which the cash rate starts to bite – as somewhat lower, closer to 2% than the RBA's 2.5%. As such, we see the prospective tightening weighing heavily on activity, driving an abrupt slowdown to a weak 1% growth pace in 2023. This, in turn, will see the RBA lowering rates again once inflation concerns ease in 2024.

9. RBA cash rate forecasts

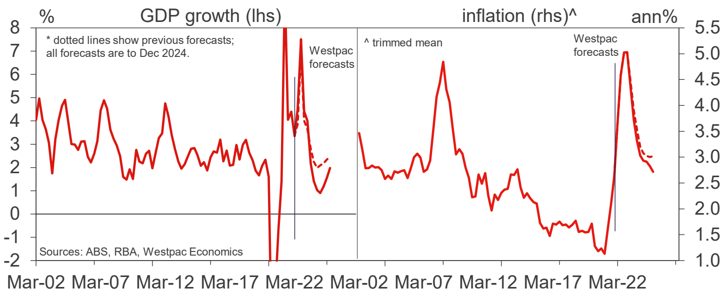


10. CPI inflation: 'core' measures



- To be fair, there are other factors driving the RBA – and some risks that it will be very keen to avoid. Foremost among these is the risk of a rise in medium term inflation expectations, which would make returning inflation to target much more difficult, effectively adding directly to its assessed 'neutral level' for rates.
- While the Bank may be comfortable with inflation expectations now, keeping them anchored will be challenging as the full extent of the inflation surge comes through, particularly with an extremely tight labour market and the prospect of an associated lift in wages growth adding to cost pressures. A key positive here will be clear signs of cooling inflation abroad.
- While it may have limited scope for monitoring the impact of rate moves, the RBA Governor has made it clear that the Board will be monitoring consumer spending particularly closely – some slowdown being desirable but a hard landing being something the Bank will also be keen to avoid. Here, assessing the relative forces and buffers at play is key. We discuss our views on this on p11.
- Unfortunately, again, timing is unlikely to be helpful for the RBA. As noted, reopening dynamics will delay the impact of slumping sentiment on spending. Buffers will also tend to see dampen and delay the impacts from rate increases. All up, this makes for a tricky path for policy.

11. Australia: growth and inflation forecasts



12. Australia: labour market forecasts

SPECIAL TOPIC: SHOCKS AND BUFFERS

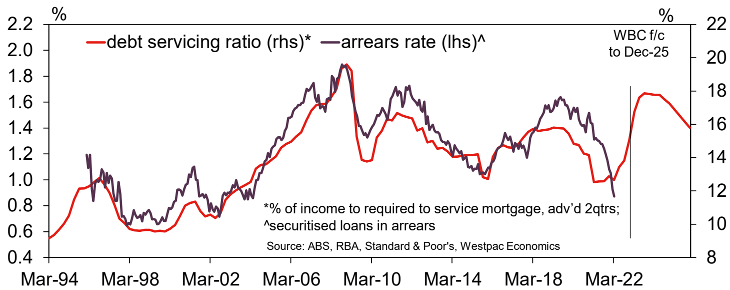
– The 325bps in cash rate increases now expected between last May and next Feb will be the largest 12mth rise since the RBA began setting targets in 1990, and the largest annual rise in variable mortgage rates since 1986. This will be a major policy shock for the economy. For consumers, a key question is the extent to which financial buffers cushion or delay the hit from rate moves.

– The household debt servicing ratio shows the scale of the jolt for the mortgage belt, taking both rate moves and debt levels into account. The ratio is projected to 5ppts to a peak of 17.9%, the highest seen since just prior to the GFC, when the cash rate hit 7.25%.

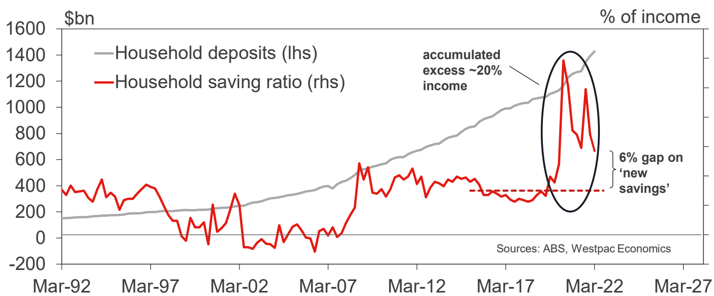
– Chart 13 shows how cycles in this ratio lead cycles in mortgage arrears, usually by around six months. The projection suggests arrears are likely to double by late 2023. Arrears are a hallmark of consumer financial stress associated with sharp cutbacks in spending.

– However, this relationship is likely to be more complicated in the current tightening cycle. The take-up of fixed rate loans – which now account for 40% of all mortgages – will delay the impact of rising rates for many borrowers. The same borrowers also face a much larger step-up in rates as they will be moving off the 'ultra-low' fixed rates available over the last two years.

13. Household debt servicing ratio

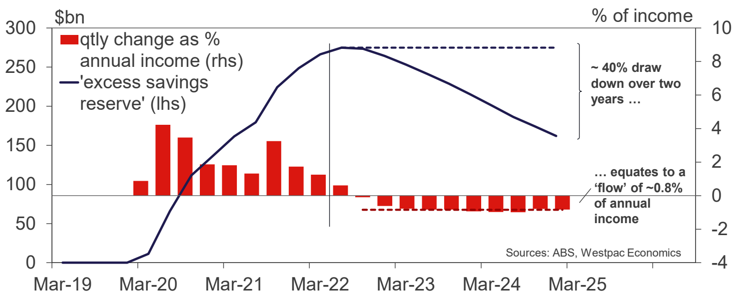


14. Households: savings ratio and deposit holdings

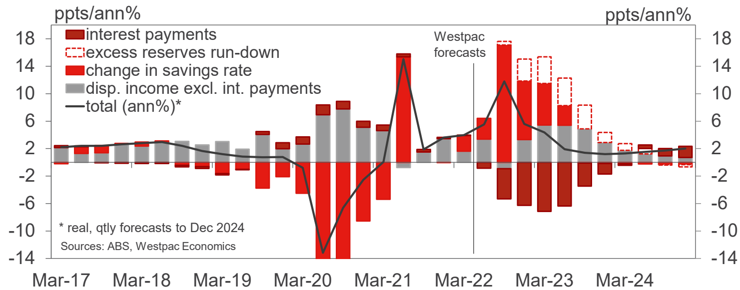


- Consumers more generally are also carrying large 'excess saving' reserves accumulated during the COVID period, when restrictions amounted to 'forced saving', particularly for those households whose incomes were not affected. Chart 14 shows the average savings rate – the proportion of income unspent – has been 16% since the onset of the pandemic, well above the 6% 'norm'.
- The notional excess reserve associated with this is very large, in the order of $260bn. That is around 20% of annual income, or roughly $25k per household. Households are unlikely to continue accumulating at this pace and many are likely to draw down on this reserve.
- Chart 15 illustrates what this could mean for household finances. Drawing down 40% of this reserve by Dec 2024 would 'free up' cash equivalent to 0.8% of annual income over the whole period. For the mortgage belt, this could be viewed as effectively lowering the debt servicing ratio by 0.8ppts.
- Chart 16 gives another perspective, showing normalising saving and a reserve run-down in terms of annual contributions to spending growth, alongside other drivers such as increased interest payments. These buffers will clearly cushion the impact of rate rises. They will likely more than offset in the very near term but diminish as we move into 2023.

15. Australian households: 'excess savings' reserve



16. Australian spending growth decomposed



SPECIAL TOPIC: RATE EXPECTATIONS

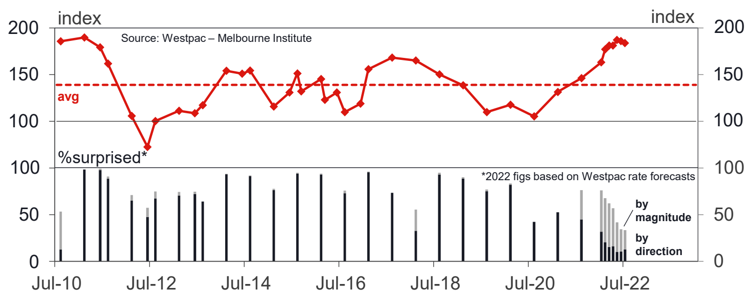
– With inflation and interest rates front and centre, consumer perceptions and expectations for both are of more importance. On interest rates, consumers are now much more hawkish, more in line with market and economist expectations. On inflation, consumers' year-ahead expectations have jumped sharply, as have their expectations for two years out, albeit with the latter running a touch lower, and wage growth expectations have shown a notable lift.

– Our survey now includes monthly updates on mortgage rate expectations. Separate surveys by the Melbourne Institute and Roy Morgan track inflation and wage growth expectations.

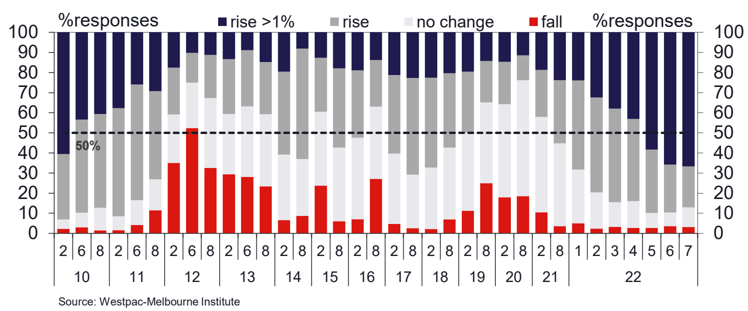
– The RBA's back-to-back 50bp rate moves have jolted consumer rate expectations. In Apr, most consumers expected mortgage rates to rise over the following 12mths but only 40% of those with a view expected rates to go up by over 1ppt. This jumped to 67% in July and 77% amongst those surveyed post RBA. This is broadly comparable to the mix in 2010.

– We can get a sense of the 'surprise factor' by looking at the share of consumers caught out by actual and prospective moves (Chart 17). While most have been alert to the likely direction of change, many have been caught out by the size of moves, with a third still underestimating the scale of increases still to come.

17. Westpac-MI Mortgage Interest Rate Expectation Index



18. Consumer interest rate expectations: detailed breakdown



Source: Westpac-Melbourne Institute

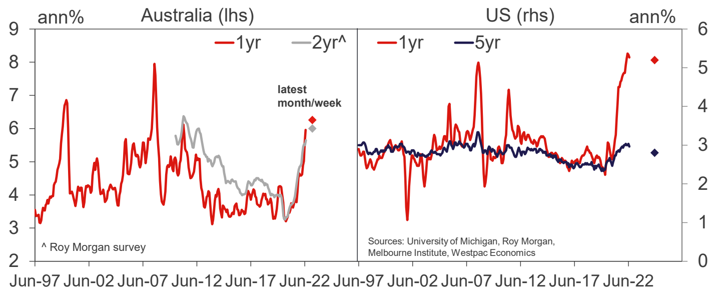
– Notably, the sub-group detail shows those in older age groups are considerably more hawkish on the rate outlook, with an average index read of 195 amongst those aged over 45 compared to 171 across younger age groups. This almost certainly reflects differences in experience, official rates having only ever declined since 2010.

– Many Australians aged under 45 would not have seen rate rises during their working careers or – more pertinently – in the time they have been paying a mortgage (if they have one). It is also notable that consumers with a mortgage are slightly less hawkish (an index read of 180 vs 185 across other groups).

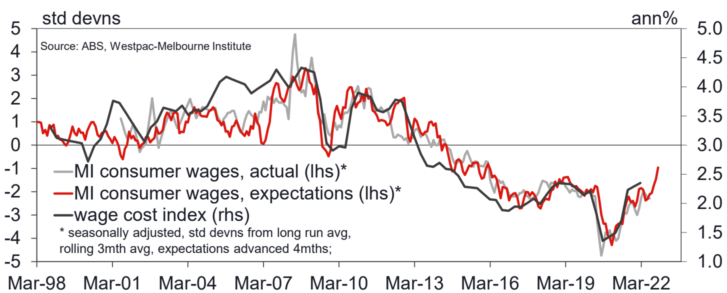
– Survey measures of consumer inflation expectations continue to run at a high level, albeit with some signs of stabilisation. 1yr-ahead expectations are holding around 6%yr, the 2-yr-ahead measure a touch softer. The latter has typically run slightly higher. Both of these are relatively short term measures. A longer term measure for the US – looking out over 5yrs – suggests expectations remain well anchored.

– Around wages, consumer expectations have shown a notable lift over the last 3mths – the recent Fair Pay Commission on minimum wages likely a factor. That said, they remain consistent with wage cost index growth running at ~2.5%yr.

19. Consumer inflation expectations



20. Consumer wage expectations



SENTIMENT INDICATORS: DURABLES

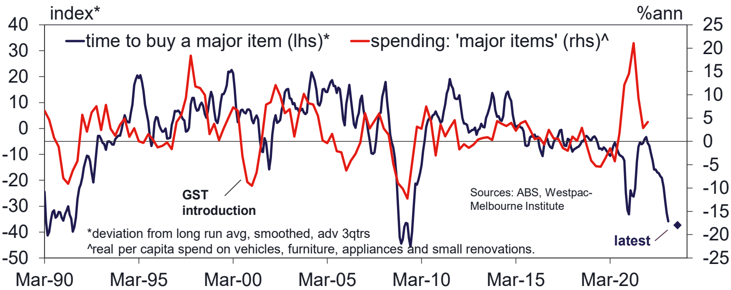
– The **'time to buy a major item'** sub-index has continued to slump, falling a further 9.6% over the 3mths to July. At 88.8, the sub-index is 37pts below the long run avg of 126.4 and in the bottom 3% of observations in the 48yr history of the survey. Only the GFC and the early-90s recession have seen sustained periods of weaker readings.

– As noted previously, the main driver of these calamitous reads are supply chain disruptions and the associated surge in prices, which has been particularly sharp for major renovations and durable purchases. Chart 2 highlights how this factor has been largely absent since the 1990s.

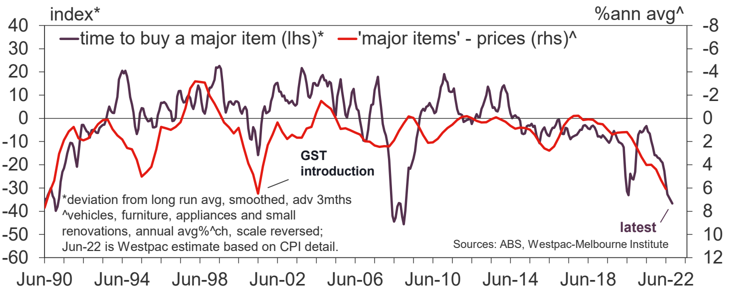
– The latest CPI detail shows price pressures intensified in the June quarter – annual inflation for our 'major items' measure likely rising above 10%yr.

– How this price shock hits demand remains to be seen. As at the March quarter, spending volumes were still seeing solid gains, up 4.2%yr in per capita terms. However, available 'partials' for the June quarter are notably softer: nominal retail sales for household goods up just 0.4%qtr (implying a contraction given strong price rises). Vehicle sales also showed a 4.4% contraction, although this may relate more to the direct effects of supply disruptions than price effects.

21. 'Time to buy major item' vs actual spend



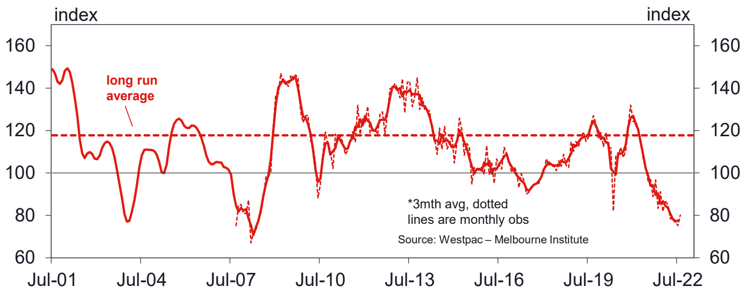
22. 'Time to buy major item' vs prices



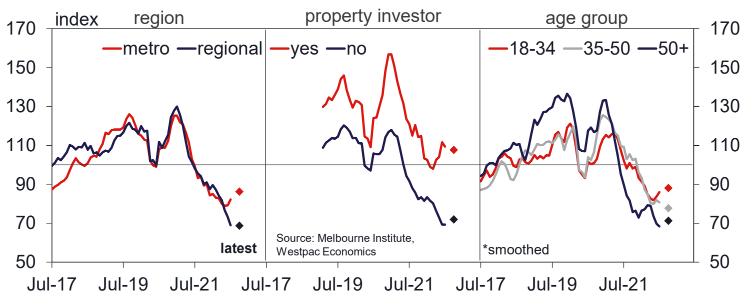
SENTIMENT INDICATORS: DWELLINGS

- The **'time to buy a dwelling'** index stabilised a little over the 3mths to July but remains at historic lows. The July read of 80.1 is in the bottom 2% of index reads historically, sustained weaker levels only seen during the GFC and the late-80s slump that led into the early-90s recession. And this is with the cash rate barely half way towards its eventual forecast peak.
- Needless to say, optimists are in very short supply. Indeed, only one sub-group index remains in net positive territory, above the 100 mark: consumers with investment properties. Even here the latest read, 107.6, is very weak for a segment that usually holds in the 120-130 range.
- At the other end of the spectrum, buyer sentiment is showing an alarming deterioration in regional areas. Most regions saw very strong price gains through the most recent upturn – much stronger than in previous cycles and in many cases taking affordability to historic extremes. Part of this looks to relate to demand from buyers moving out of capital cities during COVID (who may also have been able to take advantage of working from home flexibility to maintain their 'capital city' incomes). These drivers may now be unwinding sharply.
- Across the major capital cities, buyer sentiment remains markedly weaker in Sydney and Melbourne.

23. 'Time to buy a dwelling'



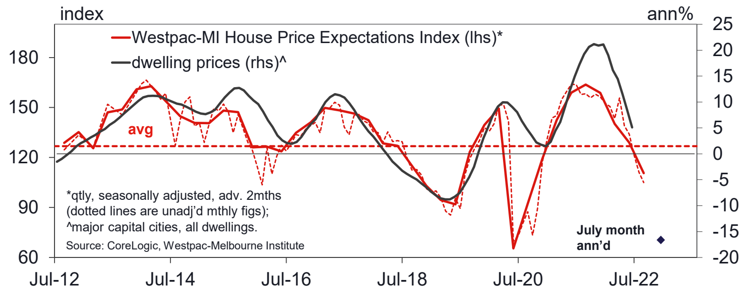
24. 'Time to buy a dwelling': selected sub-groups



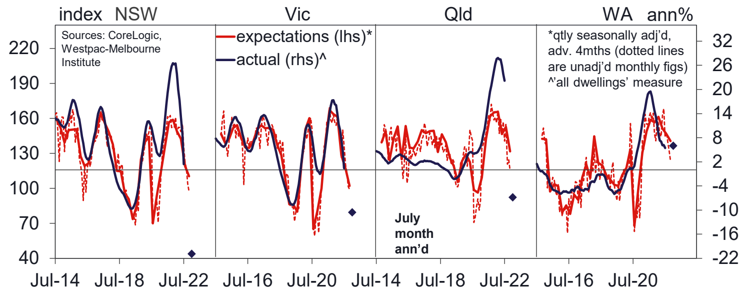
SENTIMENT INDICATORS: HOUSE PRICES

- House price expectations continue to slide rapidly, the **Westpac Melbourne Institute House Price Expectations Index** falling a further 21.7% between Apr and July. At 104.9, the index is still in net positive territory but well below the long run avg of 125. That residual optimism will be hard to sustain as more evidence of falling prices comes through, the July month set to see some very weak results.
- Outright price pessimism is already evident in NSW and Vic, with state index reads of 97.3 and 99 respectively. That looks set to deepen given the accelerating price corrections showing through in the Sydney and Melbourne markets.
- The relative optimism in Qld, with a state index read of 115.2 in July, is also likely to fade with the Brisbane market recording its first monthly price decline in July. Sentiment may be better supported elsewhere with Adelaide and Perth prices continuing to hold up. However, that may not last much longer either given the added pressure set to come from additional RBA rate rises.
- Aside from these regional patterns, the sub-group detail also shows more pronounced weakness amongst older age groups, with younger cohorts more optimistic – a common theme that runs through much of the consumer sentiment survey in recent months.

25. Westpac-MI House Price Expectations Index



26. Dwelling prices: actual vs expected by state



SENTIMENT INDICATORS: RISK AVERSION

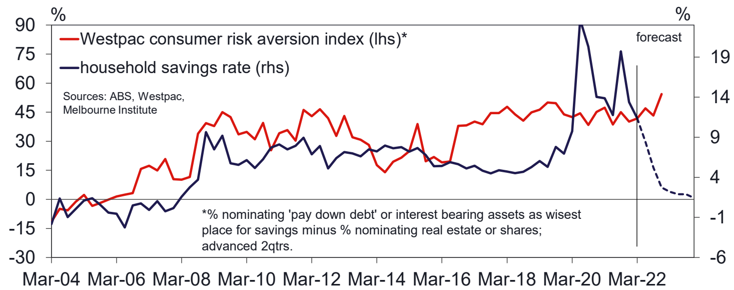
– The June survey included an update of the 'wisest place for savings' questions used to construct our **Westpac Consumer Risk Aversion Index**. Responses show little change with risk aversion at high levels.

– 'Safe' defensive options remain heavily favoured with a further rise in the proportion of consumers nominating 'bank deposits', and 'pay down debt'. Indeed, just over 64% of consumers nominated debt repayment or capital protected options, up from 59% in March and near the extreme high of 65.5% seen during the GFC. Conversely, very few consumers favour 'riskier' options such as real estate (8%) and shares (8%).

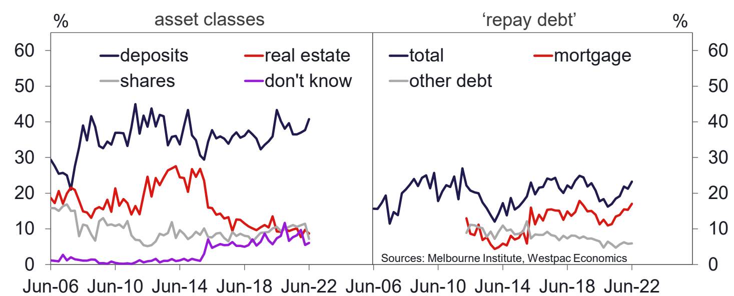
– Overall, the **Westpac Risk Aversion Index** rose from 43 in March to 54 in June, marking a new record high on measures going back to 1974.

– There is a big risk here for the economy. Our central case view is that income and cost of living pressures will lead most households to draw down on accumulated buffers with an associated decline in the savings rate cushioning the flow-on impact to demand. However, if heightened risk aversion triggers a drive towards deleveraging – as it did during the GFC – that could undo much of this effect. The household savings rate influenced by a wide array of complex factors. Which way it breaks will be key.

27. Westpac Consumer Risk Aversion Index vs savings rate



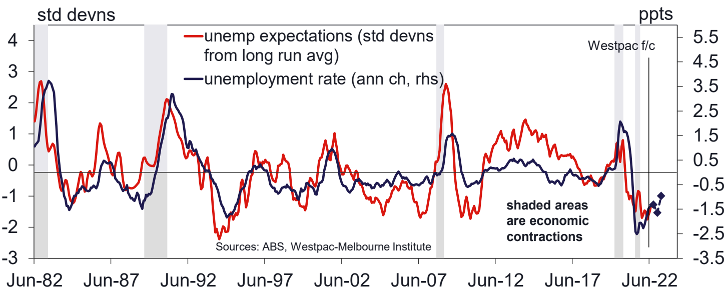
28. Consumer: 'wisest place for savings'



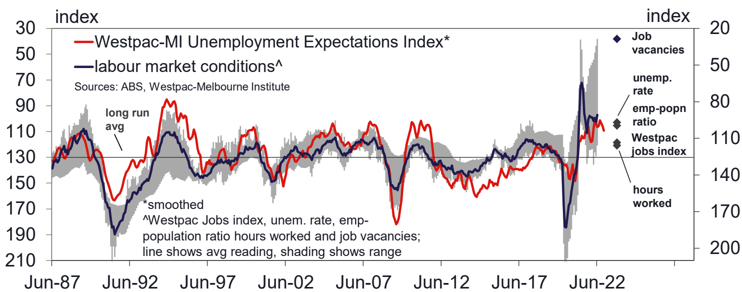
SENTIMENT INDICATORS: JOB SECURITY

- Confidence around jobs is about the only remaining stronghold for consumer sentiment. The **Westpac Melbourne Institute Index of Unemployment Expectations** has deteriorated since Apr but remains at relatively upbeat levels by historical standards. The index rose 10.6% to 109.8 over the three months to July (recall that higher index means more consumers expect unemployment to rise in the year ahead). That still compares very favourably to a long run avg of 129.
- Labour markets remain buoyant, the latest ABS updates showing a further 150k jobs added in the June quarter taking the unemployment rate to just 3.5% nationally.
- A range of indicators, consumer sentiment included, point to more gains taking the unemployment rate even lower in coming months. However, the market is very clearly butting up against absolute limits in terms of skilled labour supply. Job vacancies continue to run at extraordinary highs – as at May, employers were seeking workers to fill more than 480k positions nationally. That is out of a pool of 480k unemployed.
- Indeed, the extent of this unmet labour demand may not be entirely apparent to consumers. Job security is notably higher amongst the unemployed who may have more visibility on this front.

29. Unemployment: actual vs expectations



30. Unemployment expectations vs labour market conditions



STATE SNAPSHOT: VICTORIA

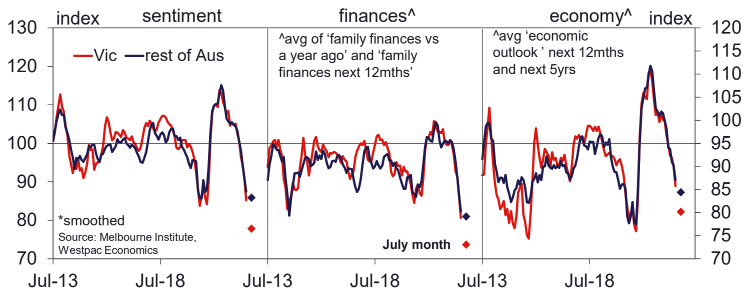
– The last time we profiled Victoria, back in July 2021, the state was still struggling to shrug off COVID disruptions, having been hit much harder by a ‘second wave’ outbreak in 2020 and a series of intermittent ‘mini-lockdowns’ in the first half of 2021. Unfortunately, that proved to be a brief reprieve with the state plunging into yet another extended hard lockdown as the delta outbreak took hold.

– A year on, the state has come out of its dark COVID battle and seen a reasonable revival but is now hitting another major shock with surging costs and the rapid re-tightening in interest rates. Our sentiment survey detail suggests this is hitting Vic harder than other states.

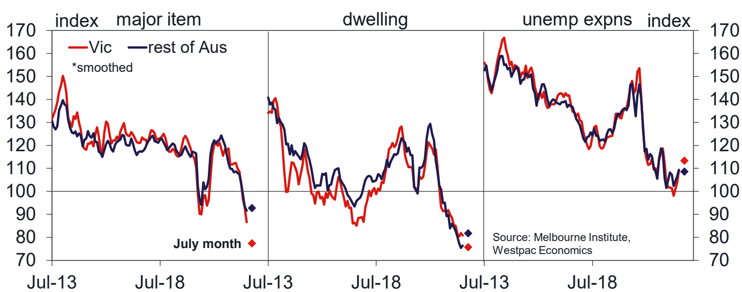
– Sentiment has plunged sharply, to just 77.8 in July, and just 71.5 in regional areas. Family finances look to have been particularly brittle with these sub-indexes weakening dramatically in Vic. While some of this may be the higher interest rate and housing market sensitivity of consumers in Melbourne it may also reflect more weakness carried over from the state’s difficult COVID experience.

– Vic consumers are also more downbeat on housing and labour market prospects, although here the wedge vs the rest of Australia is less pronounced. The overall picture suggests Vic consumers are bracing for a more abrupt slowdown.

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



32. Consumer ‘time to buy’, unemp expns: Vic vs rest of Aus



ECONOMIC AND FINANCIAL FORECASTS

Interest rate forecasts

Australia	Latest (28 Jul)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Cash	1.35	2.35	3.10	3.35	3.35	3.35	3.35	3.10
90 Day BBSW	2.22	3.05	3.55	3.55	3.55	3.55	3.38	3.13
3 Year Swap	3.52	3.55	3.50	3.30	3.10	2.90	2.80	2.75
3 Year Bond	3.07	3.20	3.25	3.10	2.90	2.70	2.60	2.55
10 Year Bond	3.43	3.60	3.50	3.35	3.15	2.90	2.65	2.50
10 Year Spread to US (bps)	56	50	50	45	45	40	35	30
US								
Fed Funds	1.625	2.875	3.375	3.375	3.375	3.375	3.125	2.875
US 10 Year Bond	2.87	3.10	3.00	2.90	2.70	2.50	2.30	2.20

Exchange rate forecasts

	Latest (28 Jul)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
AUD/USD	0.6910	0.72	0.75	0.77	0.78	0.79	0.80	0.80
NZD/USD	0.6237	0.65	0.68	0.70	0.71	0.72	0.72	0.72
USD/JPY	137.70	134	132	130	127	125	123	121
EUR/USD	1.0185	1.05	1.09	1.11	1.13	1.14	1.15	1.16
GBP/USD	1.1965	1.23	1.26	1.28	1.30	1.32	1.34	1.35
USD/CNY	6.7675	6.55	6.35	6.25	6.20	6.15	6.15	6.10
AUD/NZD	1.1107	1.11	1.10	1.10	1.10	1.10	1.11	1.11

Sources: Bloomberg, Westpac Economics.

Australian economic growth forecasts

	2021	2022				2023	
	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f
GDP % qtr	3.6	0.8	2.0	1.0	0.6	0.4	0.2
%yr end	4.4	3.3	4.5	7.5	4.4	4.0	2.2
Unemployment rate %	4.7	4.1	3.8	3.3	3.0	3.1	3.4
CPI % qtr	1.3	2.1	1.7	0.8	2.4	1.0	0.6
Annual change	3.5	5.1	6.1	6.1	7.2	6.0	4.8
CPI trimmed mean: %qtr	1.0	1.4	1.4	1.2	1.0	0.7	0.7
% yr end	2.6	3.7	4.6	5.0	5.0	4.4	3.7

	Calendar years			
	2021	2021f	2022f	2023f
GDP % qtr	–	–	–	–
Annual avg change	–0.7	4.4	4.4	1.0
Unemployment rate %	6.8	4.7	3.0	4.2
CPI % qtr	–	–	–	–
Annual change	0.9	3.5	7.2	3.0

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*	1.1	1.1	-4.7	6.4	1.5	2.6	0.9	0.5
annual chg	0.1	15.0	1.9	3.6	4.0	5.5	11.8	5.6
Real labour income, ann chg	2.7	4.5	2.7	3.0	2.2	1.8	2.3	1.1
Real disposable income, ann chg**	4.5	-0.2	1.2	2.7	1.2	1.3	-5.2	-6.0
Household savings ratio	13.9	11.8	19.7	13.4	11.4	8.4	5.2	2.7
Real retail sales, ann chg	4.3	8.7	-2.3	3.5	4.9	5.7	10.0	1.5
Motor vehicle sales (‘000s)***	798	819	734	672	768	734	807	783
annual chg	9.1	56.7	17.0	-17.8	-3.7	-10.4	10.0	16.5

	Calendar years			
	2020	**2021**	**2022f**	**2023f**
Total private consumption, ann chg*	-5.8	4.9	6.7	2.2
Real labour income, ann chg	1.6	3.2	1.9	1.7
Real disposable income, ann chg**	5.7	2.0	-2.2	-3.0
Household savings ratio, %	17.0	14.7	6.9	1.9
Real retail sales, ann chg	2.7	3.5	5.4	-0.9
Motor vehicle sales (‘000s)	675	756	773	745
annual chg	-15.6	12.0	2.3	-3.7

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

		2021			2022	
% change	avg^	Oct	Nov	Dec	Jan	Feb
Westpac–MI Consumer Sentiment Index	101.4	104.6	105.3	104.3	102.2	100.8
family finances vs a year ago	89.2	92.3	88.1	89.0	95.6	86.8
family finances next 12 months	107.4	109.7	108.9	111.2	108.1	106.4
economic conditions next 12 months	91.1	103.2	106.6	104.9	94.8	97.1
economic conditions next 5 years	92.0	108.1	111.0	110.4	103.6	105.2
time to buy major household item	126.2	109.9	111.9	105.9	108.9	108.6
time to buy a dwelling	117.8	83.3	91.1	81.9	87.0	84.9
Westpac–MI Consumer Risk Aversion Index^^	14.8	–	–	47.0	–	–
CSI±	101.6	92.1	90.9	89.8	91.7	89.3
Westpac–MI House Price Expectations Index#	126.8	156.3	152.7	150.6	143.4	155.8
consumer mortgage rate expectations#	40.5	–	–	–	63.1	77.2
Westpac–MI Unemployment Expectations	129.5	107.1	95.3	104.1	112.7	102.8

	2022				
continued	Mar	Apr	May	Jun	Jul
Westpac–MI Consumer Sentiment Index	96.6	95.8	90.4	86.4	83.8
family finances vs a year ago	83.3	79.3	79.6	74.0	72.0
family finances next 12 months	106.0	105.1	93.3	86.2	86.2
economic conditions next 12 months	90.6	95.9	90.4	83.8	80.3
economic conditions next 5 years	99.3	100.3	96.2	98.1	91.6
time to buy major household item	103.7	98.2	92.6	89.5	88.8
time to buy a dwelling	78.3	78.7	77.5	75.1	80.1
Westpac–MI Consumer Risk Aversion Index^^	43.3	–	–	54.4	–
CSI±	87.5	83.9	78.7	73.9	73.2
Westpac–MI House Price Expectations Index#	139.0	134.1	121.4	111.1	104.9
consumer mortgage rate expectations#	81.2	81.2	87.2	86.1	83.9
Westpac–MI Unemployment Expectations	101.8	99.2	109.6	108.5	109.8

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