The Red Book

January 2018

Westpac Institutional Bank

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The next issue of the **Red Book** will be released on 20 April 2018.

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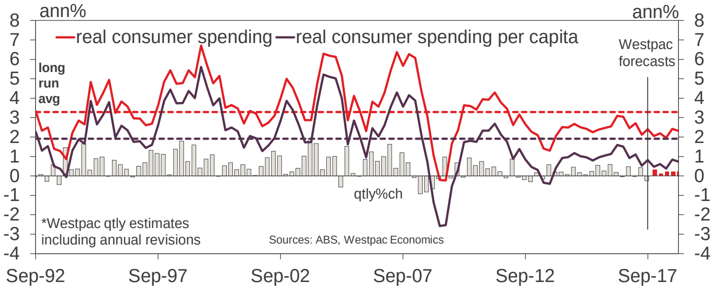
Executive summary

- The **Westpac–Melbourne Institute Consumer Sentiment Index** has continued to rally, rising 1.8% in Jan to be up over 10% from its Aug low. At 105.1 the Index is in 'cautiously optimistic' territory with Jan marking the most positive start to a calendar year since 2010.
- A less threatening outlook for interest rates and improving confidence around the economy and jobs have been the main positives.
- Despite the gains, responses around family finances continue to point to significant pressures. Whereas sub-indexes tracking expectations for the economy are comfortably above their long run average levels, indexes tracking consumers' assessments of their own finances are still below their long run average levels.
- Risk aversion remains elevated. Updated responses to 'wisest place for savings' questions show consumers continue to heavily favour safe options. More nominate 'pay down debt' than the real estate and shares combined. The **Westpac Risk Aversion Index** held at 46 in Dec, down only slightly on the record 45yr high of 47.5 in Sep.
- **CSI±**, our modified sentiment indicator that we favour as a guide to actual consumer spending, also posted a solid recovery, rising 3.4% in Jan to be up 5.7% above the avg in Q3 last year. Despite the rise, the index remains at a weak level overall, pointing to flat per capita spending over the first half of 2018.
- Consumer views on major purchases remain downbeat. The 'time to buy a major item' sub-index rose 0.5% in Jan after a 2.8% lift in Dec but is unchanged on its Oct level. Actual spending on 'big ticket' items was weak in Q3 with more recent data pointing to a partial recovery in Q4.
- Consumer views around housing have shown mixed results in recent months with buyer sentiment improving but price expectations pared back.
- The 'time to buy a dwelling' index has recovered, rising 12.2% between Oct and Jan. Despite the solid gain, the index remains at weak levels well below its long run average.
- The **Westpac-Melbourne Institute Consumer House Price Expectations Index** fell a further 8.2% over the 3mths to Jan. At 129.1 the index is in line with its long run average. State responses point to annual price growth dipping into negative in NSW, moderating to around 6.4%yr in Vic and easing in Qld but price declines moderating significantly in WA.
- Consumers continue to become more comfortable about the outlook for jobs. The **Westpac-Melbourne Institute Unemployment Expectations Index** fell a further 5% over 3mths to Jan (recall that lower reads mean more consumers expect unemployment to fall in the year ahead). The index is now looking close to a sustained 'break-out' into positive territory. That said, views are still not particularly optimistic.

Consumer spending: persistent weakness



Our first **Red Book** for 2018 finds consumers in a considerably brighter mood, the **Westpac-Melbourne Institute Consumer Sentiment Index** having recovered convincingly from its September quarter slump and posting its best start to a calendar year since the beginning of the decade.

The lift goes beyond the usual holiday cheer and is a welcome change from the recurring gloom that has dogged the Australian consumer, undermining demand and the wider economy over the past four years.

That said, the more positive tone should not be overstated. The headline index is back in 'cautiously optimistic' territory rather than outright bullish. And while the survey detail carries some promising positives – around expectations for the economy and labour markets in particular – there are also still clear areas of weakness around family finances, housing and continued high levels of risk aversion.

Incomes are under pressure and consumers look reluctant to spend – possibly even looking to lift savings instead.

In this month's report we take a closer look at the puzzling picture around household labour incomes. Despite a record year for job gains in 2017, weak wage inflation and a range of structural factors have kept growth in aggregate labour incomes very weak. While some of these factors are transitory others are likely to be more enduring features that continue to restrain incomes and sentiment in 2018.

For the rally in consumer sentiment to be more convincing, it will need to sustain and extend – a further step-up into the 110+ range is required. We may see some more uplift as conditions continue to improve in the mining states. However the prospect of lingering pressures on incomes suggests the 'persistent weakness' in Australia's household sector will be harder to shake.

The consumer mood: brightens

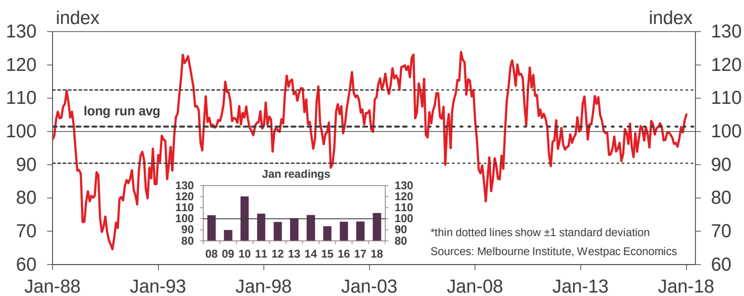
– The **Westpac Melbourne Institute Index of Consumer Sentiment** has continued to rally, rising 1.8% in Jan to be up 3.7% since our Oct report and 10% from its Aug low. While at 105.1, the Index is 'cautiously optimistic' rather than buoyant, Jan marked the best monthly read since late 2013 and the most positive start to a calendar year since 2010.

– Sentiment has now posted a solid recovery from the weak spot in Q3 last year, bolstered by a less threatening outlook for interest rates and improving confidence around the economy and jobs. The average index read over the last 3mths is 6.3% above the Q3 avg last year.

– That in turn points to some recovery in spending growth which saw a disturbing slump in Q3. However, spending growth still looks likely to be constrained with family finances remaining under pressure, limited scope for further reductions in saving to support spending, and high debt levels an ongoing concern.

– All index components have improved since Q3. While the initial rebound centred on assessments of family finances, gains over the last 3mths have been led by rising expectations for the economy. The 'economy, next 5yrs' sub-index up 5.4% in Jan and the 'economy, next 12mths' sub-index up 2.6%.

1. Consumer sentiment lifts



2. Consumer sentiment: sub-indexes

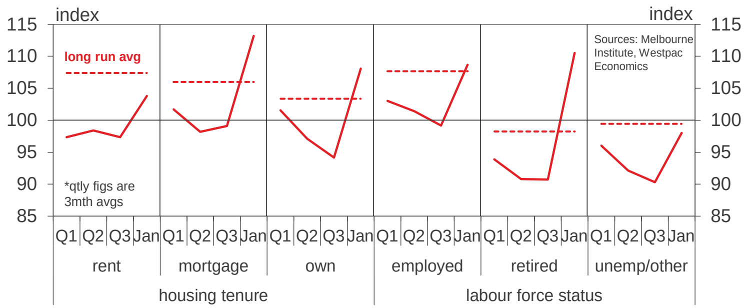
– Both economic outlook sub-indexes are now comfortably above their long run avg. In contrast, both finances sub-indexes remain at more subdued levels around their long run avg. The 'time to buy a major item' sub-index has posted the most muted lift since Q3 and is still materially below its long run avg.

– The sub-group detail highlights some of the factors at play. Sentiment gains were particularly strong for households with a mortgage, the most interest rate sensitive sub-group. Sentiment amongst retirees showed stronger gains as well, likely reflecting buoyant sharemarket conditions (the ASX hit a 10yr high in Jan).

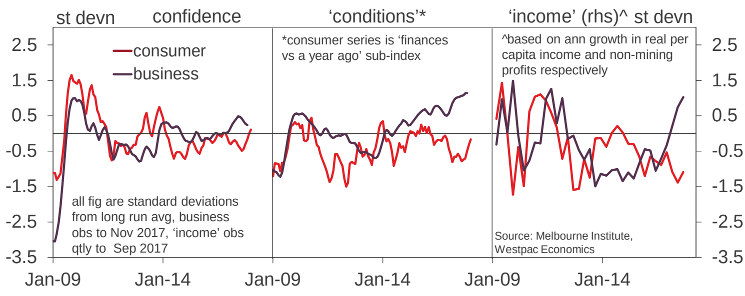
– Note that both the headline index and its components are seasonally adjusted to remove a regular lift seen over the holiday season. Other indexes in the survey are not seasonally adjusted so need to be treated with some caution.

– The rise in consumer sentiment narrows the gap with business confidence which was notably firmer throughout 2017. However, there remains a stark wedge in views on 'conditions' with businesses reporting much stronger reads than the subdued consumer views on finances. While there are many factors, the weaker picture on consumer incomes looks to be the main point of difference.

3. Consumer sentiment: selected sub-groups



4. Confidence, conditions & incomes: consumers vs business



Sentiment indicators: spending

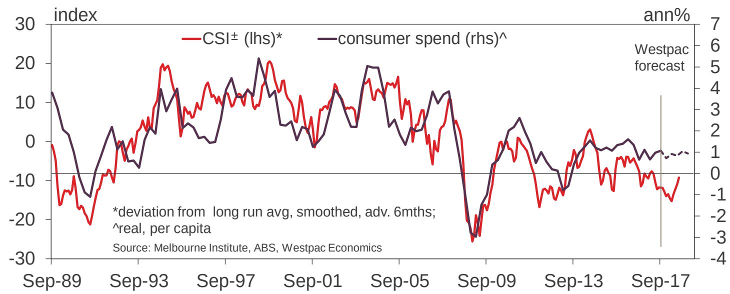
– Our **CSI±** composite combines sub-indexes tracking views on 'family finances' and 'time to buy a major item' with the **Westpac Consumer Risk Aversion Index** and provides a good guide to spending with a lead of about 6mths.

– **CSI±** has also posted a solid recovery, rising 3.4% to be up 5.7% from the avg through Q3 last year. Despite the rise, the index remains at a weak level overall (93.6, 9pts below its long run avg) reflecting ongoing soft reads on family finances, subdued buyer attitudes and elevated risk aversion. The latest readings are broadly consistent with flat per capita spending and 1% growth in per capita retail sales.

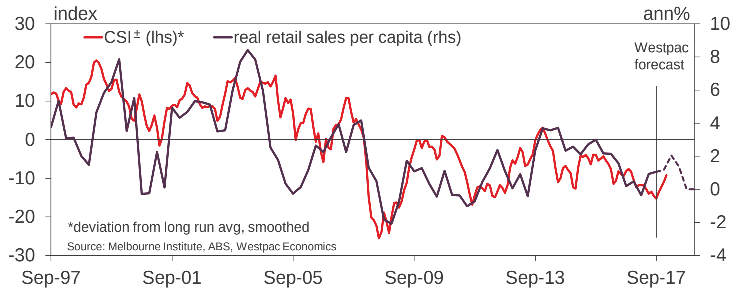
– The Q3 national accounts was a particularly poor one for Australian households with only a modest improvement in incomes and disturbing weakness in spending.

– Total consumption rose just 0.1%, the weakest quarterly result since Q4 2012, and prior to that, the GFC, when spending contracted for three successive quarters. Annual growth slowed to 2.2%, well below the long run avg, 3-3.5%, and even below the avg over the last 10yrs, 2.6%yr. The detail showed outright declines across a range of discretionary categories with surprisingly weak growth in services spend.

5. CSI± vs total consumer spending



6. CSI± vs retail sales



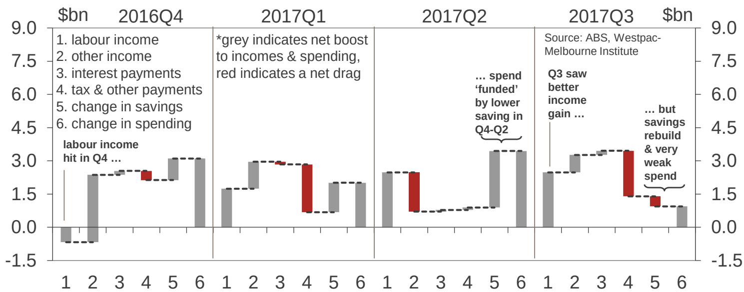
– Around incomes, labour incomes continued to lift, but are coming from a very weak starting point. Non labour income gains were more mixed with increased tax payments a notable drag.

– The modest lift in household disposable incomes in Q3 was effectively negated by an increase in the savings rate from 3.0% to 3.2%. Some of this may be due to switching from 'interest only' to 'principal and interest' mortgages. However, it also likely reflects a more general reprioritisation of savings over spending, with this pattern and the reduced discretionary spend consistent with sentiment showing a rise in risk aversion.

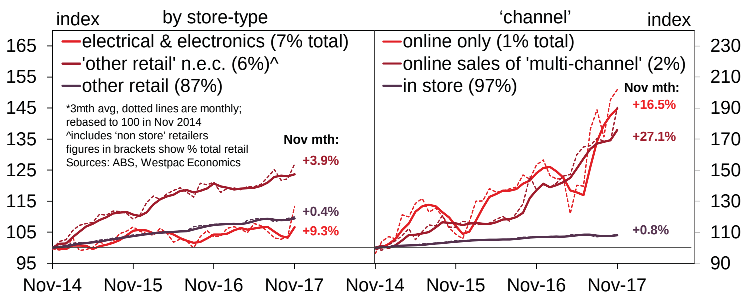
– Partial measures and indicators suggest demand has improved in Q4 although one-off factors have played a part.

– Retail sales surged 1.2% in Nov, following a solid 0.5% gain in Oct. Sales contracted 0.2% in Q3. The strong Nov gain was boosted by the iPhone X release and an increase in 'Black Friday' sales activity – a US retail event that looks to be gaining popularity in Australia as well. The month saw outsized gains for 'electrical & electronic', the 'other retail' category that covers non-store retailers and via online sales channels more generally. While still up, sales across other segments and channels showed more muted gains.

7. Household income & spending: changes decomposed



8. Monthly retail sales: by store-type and 'channel'



Special topic: Christmas spending

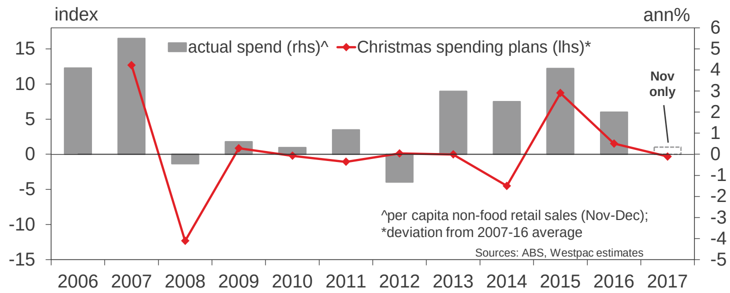
– Our Nov survey included our annual question on Christmas spending plans. Responses point to a lacklustre lead-in with responses around their 10yr avg. However the lift in sentiment through Dec-Jan, a lift in retail sales in Nov and anecdotal reports suggest actual spending may have been better.

– The question asks if consumers expect to spend less, about the same, or more on Christmas gifts than last year. Just under a third of Australians expected to spend less on gifts this year than last, with 54% expecting to spend about the same and just 11% spending more – the lowest proportion since we began running this question in 2009.

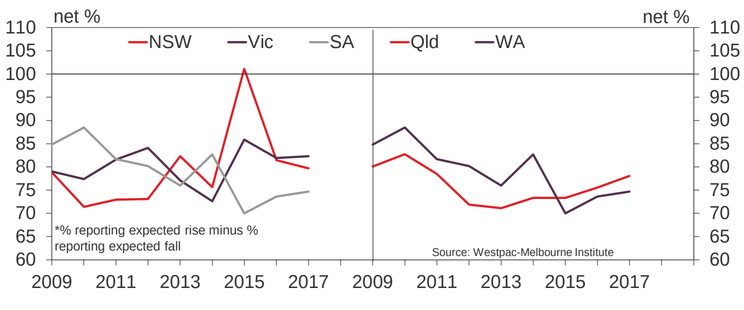
– The simplest summary measure of intentions is an index based on the net balance of responses, i.e. 100 + %more – %less. On this basis, the 2017 reading is 78, down 2.3% from 79.9 in 2016. This year's read is comparable to the 2009-13 period which saw five successive years of readings in the 77-79 range .

– While far from the disastrous 66 in the depths of the GFC, the 2017 reading is also well below the most recent peak in 2015 (87.0) and the record high in 2007 (91). Overall, it is consistent with flat per capita growth in non food retail (1.6%yr including population growth). Figures for Nov suggest a slightly firmer pace around 0.3%yr (1.9% including population).

9. Christmas spending plans vs a year ago

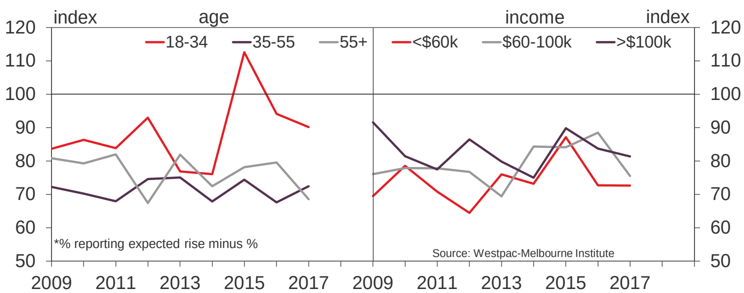


10. Christmas spending plans by state

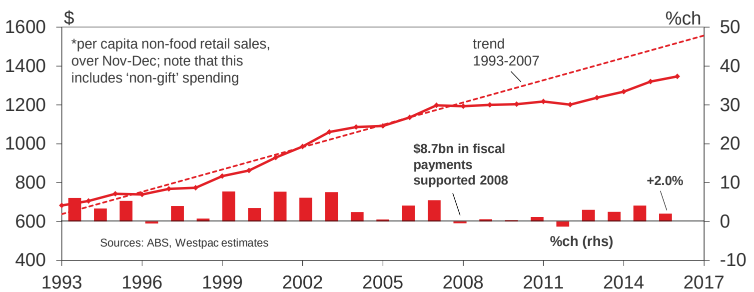


- The detailed results offer few positives. Consumers in Vic and NSW were less restrained and Qlder's were less pessimistic than in 2016 but consumers in SA and WA were more downbeat. Sub-group variations were also minor although over 55s, middle income earners and mortgagors showed bigger pull backs.
- Last year, non-food retail sales over Nov-Dec were $1346 per person (noting that this excludes spending on services and via offshore based online retailers, and and includes 'non gift' retail spending locally). This year's Nov retail figures suggest retail sales may be around $1350 per person for 2017.
- While the Nov survey read on wider consumer sentiment was also on the soft side – down on the lead in to last year – the rally through Dec-Jan suggests the backdrop improved later in the sales period. Overall, Christmas 2017 mood looks to be 'middle of the pack' sentiment-wise.
- The full wash-up will become clearer once the Dec retail figures are released. Note that Amazon also launched its Australian operations in late Nov. Although industry reports suggest the initial impact was more muted than many expected, pricing effects could mean monthly retail sales are understating volumes in some areas.

11. Christmas spending plans: selected sub-groups



12. Christmas per capita retail sales: historical



Special topic: household labour income

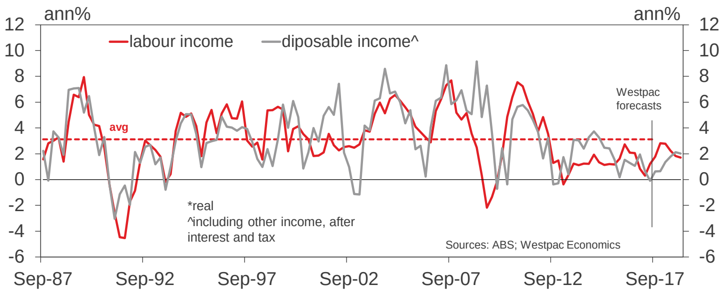
– The continued weakness of household labour income growth has been a major drag on consumer sentiment and demand over the last year. The weakness has been somewhat surprising given strong job gains. It reflects historically low wages growth and structural factors impacting average remuneration.

– While some of the drag appears to be easing, weak income growth looks likely to remain a significant restraining factor for households in 2018. That said, there remain major uncertainties around the extent to which these factors are transitory or longer lasting. This topic looks at how this issue is evolving nationally and across the major states.

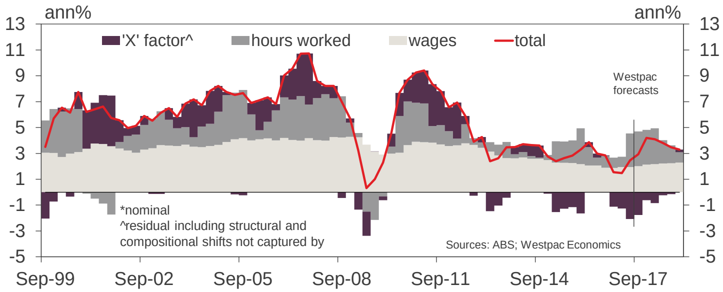
– Total labour income growth has averaged just 1.3%yr in real terms over the past 5 years, well below the long run average of 3.1%. The underperformance continued in 2017 despite both employment and hours worked growing at over 3%yr.

– We can decompose growth in nominal labour income into three parts: hours worked, wages growth and a residual 'X' factor that captures other structural and compositional effects. This shows the lift in hours worked in 2016-17 was partially offset by a slowdown in wages growth. However, the biggest offset came from the 'X' factor, a component that usually adds to growth with, prior to 2013, negatives only seen during downturns.

13. Household income: persistent weakness



14. Labour income growth decomposed



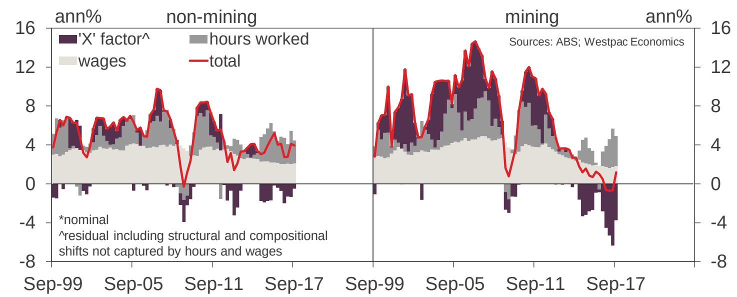
– The 'X' factor reflects influences on labour income not captured by hours worked and wages growth. Generally speaking, these relate to changes in the distribution of jobs and remuneration.

– For example, a mix of labour shedding in high paying mining sectors and job gains in lower paying service industries could be expected to see a negative 'X' factor contribution. Competitive and technological pressures could drive similar effects via shifts in the mix of jobs by industry and occupation. There may also be other drivers, e.g. relating to shifts in non wage payments (such as bonuses and redundancies) and promotion rates.

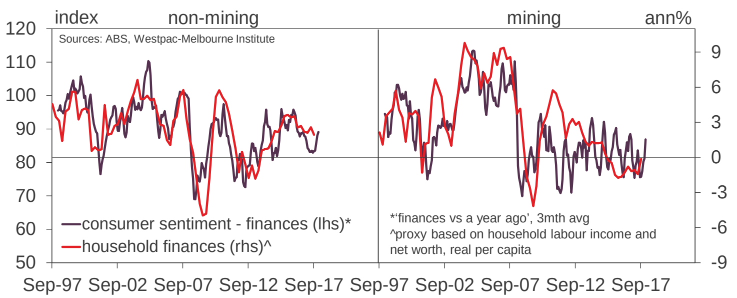
– The same analysis at the state level suggests weakness in labour income is coming from a variety of factors. The mining downturn impact on the jobs mix is clear with the mining states showing a much larger 'X' factor drag. However, non-mining states have also seen negatives over the last 5yrs pointing to other factors at play. With total income across the mining states about half of that across non-mining states, the two effects have a broadly comparable impact nationally.

– While labour income growth is now improving, the near term lift is expected to be modest, with incomes set to remain a restraint on sentiment and demand in 2018.

14. Labour income growth decomposed: mining vs non mining



16. Household finances: mining vs non mining



Sentiment indicators: durables, cars

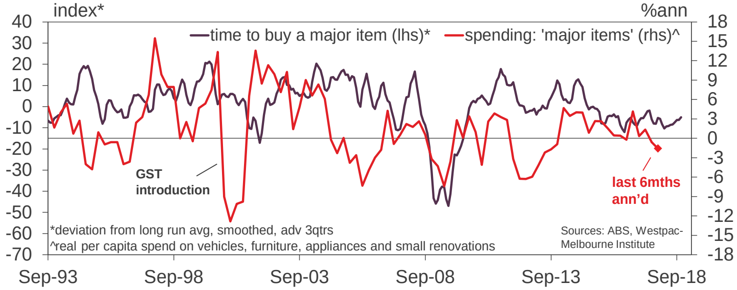
– Consumer views on major purchases remain downbeat. The ‘time to buy a major item’ sub-index rose 0.5%in Jan after a 2.8% lift in Dec but is unchanged on its Oct level. At 122.8 the index is 4.7pts below its long run avg of 127.5 but well above the cyclical lows seen during downturns.

– Actual spending on ‘big ticket’ items has been soft. Total real per capita spending on ‘major items’ (covering vehicles, major household durables and small renovations) fell 1.9% in Q3 to be down 0.6%yr, the weakest pace since 2013. The spending detail showed declines across all major sub-categories.

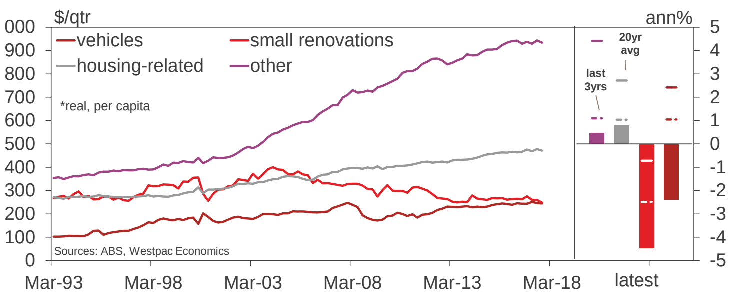
– Spending on ‘small’ renovations (works valued at less than $10k) has been a stand-out weak spot in recent years, with a 4.6% fall in Q3 taking the per capita spend to a new 25yr low. Some of this may be due to the fixed $10k threshold which will tend to exclude fewer projects over time as inflation gradually pushes more out of scope.

– More recent data suggests spending has recovered somewhat in Q4 with decent gains in housing-related retail sales (+1.3% over Oct-Nov after a 3% fall in Q3), and vehicle sales (+0.9% in Q4 after a 1.8% fall in Q3). In both cases the recoveries are not all that convincing.

17. ‘Time to buy major item’ vs actual spend



18. Spending on major items: by sub-category



Sentiment indicators: housing

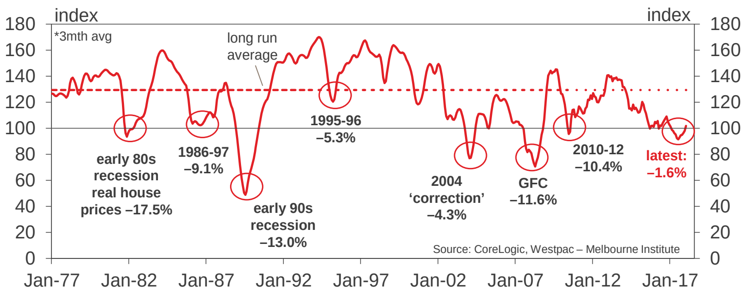
– The 'time to buy a dwelling' index has recovered over the last 3mths, rising 12.2% between Oct and Jan. Despite the gain, the index remains at weak levels overall, the 106.7 read in Jan still 13.5pts below its long run avg of 120.

– Australia's housing market continues to move through a modest correction. Updates have been thin on the ground during the holiday period with the most timely data, from auction activity, unavailable over the off season and other market metrics less reliable. What is available suggests conditions remain soft but the real test will come when auction markets re-open from mid-Feb.

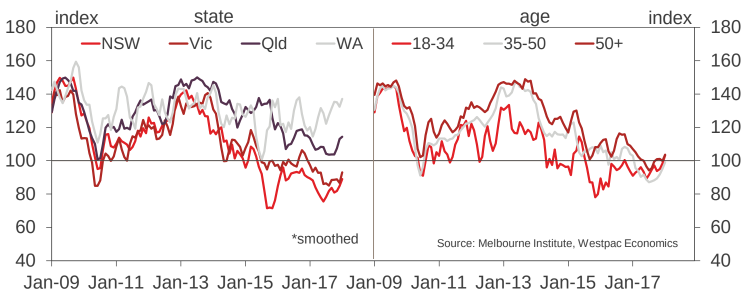
– Despite the lack of data, one notable development has been the continued resilience of housing finance approvals. The total value of finance approvals including investor finance rose 1.7% over the year to Nov. This is in stark contrast to the slowdown evident across all other market indicators. It is also much firmer than the 10% correction seen during the 2015 macro-prudential tightening. All up, the differences may be an indication that weaker foreign buyer demand had a greater hand in the 2017 slowdown.

– The state detail continues to show much weaker sentiment in NSW (89) and Vic (93) compared to Qld (114) and WA (137).

19. 'Time to buy a dwelling'



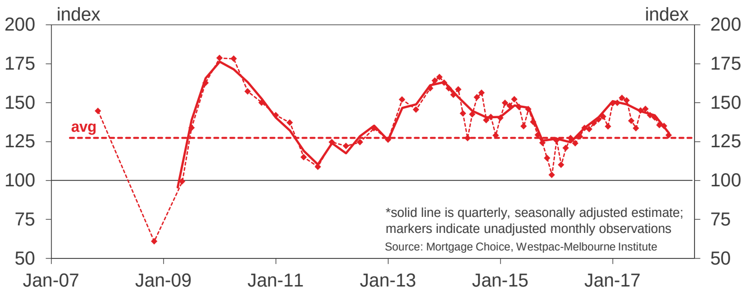
20. 'Time to buy a dwelling' by state, age group



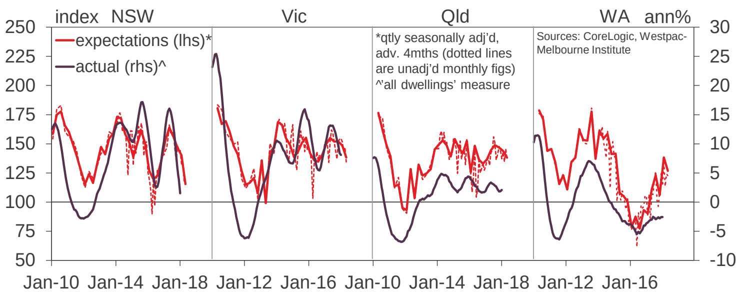
Sentiment indicators: house prices

- Consumer expectations for house prices continue to soften. The **Westpac Melbourne Institute Consumer House Price Expectations Index** fell a further 8.2% over the 3mths to Jan. At 129.1 the index is in line with its long run avg.
- Of those consumers with a view, just over half (51%) expect prices to rise over the next year, 28% expect no change and 21% expect price falls – a net proportion expecting prices to rise of 31%.
- The biggest pull back continues to come in NSW (–12% since Oct to 116.8) but with price expectations in Vic also starting to show a notable decline (–11% to 134.5).
- Price expectations have been more stable in Qld (–4.7% to 136.2). Despite an 8.5% pull-back in WA, the positive swing over the last 6mths has carried into early 2018.
- The latest data suggests annual price growth has slowed to around 1.5% in NSW. Expectations in the state point to a dip into negative in coming months. Price growth remains better supported at 8.1%yr in Vic, expectations pointing to a moderation to 6.4%yr. Qld price growth is tracking at 2.1%yr with expectations pointing to a lull back to 1.5%yr. For WA though, expectations point to some stabilisation with annual declines moderating from –2.6% to –0.5%yr.

21. Westpac-MI House Price Expectations Index



22. Dwelling prices: actual vs expected by state



Sentiment indicators: risk aversion

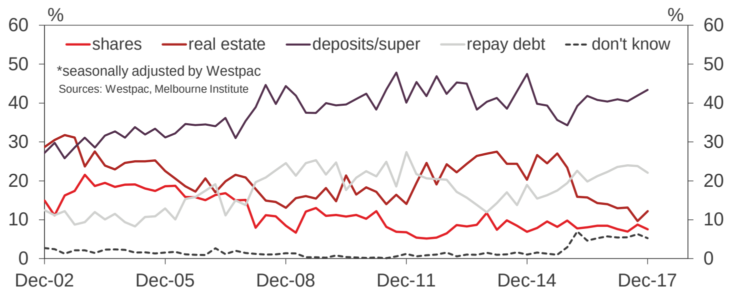
– The Dec survey included a quarterly update of questions on the 'wisest place for savings' used to construct the **Westpac Consumer Risk Aversion Index**. The results continue to indicate high levels of risk aversion, the index holding at 46 in Dec, down only slightly on the 47.4 in Sep which was a record high on readings going back to the mid-70s.

– Around two thirds of consumers still favour safe options – deposits, superannuation or paying down debt – with only 12% nominating real estate, and 7.5% nominating 'shares'. More consumers favour 'pay down debt' (20%) than real estate and shares combined.

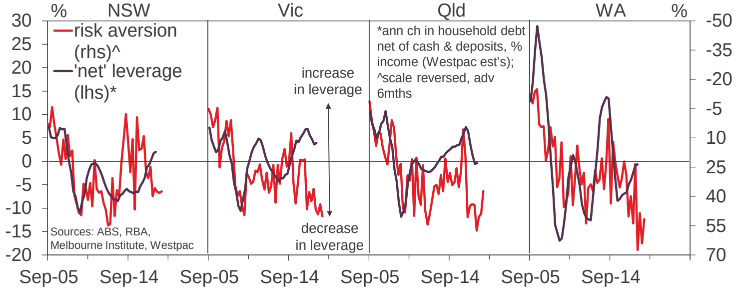
– The lift in consumer caution implied by the mix of responses continues to point to sharply higher savings rates and a swing back to balance sheet deleveraging. To date, neither of these responses have emerged suggesting there may be a qualitative difference between the current bout of risk aversion and previous episodes.

– Updated state data on household incomes and balance sheets suggests 'net' leverage (i.e. debt net of offset account holdings, cash and deposits) has been rising slightly in NSW and Vic but has declining in Qld and WA where income pressures have been more acute.

23. Consumers: 'wisest place for savings'



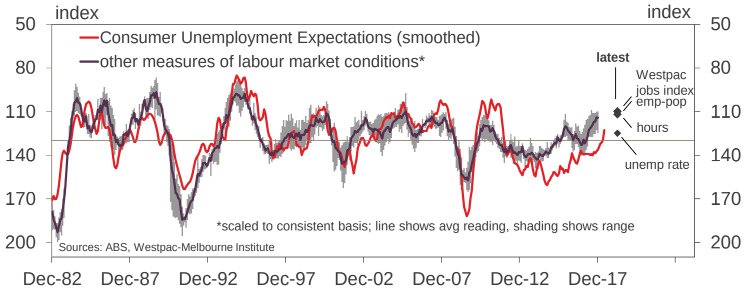
24. Westpac Consumer Risk Aversion Index vs leverage by state



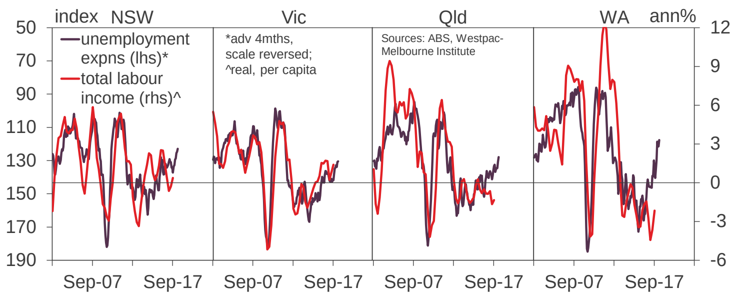
Sentiment indicators: job security

- The **Westpac Melbourne Institute Index of Unemployment Expectations** fell 5% over the 3mths to Jan (recall that lower reads mean more consumers expect unemployment to fall in the year ahead).
- At 122.8, the Index, which can be viewed as a measure of consumers' sense of job security, is now comfortably below its long run avg of 130 and at a 6½ year low.
- The index is now looking close to a sustained 'break-out' into positive territory. That said, views are still not particularly optimistic – over the five years prior to the GFC for example, the index averaged 115.6.
- As highlighted previously, consumer expectations have lagged the improvement in actual labour market conditions, evident across a range of employment and unemployment metrics, and in business surveys. Some of this likely reflects the weaker picture from wages growth and total labour income and the related factors discussed on p12.
- Interestingly, the latest shift in expectations is being led by strong improvements in the mining states where these income pressures have been most pronounced. WA in particular has seen an unexpectedly quick turnaround in its labour market and expectations.

25. Unemployment expectations vs actual conditions



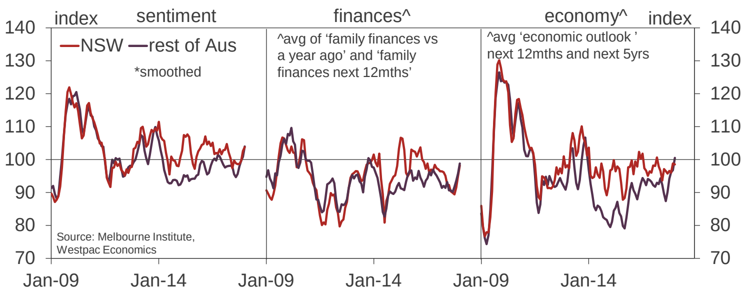
26. Unemployment expectations vs labour income by state



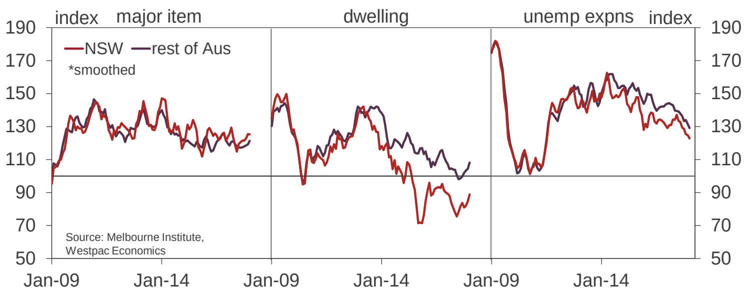
State snapshot: New South Wales

- The last time our snapshot checked in on NSW, at the start of last year, the state economy was outperforming by a wide margin but an upbeat consumer mood was starting to cool a little with signs that state demand was slowing and consumers were moving to rein in spending growth.
- A year on, the state economy looks to have re-accelerated after a soft spot in early 2017. However, business investment and government spending are driving the renewed pick up with the consumer staying subdued. Sentiment in the state is now closely in line with the national index.
- Indeed the only area where NSW consumers are clearly more positive than their interstate peers is around labour market prospects. With the state unemployment rate already at 4.8%, consumers' unemployment expectations are pointing to a further fall towards 4.2% by early 2018, on a par with pre-GFC lows.
- Unsurprisingly, where NSW sentiment is weakest is around the housing market. Deteriorating affordability has hit 'time to buy' assessments hard since 2014 and with Sydney price growth slowing abruptly in 2017, price expectations have also been lowered. These negative views are likely restraining sentiment overall.

27. Consumer sentiment, finances, economy: NSW vs rest of Aus



28. Consumer 'time to buy', unemp exps: NSW vs rest of Aus



Westpac household barometer

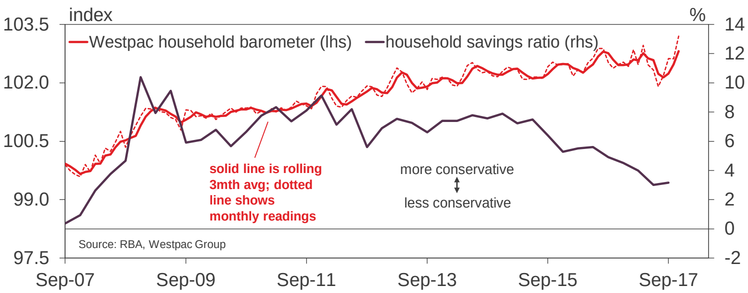
– The **Westpac Household Barometer** draws on a range of data – including system-wide credit and debit card usage from the RBA – to give a broad proxy for consumers' financial behaviour.

– After dropping sharply through Q3, the **Barometer** rebounded to hit new highs in late 2017. Both the decline and the subsequent rebound were almost entirely driven by variations in card transaction activity, suggesting neither should be viewed as a fundamental shift in consumer financial behaviour. Instead, current readings suggest consumers' in general remain disciplined and restrained with their finances.

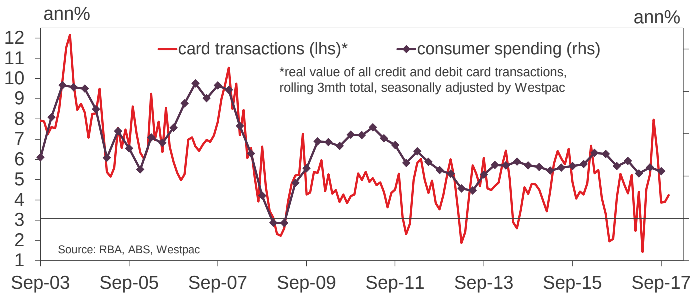
– System-wide card data from the RBA has been very uneven over the last 6mths. Annual growth in the real value of debit and credit card transactions slowed abruptly in Apr, with real credit card transactions recording a rare annual decline.

– Growth bounced strongly in Jul-Aug, some of which may have related to large increases in electricity bills and shifting cash flow pressures indirectly related to mortgage rate rises for 'interest only' and investor loans. Growth in the real value of card transactions moderated again into year end, with debit card activity particularly slow.

29. Westpac household barometer



30. Card transactions vs real spending



Economic and financial forecasts

Interest rate forecasts

	Latest (25 Jan)	Mar 18	Jun 18	Sep 18	Dec 18	Mar 19	Jun 19	Sep 19
Cash	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
90 Day Bill	1.79	1.77	1.80	1.80	1.80	1.80	1.80	1.80
3 Year Swap	2.27	2.20	2.30	2.40	2.50	2.50	2.50	2.60
10 Year Bond	2.83	2.70	2.75	2.90	2.85	3.00	3.10	3.05
10 Year Spread to US (bps)	18	10	0	–10	–15	0	20	30
International								
Fed Funds	1.375	1.625	1.875	2.125	2.125	2.125	2.125	2.125
US 10 Year Bond	2.65	2.60	2.75	3.00	3.00	3.00	2.90	2.75
US Fed balance sheet USDtrn	4.44	4.38	4.29	4.18	4.06	3.95	3.82	3.73
ECB Repo Rate	–0.40	–0.40	–0.40	–0.40	–0.40	–0.30	–0.30	–0.20

Exchange rate forecasts

	Latest (25 Jan)	Mar 18	Jun 18	Sep 18	Dec 18	Mar 19	Jun 19	Sep 19
AUD/USD	0.8074	0.78	0.76	0.74	0.72	0.70	0.71	0.72
NZD/USD	0.7376	0.71	0.69	0.67	0.65	0.63	0.64	0.65
USD/JPY	109.11	113	115	117	117	117	117	118
EUR/USD	1.2399	1.20	1.17	1.15	1.15	1.15	1.17	1.18
AUD/NZD	1.0873	1.10	1.10	1.10	1.11	1.11	1.11	1.11

Sources: Bloomberg, Westpac Economics.

Economic and financial forecasts

Australian economic growth forecasts

	2017			2018			
	Q2	Q3	Q4f	Q1f	Q2f	Q3f	Q4f
GDP % qtr	0.9	0.6	0.6	0.6	0.6	0.7	0.6
Annual change	1.9	2.8	2.5	2.8	2.4	2.4	2.5
Unemployment rate %	5.6	5.5	5.5	5.5	5.5	5.5	5.4
CPI % qtr	0.2	0.6	0.8	0.5	0.4	0.7	0.5
Annual change	1.9	1.8	2.1	2.1	2.3	2.4	2.1
CPI underlying % qtr	0.6	0.4	0.5	0.5	0.5	0.3	0.6
ann change	1.9	1.9	2.0	2.0	2.0	1.9	2.0

	Calendar years			
	2016	2017f	2018f	2019f
GDP % ann change	2.6	2.3	2.5	2.5
Unemployment rate %	5.7	5.5	5.4	5.3
CPI % ann change	1.5	2.1	2.1	1.9
CPI underlying % ann change	1.5	2.0	2.0	2.0

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

	2016	2017				2018		
% change	**Q4**	**Q1**	**Q2f**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**Q3f**
Total private consumption*	0.9	0.4	0.8	0.1	0.7	0.5	0.6	0.6
annual chg	2.7	2.1	2.4	2.2	2.1	2.2	2.0	2.4
Real labour income, ann chg	0.8	0.3	1.2	1.8	2.8	3.2	2.7	2.6
Real disposable income, ann chg**	1.9	0.7	–0.1	0.6	0.6	1.6	2.1	2.6
Household savings ratio	4.5	4.0	3.0	3.2	2.8	3.3	3.1	3.4
Real retail sales, ann chg	2.0	1.2	2.5	2.6	2.8	3.6	3.0	3.6
Motor vehicle sales ('000s)***	918.8	968.9	952.8	965.1	953.2	953.6	937.5	949.7
annual chg	–1.3	3.7	3.7	3.7	3.7	–1.6	–1.6	–1.6

	Calendar years			
	2015	**2016**	**2017f**	**2018f**
Total private consumption, ann chg*	2.4	2.8	2.2	2.2
Real labour income, ann chg	1.3	1.9	1.5	2.9
Real disposable income, ann chg**	1.6	1.5	0.4	2.3
Household savings ratio, %	6.6	5.1	3.3	3.3
Real retail sales, ann chg	3.0	3.5	2.3	3.4
Motor vehicle sales ('000s)	923.6	925.6	960.0	944.6
annual chg	4.1	0.2	3.7	–1.6

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

	2017					
% change	**avg^**	**Apr**	**May**	**Jun**	**Jul**	**Aug**
Westpac-MI Consumer Sentiment Index	**101.5**	**99.0**	**98.0**	**96.2**	**96.6**	**95.5**
family finances vs a year ago	89.5	85.2	82.6	81.4	82.3	78.1
family finances next 12 months	107.8	106.2	99.7	102.8	98.4	100.4
economic conditions next 12 months	90.6	91.7	95.9	91.3	92.9	93.3
economic conditions next 5 years	91.0	92.7	96.6	88.6	87.3	89.3
time to buy major household item	127.5	119.3	115.2	117.1	122.0	116.1
time to buy a motor vehicle	125.0	133.8	131.7	132.7	135.4	132.2
time to buy a dwelling	120.3	96.3	90.0	90.9	93.7	94.5
Westpac-MI Consumer Risk Aversion Index^^	**11.7**	**–**	**–**	**44.1**	**–**	**–**
CSI±	**102.8**	**91.7**	**88.4**	**89.3**	**89.4**	**87.1**
Westpac-MI House Price Expectations Index#	**127.3**	**151.4**	**138.3**	**133.6**	**145.0**	**146.0**
consumer mortgage rate expectations#	43.4	–	–	–	–	68.2
Westpac-MI Unemployment Expectations	**129.8**	**140.3**	**135.5**	**140.3**	**136.0**	**132.5**

	2017				2018
continued	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**
Westpac-MI Consumer Sentiment Index	**97.9**	**101.4**	**99.7**	**103.3**	**105.1**
family finances vs a year ago	82.9	83.7	84.8	89.6	88.6
family finances next 12 months	98.3	102.4	105.4	107.3	109.1
economic conditions next 12 months	95.8	102.6	96.2	101.1	103.7
economic conditions next 5 years	93.9	95.2	93.2	96.4	101.5
time to buy major household item	118.5	122.8	118.8	122.1	122.8
time to buy a motor vehicle	133.5	135.9	133.8	135.6	136.0
time to buy a dwelling	95.2	95.1	98.3	100.6	106.7
Westpac-MI Consumer Risk Aversion Index^^	**47.4**	**–**	**–**	**46.0**	**–**
CSI±	**88.1**	**90.5**	**90.6**	**93.3**	**93.6**
Westpac-MI House Price Expectations Index#	**141.9**	**140.5**	**135.6**	**135.0**	**129.1**
consumer mortgage rate expectations#	–	–	–	–	–
Westpac-MI Unemployment Expectations	**133.6**	**129.2**	**130.8**	**127.6**	**122.8**

Notes

Notes

Notes

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