NAB CASHLESS RETAIL SALES INDEX SEPTEMBER 2017



NAB Group Economics

- NAB's proprietary indicator of Australian retail sales, the NAB Cashless Retail Sales Index, reveals a rebound in spending in the month of September.
- Despite the pickup in the month of September however, there has been a clear slowing over the past three months which has seen the **yearly growth rate drop to 5.5% in September, from 6.4% in August** and 8.0% in July (in seasonally adjusted terms).
- The pickup in NAB's Cashless Retail Sales Index in September follows a contraction in August (although the magnitude of the decline is not as large following revisions). Based on movements in NAB's data and our data mapping techniques, **ABS retail trade is expected to rise by 0.6% mom in September which would reverse the published 0.6% decline in August.** (See table below, Chart 2 and appendix.)
- While most categories improved in the month (albeit often to still negative reads), the largest increase in the month was in the volatile department store category. Meanwhile, yearly growth in the NAB Cashless Retail Index is down across most categories in the past four/five months. It is particularly feeble for clothing & footwear (1.1% yoy seasonally adjusted) and household goods (1.6% yoy). Spending at cafes, restaurants & takeaways has also eased back sharply but remains strong (8.1% yoy).
- The slowing in recent months has also evident across all states and territories, although yearly spending growth strongest in **the ACT (7.5% yoy) and NSW (6.5%).** Spending growth is also reasonably strong in South Australia (5.5% yoy), Queensland (5.3% yoy and Victoria (5.0%), but very weak in WA (1.3% yoy) (Chart 4).
- The NAB Cashless Retail Index is broader than the NAB Online Retail Index and measures all cashless retail spending by consumers using debit and credit cards (both in person and online), BPAY and Paypal. The index is derived from personal transaction data from NAB platforms (around 2 million transactions per day) and offers a 2-3 week lead on ABS retail trade data. Cashless sales to consumers have been growing much more rapidly than the ABS measure of retail sales in recent years (6.4% yoy in August versus 2.1% yoy), although the gap in growth rates has narrowed (Chart 1). Further convergence is likely as the penetration of online and contactless payment systems reach a limit (reflecting minimum spend requirements for cashless transactions and the existence of a proportion of merchants who deal only in cash).
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (%)					Month-on-month growth (%)				
	Jul-17	Aug-17	Sep-17			Jul-17	Aug-17	Sep-17	
Cashless index (s.a.)*	8.0	6.4	5.5	Cashless i	ndex (s.a.)	0.7	-0.2	0.2	
ABS retail (s.a.)	3.5	2.1	2.1(f)	ABS retail	(s.a.)	-0.2	-0.6	0.6(f)	

Sources: NAB, Australian Bureau of Statistics (ABS). *Data are seasonally adjusted (s.a.) using TRAMO/SEATS with a trading day and Easter adjustment. (f) NAB forecast.





Chart 2: ABS and forecast ABS retail trade data, s.a.



NAB Chief Economist, Alan Oster commented:

"Retail spending appears to have bounced back the month of September, after poor outcomes in both July and August. NAB's Cashless Retail Sales Index shows a rise of 0.2% mom, which suggests an increase in the "official" ABS measure of retail trade of 0.6% in the month.

"This is an encouraging signal, although we note that spending has continued to slow in yearly terms, suggesting we will need to see further improvement in coming months before declaring that severe pressure on retailers has come to a halt. Indeed NAB's Business Monthly Business Survey continued to report negative business conditions for retailers, the weakest of all industry groups."

"The surge in employment growth since March may support retail spending in coming months. Other factors meanwhile may continue to weigh. These include low wages growth, with recent analysis by NAB in its State Economic Handbooks showing that consumer spending has been outpacing labour income growth in nearly all states and territories. This is consistent with the decline in the national savings rate - it is not clear whether this has been voluntary or involuntary. High energy costs and elevated levels of household debt are also legitimate concerns of households at present.

"Weakness in retail sales in nominal (value) terms may also reflect price deflation, or disinflation, for some retail goods, with retailers struggling to pass on cost increases amidst relatively weak consumer demand and cost increases. CPI data for Q3 released in October will give us a better feel for this.

"NAB's index is derived from personal transaction data from NAB platforms (around 2 million transactions per day) and includes all cashless retail spending by consumers using debit and credit cards (both in person and online), BPAY and Paypal. NAB's Cashless Retail Index is reasonably assumed to be representative of aggregate non-cash retail sales in Australia given its large sample size. The average growth rate for NAB's index is stronger than the official ABS measure of retail trade given that it does not capture cash transactions, which is why we use our mapping equations to forecast the official ABS measure of retail trade. RBA research suggests 18% of the value of retail trade occurred via cash in 2016. Over time, the growth rates of the two series are likely to come together."

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Chart 3: Cashless retail sales by industry, s.a.

Chart 5: Cashless retail sales by sub-industry, s.a.



Chart 4: Cashless retail sales by state, s.a.



Chart 6: Cashless retail sales by sub-industry, s.a.





Charts 7 & 8: Cashless sales by industry, seasonally adjusted

Growth in cashless spending growth has been trending down across most retail industries in recent months, with the exception of department stores where the yearly rate of growth has picked up to 2.9% yoy. In contrast, yearly growth in spending has weakened noticeably for household goods, food and clothing & footwear in recent months. Spending at cafes, restaurants & takeaways has also slowed noticeably, although remains strong at 8.1% yoy. Spending at "other retailers" also remains robust (8.8% yoy).



Charts 9 & 10: Cashless sales by state, trend

The pickup in cashless retail sales in the month of September saw some stabilisation in the trend growth rate across states. That said, the pace of spending growth has clearly slowed across all states and territories since April. Trend monthly growth in cashless retail spending remains the fastest in the ACT, followed closely by NSW, Victoria and Queensland which are neck and neck. Cashless retail spending continues to contract in WA.



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APPENDIX: METHODOLOGY AND COMPARISON WITH ABS RETAIL TRADE

The NAB Cashless Retail Sales Index is derived from NAB transactions data that have been assigned from particular merchant codes to retail industries by state. NAB electronic transactions data are based on an average 2 million transactions per day. The data are collected in real time at event record level, which allows significant flexibility to segment the data by time, location and merchant type. Transactions data may include EFTPOS, Credit Card, BPAY, Bank Transfers, Direct Debits and Paypal services where available, and include transactions with Australian and international merchants. Spending includes both online and offline transactions. The data excludes cash withdrawals made during a purchase and purchases made offline in an overseas location.

The data only capture electronic retail transactions (and not those through cash payments), hence it is subject to the changing nature and take-up rate of electronic payment methods relative to cash. Any growth in the overall transaction value may be attributable to either an increased preference towards card-based payments by consumers (such as near-field payment "PayWave"), or a higher level of spending across the economy by consumers, i.e. a pick-up in nominal sales. However, it is currently not possible to differentiate between these effects. Customer spending is based on where the customer lives, which may or may not be where the actual spending activity occurs. Customers without an Australian residential address are excluded.

These estimates are aggregated into national industries by applying to them the state shares of each industry from the ABS retail trade publication. State estimates are aggregated by applying the industry shares of each state from the same source. These adjustments are intended to correct for differences between the incidence of NAB transactions across industries and states when compared with the official ABS data.

The industry and state data have been seasonally adjusted using Tramo-SEATS with a trading day and Easter adjustment. Given the relatively short time frame for the data, this seasonal adjustment process should be regarded as provisional: estimates are likely to change as a longer run of data becomes available, and can be revised from month-to-month given the concurrent process. The trends have been extracted from the same process.

Our aim is to have a data series that is as reflective as possible of retail spend. As such each month we will revise previous data to take into account changes in payment processing such as chargebacks and delayed payments. Given these attributes, typically, larger revisions occur to the most recent months, and diminish as the data ages."

After appropriate weighting and seasonal adjustment, the components of NAB's cashless retail index (food, household goods, clothing & footwear, department stores, other retailing and cafes, restaurants & takeaway) can generate predictions of the corresponding ABS retail trade series. Aggregating these provides a forecast of total ABS retail trade.

The charts show the relationship between the ABS total and NAB Cashless retail sales measures, using monthly seasonally adjusted data, for the main retail industry groups. There are several relatively close relationships with only a small number of 'outliers' (see household goods, clothing & footwear and department stores), but other industries show more mixed results. The sources of these differences are:

- The inclusion of cash transactions in the ABS measure and changes in their share of total transactions. This share may begin to stabilise as the penetration of contactless payment systems reaches a limit reflecting minimum spend requirements for cashless transactions and because of the existence of a proportion of merchants who deal only in cash.
- The NAB data include a larger share of online transactions (7%) than the ABS (3%).
- Changes in NAB's market share of cashless transactions.
- Differences between the seasonality in the ABS and NAB series.

Therefore, the forecasts from the use of the NAB Cashless Retail index should be used with caution.



Comparisons between mapped NAB series and ABS data by retail industry group, s.a. % change m/m

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