# NAB CASHLESS RETAIL SALES INDEX NOVEMBER 2017



## **NAB Group Economics**

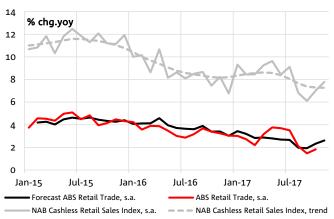
- The NAB Cashless Retail Sales Index shows strong growth in the month of November (1.6% mom). This was boosted by strength in household goods retailing (1.6% mom), particularly the electrical & electronic goods sub-category (+6.1% mom) in the same month that the new iPhone was released. There were also robust increases in spending at department stores, "other retailing" and cafes, restaurants and takeaways.
- Mapping through to the official ABS official measure of retail sales suggests a more moderate increase in November, with our data/equations suggesting a forecast monthly increase of 0.4%. This may be because of divergence between the two series in October, although the NAB series also includes a larger share of online purchases, a difference which may become even more critical in the lead up to Christmas. NAB's Cashless Retail Index does not include cash purchases, which also helps to explain the disparity in the growth rate over time.
- We are likely to see a modest pickup in the yearly pace of growth in the official retail sales (Chart 1). Improvement also evident in NAB's unmapped Cashless Retail Sales index to 7.8% after dipping down to 6.1% in September.
- Looking specifically at the NAB Cashless Retail Sales Index, spending at cafes, restaurants & takeaways remains the fastest growing category (20.5% yoy), with spending at department stores also strong (16.9% yoy). Meanwhile spending on clothing & footwear (1.3% yoy) and household goods (2.4% yoy) has been subdued over the year, despite the pickup in the month of November (Chart 3).
- By state, **NAB's Cashless Retail Index shows spending that is relatively broadly-based across the states** with the exception of WA (1.2% yoy). The ACT is the standout (18.2% yoy), with NSW (8.7%), Victoria (8.4%) and SA (8.0%) broadly neck and neck, and Queensland not too far behind (6.3% 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.

ABS Retail Trade (s.a.) 1.5 1.8			Month-on-month growth (%)		
	Sep-17	Oct-17	Nov-17	Sep-17 Oct-17 Nov-17	
NAB Cashless Index	6.1	7.0	7.8	Cashless Index (s.a.) 0.5 0.6 1.6	
ABS Retail Trade (s.a.)	1.5	1.8		ABS retail (s.a.) 0.1 0.5	
NAB Cashless index mapped to ABS	1.9	2.3	2.6	NAB Cashless index 0.6 0.3 0.4 mapped to ABS	

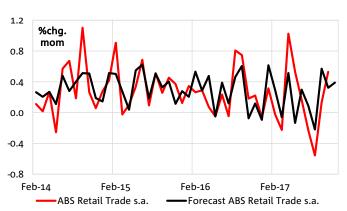
• See comments from NAB's Chief Economist, Alan Oster, on page 2.

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 1: Cashless and total retail sales



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



### NAB Chief Economist, Alan Oster commented:

"There looks to have been a pickup in retail sales growth in November, with NAB's Cashless Retail Sales Index pointing to decent increase. It is possible that sales may have been boosted by the release of the latest iPhone in a different month from previous years, as there was notable strength in the electrical & electronics sub-component. However this does not fully explain the result, with solid increases in other categories such as department stores, "other retailing" and cafes, restaurants & takeaways in the month.

"Our data and mapping techniques imply a monthly increase in the "official" ABS measure of retail sales of 0.4% in November, which would see the yearly pace of growth pick up a little. This is a welcome improvement, although spending growth still remains low by historical standards. This acceleration may see some improvement in business conditions in retail in coming months from current negative levels.

"NAB's Cashless Retail Index is growing at a faster 7.8% rate, although there are a range of differences between the two series. In particular, NAB's measure does not include cash transactions (suggesting further shift towards electronic and card payments), and also includes a higher portion of online transactions (approximately 7% on NAB's data versus 3% for the ABS data). The entry of more large online retailers may further affect the relationship between the two series going forward.

"The recent pickup in the pace of spending appears relatively broad-based across the states. The ACT is the standout, with NSW, Victoria and South Australia also showing healthy growth. Sales growth is a little slower in Queensland, but has picked up to a solid rate. The main exception is WA where retail spending remains weak though thankfully not negative as we saw in the months of August and September.

"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."



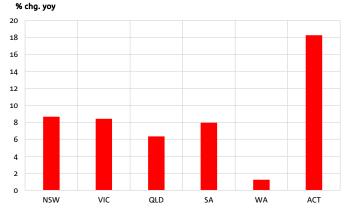
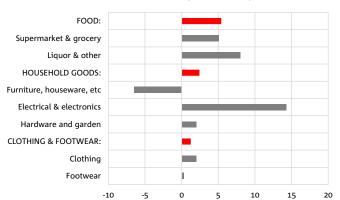


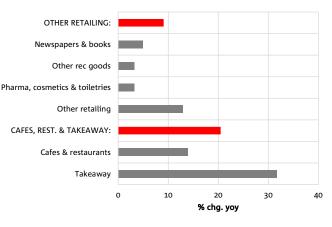
Chart 4: Cashless retail sales by state, s.a.



%chg. yoy

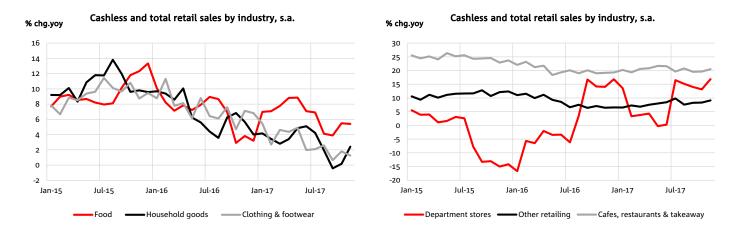
#### Chart 5: Cashless retail sales by sub-industry, s.a.





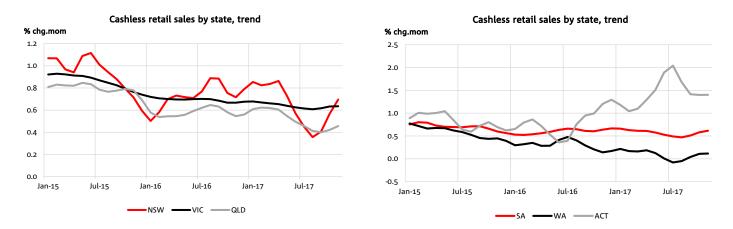
### Charts 7 & 8: Cashless sales by industry, seasonally adjusted

The recent rebound in retail sales growth has been most evident for household goods and department stores retailing, and to a lesser extent "other retailing". Spending at cafes, restaurants & takeaways is by far the fastest growing category, particularly the takeaways component. Within household goods, the fastest growth is clearly in the "electrical & electronics" category.



### Charts 9 & 10: Cashless sales by state, trend

By state, there has been a clear pickup in spending in NSW and to a lesser extent Queensland, SA and WA. The fastest growth in monthly trend terms remains in the ACT, followed by NSW, Victoria and South Australia.



# AUTHORS

Alan Oster, Group Chief Economist, +61 414 444 652, Alan.Oster@nab.com.au Riki Polygenis, Head of Australian Economics, +61 475 986 285, Riki.Polygenis@nab.com.au Brien McDonald, Senior Economist James Glenn, Senior Economist Rob Brooker, Manager – Economic Modelling

# **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.

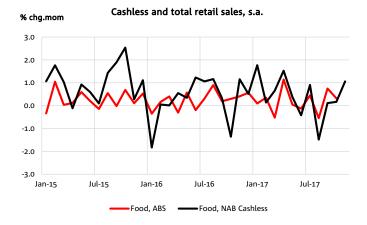
After appropriate weighting and seasonal adjustment, the components of NAB's cashless retail index (food, household goods, clothing & footwear, department stores, other retailing and cafes, restaurants & takeaway) can generate predictions of the corresponding ABS retail trade series. Aggregating these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

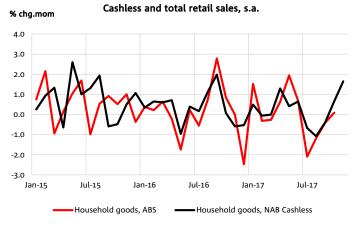
The charts show the relationship between the ABS total and NAB Cashless retail sales measures, using monthly seasonally adjusted data, for the main retail industry groups. There are several relatively close relationships with only a small number of 'outliers' (see household goods, clothing & footwear 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

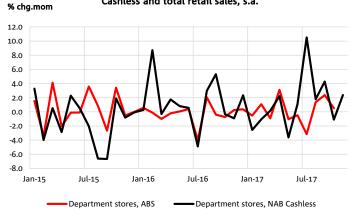


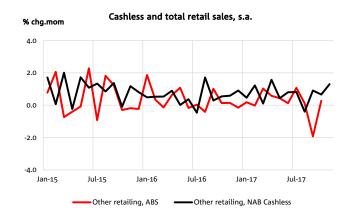




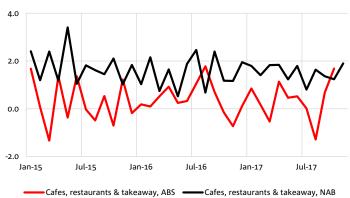
Cashless and total retail sales, s.a.

% chg.mom





Cashless and total retail sales, s.a.



## **Group Economics**

Alan Oster Group Chief Economist +61 3 8634 2927

Jacqui Brand Personal Assistant +61 3 8634 2181

Rob Brooker Manager – Economic Modelling

### Australian Economics and Commodities

Riki Polygenis Head of Australian Economics +(61 3) 8697 9534 + (61) 475 986 285

James Glenn Senior Economist – Australia +(61) 455 052 519

Phin Ziebell Economist – Australia +61 (0) 475 940 662

Amy Li Economist – Australia +(61 3) 8634 1563

### Behavioural & Industry Economics

Dean Pearson Head of Behavioural & Industry Economics +(61 3) 8634 2331

Robert De Iure Senior Economist – Behavioural & Industry Economics +(61 3) 8634 4611

Brien McDonald Senior Economist – Behavioural & Industry Economics +(61 3) 8634 3837

Steven Wu Economist – Behavioural & Industry Economics +(613) 9208 2929

### **International Economics**

Tom Taylor Head of Economics, International +(61 3) 8634 1883

Tony Kelly Senior Economist – International +(61 3) 9208 5049

Gerard Burg Senior Economist – Asia +(61 3) 8634 2788

John Sharma Economist – Sovereign Risk +(61 3) 8634 4514

# **Global Markets Research**

Peter Jolly Global Head of Research +61 2 9237 1406

Ivan Colhoun Chief Economist, Markets +61 2 9237 1836

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