NAB CASHLESS RETAIL SALES INDEX JULY 2017

NAB Group Economics

- The NAB Cashless Retail Sales Index was launched in June 2017 and provides timely proprietary data on a major part of retail spending in Australia.

- The NAB Cashless Retail Sales Index shows that the value of cashless retail spending increased at a yearly rate of **7.3% in July** (in seasonally adjusted terms), broadly unchanged from the previous month (Chart 1). While the increasing popularity of online and contactless payments has seen Cashless Retail outpace the ABS measure of retail sales in recent years (3.8% y/y in June), growth rates have slowed from a yearly peak of over 12% in late 2015.

- Within total cashless retail, the **yearly growth was strongest in household goods (12.1%)** and weakest in department stores (-10.1%) (Chart 3). By state, **yearly growth in cashless retail was strongest in the ACT (8.8%), NSW (8.3%) and Victoria (8.2%), and weakest in WA (2.2%)** (Chart 4).

- The NAB Cashless Retail Sales Index suggests some loss of momentum in June and July, following stronger outcomes in April and May. Based on monthly movements in the NAB cashless spending index and our data mapping techniques, **ABS retail trade is expected to increase slightly in seasonally adjusted terms in July.** (See table below and appendix.)

- 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 (Chart 1). Growth rates between the NAB and ABS retail sales measures are likely to converge at some point as the penetration of contactless payment systems reaches a limit (reflecting minimum spend requirements for cashless transactions and the existence of a proportion of merchants who deal only in cash).

Year-on-year growth (%)			
	May-17	Jun-17	Jul-17
Cashless index (s.a.)*	8.6	7.4	7.3
Online index (n.s.a.)^	8.2	7.6	N/A
ABS retail (s.a.)	3.8	3.8	4.0(f)

Month-on-month growth (%)			
	May-17	Jun-17	Jul-17
Cashless index (s.a.)	0.7	0.2	0.4
Online index (s.a.)	1.4	0.7	N/A
ABS retail (s.a.)	0.6	0.3	0.1(f)

Sources: NAB, Quantium, Australian Bureau of Statistics (ABS). *Data are seasonally adjusted (s.a.) using TRAMO/SEATS with a trading day and Easter adjustment. ^For online data, see the NAB Online Retail Sales Index, produced in conjunction with Quantium. (f) NAB forecast.

Chart 1: Cashless and total retail sales
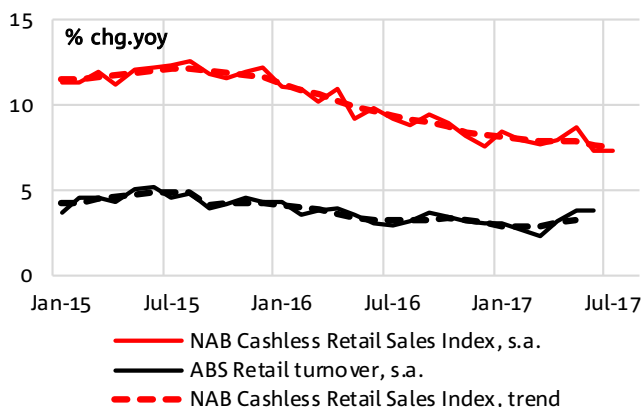
Chart 2: ABS and forecast ABS retail trade data, s.a.
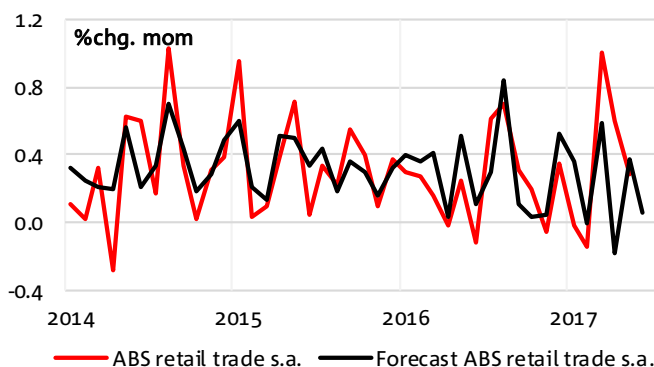
NAB Chief Economist, Alan Oster commented:

"The recently launched NAB Cashless Retail Sales Index is designed to capture the value of retail sales turnover through "cashless" means. The NAB Cashless Retail Sales Index captures transactions passing through NAB's payments systems, and given the sample size - an average of two million transactions per day - is reasonably judged to be representative of the national aggregate. Recent RBA estimates for 2016 estimated that only 18% of the value of consumer payments, and 37% of the number of consumer payments are now done in cash, highlighting the importance payment methods such as credit and debit cards, and BPAY and Paypal transactions.

"The NAB Cashless Retail Sales Index shows a moderation in the value of retail sales growth in June and July. This had followed an encouraging pick up in April and May, which had provided hope that stronger employment growth in early 2017 was translating into a lift in sales growth. Unfortunately however, these stronger rates of growth have not been sustained. Our raw data and mapping equations also anticipate a slowdown in the ABS's measure of retail sales in July. Meanwhile, NAB's measure of business conditions in the retail sector softened considerably in July, with the sector continuing to face the challenges of strong competition, margin pressure and limited inflation which is weighing on the value of sales growth in dollar terms.

"The slowdown in recent months has been most evident in food as well as cafes & restaurants. These are industry groups which have generally outpaced broader retail sales in recent years, and we will watch future outcomes slowly for further signs of weakness. Department stores are the only broad industry category showing declines in yearly terms, with the sector more heavily weighed down by structural changes in the industry.

"By state, the pattern of growth remains consistent with the mining/non-mining divide evident in other indicators. The non-mining states of the ACT, NSW and Victoria are experiencing the strongest growth in yearly terms, while WA has weakened further behind other states. A modest slowing has also been evident in NSW in recent months.

"Whether or not this recent slowdown will continue in coming months is unclear. While the increase in the minimum wage of 3.3% will support the income of a large portion of workers from July, and forward-looking indicators of employment remain strong, discretionary spending may suffer as energy price rises start to bite. Over a longer period, there are a range of factors which will likely constrain spending by consumers on retail goods and services, including low wages growth and high household debt levels. Meanwhile, high house prices are a double edged sword – supportive of consumer spending those who are already in the market via the "wealth effect" (even if this has become more muted), but constraining of consumer spending for those saving for deposit."
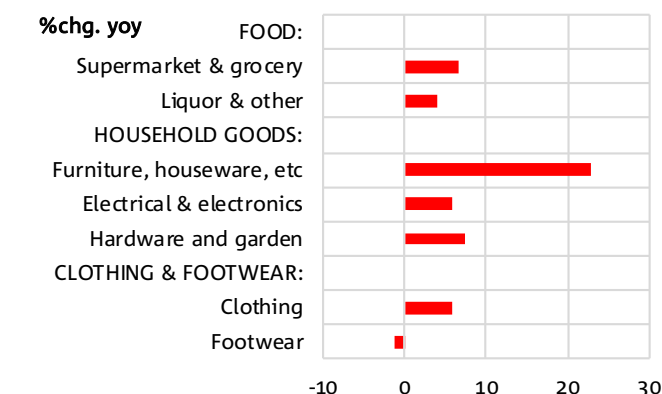
Chart 3: Cashless retail sales by industry, s.a.

Chart 4: Cashless retail sales by state, s.a.
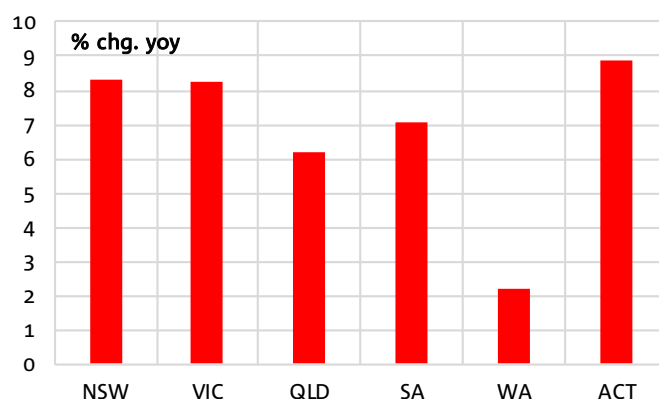
**Chart 5: Cashless retail sales by sub-industry, s.a.**

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

Charts 7 & 8: Cashless sales by industry, trend

Cashless spending growth has been trending down across most retail industries over the past two and a half years. There has been a notable bounce in yearly spending growth for household goods in recent months, while growth for 'other retailing' (pharmaceuticals, cosmetics, newspapers and books, and 'other retailing') has picked up pace and is now the second-fastest industry grouping, ahead of cafes, restaurants & takeaways.
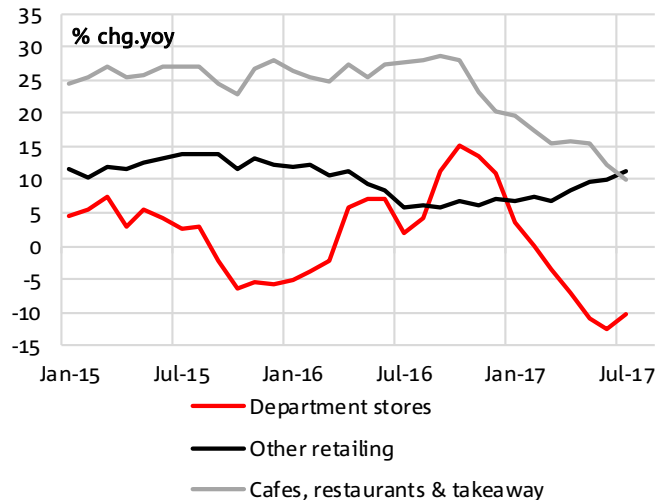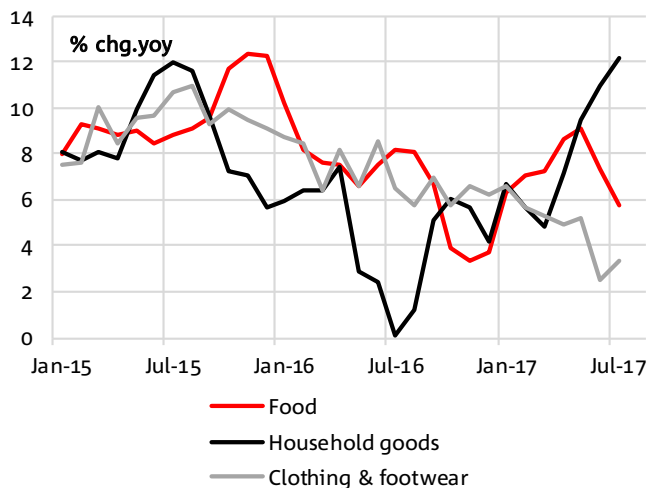
Charts 9 & 10: Cashless sales by state, trend

Growth in cashless retail sales has slowed across all major states in recent months. The south-eastern non-mining states of NSW, Victoria and the ACT continue to outpace the rest of the country, although there has been a more notable slowdown in NSW in recent months. In WA, trend monthly growth has continued to deteriorate in 2017, as the broader effects of lower mining investment activity continue to percolate through the state's economy.
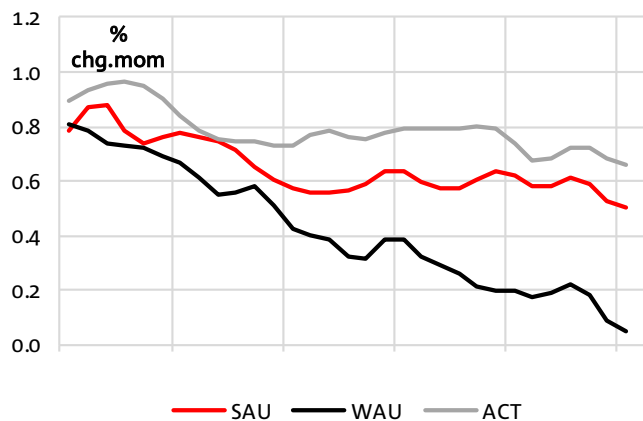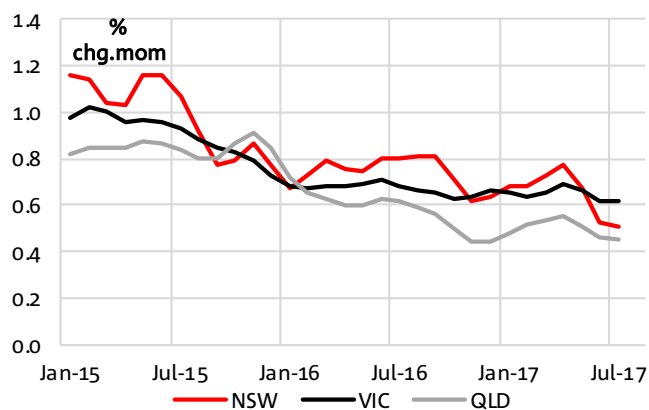
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APPENDIX: METHODOLOGY AND COMPARISON WITH ABS RETAIL TRADE

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. "
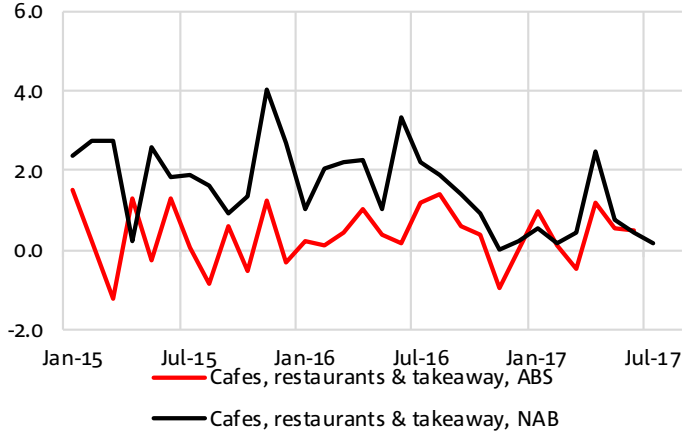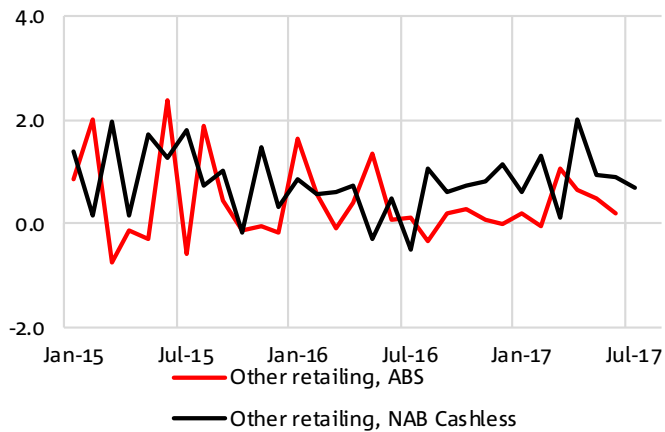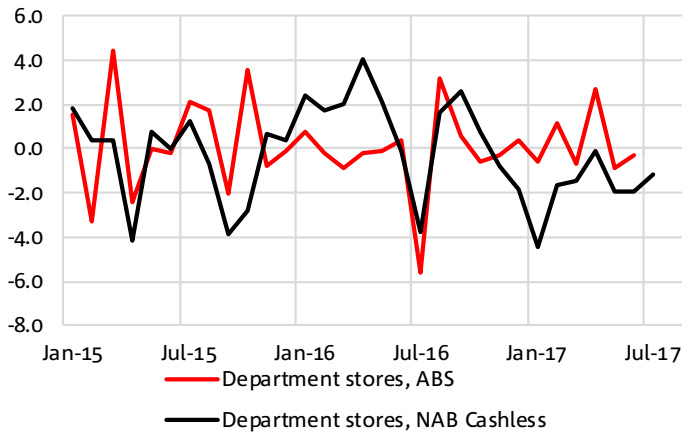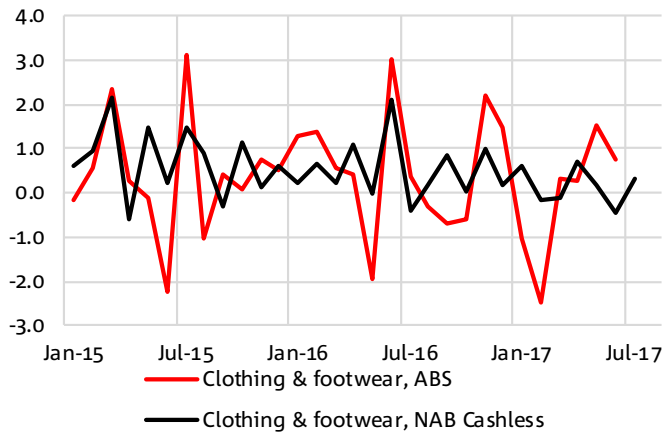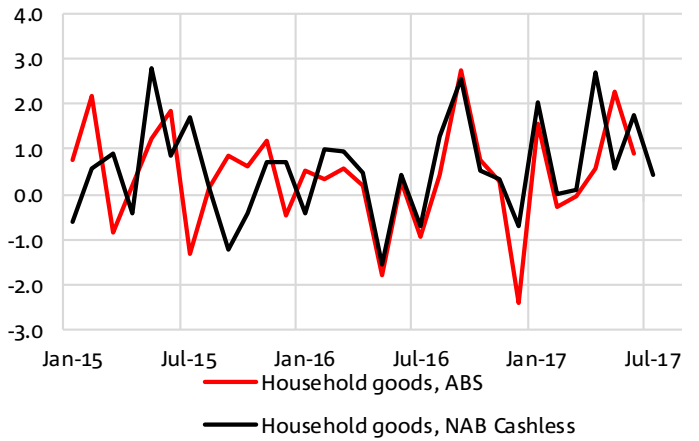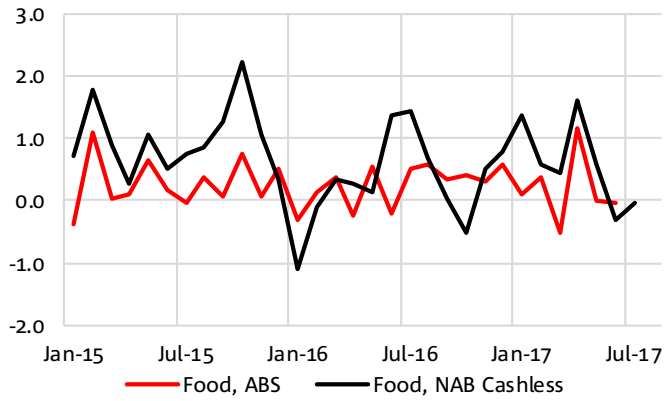
After appropriate weighting and seasonal adjustment, the components of NAB's cashless retail index (food, household goods, clothing & footwear, department stores, other retailing and cafes, restaurants & takeaway) can generate predictions of the corresponding ABS retail trade series. Aggregating these 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 NAB and ABS data by retail industry group, s.a. % change m/m

Food, ABS — Food, NAB Cashless

Household goods, ABS — Household goods, NAB Cashless

Clothing & footwear, ABS — Clothing & footwear, NAB Cashless

Department stores, ABS — Department stores, NAB Cashless

Other retailing, ABS — Other retailing, NAB Cashless

Cafes, restaurants & takeaway, ABS — Cafes, restaurants & takeaway, NAB

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