NAB CASHLESS RETAIL SALES INDEX MAY 2018

NAB Group Economics

- **The NAB Cashless Retail Sales Index gained 0.8% in May on a month-on-month basis, following a flat read in April (revised from -0.6%).** Results were stronger for four of the six major categories: food, household goods, clothing & footwear and department stores. Meanwhile other retailing turned negative and while cafes, restaurants & takeaways rose in the month, growth moderated. **Our data mapping suggests that the official ABS measure of retail sales will be flat in May following the stronger-than-expected 0.4% in April.** Our April estimate was revised this month, although remains well below the ABS April print.

- **The data remains more encouraging on a year ended basis, with the NAB Cashless Retail Sales Index up 10.3% in May,** although this is potentially distorted by special factors from late-2017 (for example Black Friday sales and Apple's Iphone x).

- **Year-on-year growth remained positive for all six NAB Cashless Retail Index major industry groupings.** Cafes, restaurants & takeaways remains the fastest growing category (14.9% y/y), although the pace of growth has moderated a little recently. Department stores was the next strongest category at 10.7% y/y, followed by household goods (10.1%), food (9.3%) other retailing (9.3%) and clothing & footwear (7.7%). For more detail see Charts 3, 7 & 8.

- **Retail spending patterns continue to converge across Australia,** with an only 2.0 ppt difference between the fastest growing state (the Australian Capital Territory) and the weakest (Western Australia) – see chart 4. The average difference between the highest and lowest state growth rates since 2015 has been around 4.8 ppts.

- **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. Likely reflecting the increasing popularity of online and contactless payments, the NAB Cashless Retail Index has continued to outpace the ABS measure of retail sales (10.2% y/y versus 2.6% y/y in April).

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

Year-on-year growth (%)			
	Mar-18	Apr-18	May-18
NAB Cashless Index	12.1	10.2	10.3
ABS Retail Trade (s.a.)	3.2	2.6	--
NAB ABS Retail Trade forecast	4.7	3.8	4.0

Month-on-month growth (%)			
	Mar-18	Apr-18	May-18
Cashless Index (s.a.)	1.5	0.0	0.8
ABS retail Trade (s.a.)	0.0	0.4	--
NAB ABS Retail Trade forecast	0.4	-0.1	0.0

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

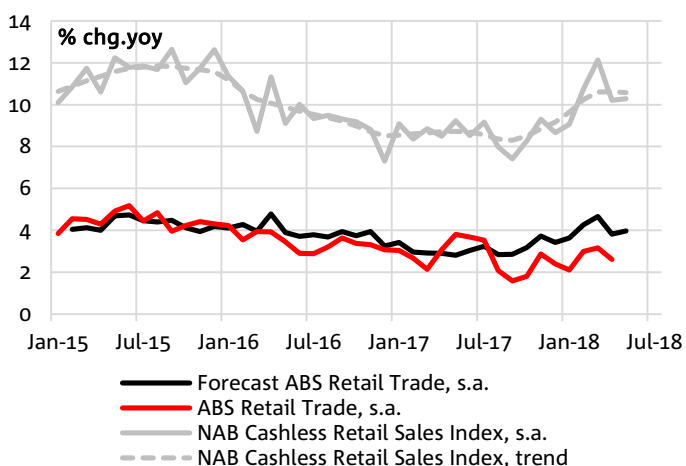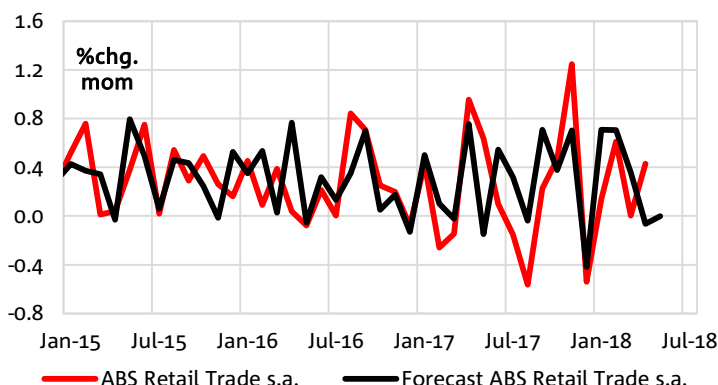### Chart 1: Cashless and total retail sales

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

NAB Chief Economist, Alan Oster commented:

The NAB Cashless Retail Sales Index growth improved in May (0.8% m/m) after the weak outcome last month. However, our mapping of the "official" ABS measure presents a less positive picture, suggesting a flat result for retail sales in May (0.0% m/m).

While the monthly data are volatile, our latest Monthly Business Survey also showed a pull-back in overall business conditions in May after reaching historical highs in April. Retail remains the weakest sector in the survey, although it is positive in trend terms, if only just.

The National Accounts also reported soft consumption growth in Q1, reinforcing our caution about the outlook for the consumer. This reflects several headwinds including rising energy costs, low wages growth, stalling growth in housing wealth (with house prices falling in some markets) and high debt levels.

Month-on-month results were mixed across the six sectors. Food, household goods, clothing & footwear and department stores strengthened, while other retailing turned negative and growth moderated for cafes, restaurants & takeaways. Over the year, growth remains positive across all six sectors. Overall, the NAB Cashless Retail Sales Index was up 10.3% y/y in May.

Cashless retail sales growth has shown signs of convergence across Australia. While the Australian Capital Territory is the strongest performer (+11.0% y/y), the weakest, Western Australia, is only 2.0 percentage points behind (+9.0% y/y). Cashless retail sales in Western Australia are now growing roughly twice as fast the same time in 2017 on a year on year basis

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.

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

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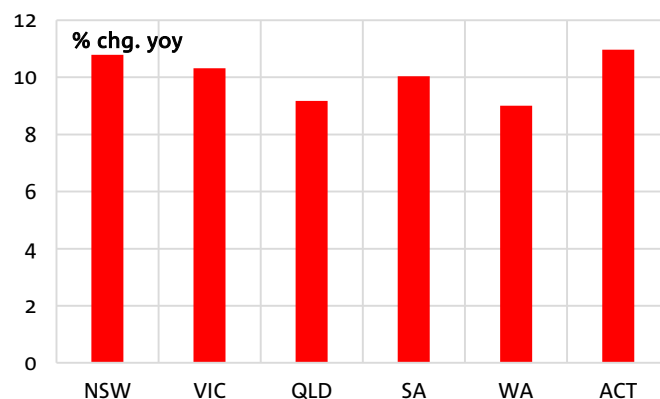

Chart 5: Cashless retail sales by sub-industry, s.a.
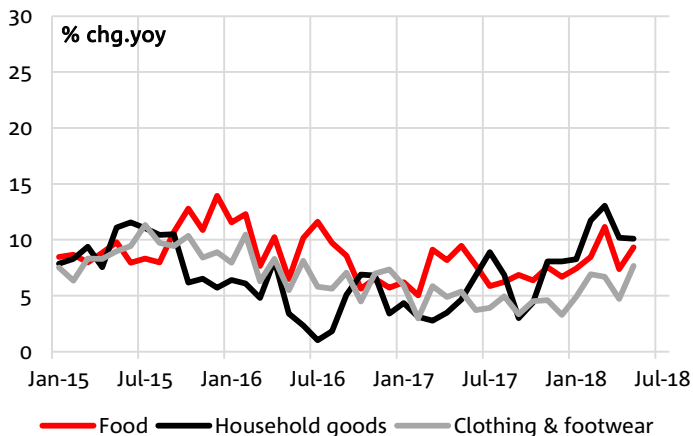

Chart 6: Cashless retail sales by sub-industry, s.a.
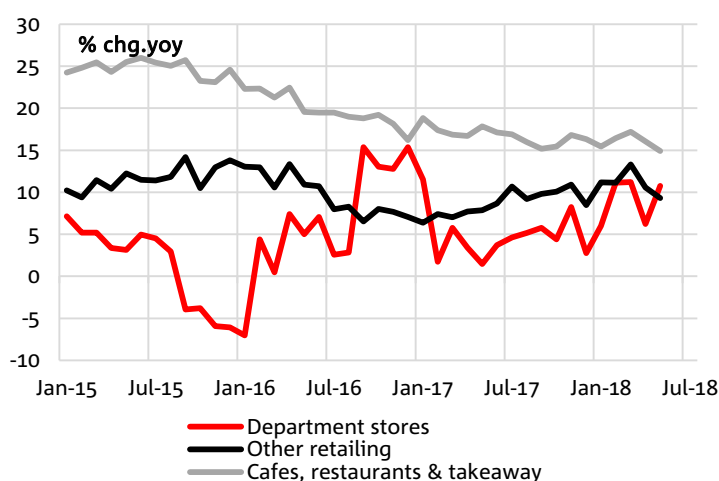

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Charts 7 & 8: Cashless sales by industry, seasonally adjusted

Year on year growth remained positive for all six NAB Cashless Retail Index major industry groupings, although the growth rate slowed across half of them. Cafes, restaurants & takeaways remains the fastest growing category (14.9% y/y), although the pace of growth has moderated a little recently. The department stores category was the next strongest category at 10.7% y/y, followed by followed by household goods (10.1%), food (9.3%) other retailing (9.3%) and clothing & footwear (7.7%).

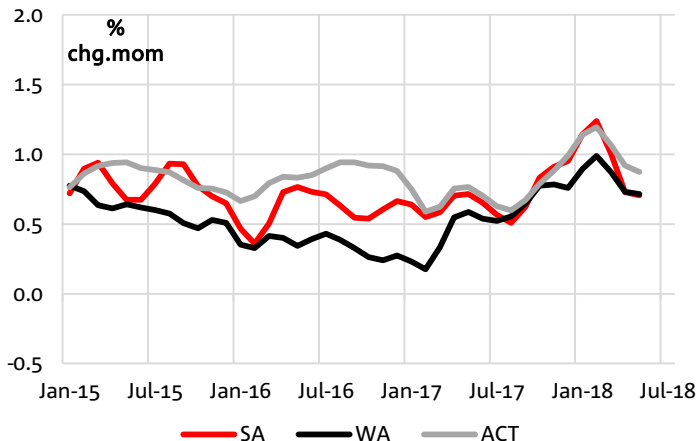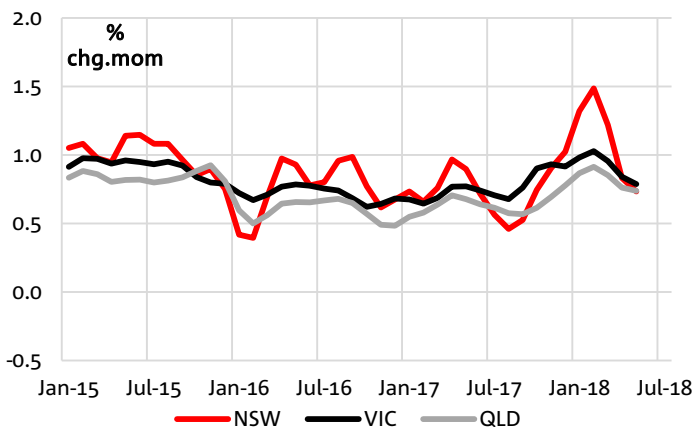Cashless and total retail sales by industry, s.a.

Cashless and total retail sales by industry, s.a.

Charts 9 & 10: Cashless sales by state, trend

Retail spending patterns continue to converge across Australia. The ACT is fastest growing (+11.0% y/y), followed by New South Wales (+10.8%), Victoria (10.3%), South Australia (+10.0%), Queensland (+9.2%) and Western Australia (+9.0%).

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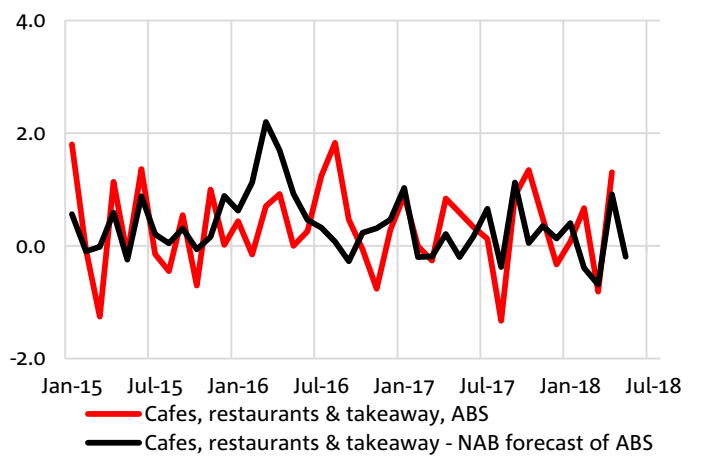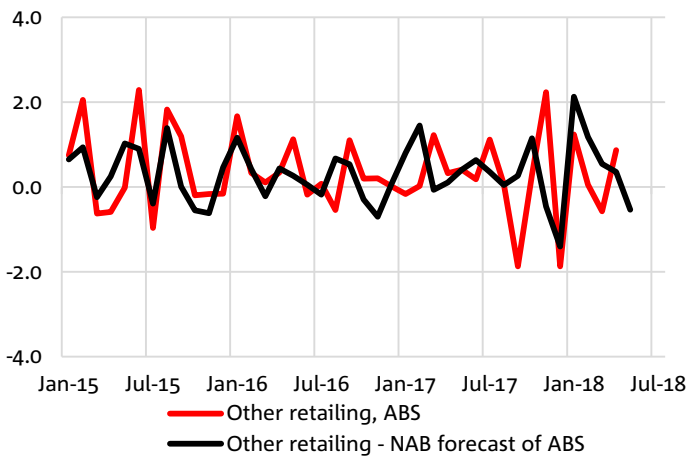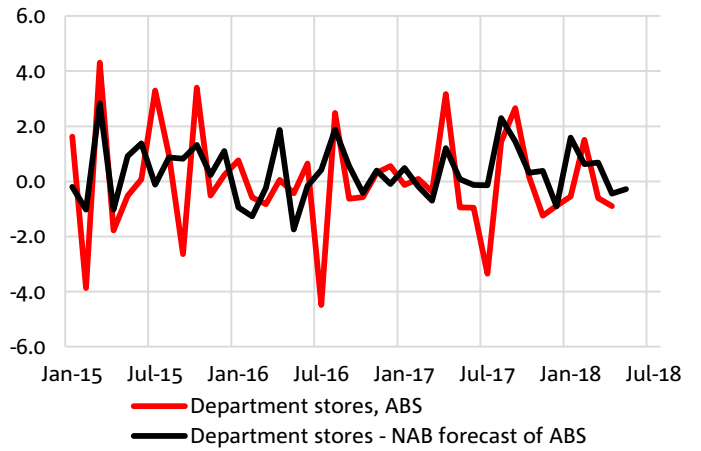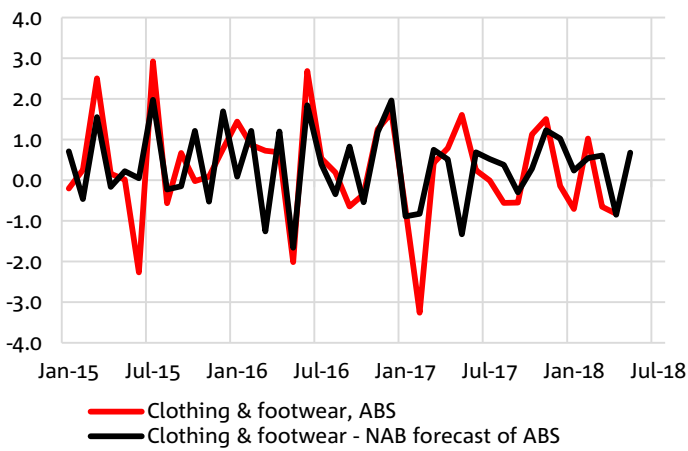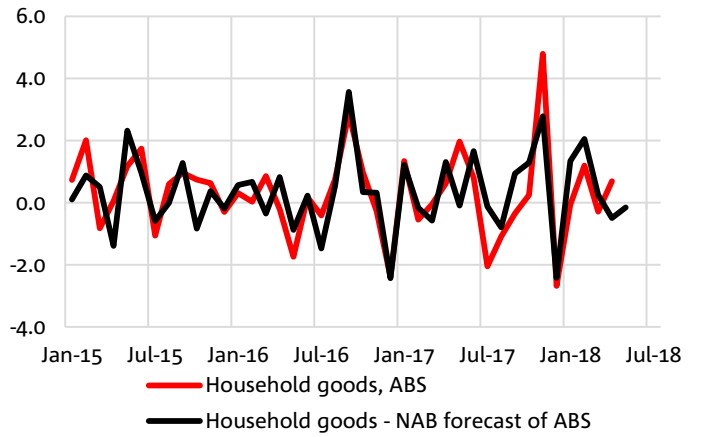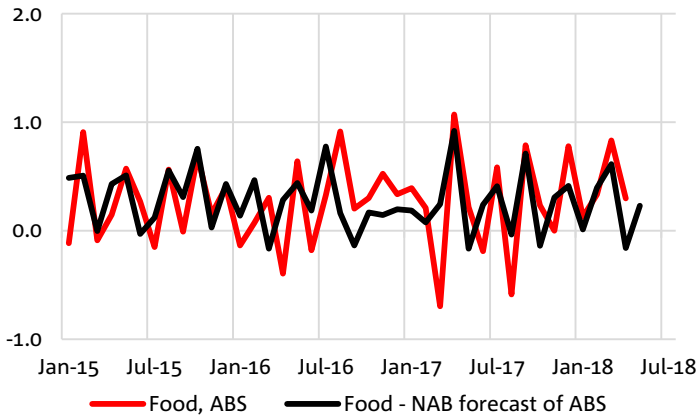
After appropriate weighting and seasonal adjustment, the components of NAB's cashless retail index (food, household goods, clothing & footwear, department stores, other retailing and cafes, restaurants & takeaway) can generate predictions of the corresponding ABS retail trade series. Aggregating these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

The charts in the appendix show the relationship between the ABS total and NAB Cashless retail sales measures mapped to the ABS using monthly seasonally adjusted data, for the main retail industry groups. The sources of difference between the two series 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

Food, ABS — Food - NAB forecast of ABS

Household goods, ABS — Household goods - NAB forecast of ABS

Clothing & footwear, ABS — Clothing & footwear - NAB forecast of ABS

Department stores, ABS — Department stores - NAB forecast of ABS

Other retailing, ABS — Other retailing - NAB forecast of ABS

Cafes, restaurants & takeaway, ABS — Cafes, restaurants & takeaway - NAB forecast of ABS

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