



# NAB ONLINE RETAIL SALES INDEX MAY 2022

## NAB Group Economics

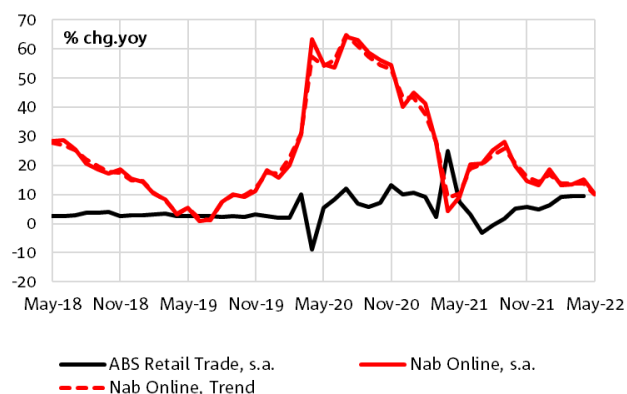
- On a month-on-month, seasonally adjusted basis, growth for the NAB Online Retail Sales Index contracted again in May (-0.9%), following on from a significantly revised contraction in April (-1.3%).
- In year-on-year terms, the NAB Online Retail Sales Index continued to grow, albeit slowing in May (10.4% y/y).
- By category, results were somewhat mixed this month. Department stores continued to grow, and fashion returned to growth, while large sales category grocery and liquor, which recorded growth in April, contracted the most in May. In year-on-year terms, for grocery and liquor, growth however has remained double digit, albeit slowing. The largest sales category, homewares and appliances, recorded a smaller contraction than the overall index, but in year-on-year terms, is one of the slowest after strong growth over the prior two years. For more detail, see charts 3, 5, 7 & 8 and table 3 below.
- All states, except QLD, recorded a contraction in growth in month-on-month terms in May, with last month's growth leader, SA, contracting more than the average. In year-on-year terms, ACT leads growth, with QLD leading the larger sales states. See charts 4, 6, 9-14, and table 3 for more detail.
- The contraction in growth deteriorated for regional areas in the month, while metro areas improved to record a smaller contraction. However, this headline result was influenced by a significant decline in SA regional sales in May, mostly reversing the gain for the same area in April. In year-on-year terms, growth in metro areas was slightly faster, with NSW and QLD contributing heavily to the result. See Charts 15 and 16 for more detail.
- The contraction in growth was larger in May for international retailers, with domestic improving slightly, albeit still contracting. Fashion, department stores, and personal and recreational goods contributed heavily to the monthly result for international. Over the year, domestic retailers continue to outpace international. See charts 13 and 14, and table 4 for category growth and share.
- NAB estimates that in the 12 months to May, Australians spent \$55.96 billion on online retail, a level that is around 14.7% of the total retail trade estimate (April 2022, Series 8501, Australian Bureau of Statistics), and about 16.6% higher than the 12 months to May 2021.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

	Year-on-year growth (% s.a.)		
	Mar-22	Apr-22	May-22
NAB Online Index	13.6	15.1	10.4
ABS Traditional Retail	9.4	9.6	-

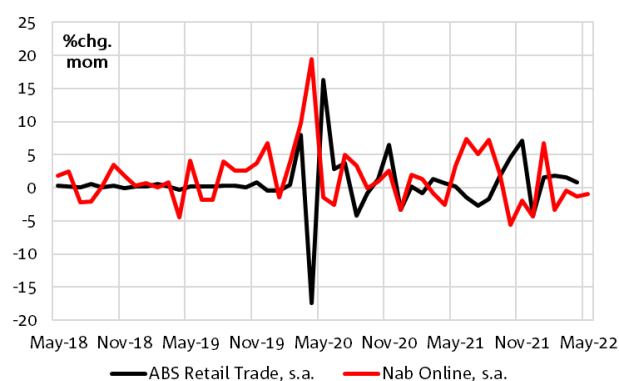
	Month-on-month growth (% s.a.)		
	Mar-22	Apr-22	May-22
NAB Online Index	-0.4	-1.3	-0.9
ABS Traditional Retail	1.6	0.9	-

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

**Chart 1: Online retail sales and ABS retail sales**



**Chart 2: NAB Online retail trade data (mom, s.a.)**



**NAB Chief Economist, Alan Oster commented:**

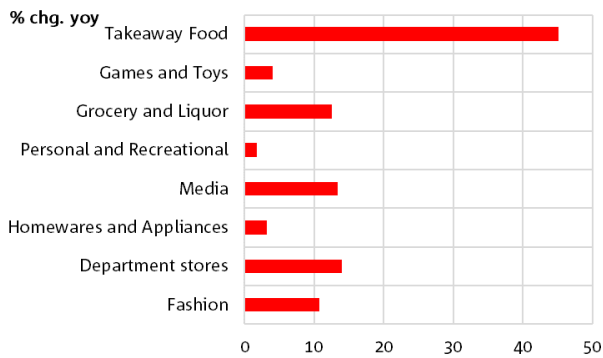
In month-on-month terms, our NAB Online Retail Sales Index contracted again in May. Apart from the omicron induced spike in January, the monthly change has generally been negative since October. This coincided with the ending of lockdowns in the larger states, supporting the broader rebound in instore retail sales. In year-on-year terms our series remains positive, albeit slowing. This compares favourably with some published overseas series. The UK measure (BRC), for example, indicates UK online retail sales contracted again in year-on-year terms.

Our broader measure of retail trade, the NAB Cashless Retail Index, and our weekly monitor, suggests spending growth is beginning to soften. It is likely that inflationary pressures and concerns over the future direction of borrowing costs are beginning to weigh on the consumer.

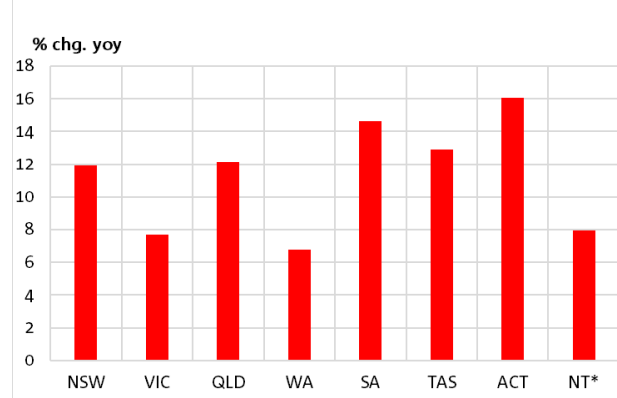
For online retail, looking beyond the monthly volatility, what we observed in the past twelve months is the strong contribution to the index made by department stores, grocery and liquor, and takeaway food. These three categories make up about 40% of the index, but have contributed about 60% of the growth over the past year. In contrast, largest sales share category, homewares and appliances, has contributed much less to growth than its proportion of the index, while other categories like fashion have been on par.

This month in the heat map section, we take a look at the homewares and appliances category, and the change in growth compared to the pre-pandemic period.

**Chart 3: Online retail sales by category, yoy s.a.**



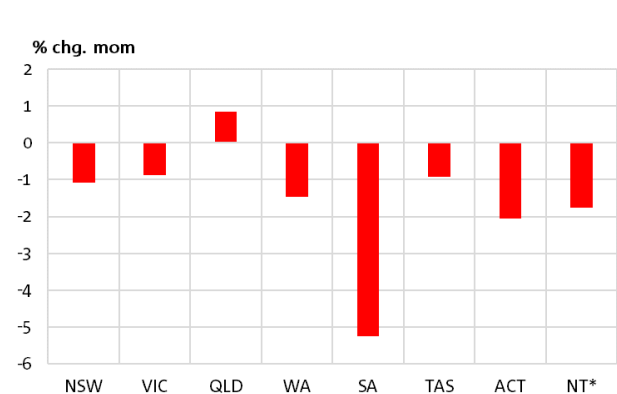
**Chart 4: Online retail sales by state, yoy s.a.**



**Chart 5: Online retail sales by category, mom s.a.**

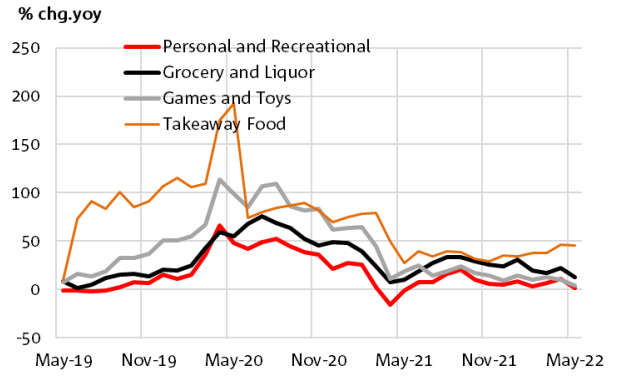
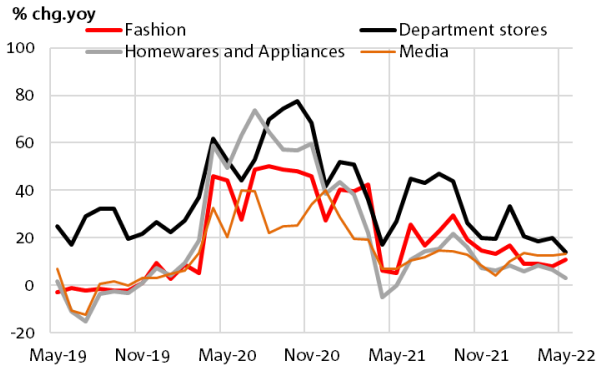


**Chart 6: Online retail sales by state, mom s.a.**

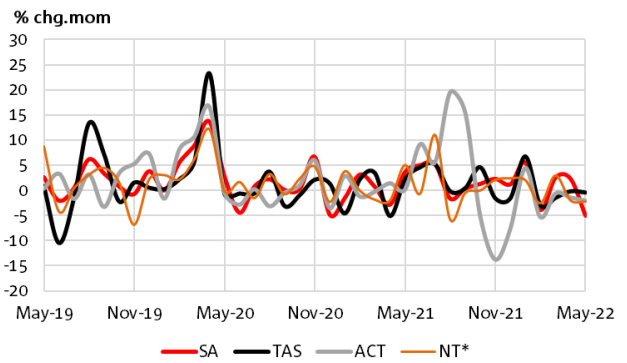
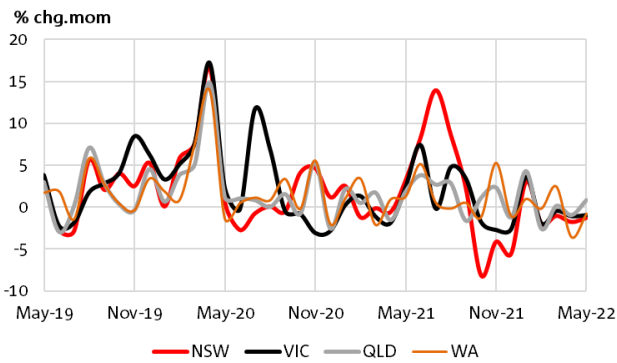


\* Note that the series representing Northern Territory is highly variable and should be used with caution.

Charts 7 & 8: Online sales by category, seasonally adjusted

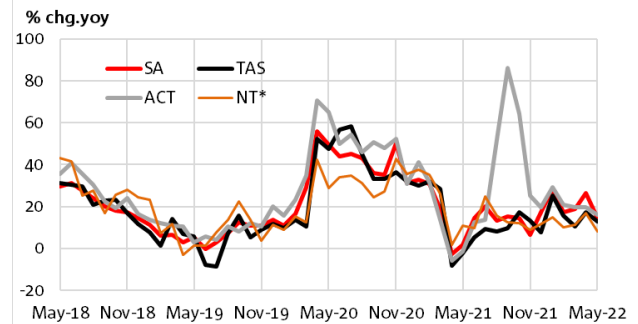
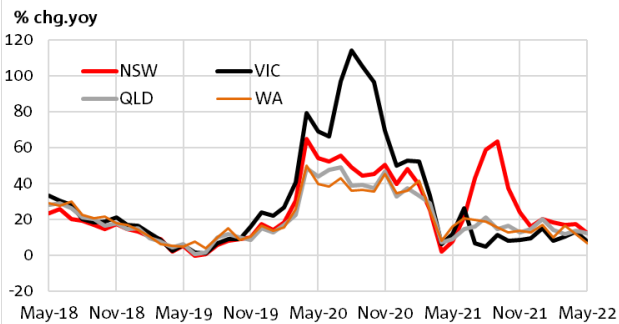


Charts 9 & 10: Online sales by state, trend



\*Note that the series representing Northern Territory is highly variable and should be used with caution.

Charts 11 & 12: Online sales by state, yoy, s.a.



Charts 13 & 14: Online sales by merchant location

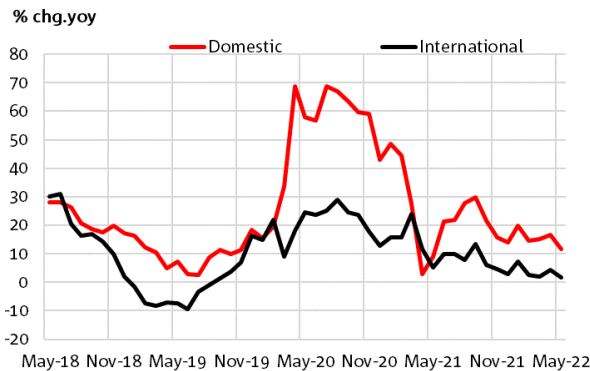
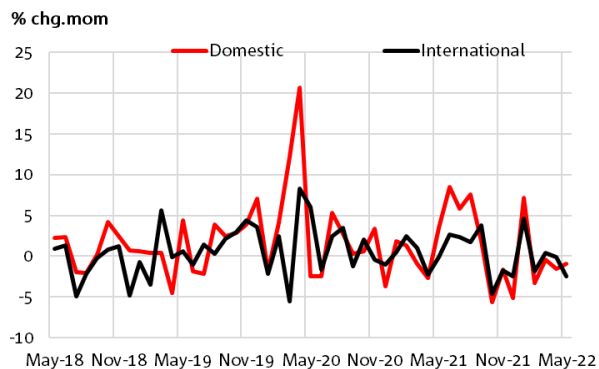


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	-3.4	-1.0	-2.2	-1.4	1.5	-2.6	0.3	-8.6	-2.1
NSW	0.5	0.7	-0.5	-2.8	0.5	-4.4	-0.8	-2.8	-1.1
NT	8.4	9.0	-17.9	-9.0	-6.7	0.5	7.3	-3.8	-1.8
QLD	3.4	2.3	3.2	-1.2	-2.1	-1.8	-2.3	3.7	0.8
SA	4.4	2.4	-17.7	0.7	-3.9	-4.4	-4.0	-5.8	-5.3
TAS	9.7	-0.7	3.8	-5.0	-1.0	-4.6	-18.3	3.2	-0.9
VIC	2.7	0.6	0.4	1.3	0.1	-3.6	-2.7	-7.4	-0.9
WA	-0.5	-2.0	-0.2	2.4	-4.3	-1.4	-6.4	1.5	-1.5
Total	1.9	0.9	-0.4	-0.6	-0.8	-3.3	-2.5	-3.1	-0.9

Table 4: Online sales by category and merchant location- Domestic, International (Int'l)

%	Monthly growth – Domestic	Monthly growth – Int'l.	Annual growth – Domestic	Annual growth – Int'l.	Domestic Share of Category Spend	Int'l Share of Category Spend	Overall Category Spend Share
Fashion	2.8	-2.1	10.3	10.2	83.8	16.2	10.9
Department stores	1.6	-4.3	16.1	-6.1	91.8	8.2	16.8
Homewares and appliances	-0.2	-4.6	4.4	-7.1	96.5	3.5	22.8
Media	-0.9	-2.5	15.0	-5.1	91.1	8.9	6.3
Personal and Recreational	-0.7	-1.7	2.4	-4.3	89.8	10.2	11.8
Grocery and Liquor	-3.6	2.2	12.7	26.0	96.9	3.1	16.0
Games and Toys	-3.5	-0.8	5.8	0.0	83.4	16.6	8.8
Takeaway Food	-3.4	-1.5	43.3	138.8	99.3	0.7	6.7
All categories	-0.9	-2.2	11.4	1.3	92.3	7.7	100

## METROPOLITAN AND REGIONAL SPEND

Chart 15: Online retail sales growth by region, yoy s.a.

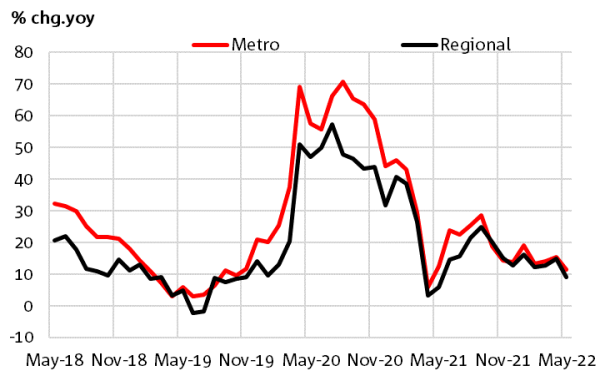
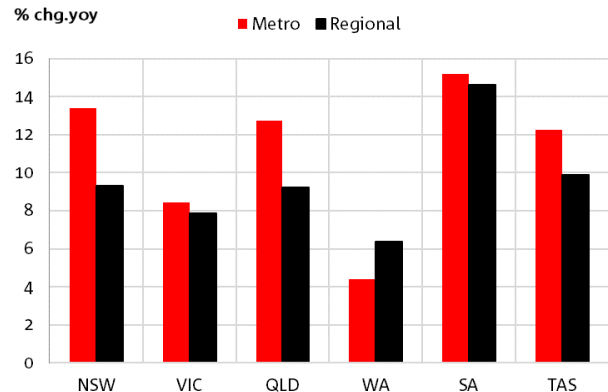
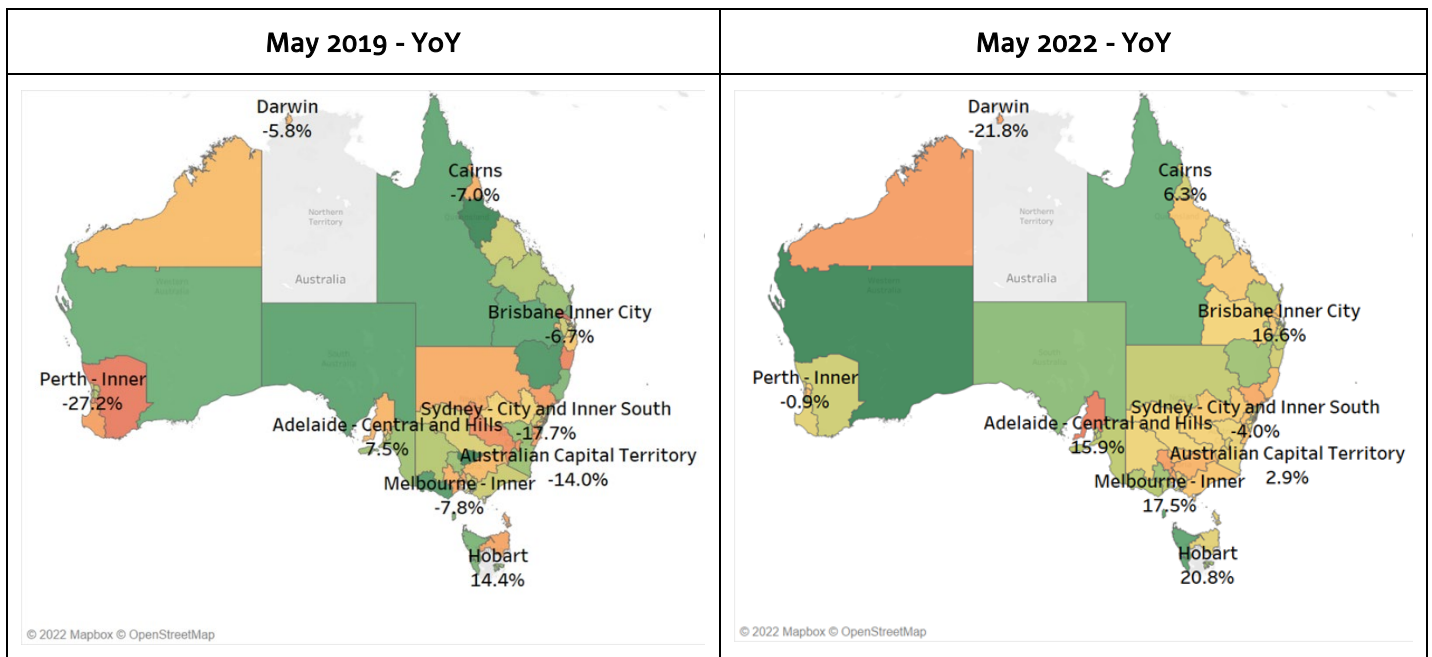


Chart 16: Online retail sales growth by state region, yoy s.a.



## A HEATMAP VIEW OF SPEND GROWTH – HOMEWARES AND APPLIANCES - YEAR ON YEAR, BY STATISTICAL AREA (SA4)

This month we look at the change in online spend for homewares and appliances, by ABS statistical area (SA4). The homewares and appliances category includes sectors like electrical and electronic goods, furniture, floor coverings, houseware and hardware, manchester, and garden supplies. The growth comparison here is May 2019 relative to the year prior, and May 2022 relative to May 2021 (i.e. year-on-year comparisons). In May 2019, growth for the index (+5.4% yoy) followed a period of double-digit growth, with homewares and appliances (+1.6%) at a pace below the overall. The map shows that growth for this category in May 2019 was slow in most capital city areas, while growth was recorded in many regional areas. In 2022, year-on-year growth is higher for the category (3.7%), but is far more mixed, with some major capital areas contracting, and others recording strong growth. While not shown, the data also indicates that the average spend per transaction across the country is now about \$122.90 more than pre-pandemic, although volumes are lower. This may indicate price increases, higher value goods, or more items purchased in each transaction.



## APPENDIX: METHODOLOGY

The NAB Online Retail Sales Index is now sourced in-house and is produced by Group Economics. We have made some significant changes to the NAB online series. Importantly, we have merged SME and Corporate Online into a single index, and provide more detail by region and industry on a monthly basis.

It is derived from NAB transactions data that have been assigned from particular merchant codes to retail industries by state. To keep the series reasonably consistent with past series, we have left these category descriptions broadly unchanged, albeit we now include new entrants to the Australian market. Against that, we have however removed the standalone previously reported category of 'Daily Deals', as this category was considerably volatile and caused statistical issues with indirect seasonal adjustment.

The NAB Online Retail Sales Index measures all Online Retail spending by consumers using various electronic payment methods such as credit cards, BPAY, and PayPal. We have made adjustments for where merchants appear to be wholesaling goods as opposed for final household consumption, and also incorporate new standards involving purchases using stored customer details. The index is derived from personal transaction data from NAB platforms and is scaled up to be representative of the economy by using scalars including ABS Estimated Resident Population, and RBA payments data.

NAB electronic transactions data for the compilation of this series is collected in real time at event record level, which allows significant flexibility to segment the data by age, time, location and merchant type. In future months, we plan to expand the data provided from the series as we bed-in acceptable seasonal adjustment factors for the new series. Transactions included in these data may incorporate purchases by Card, BPAY, Bank Transfers, Direct Debits and PayPal services where available, and include transactions with Australian and international merchants. Spending represented here includes transactions we have identified as online. NAB's estimate of the online retail market is larger than that of the official ABS measure of Online retail trade as it covers businesses that may not be within the remit of the ABS business register, such as overseas online retailers.

In the previously published series, we were using online retail sales by merchants with turnover greater than \$2.5m ('Corporate') as a proxy for online sales growth of the whole online market. This was due to the shorter time series of the previous market estimate and associated seasonal adjustment issues. With the new extract, we now have sufficient time series, and the growth rates represented are for the total market – i.e. Corporate and SME combined in a single series.

The data captures electronic retail online transactions and is therefore subject to the changing nature and take-up rate of electronic payment methods. Hence, change in growth in the overall transaction value may be attributable to either an increased preference towards a payment type by consumers (such as buy now pay later schemes), or a change in the level of spending across the economy by consumers, i.e. a pick-up in nominal online sales. We continue to work to isolate 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 developed from transaction micro level data are then aggregated to higher level categories based on transaction attributes. The data is made representative of national sales activity by applying both demographic attributes to customer location using the most recent ABS Estimated Resident Population, and comparing NAB transaction data to RBA payments system data. Changes in these data is reflected in the NORSI market size estimate timeseries.

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 online 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, but the latter effect cannot be excluded.

Our data differs to that of the ABS series as the NAB series covers a broader spectrum of online retailers – overseas merchants selling to Australian residents for example, and categories that substitute for previously retail purchased goods. Categories such as music and book retailing, and electronic games form part of the current online estimate. These are now substitutes for what may have been purchased in-store, but are now provided by online media streaming companies. While these may not fit the strict retail trade definition, our data reveals that they are increasingly being used by customers who previously purchased media in-store. We incorporate these companies into our estimate of online retail sales.

As part of the continual improvement of the series, this month we have revised our total market estimates. We have identified and removed potential wholesale trade transactions made on personal accounts. We have also identified more transactions that are made using a 'stored credentials' technique of online purchases. This technique is increasing in popularity as consumers opt for convenience especially with purchases made using mobile apps. Finally, in March 2018 the RBA made changes to its Payments System Data which we use as an input into our estimate of online total market size. These revisions are retrofitted to the series history.

We have also added a comparison based on metropolitan and regional areas. The definition of these geographical areas is based on the ABS geographical concordance tables, specifically the Greater Capital City Statistical Areas (GCCSAs).

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