



NAB ONLINE RETAIL SALES INDEX FEBRUARY 2022

NAB Group Economics

- Growth for the NAB Online Retail Sales Index contracted in February (-3.5%), following rapid growth in January (7.2%), on a month-on-month, seasonally adjusted basis.
- In year-on-year terms, the NAB Online Retail Sales Index continued to grow, albeit slowing in February (13.4% y/y).
- Takeaway food was the only category to record growth in month-on-month terms in February. While games and toys, and media were virtually flat, all other categories contracted, led by grocery and liquor, and department stores. The contraction in large sales category, homewares and appliances, was at a rate slightly better than the overall index. In year-on-year terms, takeaway food, department stores, and grocery and liquor still lead. For more detail, see Charts 3, 5, 7 & 8 and table 3 below.
- All states recorded a contraction in growth in month-on-month terms in February, with the smaller sales states fairing worse. For the large sales states, the contraction in growth was better for VIC, NSW, and WA, with QLD weaker. See charts 4, 6, 9-14, and table 3 for more detail.
- The contraction in growth was about the same for metro and regional areas in the month, although at a state level, metro QLD and regional SA faired far worse than the overall. In year-on-year terms, growth in metro areas was generally stronger relative to regional, especially in NSW, SA, WA, and TAS. See Charts 15 and 16 for more detail.
- Sales growth contraction was recorded for both domestic and international merchants this month, with domestic retailers recording a larger contraction relative to international. This was the case for most categories, except grocery and liquor, games and toys, and takeaway food. See charts 13 and 14, and table 4 for category growth and share.
- NAB estimates that in the 12 months to February, Australians spent \$54.7 billion on online retail, a level that is around 14.7% of the total retail trade estimate (January 2022, Series 8501, Australian Bureau of Statistics), and about 17.4% higher than the 12 months to February 2021.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

	Year-on-year growth (% s.a.)		
	Dec-21	Jan-22	Feb-22
NAB Online Index	13.7	19.8	13.4
ABS Traditional Retail	4.8	6.4	-

	Month-on-month growth (% s.a.)		
	Dec-21	Jan-22	Feb-22
NAB Online Index	-4.0	7.2	-3.5
ABS Traditional Retail	-4.4	1.8	-

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

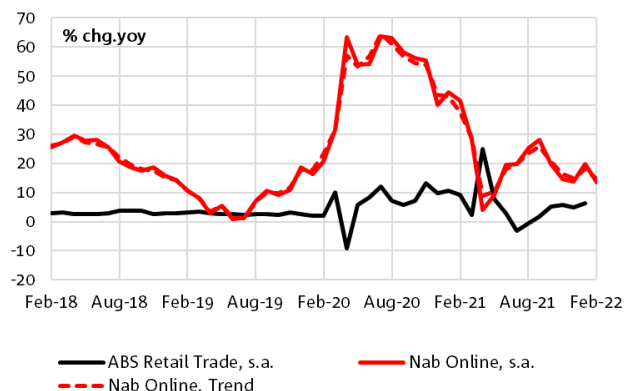
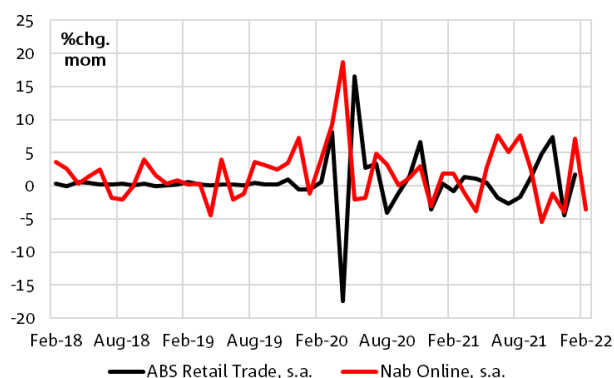


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

In month-on-month terms, our NAB Online Retail Sales Index contracted in February. For our online series, growth over the past two years has been particularly volatile, with the standard deviation more than double that compared to the first eight years of the series. Looking through this monthly volatility, using the year-on-year and 12-months-to measures, online sales continue to trend up.

Our broader measure of retail trade, the nab cashless retail index, suggests retail was up in February. So, it is likely that, with the easing of instore restrictions in most states in February, instore sales were boosted. The national two dose vaccine rate currently sits at around 95% of those aged 16plus, and over 65% for boosters. At the same time, rates of infection from the omicron wave, which peaked in most states December and January, began to ease. It is clear from the past two years that variant spikes are correlated with stronger online activity, as is subsequent easing once the peak passes.

By category, interest in takeaway food continued, albeit at a rate slower than the prior two months. For all other categories, the monthly result was either flat or recorded a contraction in growth. The biggest drop in monthly growth was in grocery and liquor, but this follows strong growth in January. The contraction in growth for the category was generally consistent across states, except VIC and ACT, which fared slightly better. Over the year though, grocery and liquor has contributed heavily to growth in online sales, except for WA, where growth was more subdued.

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

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

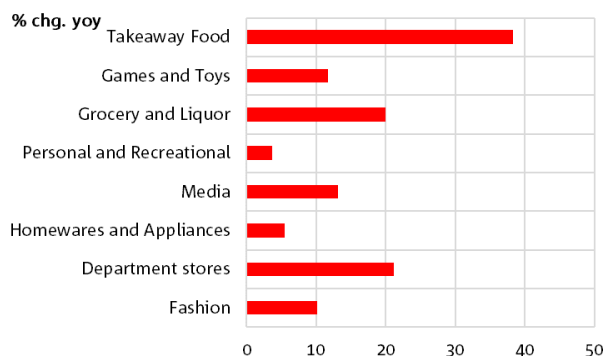


Chart 4: Online retail sales by state, yoy s.a.

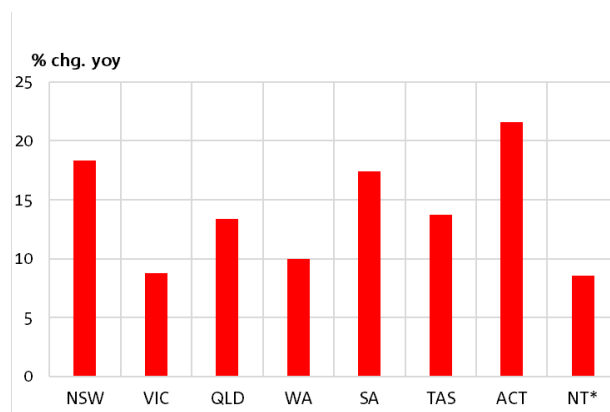
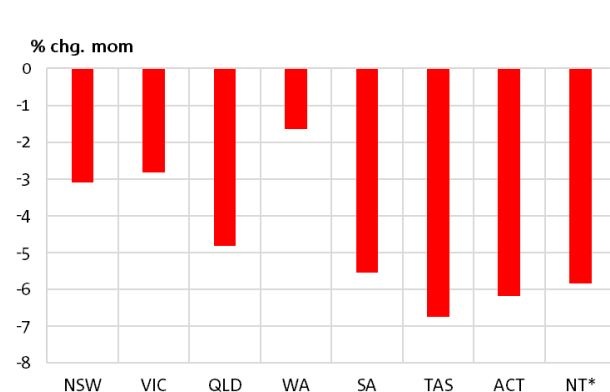


Chart 5: Online retail sales by industry, mom s.a.

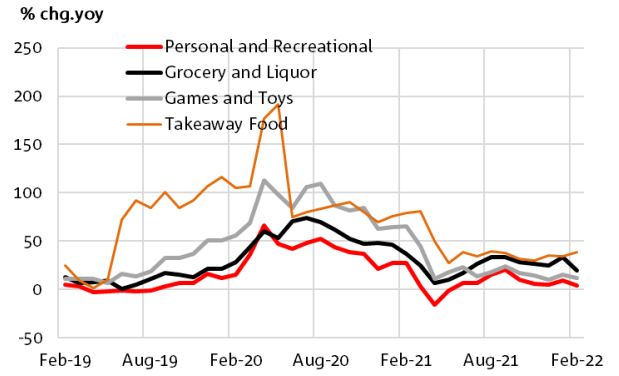
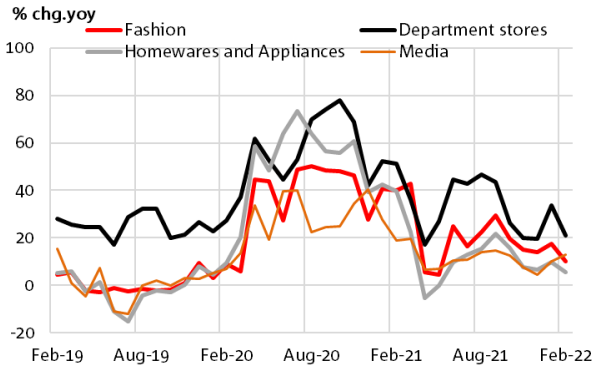


Chart 6: Online retail sales by state, mom s.a.

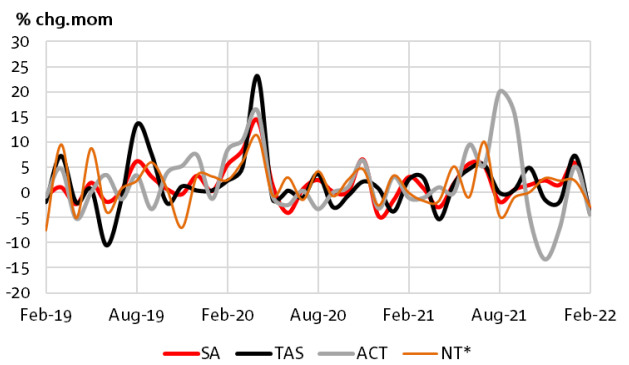
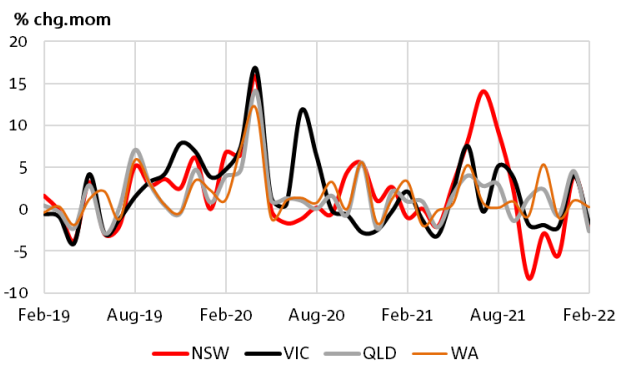


* Note that the series representing Northern Territory is highly variable and should be used with caution.

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

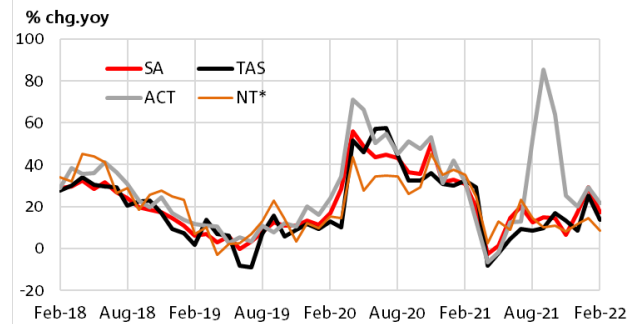
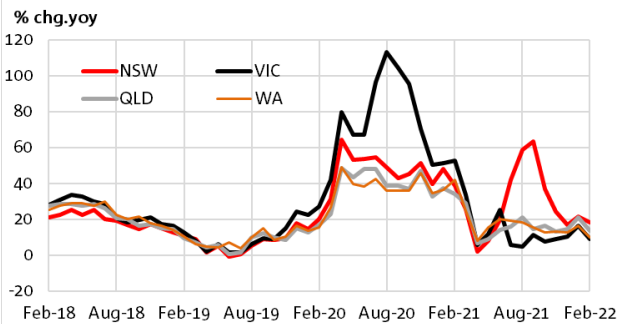


Charts 9 & 10: Online sales by state, trend



*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

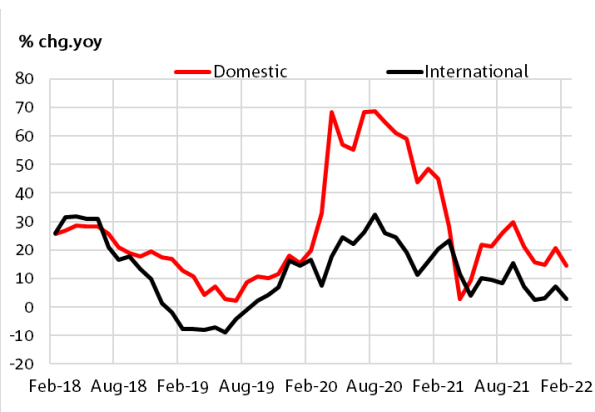
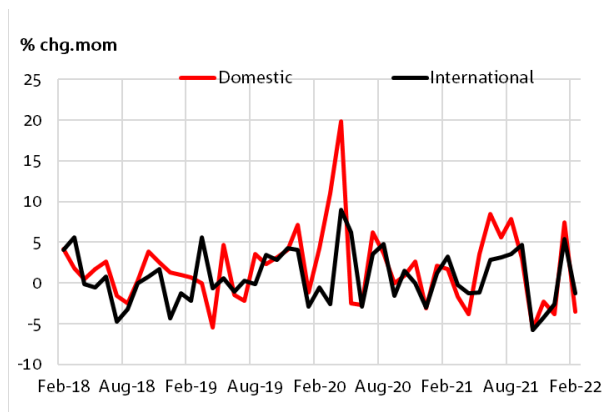


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	-10.7	-9.3	-9.4	-0.3	-5.4	-4.9	0.7	-0.7	-6.2
NSW	-0.2	-4.5	-2.1	0.6	-0.7	-9.0	-0.5	-2.6	-3.1
NT	-2.5	-5.4	5.5	-9.1	-13.1	-11.1	-12.5	-0.2	-5.8
QLD	-2.1	-8.4	-6.1	0.8	-3.8	-8.2	-1.2	3.4	-4.8
SA	1.9	-4.7	-13.6	2.2	-5.7	-9.4	-1.0	5.4	-5.5
TAS	-6.6	-5.2	-9.2	4.6	-12.1	-9.6	-6.6	13.2	-6.7
VIC	-5.9	-4.2	-1.3	-0.9	-4.4	-6.0	1.4	2.4	-2.8
WA	-1.9	-8.8	4.4	-3.2	1.4	-9.7	3.4	8.3	-1.6
Total	-2.8	-5.7	-3.1	-0.1	-2.9	-8.0	0.1	1.6	-3.5

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	-3.3	-0.7	10.3	7.4	83.7	16.3	10.9
Department stores	-5.9	-2.1	22.8	6.3	91.5	8.5	16.6
Homewares and appliances	-2.8	3.2	6.0	6.6	96.4	3.6	23.2
Media	-0.5	2.2	13.9	3.9	90.8	9.2	6.2
Personal and Recreational	-2.8	-2.3	6.2	-8.6	89.5	10.5	11.9
Grocery and Liquor	-7.0	-9.8	20.1	16.7	96.9	3.1	15.9
Games and Toys	0.3	-0.7	15.4	-4.0	83.1	16.9	8.8
Takeaway Food	0.1	-0.8	38.1	84.1	99.4	0.6	6.3
All categories	-3.5	-1.2	14.6	2.7	92.1	7.9	100

METROPOLITAN AND REGIONAL SPEND

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

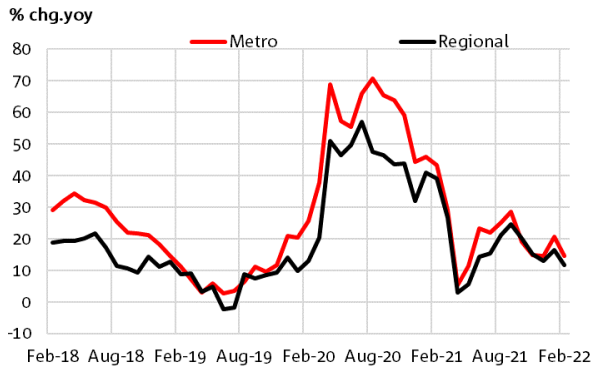
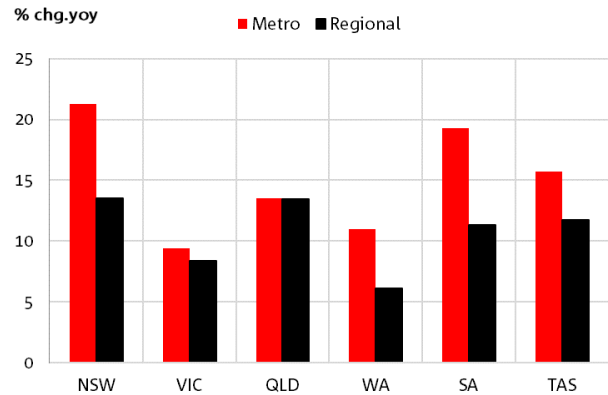


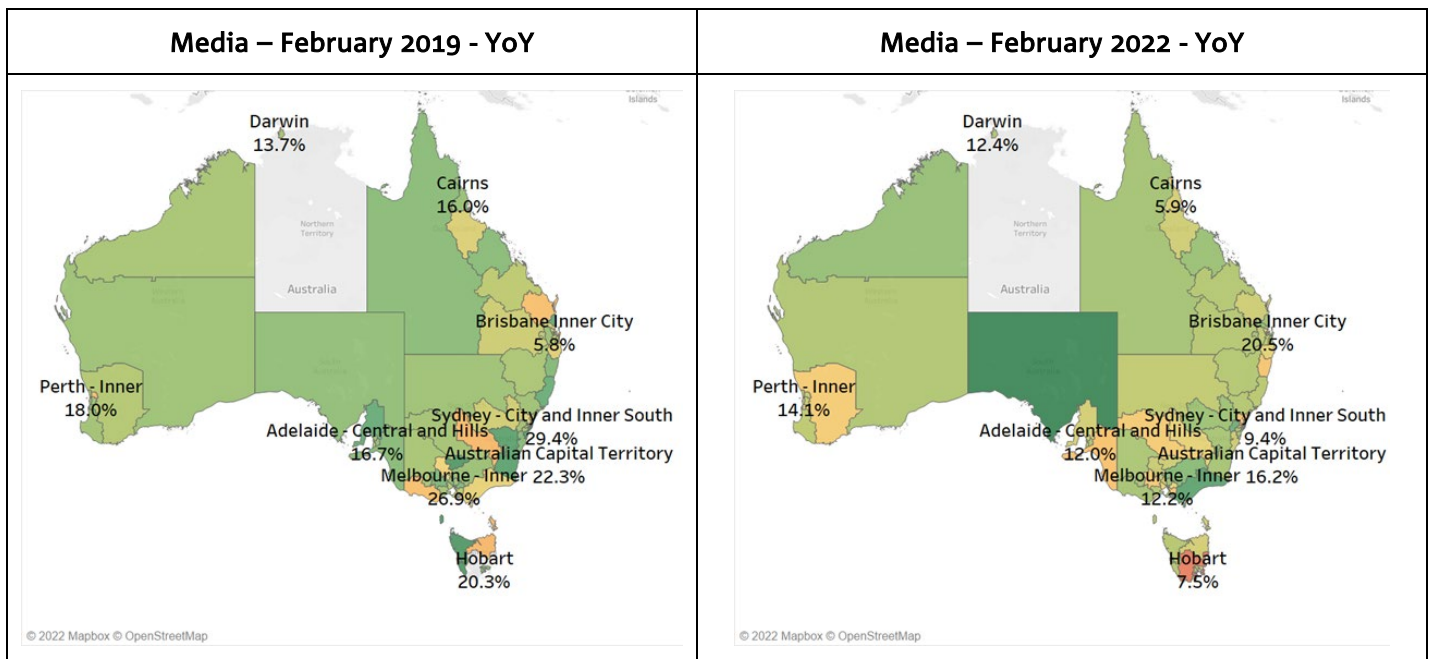
Chart 16: Online retail sales growth by state region, yoy s.a.



A HEATMAP VIEW OF SPEND GROWTH – FASHION AND ACCESSORIES - YEAR ON YEAR, BY STATISTICAL AREA (SA4)

This month we look at the change in online spend for the Media category, by ABS statistical area (SA4). The Media category includes merchants such as newsagents, book, and music retailers. The growth comparison here is February 2019 relative to the year prior, and February 2022 relative to February 2021 (i.e. year-on-year comparisons).

In February 2019, growth for the overall online index (+10.5% yoy) was beginning to moderate, after significant growth over prior years, as the market began to mature. The growth rate for media (15.9% yoy) was above the overall. The current rate of growth for media (13.1%) is much closer to the overall (13.4%). What is noticeable with this category is the degree to which much of the country met the volume criteria to display growth rates in 2019. In addition, much of the growth in capital cities has slowed, indicating that more of the contribution to the category has come from regional areas.



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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