EMBARGOED UNTIL 11:30AM AEDT, Wednesday 3rd March 2021

NAB ONLINE RETAIL SALES INDEX JANUARY 2021

NAB Group Economics

- **The NAB Online Retail Sales Index growth rebounded in January (4.0%), from a revised contraction in December (-4.7%), on a month-on-month, seasonally adjusted basis.**
- **In year-on-year terms, the growth in the NAB Online Retail Sales Index accelerated (45.6% y/y). While slower than the record-breaking period between April and November 2020, it remains elevated.**
- **All categories except media recorded growth in seasonally adjusted, month-on-month, terms.** Strongest growth was recorded by the smallest spend share categories, takeaway food, and games and toys, and midsize categories, fashion, and personal and recreational goods. The largest category, homewares and appliances, recorded growth in line with the overall index. Grocery continued to grow in January, albeit slower than the overall index, erasing the slowdown from September to November 2020. For more detail, see Charts 3, 5, 7 & 8 and table 3 below.
- **In month-on-month terms, growth was led by the big sales states of NSW and VIC, while small sales state, TAS, contracted for a second month.** All states other than TAS recorded growth in January. SA, which contracted heavily a month prior, recorded very moderate growth, well below the national average. In year-on-year terms, VIC still leads, along with other large sales state NSW. See charts 4,6,9-14, and table 3 for more detail.
- **Regional areas bounced back more strongly in January, with higher growth relative to metro areas after both recorded a large contraction in December.** The results were quite mixed, even within states, with growth in metro TAS again much worse than regional areas, which was flat. Regional growth strongly outperformed metro in NSW and WA, while growth was much closer for all other states that recorded growth. A different pattern emerges over the year, where metro, particularly VIC, outpaces regional areas. See Charts 15 and 16 for more detail.
- **Sales growth was recorded for both domestic and international merchants in month-on-month terms, with domestic online retailers stronger.** Domestic merchants led sales growth across most categories, except personal and recreational goods, and media, where international recorded a smaller contraction. See charts 13 and 14, and table 4 for category growth and share.
- **We estimate that in the 12 months to January, Australians spent $45.61 billion on online retail,** a level that is around 12.9% of the total retail trade estimate (Preliminary January 2021, Series 8501, Australian Bureau of Statistics), and about 49.1% higher than the 12 months to January 2020.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (% s.a.)	Nov-20	Dec-20	Jan-21
NAB Online Index	55.1	39.9	45.6
ABS Traditional Retail	13.3	9.6	10.7*p

Month-on-month growth (% s.a.)	Nov-20	Dec-20	Jan-21
NAB Online Index	1.9	-4.7	4.0
ABS Traditional Retail	7.1	-4.1	0.6*p

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

*p – Preliminary release from the ABS. These data are incorporated into charts 1&2 as **preliminary** figures.

Chart 1: Online retail sales and ABS retail sales

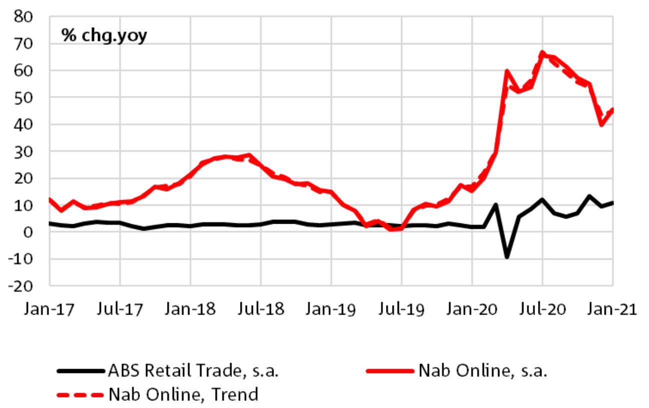
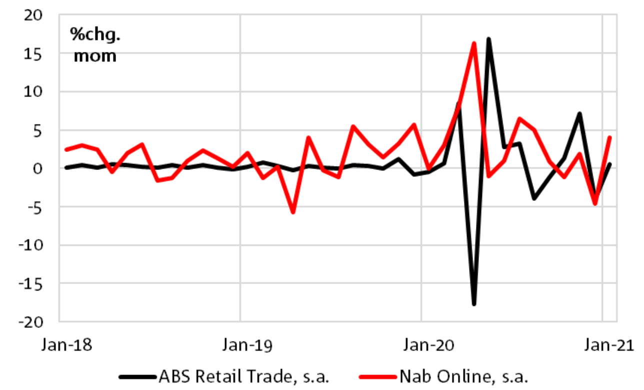


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

In month-on-month terms, our NAB Online Retail Sales Index returned to growth in January, after a short sharp contraction in December. When comparing this January to 2020, i.e. in year-on-year terms, the index continues to grow strongly, just under the pace set between April and November (50% to 60%). Lockdowns are likely to be again impacting the data, with NSW returning to monthly growth rates from mid-2020. It is likely that February data will see some effect from the WA and VIC 'Circuit breaker' lockdowns, given that in November, SA had experienced a 3 day lockdown, and recorded the highest growth for that month.

The relevance of takeaway food is increasing for online retail. While it is still the smallest share of spend, with such high growth over the past year, its share of spend has increased from 4.1% a year ago to 5.3% in January. The largest contribution to growth for this category in January was from the two biggest sales states, NSW and VIC. Growth was in line with overall growth for the largest sales category, homewares and appliances. But this growth was far from uniform across states, with the big drop in homewares and appliances in the month for TAS contributing heavily to the result for that state. This large contraction more than neutralised growth for other categories in TAS. In contrast, for NSW and VIC, sales for the Homewares were either at or above state growth.

In January, most states recorded growth, but the growth tended to be more mixed by region. In NSW and WA, regional areas far outpaced metro areas in month-on-month terms, whereas the result for VIC was far closer, and QLD and SA recorded higher growth in metro areas. For TAS, as mentioned above, a big drop in Homewares and appliances, driven by metro areas, contributed heavily to the result for that state. Over the year though, metro areas are still outpacing regional, led by VIC.

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

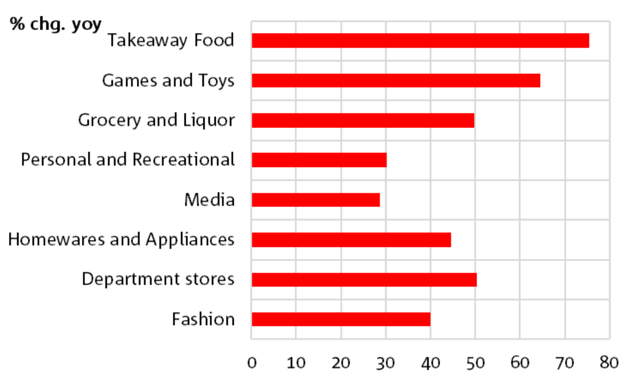


Chart 4: Online retail sales by state, yoy s.a.

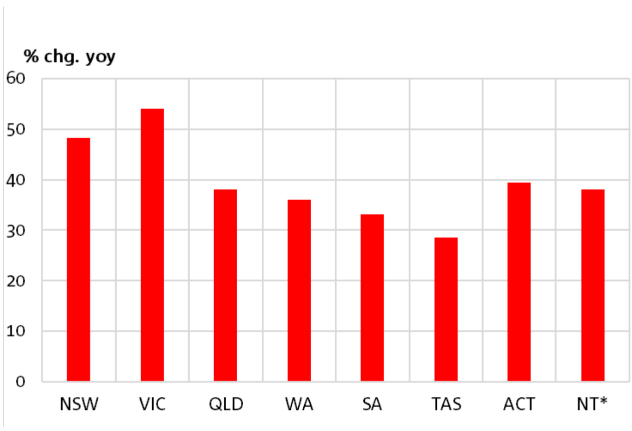
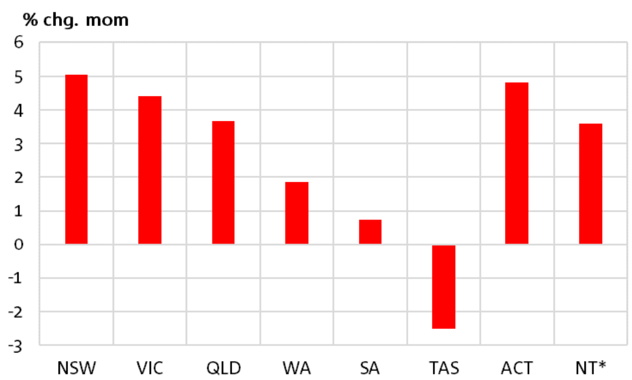


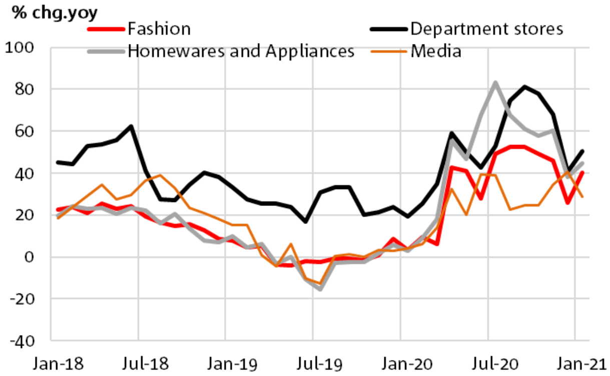
Chart 5: Online retail sales by industry, mom s.a.

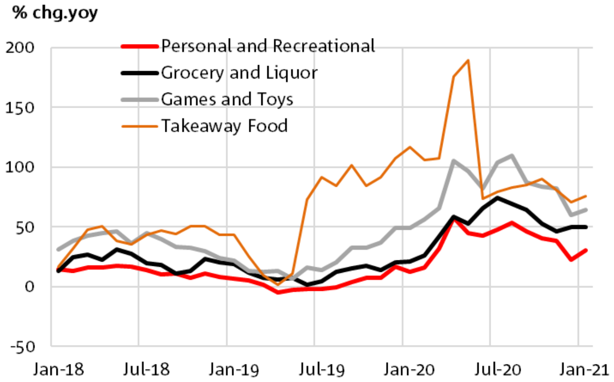
Chart 6: Online retail sales by state, mom s.a.



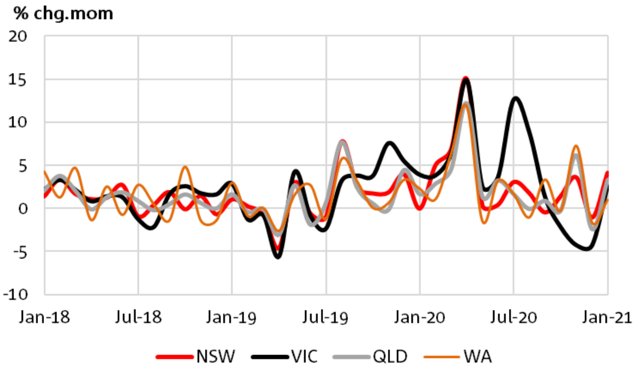
* Note that the series representing Northern Territory is highly variable and should be used with caution.

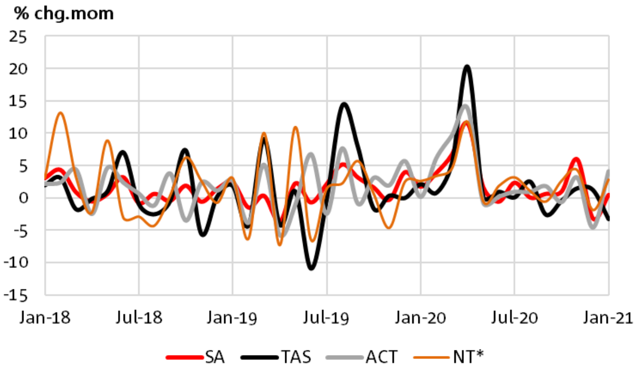
Charts 7 & 8: Online sales by category, seasonally adjusted





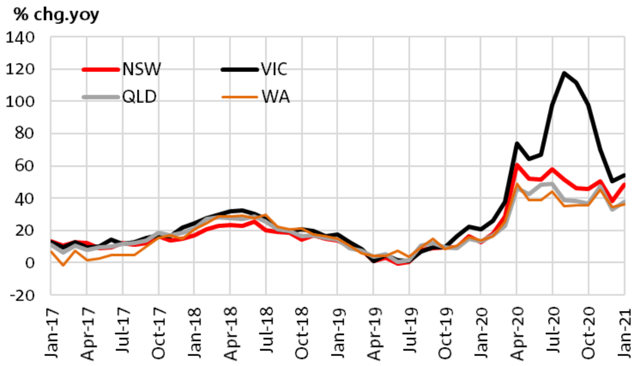
Charts 9 & 10: Online sales by state, trend

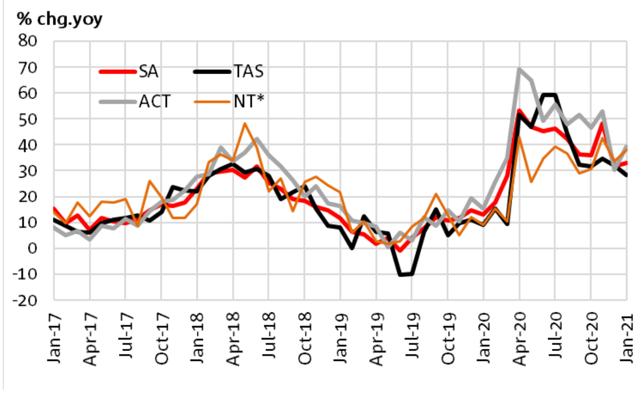




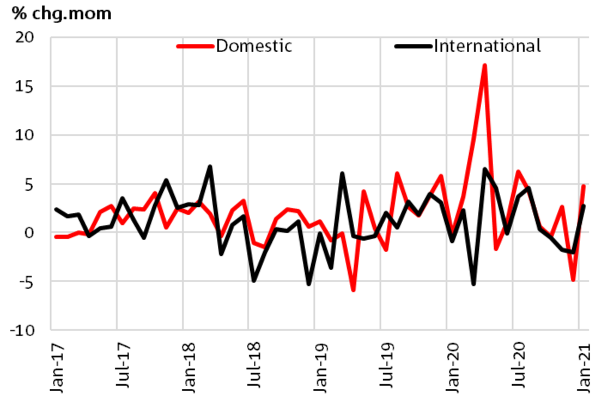
*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





Charts 13 & 14: Online sales by merchant location



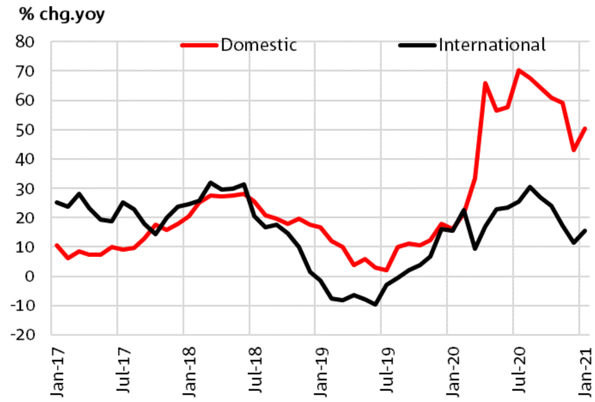


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	9.3	1.2	7.5	4.3	6.6	3.3	-0.3	2.5	**4.8**
NSW	6.7	4.7	6.2	0.2	4.5	1.9	6.8	10.8	**5.0**
NT	21.4	2.7	10.1	-9.0	5.6	-4.3	-11.0	12.6	**3.6**
QLD	4.9	0.9	5.8	0.8	3.6	0.7	8.4	4.5	**3.7**
SA	7.8	1.6	0.2	-2.6	1.3	-4.8	1.2	5.1	**0.7**
TAS	4.8	4.5	-18.1	7.2	3.1	4.3	8.2	-0.6	**-2.5**
VIC	8.3	5.2	3.9	-9.8	4.5	4.7	3.9	13.9	**4.4**
WA	11.8	3.0	-1.1	-15.8	6.5	2.6	7.4	-0.2	**1.9**
Total	**7.4**	**3.7**	**4.2**	**-4.7**	**4.3**	**2.3**	**5.8**	**9.5**	**4.0**

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	9.5	7.4	51.3	11.6	83.4	16.6	10.9
Department stores	3.2	0.8	54.1	24.2	90.7	9.3	14.8
Homewares and appliances	4.6	-0.3	46.3	17.0	96.1	3.9	25.0
Media	-5.8	-1.7	27.2	27.6	91.0	9.0	6.7
Personal and Recreational	4.2	5.4	31.5	14.2	89.0	11.0	13.4
Grocery and Liquor	2.8	-0.6	53.2	7.1	96.8	3.2	15.2
Games and Toys	9.0	0.4	89.4	12.1	78.3	21.7	8.8
Takeaway Food	10.0	-7.0	77.1	-56.0	99.4	0.6	5.3
All categories	**4.7**	**2.7**	**50.3**	**15.5**	**91.3**	**8.7**	**100**

METROPOLITAN AND REGIONAL SPEND

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

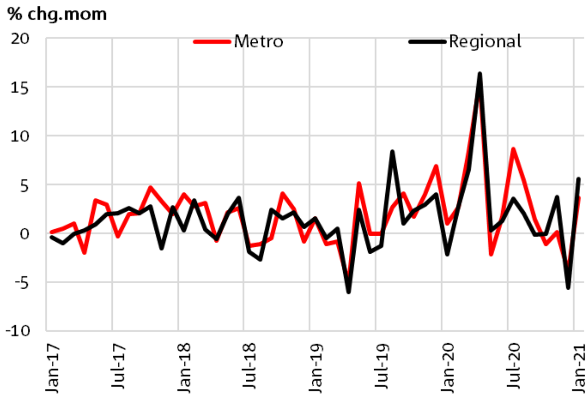
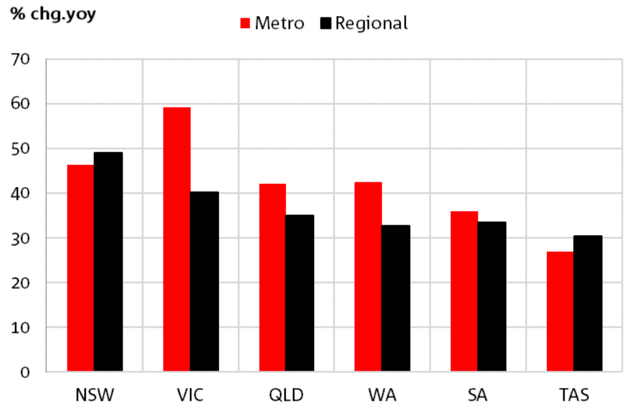


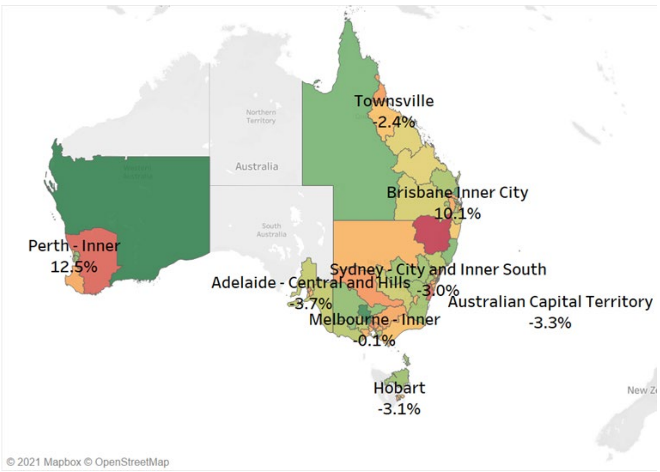
Chart 16: Online retail sales growth by state region, yoy s.a.



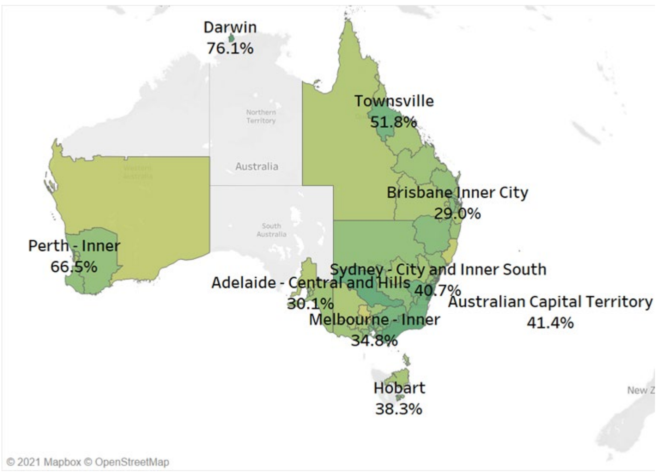
A HEATMAP VIEW OF SPEND GROWTH – FASHION – YEAR ON YEAR – BY STATISTICAL AREA (SA4)

This month we look at the change in online spend for Fashion and accessories, by ABS statistical area (SA4), comparing January 2020 relative to the year prior, and January 2021 relative to January 2020 (i.e. year-on-year comparisons). The larger statistical areas, beyond local government areas, help provide a sub-national view of activity, whilst remaining relatively legible. In January 2020, growth for the index (+15.7% yoy) was slowing, and fashion (3.4% yoy) was well below the overall. In month-on-month terms (i.e. January 2020 vs December 2019), it recorded the largest contraction in growth of all categories for that month. The map on the left shows many areas in orange and red, indicating where the online sales growth rate was below the national average, with the exception of some key outback areas. In contrast, by December 2020, many areas are green, indicating that they are closer to the national average, especially in most capital cities, but also regional centres. The general area though, covered by the series (with minimum cut-off applied for display) hasn't changed much for this category, indicating that most of the spread of online for Fashion is far more advanced than other categories.

January 2020 - YoY



January 2021 - YoY



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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