EMBARGOED UNTIL 11:30AM AEST, Thursday 26th August 2021

NAB ONLINE RETAIL SALES INDEX JULY 2021

NAB Group Economics

National Australia Bank

- **Growth continued, albeit at a slower pace, for the NAB Online Retail Sales Index in July (6.4%), following an upwardly revised June (8.4%, previously 7.6%), on a month-on-month, seasonally adjusted basis.**
- **In year-on-year terms, the growth in the NAB Online Retail Sales Index accelerated in July (20.1% y/y). Year-on-year growth had previously begun to moderate, given the base effects from high growth for the same period 2020.**
- **Growth was recorded in month-on-month terms for all categories, led by grocery and liquor, which accelerated and grew at almost twice the rate of the overall index.** The largest sales category, homewares and appliances, which had returned to growth in May, continued to grow in July, albeit at a rate slightly slower than the broader index. In year-on-year terms, department stores continue to lead. For more detail, see Charts 3, 5, 7 & 8 and table 3 below.
- **In month-on-month terms, online sales growth accelerated in all states and territories, except VIC, which contracted slightly after rapid growth in June. Growth was led by NSW, at a rate double that of second placed NT.** By category, NSW ranked first this month for all categories, except homewares and appliances, games, and takeaway food, where it ranked second. It noteworthy that, even for goods considered essential, and physical store front still open under current lockdown restrictions, the fastest online category in NSW was grocery and liquor. See charts 4, 6, 9-14, and table 3 for more detail.
- **Monthly growth in online sales was higher in metro areas relative to regional, driven by NSW. All other metro areas recorded growth, except VIC, which contracted after rapid growth in June.** For NSW, growth in metro areas was nearly about five times that of regional areas in July, and in year-on-year terms, nearly triple. VIC was the only state in July where growth was much faster in regional areas in year-on-year terms. See Charts 15 and 16 for more detail.
- **Sales growth was recorded for both domestic and international merchants this month.** Sales growth for international merchants was slower than domestic in all categories, except department stores, media, and personal and recreational goods, this month. See charts 13 and 14, and table 4 for category growth and share.
- **NAB estimates that in the 12 months to June, Australians spent $49.7 billion on online retail,** a level that is around 13.6% of the total retail trade estimate (June 2021, Series 8501, Australian Bureau of Statistics), and about 32.8% higher than the 12 months to July 2020.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (% s.a.)	May-21	June-21	July-21
NAB Online Index	7.9	18.8	20.1
ABS Traditional Retail	7.7	2.9	-

Month-on-month growth (% s.a.)	May-21	June-21	July-21
NAB Online Index	3.4	8.3	6.4
ABS Traditional Retail	0.4	-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

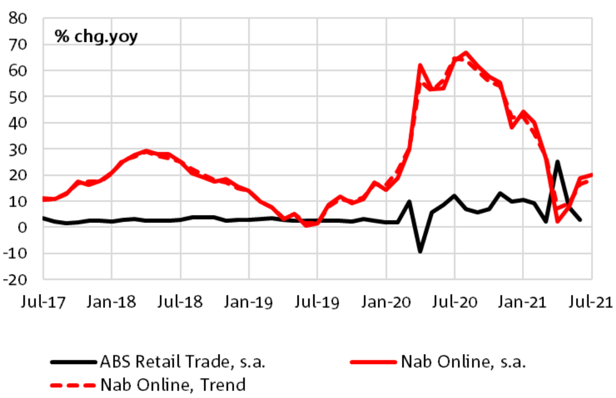
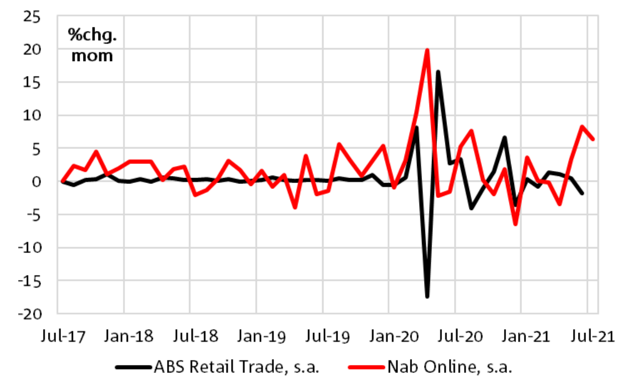


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

In month-on-month terms, our NAB Online Retail Sales Index continued to grow in July, albeit at a rate slower than June. Growth accelerated when comparing this July to the same month 2020, i.e. in year-on-year terms. This indicates considerable strength in the index, given that the base of July 2020, had already grown over 63% on July 2019. Growth had trended lower in April and May this year, but has picked up again in the past three months, with a strong contribution from key online sectors.

Growth in monthly sales in July was driven by NSW, whereas VIC, which led growth in June, contracted slightly, and other states slowed. Growth was strong across all categories in NSW, but particularly strong online sales growth was observed in grocery and liquor, personal and recreational goods, and department stores, relative to other states and territories. In year-on-year terms, the growth in department stores has been so rapid that the spend share has boosted its place to second largest in the index, behind homewares and appliances, and just ahead of grocery and liquor, which has also grown rapidly.

Metro NSW had a marked contribution to overall growth this month, with an increase of nearly 28% on June, and up nearly 60% on last July. The latter can be seen in our heatmaps section, which shows key geographical areas for NSW growth this month. In month-on-month terms, with the exception of VIC, all states recorded more rapid growth for metro areas. In VIC, metro contracted after rapid growth in June, while metro and regional were on par in SA.

In month-on-month growth terms, there were mixed results by location and merchant category. Overall, domestic merchants recorded strong growth across most categories, but were outpaced this month in the department store, media, and personal and recreational goods categories by international merchants. However, in year-on-year terms, the key international categories, games and toys, and fashion, grew faster for domestic retailers.

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

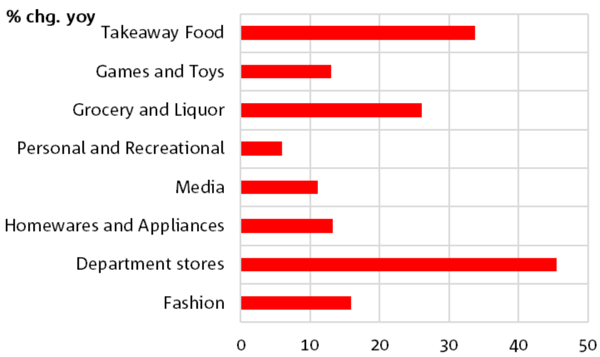


Chart 4: Online retail sales by state, yoy s.a.

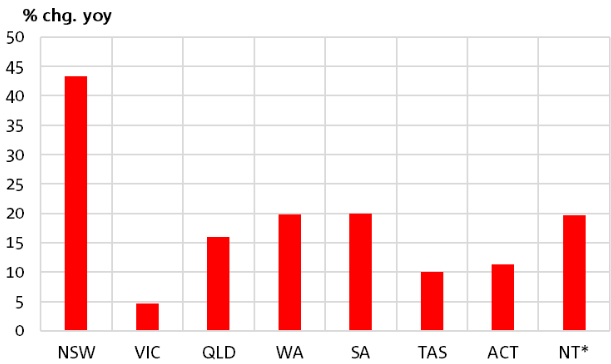


Chart 5: Online retail sales by industry, mom s.a.

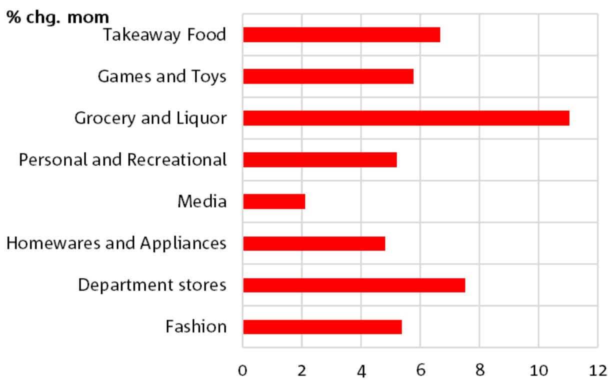
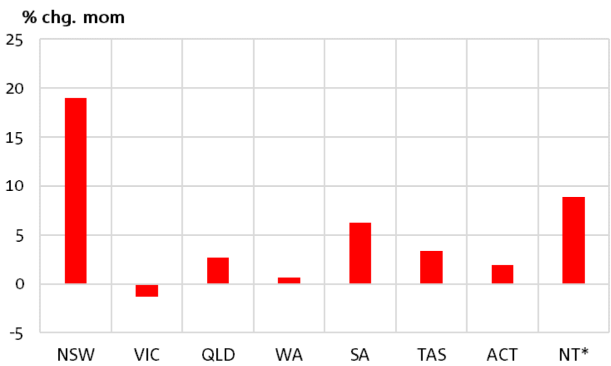
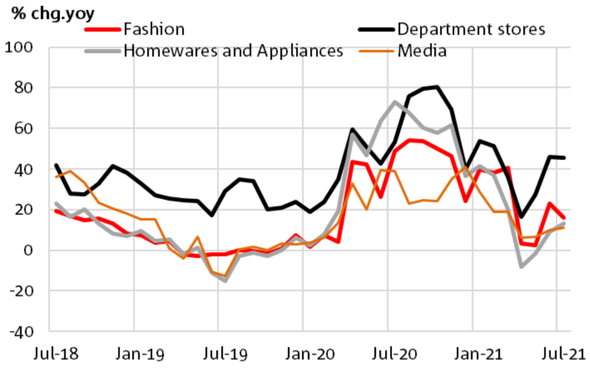


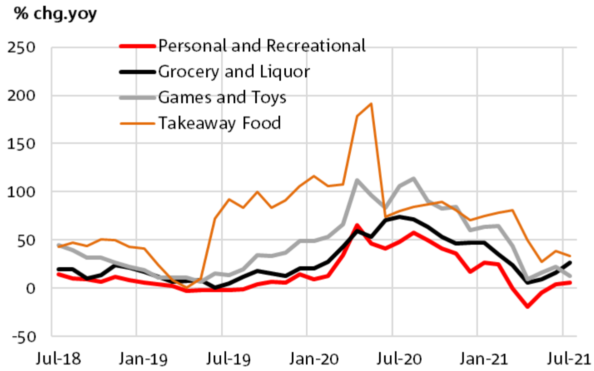
Chart 6: Online retail sales by state, mom s.a.



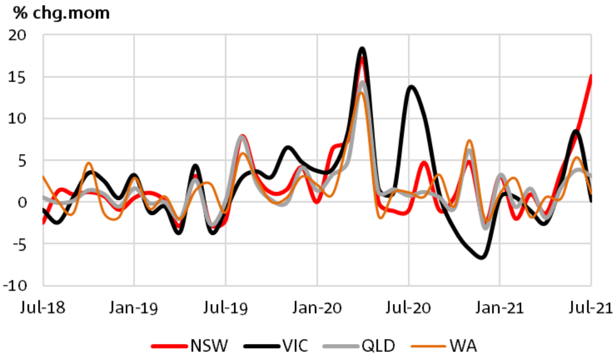
* Note that the series representing Northern Territory is highly variable and should be used with caution.

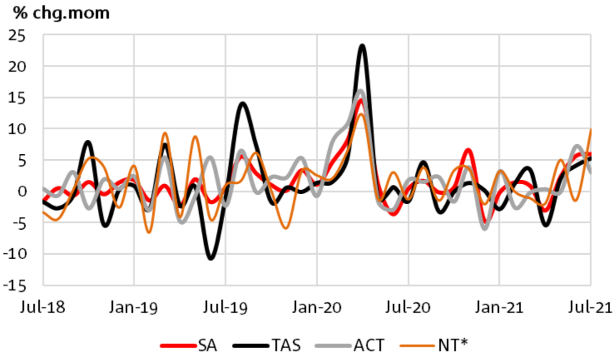
Charts 7 & 8: Online sales by category, seasonally adjusted





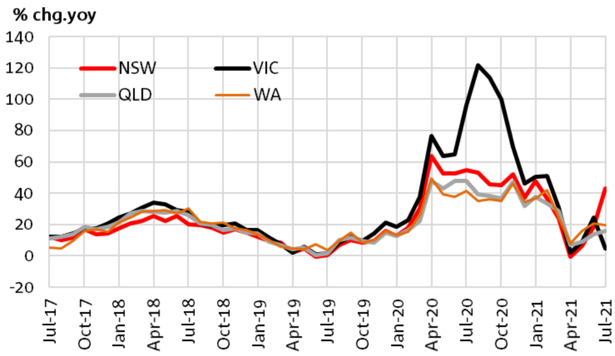
Charts 9 & 10: Online sales by state, trend

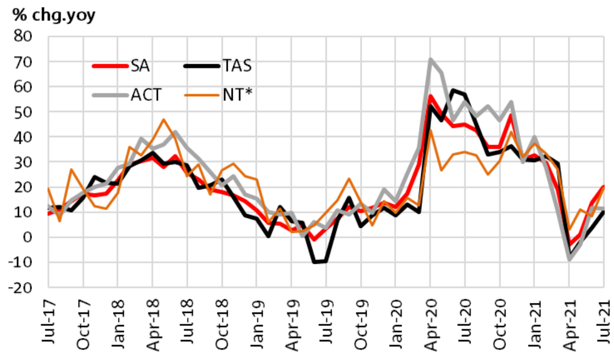




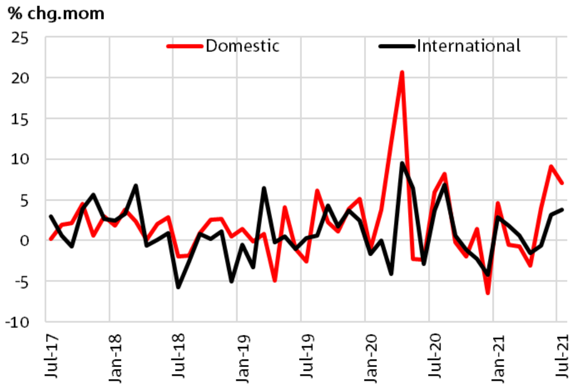
*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





Charts 13 & 14: Online sales by merchant location



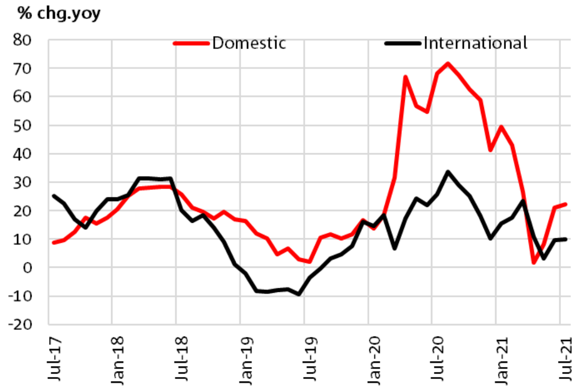


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	6.6	-1.0	2.9	2.7	-0.5	5.4	-5.3	5.2	**1.9**
NSW	15.7	20.4	15.9	6.6	23.0	28.2	16.7	16.6	**19.0**
NT	-0.9	0.1	29.9	-5.0	-0.5	1.5	28.9	24.8	**8.9**
QLD	3.2	2.8	3.0	1.2	-0.2	3.6	3.7	3.9	**2.7**
SA	13.2	8.5	2.9	1.4	0.0	11.3	6.7	4.8	**6.3**
TAS	3.0	-5.0	9.6	-0.2	-6.0	11.3	1.0	6.6	**3.3**
VIC	-3.5	1.1	-2.7	-0.7	-4.4	0.3	-1.0	1.9	**-1.3**
WA	2.5	1.8	-2.6	1.4	0.3	2.5	-0.2	3.2	**0.7**
Total	**5.4**	**7.5**	**4.8**	**2.1**	**5.2**	**11.0**	**5.8**	**6.7**	**6.4**

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	9.0	0.9	21.4	6.1	83.2	16.8	11.0
Department stores	6.8	8.2	44.9	39.2	90.9	9.1	16.0
Homewares and appliances	5.6	-1.5	15.1	-0.9	96.1	3.9	24.0
Media	2.6	4.2	8.4	32.2	90.6	9.4	6.5
Personal and Recreational	4.9	5.6	6.8	3.7	88.7	11.3	12.4
Grocery and Liquor	10.9	8.5	27.4	28.9	97.0	3.0	15.3
Games and Toys	8.7	2.6	23.3	-7.7	81.0	19.0	9.0
Takeaway Food	7.6	3.4	33.7	74.3	99.4	0.6	5.9
All categories	**7.1**	**3.8**	**22.3**	**9.8**	**91.6**	**8.4**	**100**

METROPOLITAN AND REGIONAL SPEND

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

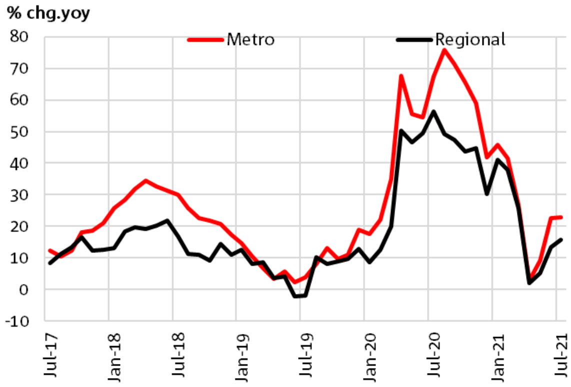
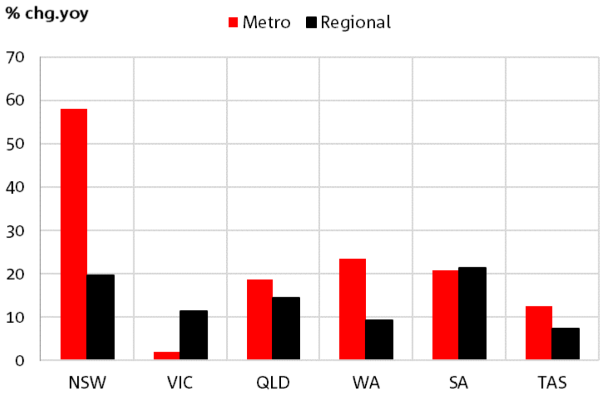


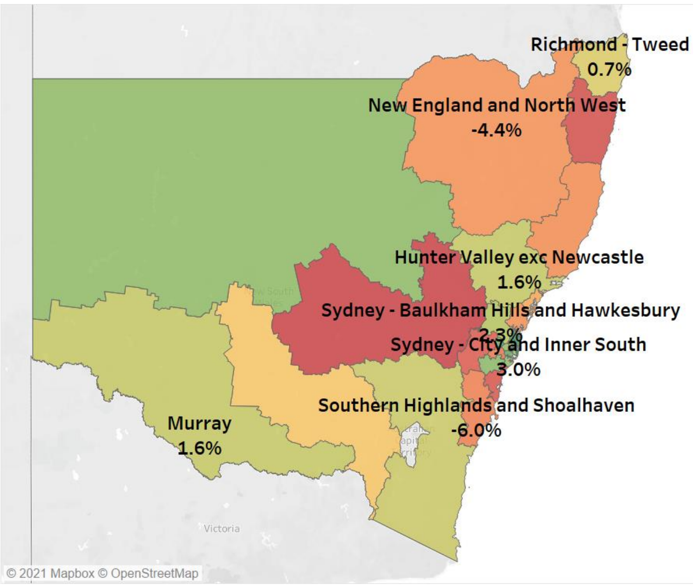
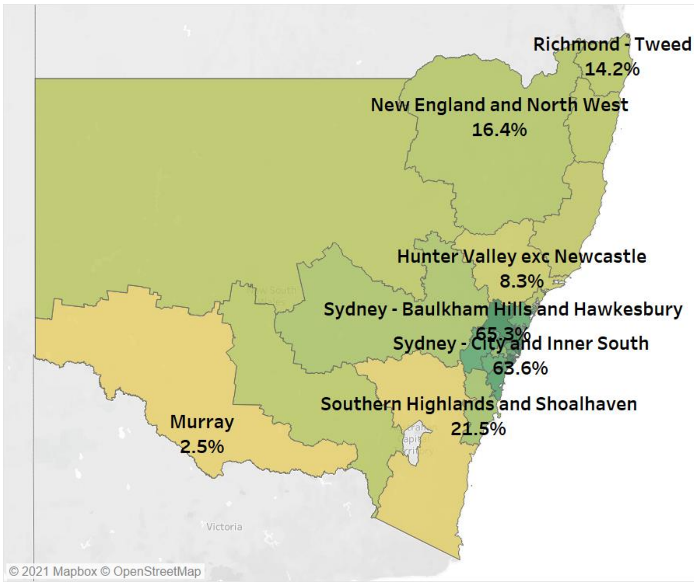
Chart 16: Online retail sales growth by state region, yoy s.a.



A HEATMAP VIEW OF SPEND GROWTH – NSW ZOOM YEAR ON YEAR, BY STATISTICAL AREA (SA4)

This month we look at the change in online spend with a zoom on NSW, by ABS statistical area (SA4). The growth comparison here is June 2019 relative to the year prior, and June 2021 relative to June 2020 (i.e. year-on-year comparisons).

In July 2019, growth for the overall index (+1.5% yoy) was relatively moderate. At that time online sales in NSW (0.6% yoy) grew at under half that pace, with some key geographic areas even recording a contraction in growth. In July 2021, online retail sales growth averaged 58% for Sydney metro statistical areas, and regional areas have also accelerated, to average just under 20%. For grocery and liquor stores, growth is even higher, as people in lockdown seek to get even the essentials delivered. For example, the increase in Baulkham Hills and Hawkesbury for grocery and liquor was up 117% on last year, well above overall online sales growth for the area (65.3%). It's worth noting that this figure is on top of the 81% growth for the same category that the area recorded in July 2020.

July 2019 - YoY	July 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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