EMBARGOED UNTIL 11:30AM AEDT, Thursday 3rd December 2020

NAB ONLINE RETAIL SALES INDEX OCTOBER 2020

NAB Group Economics

- **The NAB Online Retail Sales Index contracted in October (-0.7%), from stronger growth in September (revised to 1.2%), on a month-on-month, seasonally adjusted basis.**
- **In year-on-year terms, the growth in the NAB Online Retail Sales Index, while slowing, (59.3% y/y) remains amongst the strongest growth recorded in the series history.**
- **Results by category were mixed in month-on-month growth terms.** While category growth was again led by small sales category, takeaway food, larger sales categories like, homewares and appliances, grocery and liquor, and department stores, contracted, along with media. In year-on-year terms, the larger sales categories are up between 55% and 80%, contributing heavily to the headline result. For more detail, see Charts 3, 5, 7 & 8 and table 3 below.
- **In month-on-month terms, NSW and SA rebounded after last months contraction, along with strong sales growth in NT.** While all other states contracted in the month, sales growth for all states remains strongly positive when compared to October 2019. Though slowing in year-on-year terms, online sales for Vic. are still more than double what they were in October 2019. See charts 4,6,9-14, and table 3 for more detail.
- **Sales in regional areas improved from a contraction in the previous month to record no growth in October, while most metro areas contracted.** The result this month was again quite mixed across states, with online sales in regional WA and NSW up strongly, while regional sales in VIC and TAS were considerably weak. See Charts 15 and 16 for more detail.
- **Sales growth for both domestic and international merchants contracted in month-on-month terms, with international online retailers weaker.** While sales growth was negative for both, domestic fashion and games and toys were stronger, although like last month, international department stores outpaced domestic. See charts 13 and 14, and table 4 for category growth and share.
- **We estimate that in the 12 months to October, Australians spent $42.2 billion on online retail,** a level that is around 12.3% of the total retail trade estimate (Preliminary Oct 2020, Series 8501, Australian Bureau of Statistics), and about 41.2% higher than the 12 months to October 2019.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (% s.a.)	Aug-20	Sep-20	Oct-20
NAB Online Index	66.4	62.9	59.3
ABS Traditional Retail	7.1	5.6	7.3*p

Month-on-month growth (% s.a.)	Aug-20	Sep-20	Oct-20
NAB Online Index	5.6	1.2	-0.7
ABS Traditional Retail	-4.0	-1.1	1.6*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

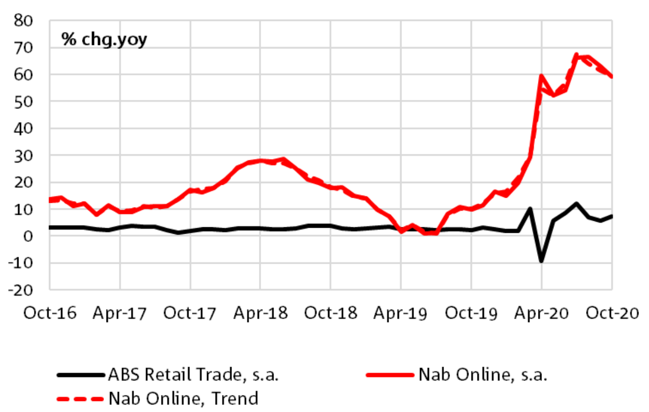
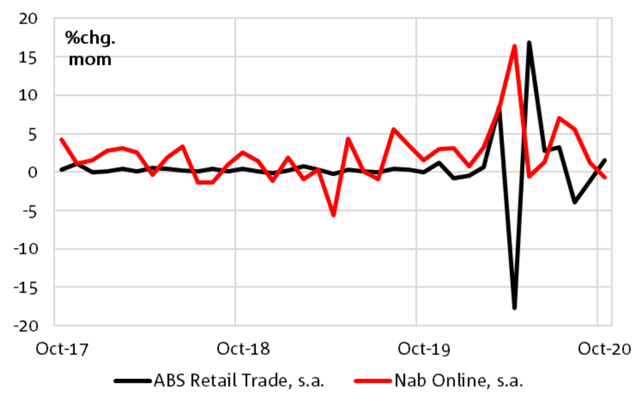


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

Our NAB Online Retail Sales Index contracted in October, after four strong months of growth. When comparing this October to 2019, i.e. in year-on-year terms, the index continues to grow strongly, up about 60%. Results were mixed across the key categories by state this month.

Takeaway food again led growth in the month, and in year-on-year terms. With the relatively strong growth over this period, its share of the index has increased. In October 2019, this category represented about 3.5% of the index, but with rapid growth over the past year, now represents about 5%. Online takeaway food growth was particularly strong in the ACT and NT this month, and all states except TAS recorded growth. After strong growth last month, larger sales category, department stores, contracted in October, but is still up strongly over the year. Interestingly for this category, while international outpaced domestic in the month, the reverse is true over the year. This is partly driven by an Australian retailer focus on 'marketplace' arrangements. While the largest sales category, homewares and appliances, has recorded two consecutive months of contraction, at +60.2%, this category is one of the strongest in year-on-year terms.

NT followed on from strong growth last month, to lead sales growth in October, though it remains the slowest in year-on-year terms. The three most populous states represent just over 80% of all online sales, slightly above their share of the population. Of these three states, NSW rebounded after a contraction the month prior, while VIC and QLD both contracted. In year-on-year terms, with sales about double the same month 2019, VIC remains by far the fastest growing state. It is worth noting that the period covered by this data only includes three days where most metro Vic physical instore retail reopened. Next month we will get a better view of whether the reopening of physical retail in November is offset by the countervailing effect of November sales events.

Metro areas contracted in the month, and regional areas were flat. In NSW and WA, growth was particularly strong for regional areas, while metro for the former recorded more moderate growth, and for the latter, a contraction. While Vic regional areas recorded a significant drop in October, in year-on-year terms, it is still up strongly, albeit outpaced by metro areas, where sales are still more than double the same period 2019. In year-on-year terms, NSW regional areas have outpaced metro sales growth.

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

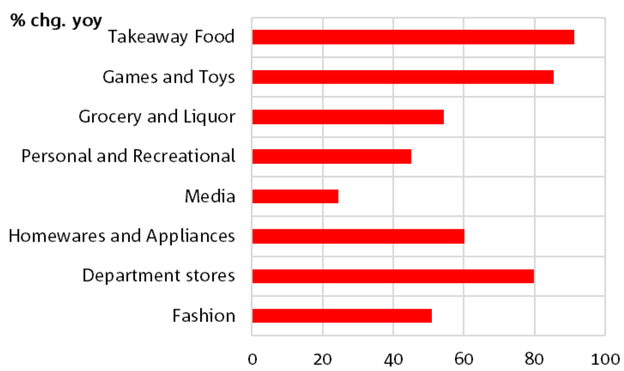


Chart 4: Online retail sales by state, yoy s.a.

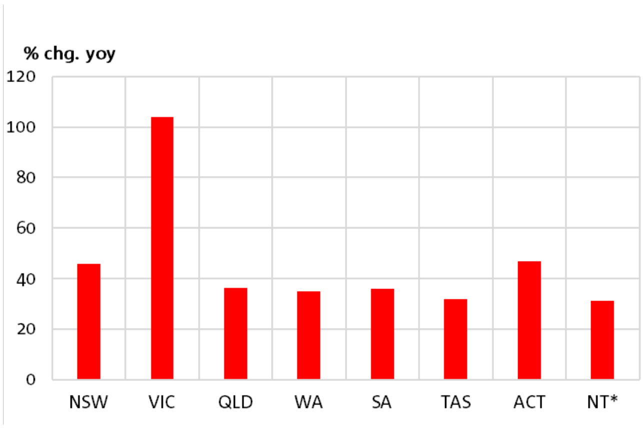
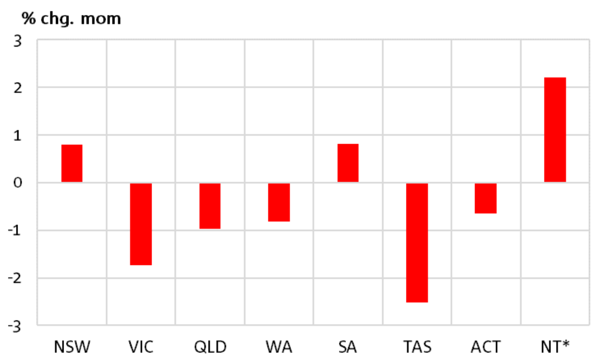


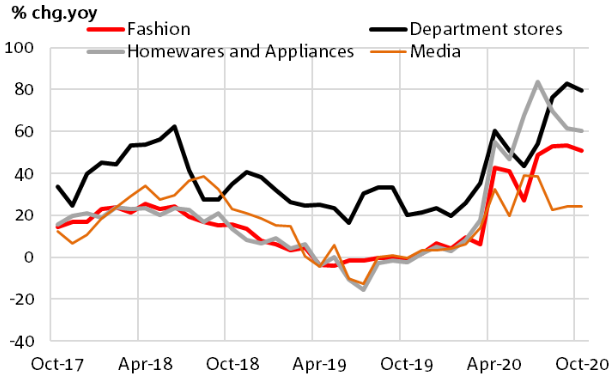
Chart 5: Online retail sales by industry, mom s.a.

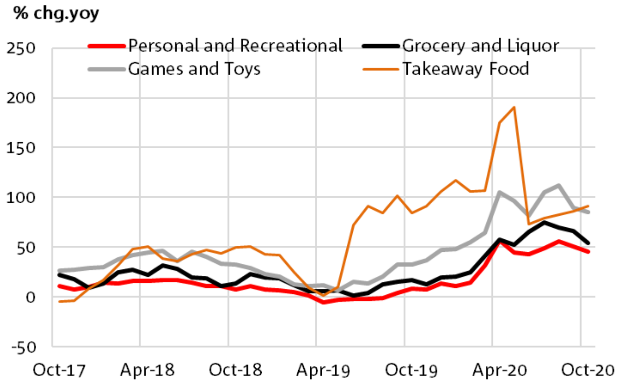
Chart 6: Online retail sales by state, mom s.a.



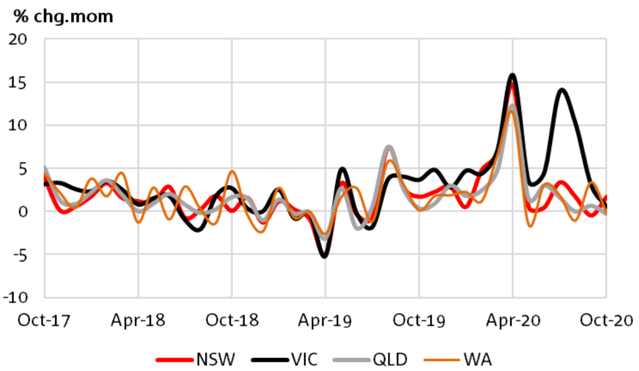
* Note that the series representing Northern Territory is highly variable and should be used with caution.

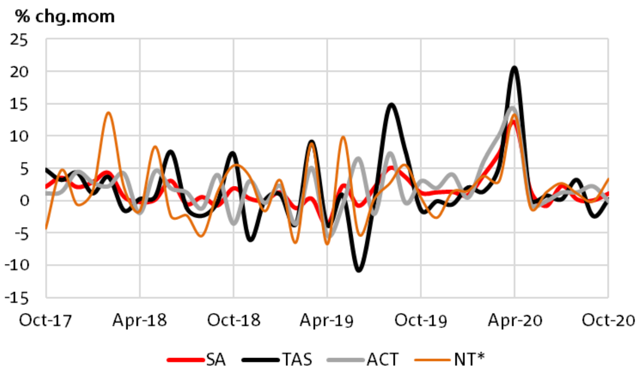
Charts 7 & 8: Online sales by category, seasonally adjusted





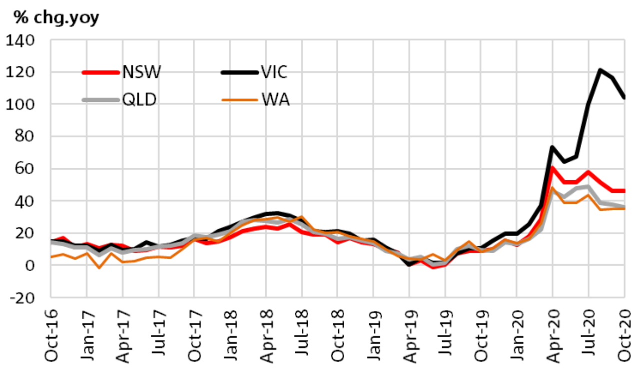
Charts 9 & 10: Online sales by state, trend

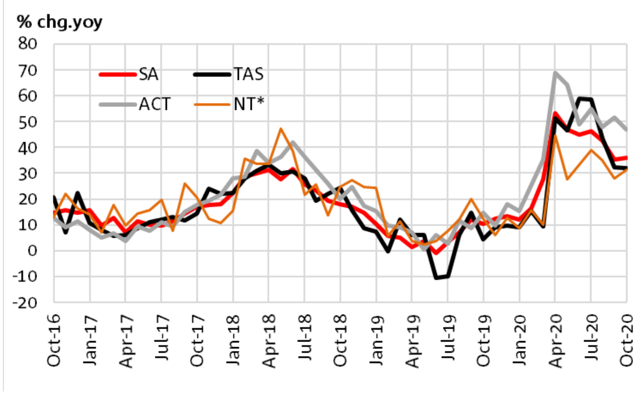




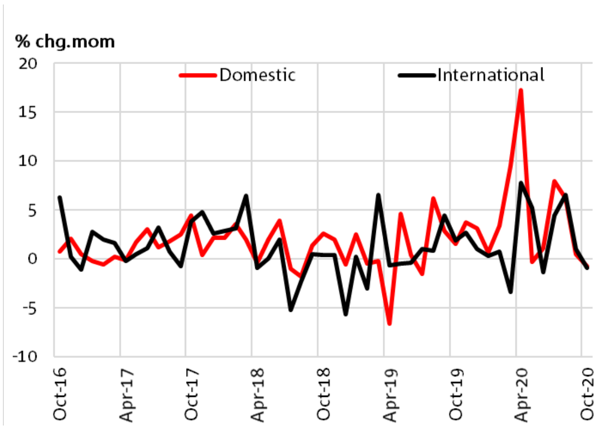
*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





Charts 13 & 14: Online sales by merchant location



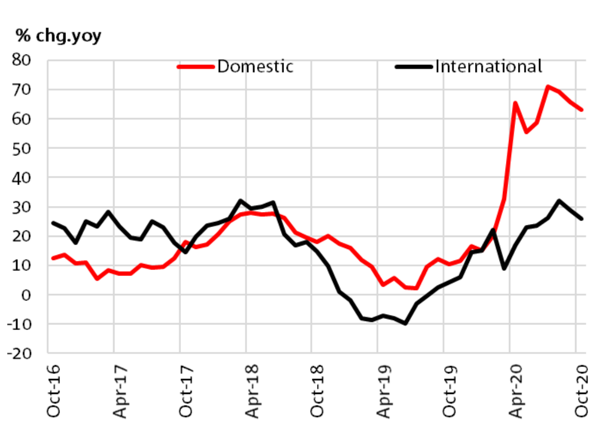


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	2.3	0.4	-5.0	0.4	1.5	-4.7	2.9	11.4	**-0.7**
NSW	2.0	-2.4	1.5	-2.7	0.7	-0.1	5.1	4.4	**0.8**
NT	-4.0	-0.9	6.6	-3.3	-4.0	4.0	13.4	8.9	**2.2**
QLD	-0.9	0.5	-1.9	-5.3	-1.1	-0.6	-0.2	3.4	**-1.0**
SA	0.9	-1.6	-3.0	2.2	2.9	2.3	5.4	5.3	**0.8**
TAS	-1.6	-8.2	-1.2	-5.4	-6.6	1.9	3.5	-1.1	**-2.5**
VIC	-1.4	-5.2	-2.6	0.7	1.3	-2.8	-1.0	3.5	**-1.7**
WA	3.4	0.5	-4.9	-1.7	-0.8	-0.8	2.6	0.9	**-0.8**
Total	**0.1**	**-2.7**	**-1.5**	**-1.8**	**0.5**	**-1.1**	**1.6**	**3.8**	**-0.7**

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	0.4	0.1	62.4	17.7	82.3	17.7	11.1
Department stores	-3.8	2.1	84.6	46.1	90.2	9.8	14.7
Homewares and appliances	-2.4	-2.6	61.0	30.4	95.9	4.1	25.0
Media	-1.6	-3.7	25.3	20.0	90.9	9.1	6.8
Personal and Recreational	-0.0	-1.2	50.4	18.9	88.7	11.3	13.8
Grocery and Liquor	-1.2	0.5	57.6	-9.6	96.6	3.4	15.1
Games and Toys	7.6	-2.6	111.3	41.1	76.4	23.6	8.5
Takeaway Food	3.1	3.4	94.8	-44.9	99.1	0.9	5.0
All categories	**-0.7**	**-0.8**	**63.1**	**25.9**	**90.8**	**9.2**	**100**

METROPOLITAN AND REGIONAL SPEND

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

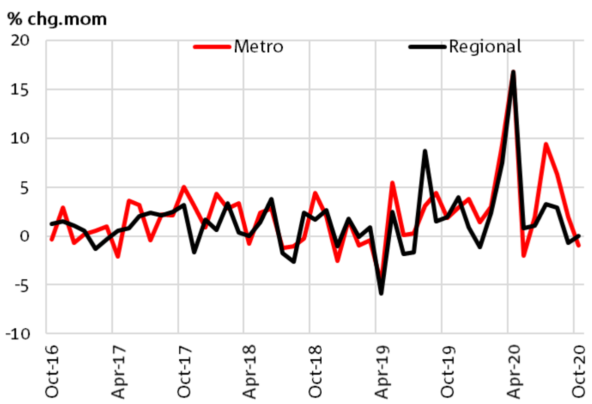
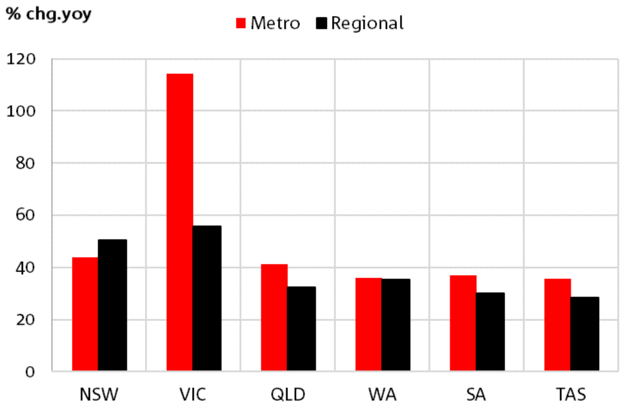
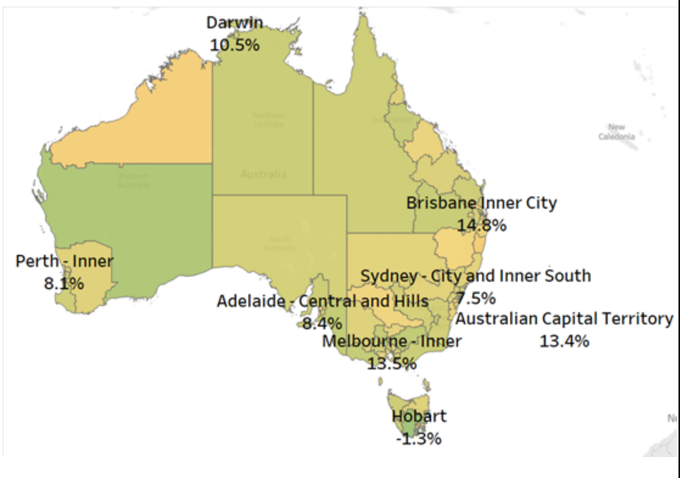
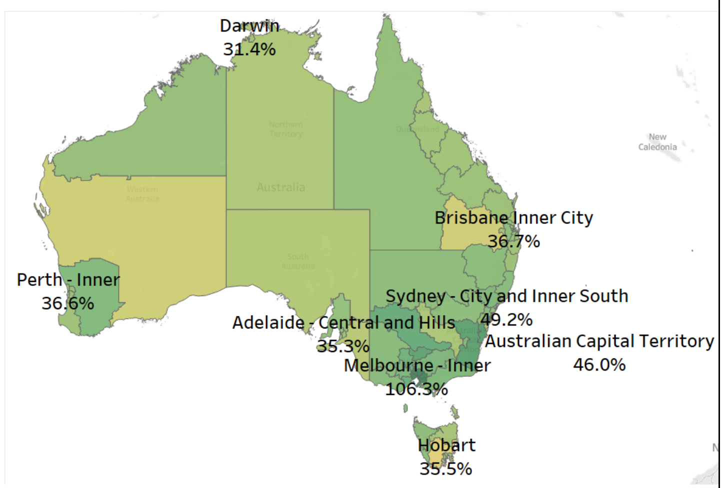


Chart 16: Online retail sales growth by state region, yoy s.a.



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

This month we look at the change in overall online spend by ABS statistical area (SA4), comparing October 2019 relative to the year prior, and October 2020 relative to October 2019 (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 October 2019, growth for the index (+9.8% yoy) was relatively slow compared to the surrounding months. The left map, those areas in orange show areas where online sales in October 2019 were lower than the same month 2018. For that same period, 61 of the 88 statistical areas grew below 10%. In contrast, by October 2020, many areas are strongly green, and there were no Statistical areas with negative year on year sales growth. In addition, all except one have recorded 10%+growth (YoY).

October 2019 - YoY	October 2020 - 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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