



NAB ONLINE RETAIL SALES INDEX APRIL 2021

NAB Group Economics

- Growth contracted again for the NAB Online Retail Sales Index in April (-3.7%), following on from a revised contraction in March (-1.0%, previously -0.5%), on a month-on-month, seasonally adjusted basis.
- In year-on-year terms, the growth in the NAB Online Retail Sales Index slowed considerably (1.4% y/y). The base effects from the high sales growth period of 2020 are now evident in the year-on-year comparisons. Per last month, we expect the moderating influence that this has had on growth rates to continue.
- General contraction by category in month on month terms, with the exception of takeaway food and media. The largest sales category, homewares and appliances recorded the largest contraction in the month, and has now contracted for the past three months. In contrast, smaller sales categories media, and takeaway food, have recorded two consecutive months of growth, and the latter category leads in year-on-year terms. For more detail, see Charts 3, 5, 7 & 8 and table 3 below.
- In month-on-month terms, after leading growth a month prior, TAS contracted sharply in April. Of the large sales states, VIC recorded the largest contraction in monthly sales growth, while WA was the most mild. In VIC, there was a larger fall relative to other states in department stores, while for TAS it was a drop in homewares and appliances. While TAS also leads the fall in year-on-year growth terms, a bigger contribution was from large sales state NSW, which also contracted. With VIC now slowing by this metric, WA leads, albeit this comparison is made to a period in 2020 of rapid growth for VIC. See charts 4,6,9-14, and table 3 for more detail.
- The monthly contraction in online sales was slightly higher in Metro areas, with QLD a key driver. The headline contraction for TAS and VIC was more pronounced in regional areas this month. In year-on-year terms, metro WA, and QLD regional now outpace other areas. See Charts 15 and 16 for more detail.
- Sales growth for both domestic and international merchants contracted in month-on-month terms. Sales growth for domestic merchants recorded a larger contraction in the month in all categories, except takeaway food. See charts 13 and 14, and table 4 for category growth and share.
- We estimate that in the 12 months to April, Australians spent \$46.7 billion on online retail, a level that is around 12.9% of the total retail trade estimate (Preliminary April 2021, Series 8501, Australian Bureau of Statistics), and about 39.6% higher than the 12 months to April 2020.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

	Year-on-year growth (% s.a.)		
	Feb-21	Mar-21	Apr-21
NAB Online Index	39.2	25.6	1.4
ABS Traditional Retail	9.1	2.2	25.1*p

	Month-on-month growth (% s.a.)		
	Feb-21	Mar-21	Apr-21
NAB Online Index	-0.5	-1.0	-3.7
ABS Traditional Retail	-0.8	1.3	1.1*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

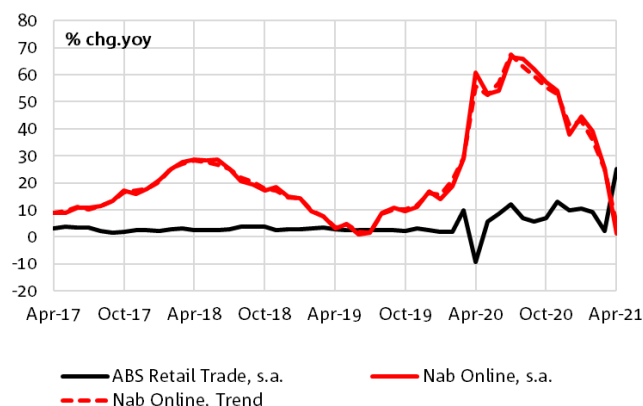
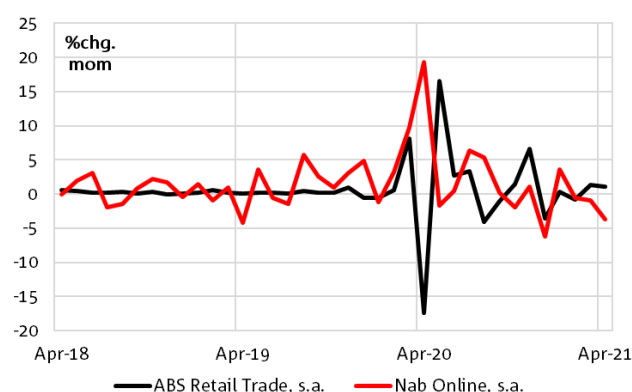


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

In month-on-month terms, our NAB Online Retail Sales Index contracted again in April, after a revised contraction in March. When comparing this April to 2020, i.e. in year-on-year terms, growth has now slowed considerably. As mentioned last month, part of this slowdown in year-on-year growth is a result of the base effects of the initial online spike in 2020. At that time, online growth accelerated to +60.9%(y/y), with double digit growth only ceasing now. An element of perspective is advised when interpreting the year-on-year results over the next few months.

The contraction in sales this month was driven by another drop in the largest sales category, homewares and appliances in all states except WA and ACT. There was also a drop for other key sales categories, fashion, and personal and recreational goods, which weighed heavily on the overall result. In year-on-year terms, the personal and recreational goods category contracted heavily. However, base effects are playing a part here, as this is a comparison to a period where the category recorded strong growth. There was general alignment between most overall category results and state category result this month, with some minor exceptions such as growth for WA grocery and liquor, or the contraction in media spend for VIC and NT.

In year-on-year terms, growth for metro and regional areas has somewhat converged, but, split by state, there remain some large differences. Most of the contraction in NSW appears primarily from regional areas, which also detracted from growth in VIC. However, for QLD, it was regional areas that outpaced metro.

In month-on-month growth terms, while both domestic and international sales contracted, this months result was more heavily weighted towards domestic retailers. Categories like homewares and appliances, that are predominantly domestic, contracted for both, as did fashion, which has a larger international presence. The game and toy, and personal and recreational goods, categories looked to be similarly affected, regardless of merchant location in April. Over the past year, growth had been driven overwhelmingly by domestic online retailers, but international retailers, which did not grow as strongly in 2020, are beginning to outpace domestic.

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



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

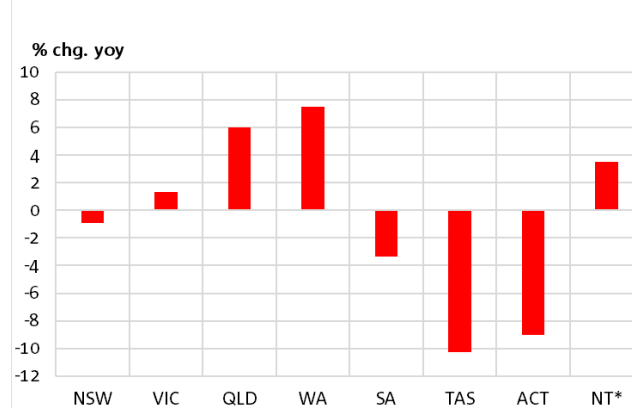
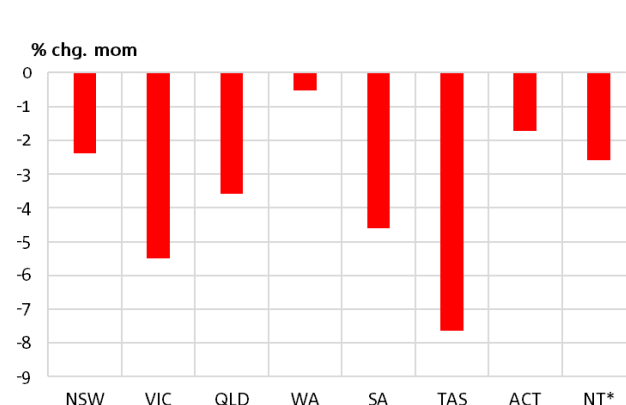


Chart 5: Online retail sales by industry, mom s.a.

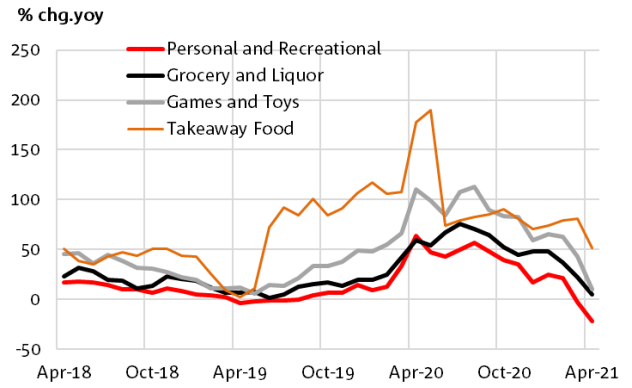
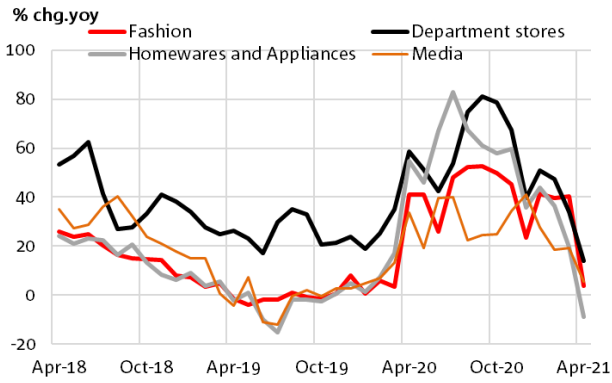


Chart 6: Online retail sales by state, mom s.a.

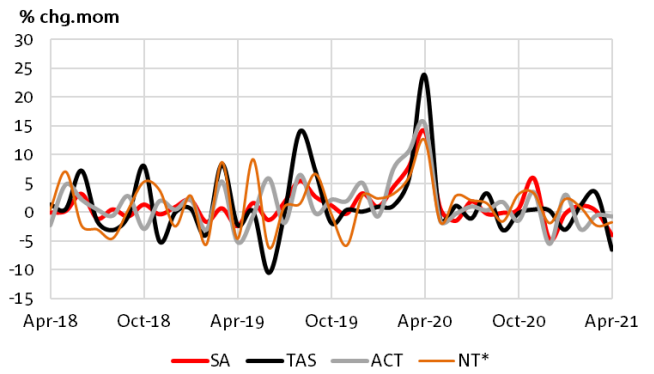
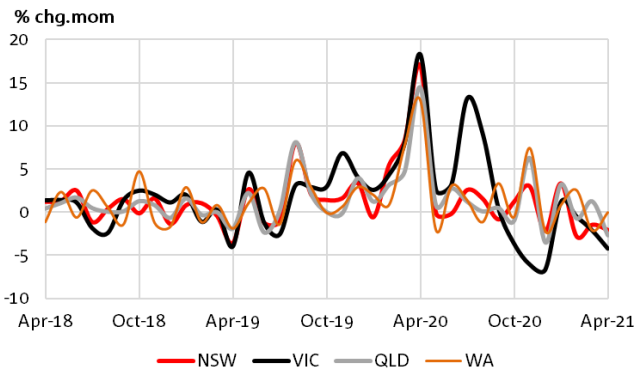


* Note that the series representing Northern Territory is highly variable and should be used with caution.

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

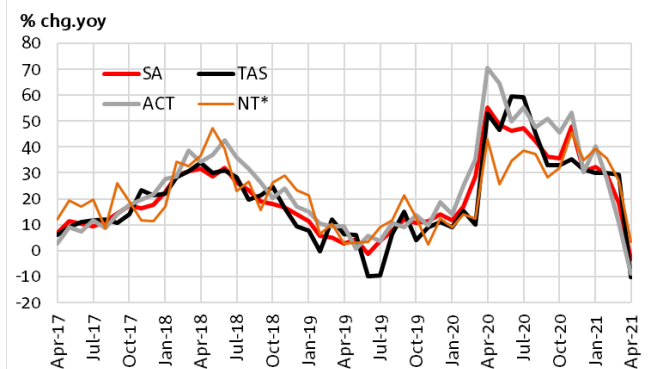
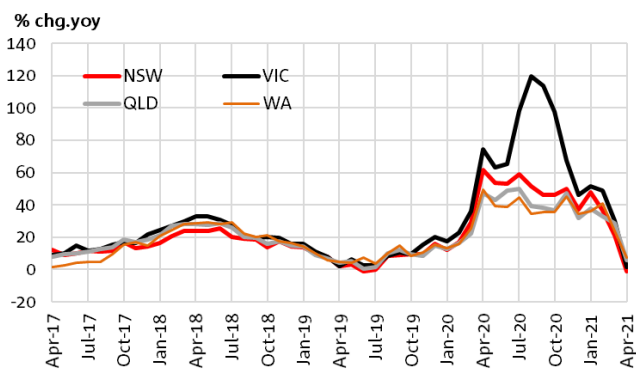


Charts 9 & 10: Online sales by state, trend



*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

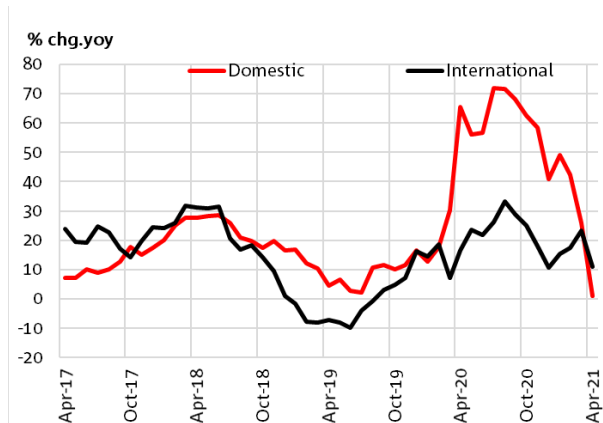
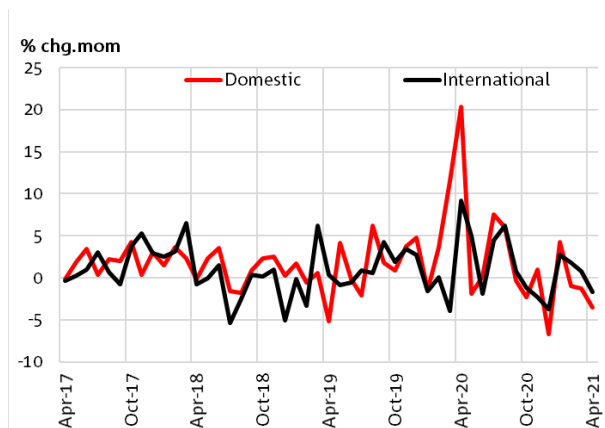


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	-5.9	-0.9	2.0	0.9	-8.7	-5.1	-5.6	11.8	-1.7
NSW	-4.3	-0.4	-5.5	2.7	-4.2	-2.0	-1.8	4.8	-2.4
NT	-8.2	10.2	-0.1	-6.5	-17.0	-10.5	3.8	10.8	-2.6
QLD	-5.4	-0.5	-7.5	1.8	-6.3	-2.1	-5.1	6.1	-3.6
SA	-5.6	-1.1	-8.0	0.3	-4.9	-7.2	-5.7	4.7	-4.6
TAS	-10.9	-3.7	-18.0	3.8	-3.2	-5.1	-3.0	8.9	-7.6
VIC	-7.1	-4.4	-6.8	-2.8	-8.2	-6.6	-5.2	1.4	-5.5
WA	-5.5	-1.6	0.3	4.2	-1.2	0.1	-2.8	5.6	-0.5
Total	-5.7	-1.9	-6.0	0.6	-5.8	-3.6	-4.0	3.9	-3.7

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	-4.3	-0.7	0.4	40.2	82.8	17.2	11.0
Department stores	-3.0	0.1	12.6	27.5	90.8	9.2	15.1
Homewares and appliances	-6.2	-2.3	-9.7	7.7	96.1	3.9	24.6
Media	0.9	2.6	4.3	19.9	90.9	9.1	6.6
Personal and Recreational	-6.1	-5.9	-23.7	3.7	88.5	11.5	12.7
Grocery and Liquor	-3.0	-0.8	5.8	0.4	96.9	3.1	15.2
Games and Toys	-2.9	-2.4	20.8	-15.9	79.8	20.2	9.0
Takeaway Food	3.2	1.3	48.7	34.6	99.5	0.5	5.7
All categories	-3.6	-1.7	1.0	10.9	91.4	8.6	100

METROPOLITAN AND REGIONAL SPEND

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

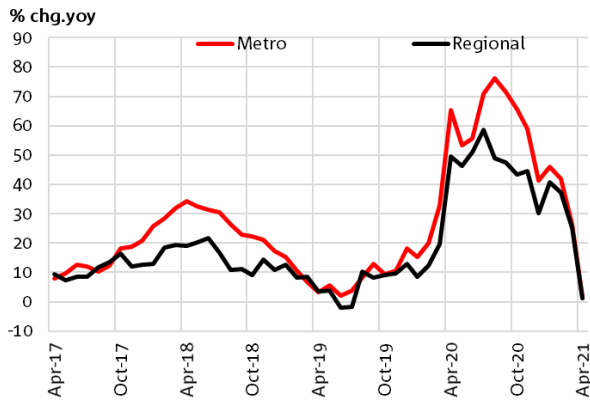
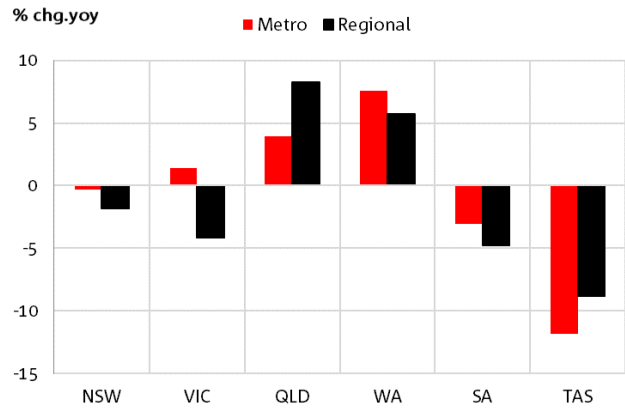
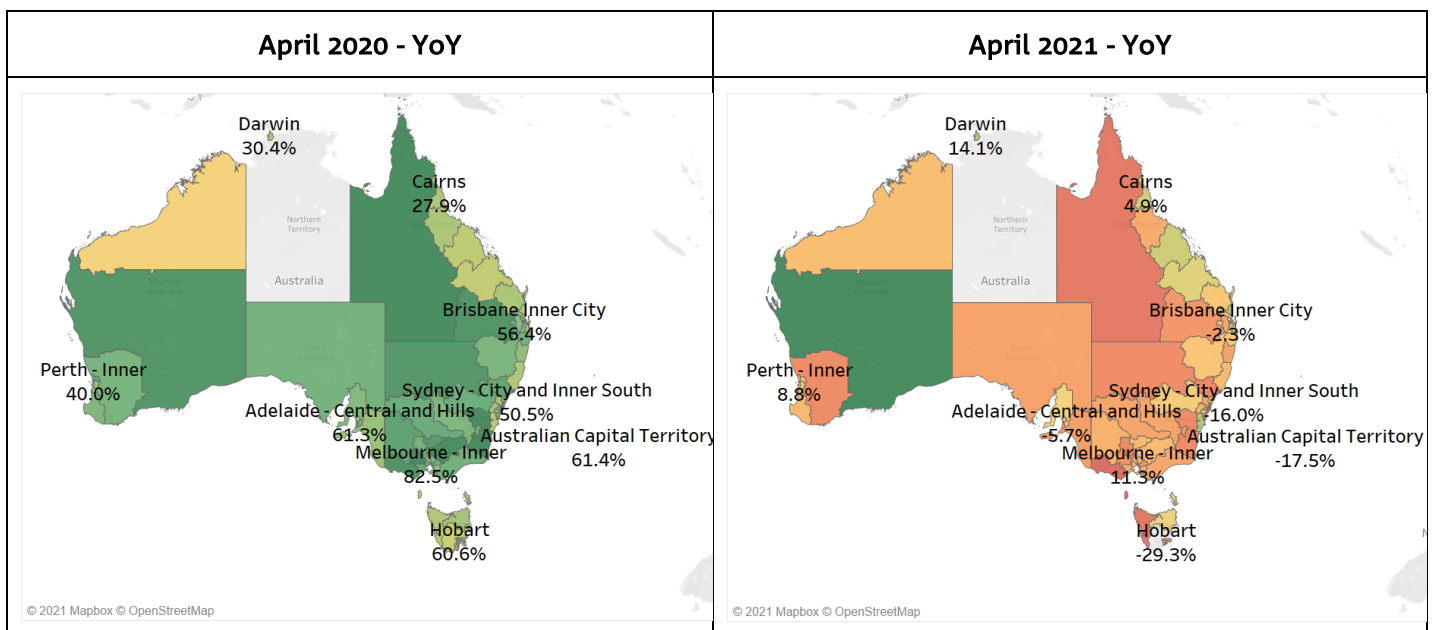


Chart 16: Online retail sales growth by state region, yoy s.a.



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 April 2020 relative to the year prior, and April 2021 relative to April 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 April 2020, growth for the index (+60.8% yoy) continued to accelerate, with homewares and appliances (+54.9%) contributing heavily to the headline result. The maps show that growth for this category in 2020 was strong in both metro and regional areas. In 2021, however, it looks like growth has slowed or contracted in year-on-year terms for most areas, except a few statistical areas like inner Melbourne, Perth, Darwin, Cairns, and some regional areas. Hence the headline result for this category in year-on-year terms in April (- 8.9% yoy). It is worth noting though, that while areas like Brisbane and Sydney recorded a contraction in April for this category, this is relative to a period where growth was exceptionally high.



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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