EMBARGOED UNTIL 11:30AM AEST, Monday 27th September 2021

NAB ONLINE RETAIL SALES INDEX AUGUST 2021

NAB Group Economics

- **Growth accelerated, for the NAB Online Retail Sales Index in August (8.8%), following an upwardly revised July (6.7%, previously 6.4%), on a month-on-month, seasonally adjusted basis.**
- **In year-on-year terms, the growth in the NAB Online Retail Sales Index accelerated in August (25.6% y/y). Year-on-year growth had begun to moderate earlier in the year, given the base effects from high growth for the same period 2020, but has accelerated with rolling lockdowns.**
- **Growth was recorded in month-on-month terms for all categories, led by department stores and liquor, which accelerated and grew at more than twice the rate of the overall index.** Personal and recreational goods, and games and toys, also recorded monthly growth above 10%, with grocery and liquor not far behind. The largest sales category, homewares and appliances, continued to grow in August, 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.
- **Mixed results in month-on-month terms by state, with growth in the eastern states offsetting a contraction in SA, NT and WA. Growth was led by ACT (30.0% mom, s.a.), which came close to the record for monthly growth set by TAS in April 2020.** Of the larger sales states, NSW continues to lead, and VIC rebounded from last month's contraction. While department stores led national growth, for the ACT, personal and recreational goods was more rapid, along with grocery and liquor retailing. 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. The results were varied, with regional areas of NSW, TAS and WA recording more rapid growth relative to metro areas, whereas for VIC and QLD, growth was far stronger in metro areas.** For SA, the contraction in growth was milder in metro areas, with a larger drop for regional. In year-on-year terms, NSW growth in metro areas was nearly double that of regional. 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 media, and grocery and liquor, albeit the latter is a small share of international. See charts 13 and 14, and table 4 for category growth and share.
- **NAB estimates that in the 12 months to August, Australians spent $50.74 billion on online retail,** a level that is around 13.9% of the total retail trade estimate (July 2021, Series 8501, Australian Bureau of Statistics), and about 29.8% higher than the 12 months to August 2020.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (% s.a.)	Jun-21	Jul-21	Aug-21
NAB Online Index	20.2	21.7	25.6
ABS Traditional Retail	2.9	-3.1	-

Month-on-month growth (% s.a.)	Jun-21	Jul-21	Aug-21
NAB Online Index	8.2	6.7	8.8
ABS Traditional Retail	-1.8	-2.7	-

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

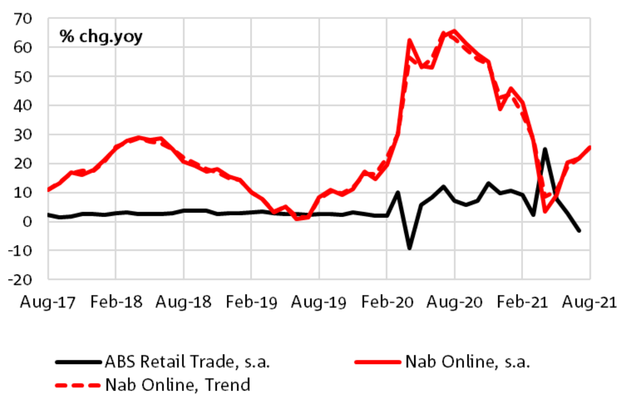
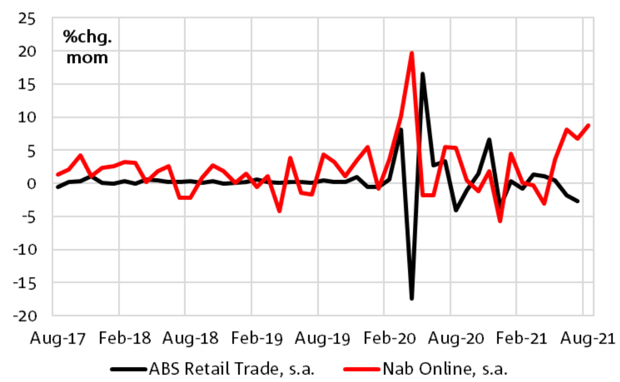


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

In month-on-month terms, our NAB Online Retail Sales Index continued to grow in August, accelerating in the month. Growth also accelerated when comparing this August to the same month 2020, i.e. in year-on-year terms. This indicates considerable strength in the index, given that the base of August 2020 had already grown over 65% on August 2019. Growth had trended lower in April and May this year, but has picked up again in the past four months, with a strong contribution from key online sectors. There are reports that, with a combination of increased volumes, and staff in isolation in distribution centres and delivery services, significant delays are emerging. Some suggest that this may impact sales growth in the near term. What we observed in 2020 was continued strong sales growth, despite pressures that emerged at that time. In the coming months this year we may even observe Christmas sales brought forward as supply constraints emerge.

Growth in monthly sales in August was driven by the three key sales states, NSW, VIC, and QLD, as well as rapid growth from ACT. While department store sales led category growth, in the locked down ACT, and NSW, personal and recreational goods grew more rapidly. Grocery and liquor in ACT was quite strong, even though this is one of the retail sectors still open to public. In year-on-year terms, growth for personal and recreational goods is being driven by NSW and ACT, with other states moderating after rapid growth for the same period in 2020. See this month's heatmap for more detail.

Regional NSW led growth in the month, while metro VIC slightly outpaced metro NSW. In year-on-year terms, both regional and metro VIC growth has moderated to around 5%, but this is compared to a base period in 2020 where growth was up 81% and 130% respectively. For NSW metro, year-on-year growth is now up 74%, on top of growth for the same period 2020 of 51%.

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 media, and grocery and liquor categories by international merchants, although the latter is a small share of the total for that category. 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.

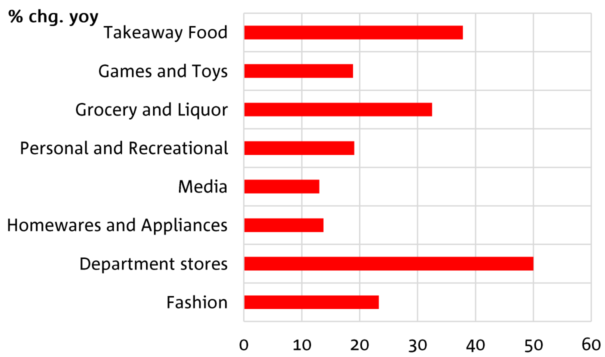


Chart 4: Online retail sales by state, yoy s.a.

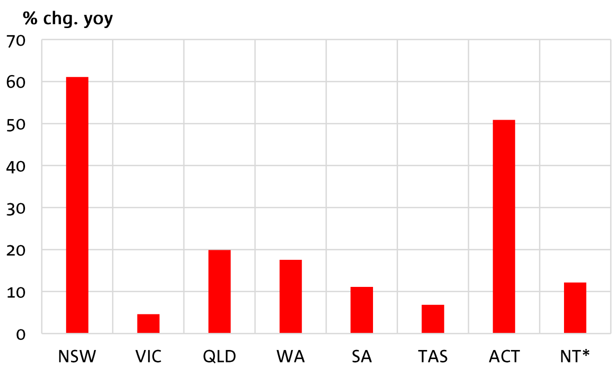


Chart 5: Online retail sales by industry, mom s.a.

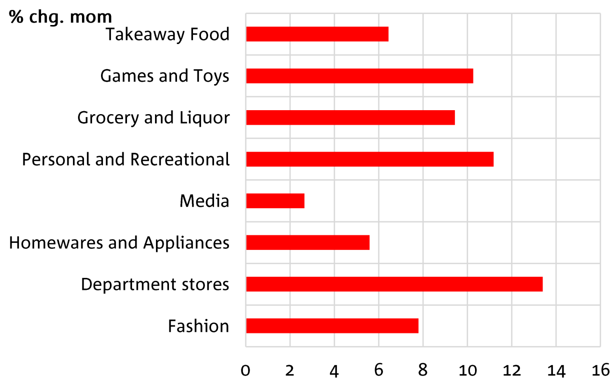
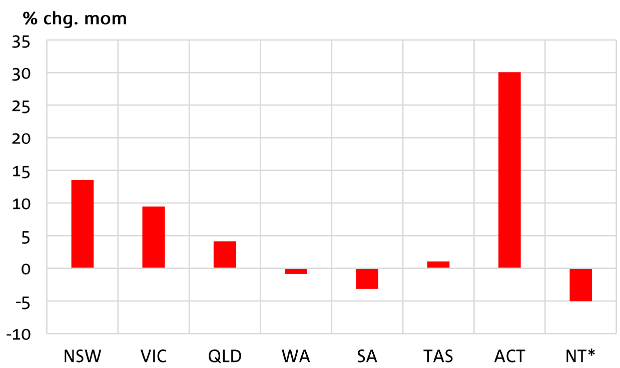
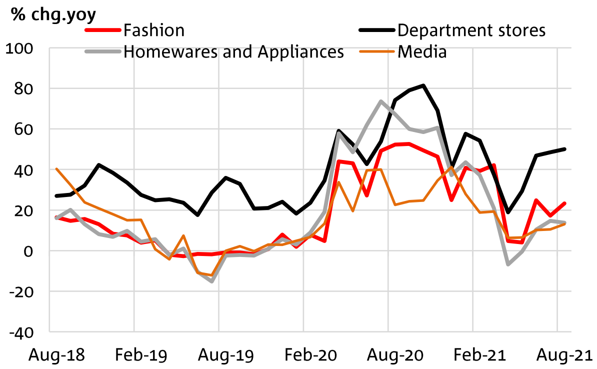


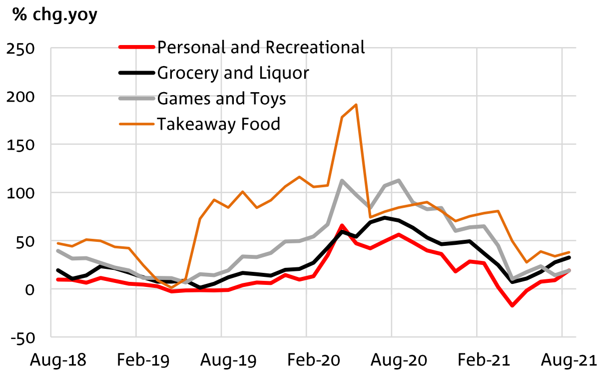
Chart 6: Online retail sales by state, mom s.a.



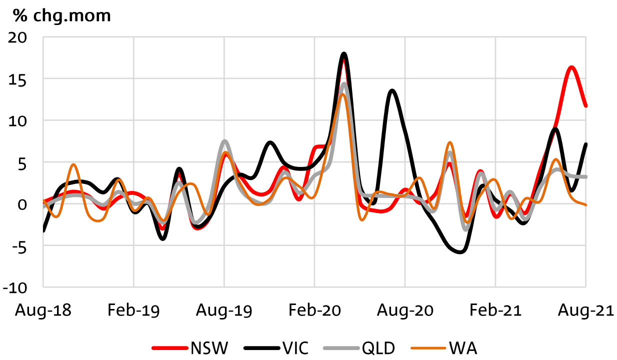
* Note that the series representing Northern Territory is highly variable and should be used with caution.

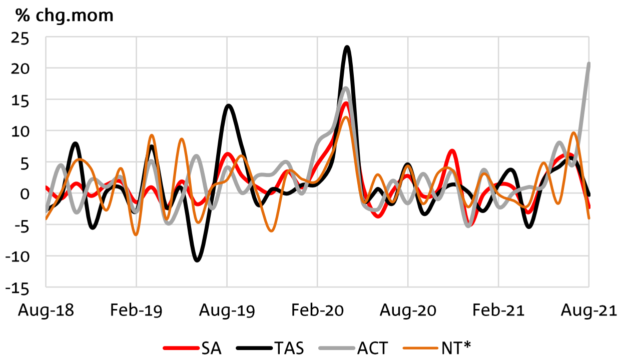
Charts 7 & 8: Online sales by category, seasonally adjusted





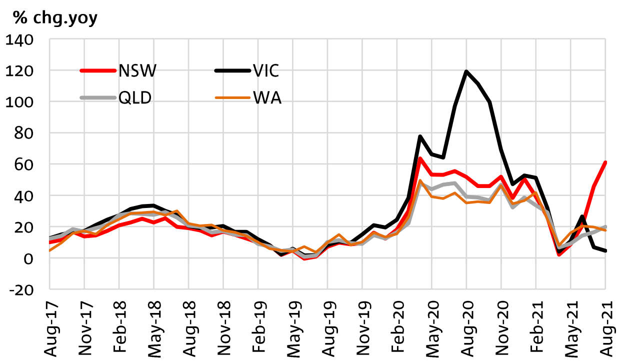
Charts 9 & 10: Online sales by state, trend

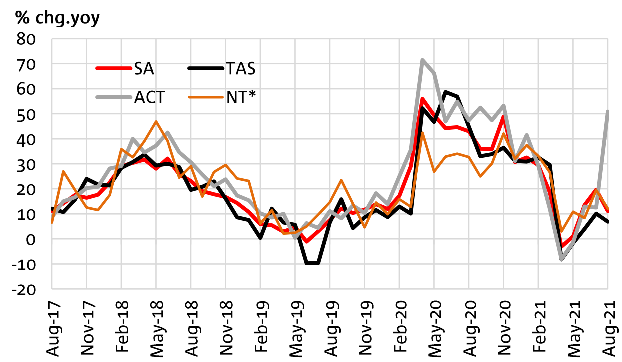




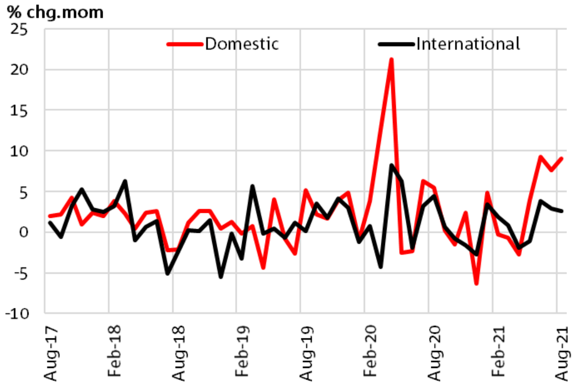
*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





Charts 13 & 14: Online sales by merchant location



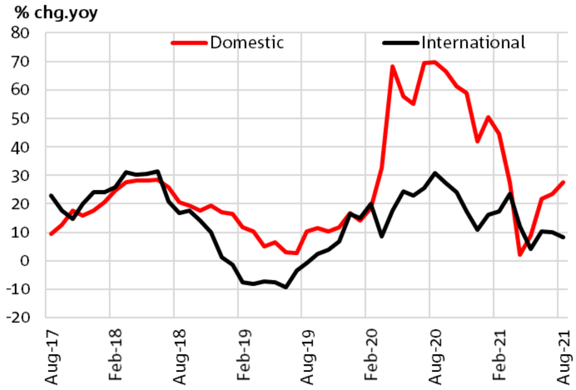


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	19.2	35.7	29.1	4.0	42.6	39.9	32.4	15.1	**30.0**
NSW	8.2	17.2	11.9	5.1	17.7	15.5	12.6	13.4	**13.5**
NT	1.0	-6.3	-4.2	3.0	6.0	-9.9	-19.6	-8.0	**-5.0**
QLD	2.9	9.2	0.3	-1.1	3.4	5.6	8.4	3.7	**4.1**
SA	-5.5	-0.4	-5.4	-2.8	-0.9	-2.0	-7.4	-0.1	**-3.2**
TAS	8.7	8.0	-7.7	-3.1	4.3	7.6	-6.5	3.1	**1.0**
VIC	13.0	16.8	5.8	5.0	10.7	5.6	13.1	2.4	**9.5**
WA	0.1	-3.3	-7.8	-1.5	3.4	3.1	2.0	7.2	**-0.9**
Total	**7.8**	**13.4**	**5.6**	**2.7**	**11.2**	**9.4**	**10.3**	**6.4**	**8.8**

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	8.6	3.9	29.2	5.8	83.6	16.4	10.9
Department stores	15.8	3.0	51.1	33.3	91.1	8.9	16.3
Homewares and appliances	5.6	1.1	14.0	-7.1	96.2	3.8	23.8
Media	2.5	5.8	11.2	30.9	90.5	9.5	6.4
Personal and Recreational	12.3	2.5	20.2	2.8	89.0	11.0	12.4
Grocery and Liquor	6.8	10.7	29.9	44.5	96.9	3.1	15.3
Games and Toys	6.0	3.4	23.9	-10.3	81.5	18.5	8.9
Takeaway Food	6.2	-2.4	36.7	42.7	99.4	0.6	5.9
All categories	**9.1**	**2.6**	**27.6**	**8.1**	**91.7**	**8.3**	**100**

METROPOLITAN AND REGIONAL SPEND

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

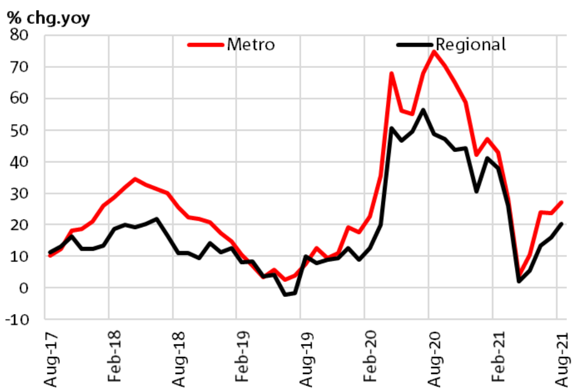
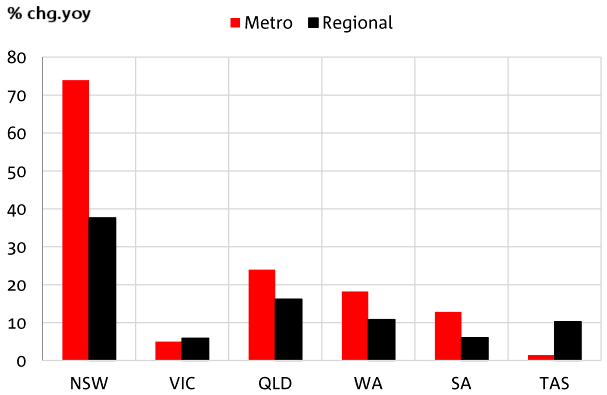


Chart 16: Online retail sales growth by state region, yoy s.a.

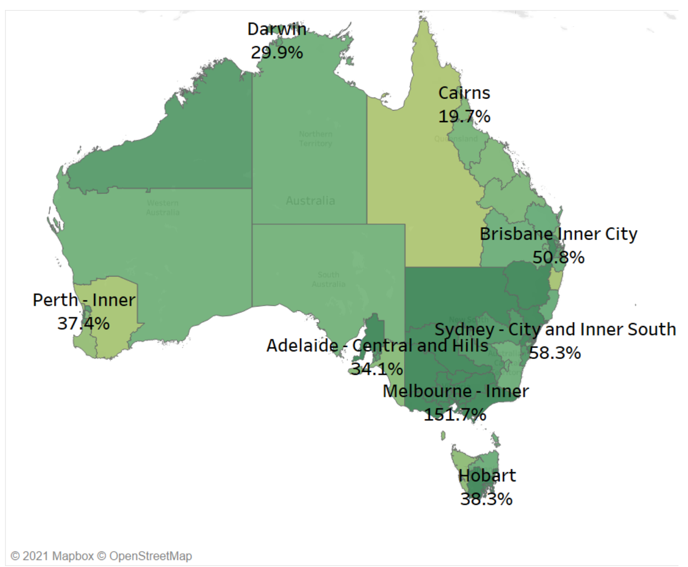


A HEATMAP VIEW OF SPEND GROWTH – PERSONAL AND RECREATIONAL GOODS YEAR ON YEAR, BY STATISTICAL AREA (SA4)

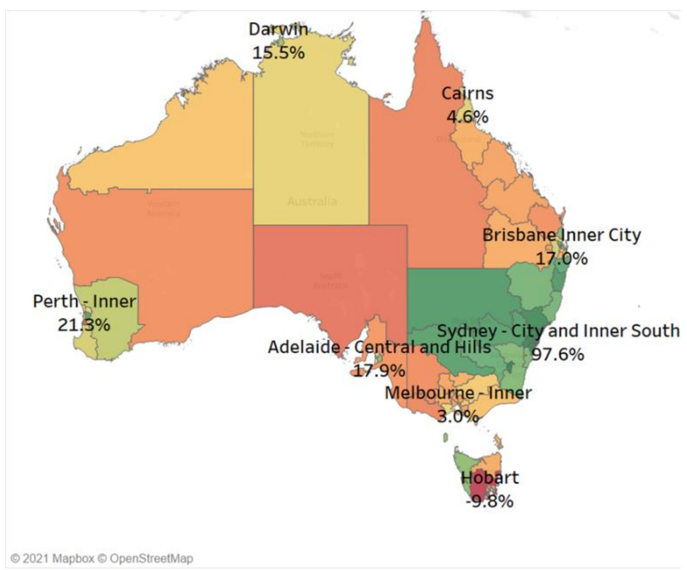
This month we look at the change in online spend for personal and recreational goods, by ABS statistical area (SA4). The growth comparison here is August 2019 relative to the year prior, and August 2021 relative to August 2020 (i.e. year-on-year comparisons).

In August 2020, growth for the overall index (+65.6% yoy) was rapid, with the south east of Australia more so. Online retail sales in Victoria, in full grip of lockdown, was about 119% higher than the previous year. For personal and recreational goods, the VIC state average was slightly higher, at 122% (yoy), with metro areas faster still. In August 2020 NSW was ranked second fastest for the overall and the category. In 2021, from the map below, while other areas have moderated, growth in NSW for this category continues apace. The state is now averaging about 70% growth for the category, with stronger growth in metro areas.

Personal and Recreational goods - August 2020 - YoY



Personal and Recreational goods August 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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