EMBARGOED UNTIL 11:30AM AEDT, Thursday 25th November 2021

NAB ONLINE RETAIL SALES INDEX OCTOBER 2021

NAB Group Economics

- **Growth contracted for the NAB Online Retail Sales Index in October (-5.6%), following a slight downward revision to September (3.2%, previously 3.3%), on a month-on-month, seasonally adjusted basis.**
- **In year-on-year terms however, the NAB Online Retail Sales Index continued to grow, albeit slowing in October (21.0% y/y). It is likely, with easing of restrictions, that year-on-year growth will now begin to moderate, as it had done earlier in the year, prior to the recent lockdowns in the key sales states.**
- **A contraction in growth was recorded in month-on-month terms for all categories in October, led by department stores, which had already slowed a month prior, and personal and recreational goods.** The contraction in large sales category, homewares and appliances, was slightly better than the overall index change. More moderate declines were observed in takeaway food, and grocery and liquor. In year-on-year terms, these two categories recorded the fastest growth. For more detail, see Charts 3, 5, 7 & 8 and table 3 below.
- **NSW, ACT and VIC, which ended lockdowns during October, saw the largest contractions in month-on-month terms. These three had in previous months seen the most rapid growth in online sales, and indeed, in year-on year-terms, NSW and ACT still lead. In month-on-month terms, TAS, which entered a short lockdown in mid-October, recorded strong growth.** Some consistency this month with department stores, which led the category contraction, aligned to the biggest drop by state. For smaller category, takeaway food, the result was more mixed, with the territories, TAS, and SA recording strong growth, and VIC almost flat. See charts 4, 6, 9-14, and table 3 for more detail.
- **The contraction in growth was higher in metro areas relative to regional. The monthly result was heavily influenced by NSW, with a pronounced fall in metro areas almost double that of regional.** More mixed results from other states, with VIC regional slightly worse, and the jump in TAS driven by metro. In year-on-year terms, NSW growth in metro areas is about one and a third times that of regional, with WA and SA more than double, while VIC and TAS online growth has been more regional. See Charts 15 and 16 for more detail.
- **Sales growth contraction was recorded for both domestic and international merchants this month,** with domestic department stores, and international media, particularly weak. See charts 13 and 14, and table 4 for category growth and share.
- **NAB estimates that in the 12 months to October, Australians spent $52.24 billion on online retail,** a level that is around 14.3% of the total retail trade estimate (September 2021, Series 8501, Australian Bureau of Statistics), and about 24.8% higher than the 12 months to October 2020.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (% s.a.)	Aug-21	Sep-21	Oct-21
NAB Online Index	25.6	29.7	21.0
ABS Traditional Retail	-0.7	1.7	-

Month-on-month growth (% s.a.)	Aug-21	Sep-21	Oct-21
NAB Online Index	8.8	3.2	-5.6
ABS Traditional Retail	-1.7	1.3	-

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

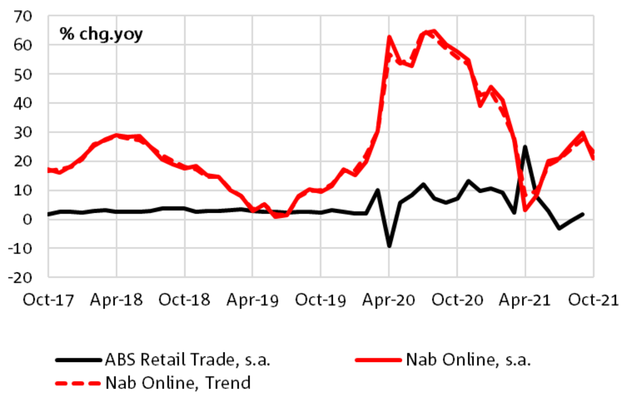
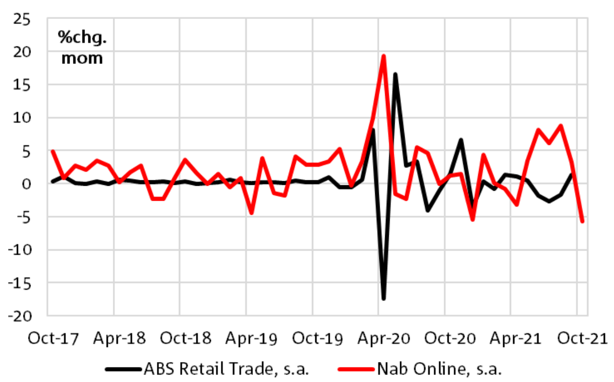


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

In month-on-month terms, our NAB Online Retail Sales Index contracted in October, following on from lockdown enhanced strong growth in recent months. Despite the monthly contraction, comparing this October to the same month 2020, i.e. in year-on-year terms, the index continues to exhibit considerable strength, up 21%. Given that the base of October 2020 had already grown over 57.6% on October 2019, the share of online retail sales continued to increase.

The contraction in monthly online sales in October was driven by the ACT, NSW, and VIC. These three had seen strong online sales growth during the lockdown periods over the past few months, and the current monthly result is likely to be partially reflective of an easing in restrictions during October. Interestingly, WA also contracted, suggesting separate factors at play for that state. In year-on-year terms, while all states were positive, ACT (67.4%) and NSW (38.6%) are driving the strong growth rate, with all other states growing under 20% year-on-year.

As lockdowns eased part way through October, growth in month-on-month terms contracted for all categories. The results were generally consistent where restrictions were eased, except ACT for takeaway food, which continued to grow in the month. Tas, which entered a short lockdown during the month, went against the broader trend for some categories, but particularly large sales category, homewares and appliances. The category which led the monthly contraction, department stores, was uniform except NT. While grocery and liquor also contracted in the month, it recorded strong year-on-year growth, so given its relative size, it has contributed heavily to the year-on-year growth in the index. See this month's heatmap for more detail.

Metro areas, which had grown more rapidly in recent months, recorded a larger contraction in October. Coinciding with the Hobart lockdown, metro TAS led growth in the month, while an easing in restrictions saw metro NSW lead the falls. For most states, year-on-year growth was highest for metro areas, with the exception of VIC and TAS. Part of the reason for this is the pattern of growth during the 2020 lockdown, where metro VIC had already experienced significant growth, whereas 2021 lockdowns included greater restrictions in regional areas.

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

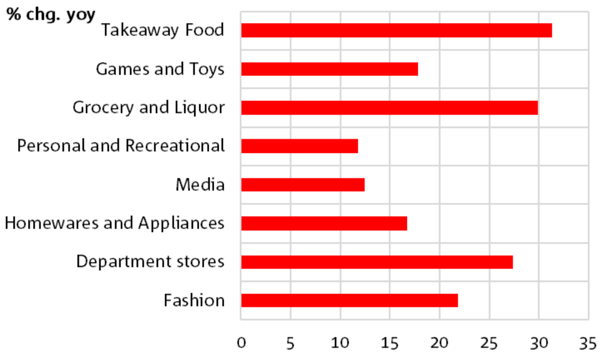


Chart 4: Online retail sales by state, yoy s.a.

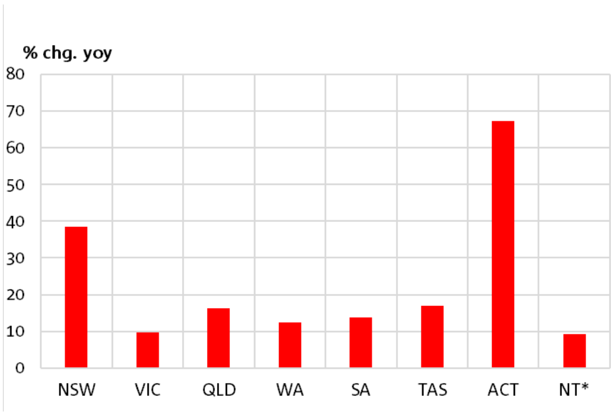


Chart 5: Online retail sales by industry, mom s.a.

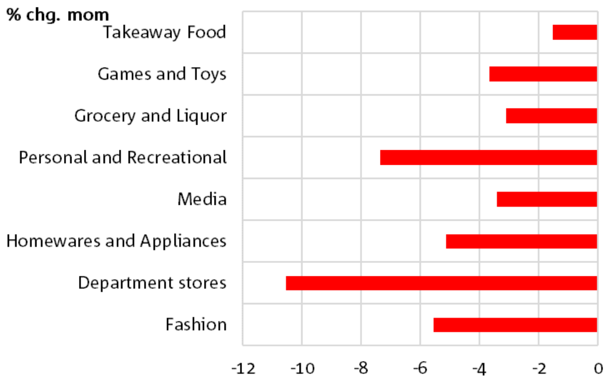
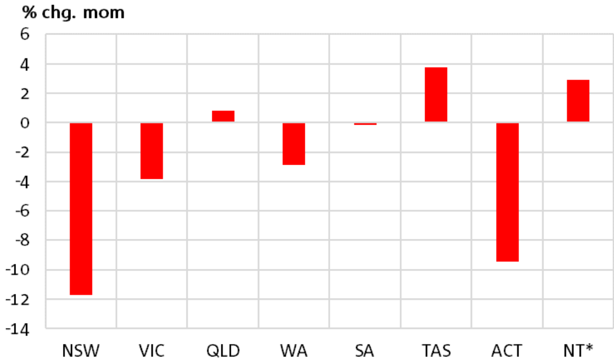
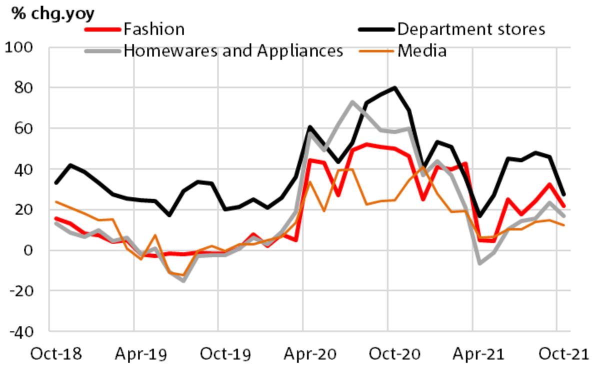


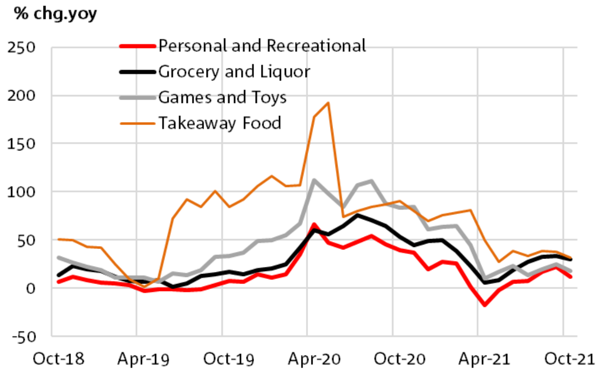
Chart 6: Online retail sales by state, mom s.a.



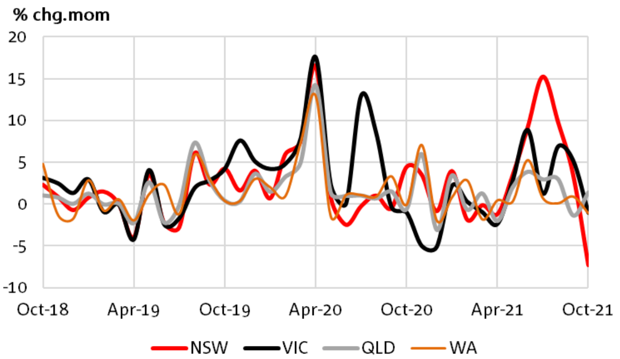
* Note that the series representing Northern Territory is highly variable and should be used with caution.

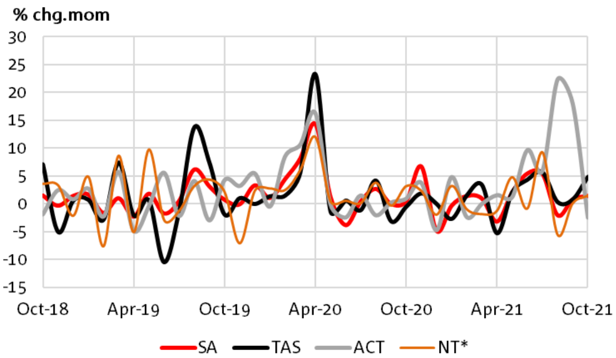
Charts 7 & 8: Online sales by category, seasonally adjusted





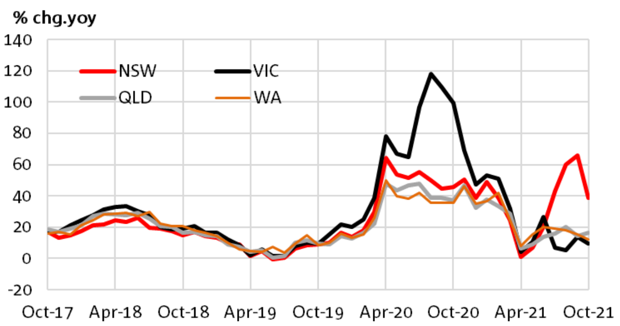
Charts 9 & 10: Online sales by state, trend

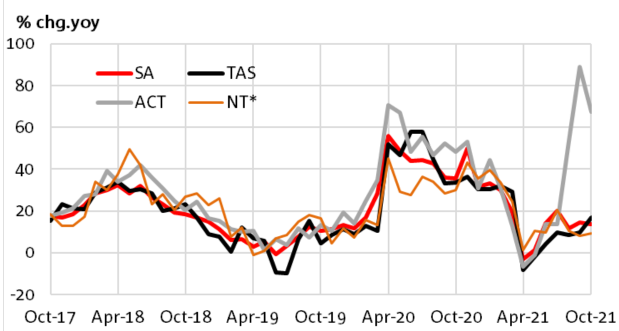




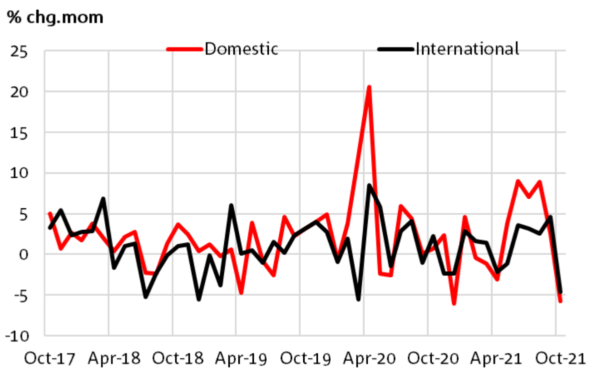
*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





Charts 13 & 14: Online sales by merchant location



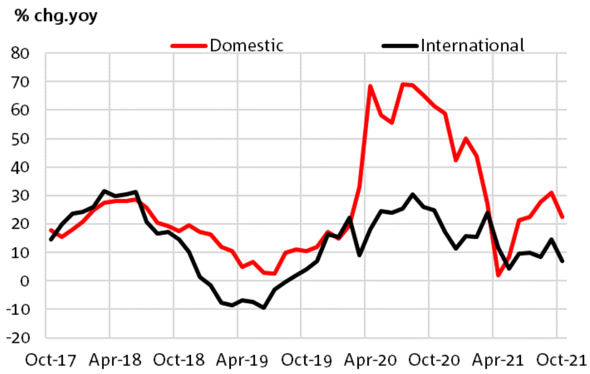


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	-8.2	-18.6	-7.3	-6.9	-15.6	-6.9	-4.2	4.5	**-9.5**
NSW	-11.3	-16.3	-12.9	-6.7	-14.7	-9.1	-8.4	-4.7	**-11.7**
NT	11.6	6.1	-9.1	-1.4	4.1	13.8	-5.4	13.8	**2.9**
QLD	2.5	-2.5	1.7	-2.8	-0.2	4.0	1.9	-0.7	**0.8**
SA	-2.1	-5.1	5.9	2.5	-3.1	-2.0	1.4	3.3	**-0.1**
TAS	2.1	-6.6	10.8	1.0	3.6	2.4	7.6	9.4	**3.8**
VIC	-4.5	-9.6	-2.3	-1.9	-4.7	-0.5	-3.3	-0.2	**-3.9**
WA	1.7	-8.5	-4.1	-1.6	-2.3	0.3	-1.3	-3.0	**-2.9**
Total	**-5.6**	**-10.5**	**-5.1**	**-3.4**	**-7.4**	**-3.1**	**-3.7**	**-1.5**	**-5.6**

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	-5.6	0.0	21.9	20.2	83.6	16.4	11.0
Department stores	-12.8	-5.0	28.8	13.6	91.2	8.8	16.4
Homewares and appliances	-4.1	-6.0	17.9	-0.8	96.4	3.6	23.7
Media	-2.7	-12.6	12.5	10.9	90.4	9.6	6.3
Personal and Recreational	-7.7	-6.4	12.9	0.8	89.1	10.9	12.3
Grocery and Liquor	-2.6	-7.2	29.8	32.2	96.9	3.1	15.5
Games and Toys	0.1	-10.1	22.0	-7.4	82.2	17.8	8.9
Takeaway Food	-3.1	4.3	30.6	49.4	99.4	0.6	6.0
All categories	**-5.7**	**-4.6**	**22.5**	**6.9**	**91.8**	**8.2**	**100**

METROPOLITAN AND REGIONAL SPEND

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

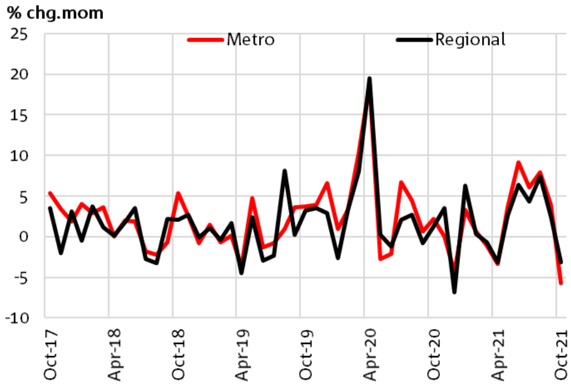
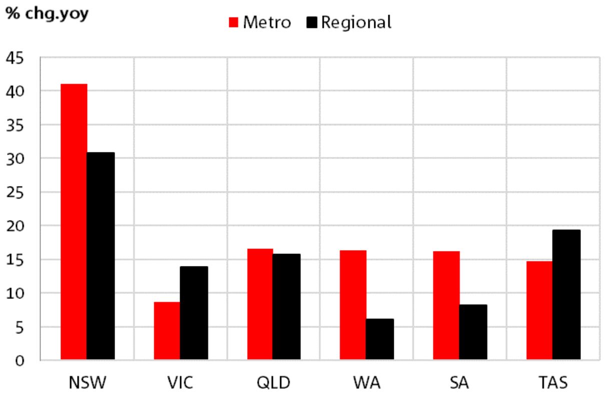


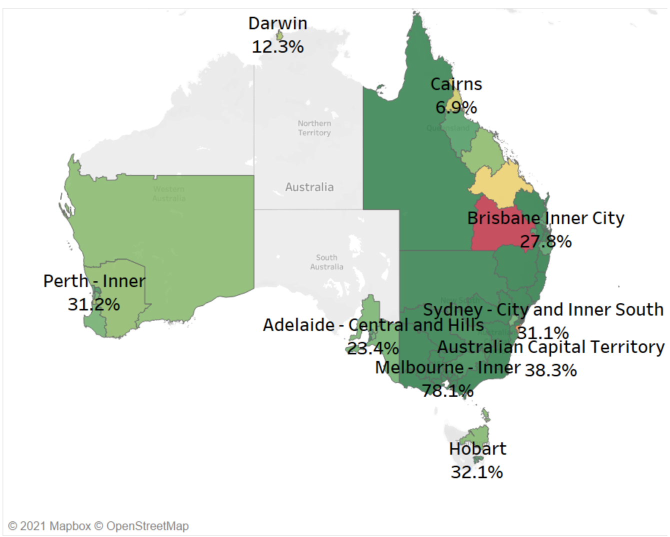
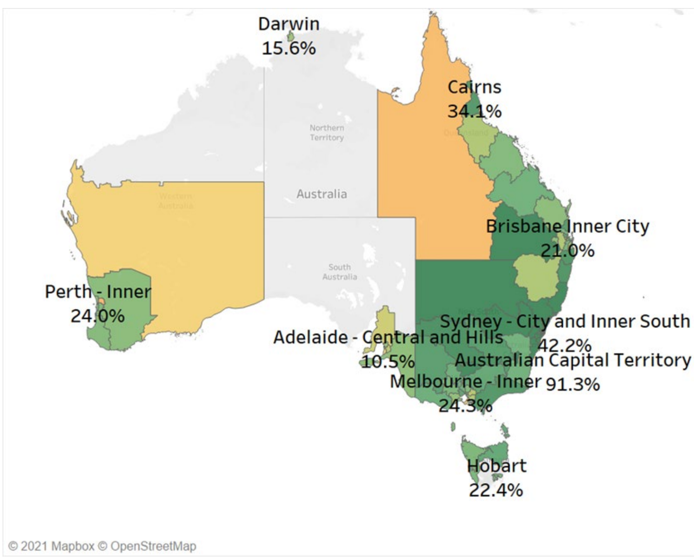
Chart 16: Online retail sales growth by state region, yoy s.a.



A HEATMAP VIEW OF SPEND GROWTH – GROCERY AND LIQUOR - YEAR ON YEAR, BY STATISTICAL AREA (SA4)

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

In October 2020, growth for the overall online index (+57.6% yoy) was relatively rapid compared to the current rate (21.0%). For online grocery and liquor retailing, year-on-year growth was keeping a close pace (53.4%) to the overall. As can be seen in the left map below, the eastern states recorded strong growth, particularly in and around Melbourne and ACT. In 2021, from the right map below, all capitals recorded growth, with ACT and Greater Sydney outpacing all other areas, in-line with the headline state growth. By SA4, the strongest growth for the category was in Baulkham Hills and Hawkesbury, at about 112% yoy. While many areas recorded slower growth in 2021, it is worth noting that this growth is in addition to strong growth for those areas in 2020.

Grocery and liquor - October 2020 - YoY	Grocery and liquor - October 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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