EMBARGOED UNTIL 11:30AM AEST, Monday 3rd August 2020

NAB ONLINE RETAIL SALES INDEX JUNE 2020

NAB Group Economics

- **The NAB Online Retail Sales Index returned to growth in June, albeit mildly (0.2%), on a month-on-month, seasonally adjusted basis. The results this month are considerably mixed based on category and state results, somewhat reflecting the varied restrictions around Australia.**
- **In year-on-year terms, the growth in the NAB Online Retail Sales Index (+49.6% y/y) is on par with the previous month. The year-on-year result implies that, even after the easing of restrictions, online sales growth remains elevated.**
- **Four of eight categories recorded a sales growth in month-on-month growth terms.** Growth was led by large sales category, grocery and liquor, along with media, homewares and appliances, and personal and recreational goods. Grocery and Liquor has recorded growth in each month over the past year. The biggest drop was recorded in the smallest sales category, takeaway food, although this was second fastest in year-on-year growth terms. Given their share of the index, the contraction in fashion, and department stores, had a considerable impact in offsetting the monthly growth result. For more detail, see Charts 3, 5, 7 & 8 below.
- **In month-on-month terms, NT, WA and Qld. recorded strong online sales growth, with milder growth in Vic.** The largest contraction in sales growth was in ACT, along with SA and Tas., and a milder contraction in NSW. In year-on-year terms, all states recorded double digit growth, with Vic. leading overall, along with smaller sales state, Tas. See charts4,6,9-14, and table 3 for more detail.
- **Sales growth in both regional and metro areas recorded growth in June, with the latter returning to growth from a contraction in May, while regional growth has slowed slightly.** In year-on-year terms, Metro Victoria recorded the highest growth, along with regional NSW which outpaced metro areas. See Charts 15 and 16 for more detail.
- **Monthly growth was driven by domestic online retailers, with sales at international merchants contracting again.** In June, category weakness and strength for both domestic and international retailers was in line with the headline result. See charts 13 and 14, and table 4 for category growth and share.
- **We estimate that in the 12 months to June, Australians spent $35.69 billion on online retail,** a level that is around 10.7% of the total retail trade estimate (Preliminary June 2020, Series 8501, Australian Bureau of Statistics), and about 23.1% higher than the 12 months to June 2019.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (% s.a.)	Apr-20	May-20	Jun-20
NAB Online Index	57.7	50.0	49.6
ABS Traditional Retail	-9.2	5.8	8.2*p

Month-on-month growth (% s.a.)	Apr-20	May-20	Jun-20
NAB Online Index	16.2	-0.8	0.2
ABS Traditional Retail	-17.7	16.9	2.4*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

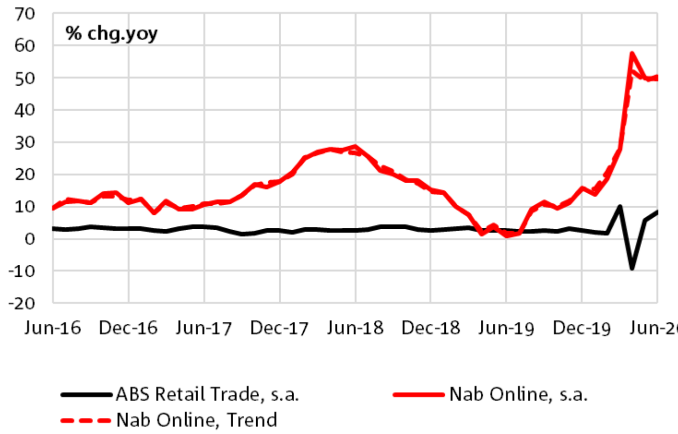
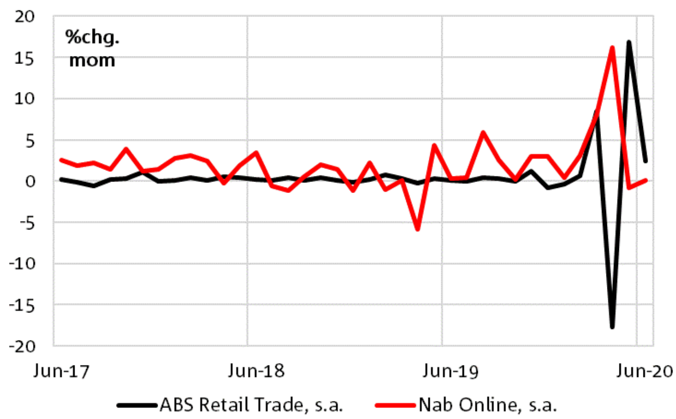


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

Our NAB Online Retail Sales Index data returned to more moderate growth in June, from the contraction in May and record growth in the two months prior. While online retail sales growth is typically volatile month to month, the recent changes that COVID-19 has brought to the broader economy, and day to day life, has made it even more so.

While the smaller spend share category, games and toys, contracted in month-on-month terms, this category has performed strongly relative to the same period 2019. This category includes merchants such as online game subscriptions, which have proved popular in the current environment, in addition to physical goods such as puzzles. In month-on-month terms, growth was strongest for the second largest sales category, grocery and liquor. Given that this category has recorded consecutive monthly growth over the past 12 months, it has contributed heavily to the headline result for the year. The category with the third fastest growth in April, fashion, is now back amongst the weaker performers after two monthly contractions, and is slowest in year-on-year terms (+24.6%, yoy).

The three most populous states represent just over 80% of all online sales, slightly above their share of the population. Of these three states, Queensland recorded the strongest growth in the month, but was outpaced by WA and NT. Victoria retains the lead over the year. This month we have included data by state and category to provide additional insights. The strong result for Queensland in the month was driven by grocery and liquor, and homeware and appliance sales, with WA growth more broadly spread across categories. NT was the only region to record growth in fashion in the month, and saw strong growth in personal and recreational gear.

Both metro and regional areas grew in the month. In year-on-year terms, Vic metro leads overall, while regional growth is led by NSW, followed by Vic and Tas.

In terms of merchant location, sales at international merchants saw slight contraction in the month while domestic merchants returned to mild growth. Domestic merchants have significantly outpaced international over the year.

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

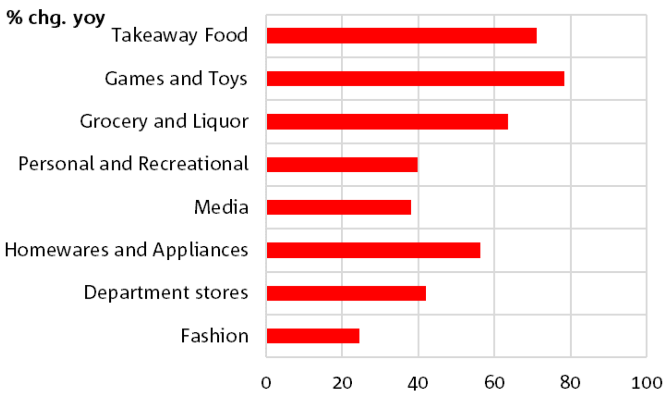


Chart 4: Online retail sales by state, yoy s.a.

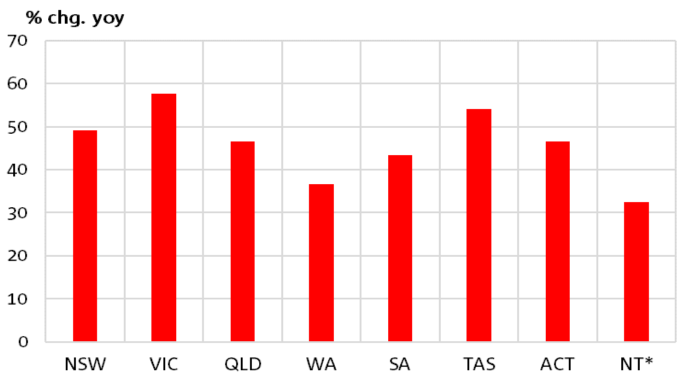


Chart 5: Online retail sales by industry, mom s.a.

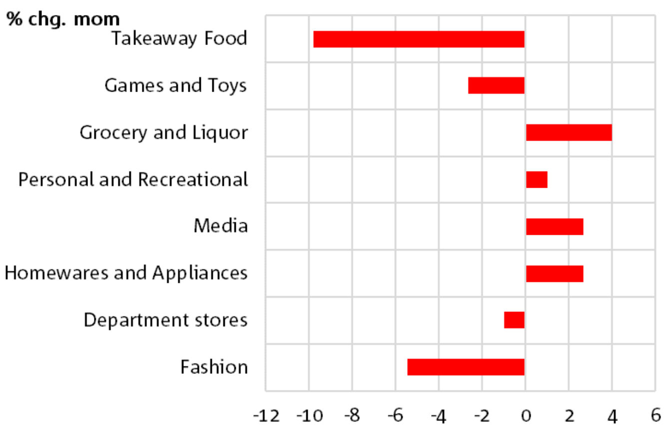
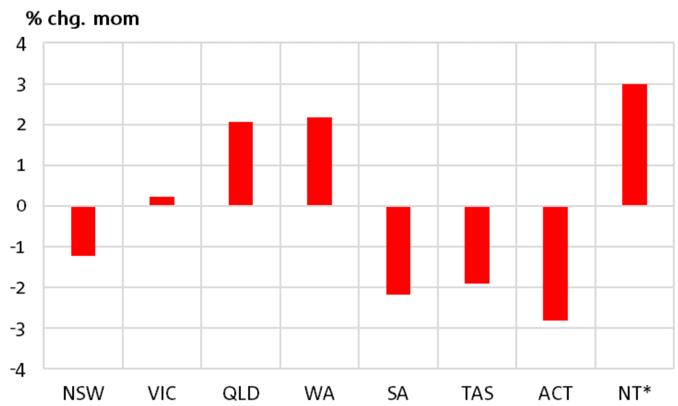
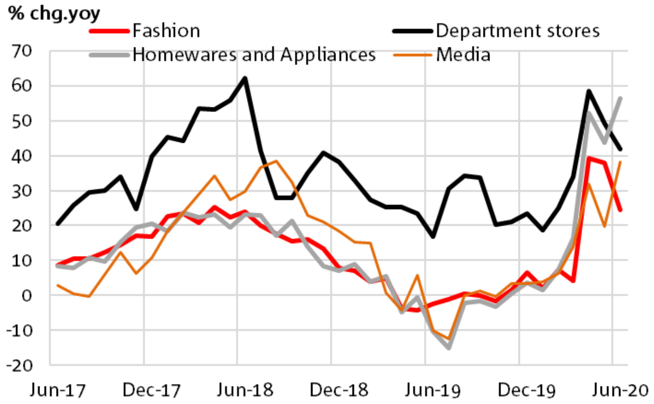


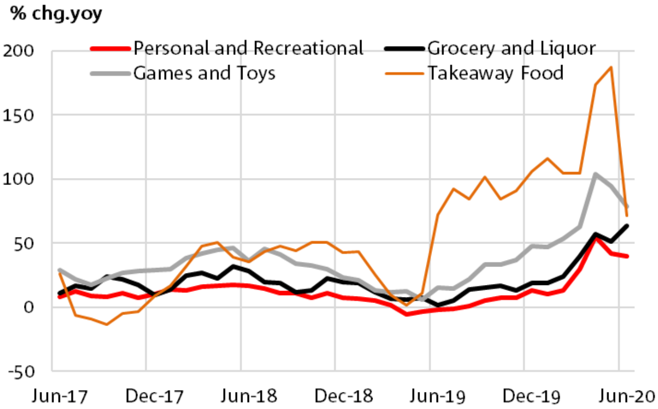
Chart 6: Online retail sales by state, mom s.a.



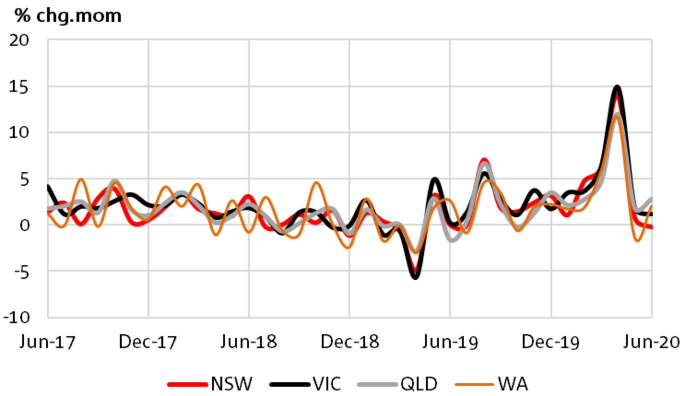
* Note that the series representing Northern Territory is highly variable and should be used with caution.

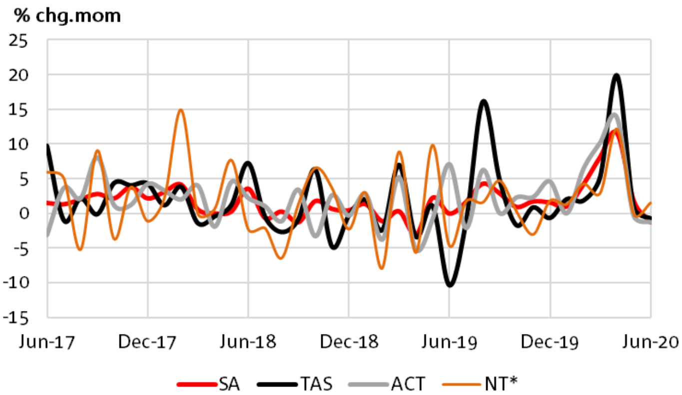
Charts 7 & 8: Online sales by category, seasonally adjusted





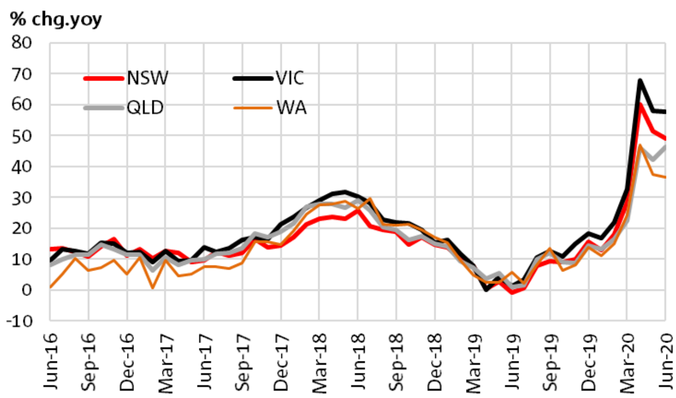
Charts 9 & 10: Online sales by state, trend

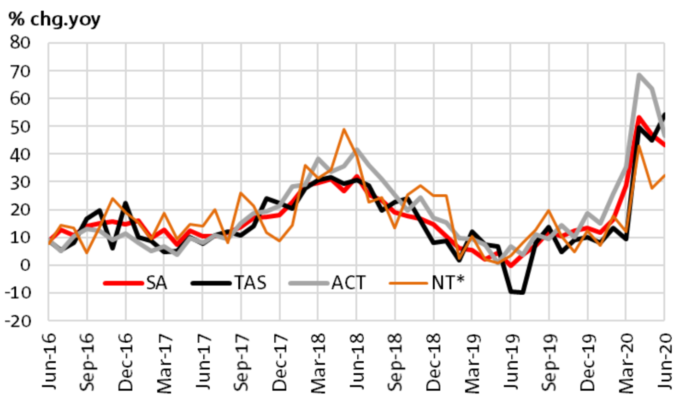




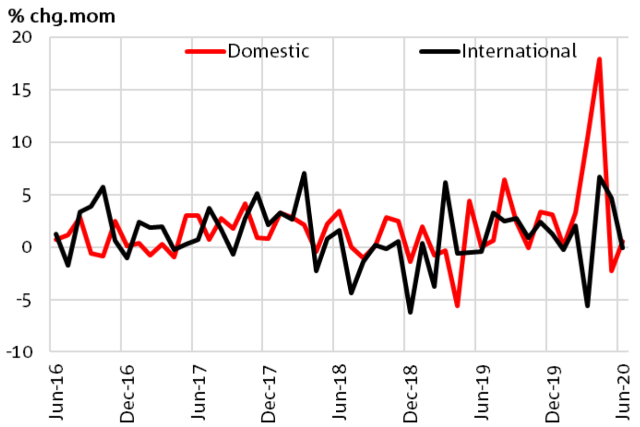
*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





Charts 13 & 14: Online sales by merchant location



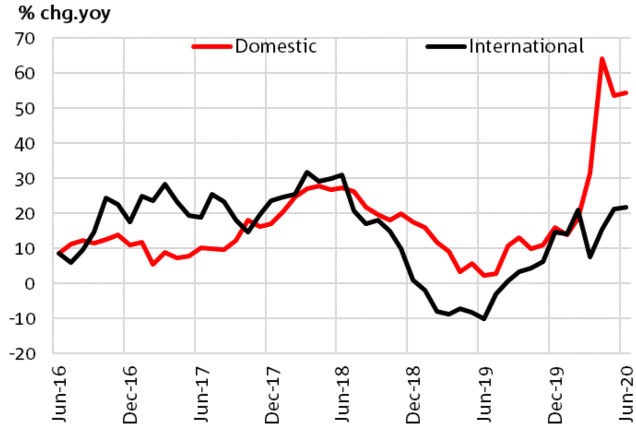


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	-10.9	-3.8	5.3	1.1	-3.1	-2.2	-14.2	-11.4	-2.8
NSW	-5.8	-1.7	2.0	2.6	0.0	-0.6	-3.2	-12.4	-1.2
NT	17.1	1.7	-0.2	9.1	14.1	-2.6	-10.5	-7.8	3.0
QLD	-5.1	0.4	3.9	3.6	1.3	9.6	-0.4	-8.6	2.1
SA	-6.0	-2.7	-2.7	4.6	-0.8	0.2	-6.4	-2.7	-2.2
TAS	-6.7	-1.8	-2.3	-1.2	-0.3	-0.7	1.1	-4.3	-1.9
VIC	-5.1	-1.5	2.8	1.8	1.9	6.4	-2.8	-10.4	0.2
WA	-5.4	2.2	5.7	3.3	2.6	4.0	0.6	-4.3	2.2
Total	**-5.5**	**-1.0**	**2.7**	**2.7**	**1.0**	**4.0**	**-2.6**	**-9.8**	**0.2**

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	-7.0	-3.5	31.0	-3.1	80.9	19.1	11.3
Department stores	-0.8	-4.2	46.6	9.3	89.3	10.7	14.4
Homewares and appliances	1.9	2.8	55.7	34.8	95.6	4.4	24.7
Media	3.2	0.3	41.2	17.1	90.6	9.4	7.4
Personal and Recreational	1.3	3.5	42.7	19.9	87.7	12.3	14.2
Grocery and Liquor	2.8	1.8	61.9	6.6	95.9	4.1	15.1
Games and Toys	-3.8	-3.9	82.7	66.5	74.4	25.6	8.0
Takeaway Food	-7.8	-16.1	72.4	-47.1	98.7	1.3	4.8
All categories	**0.5**	**-0.1**	**54.4**	**21.8**	**90.0**	**10.0**	**100**

METROPOLITAN AND REGIONAL SPEND

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

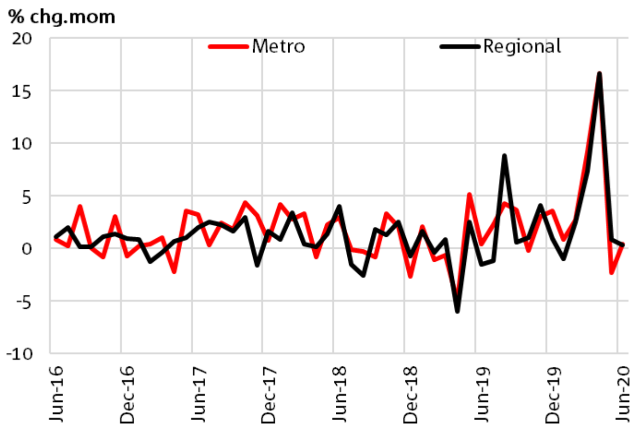
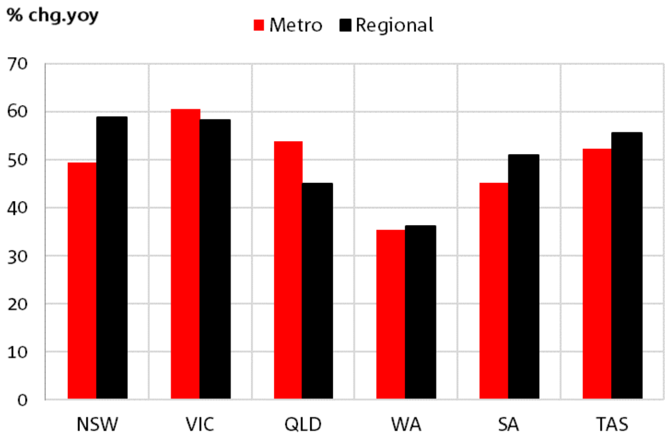
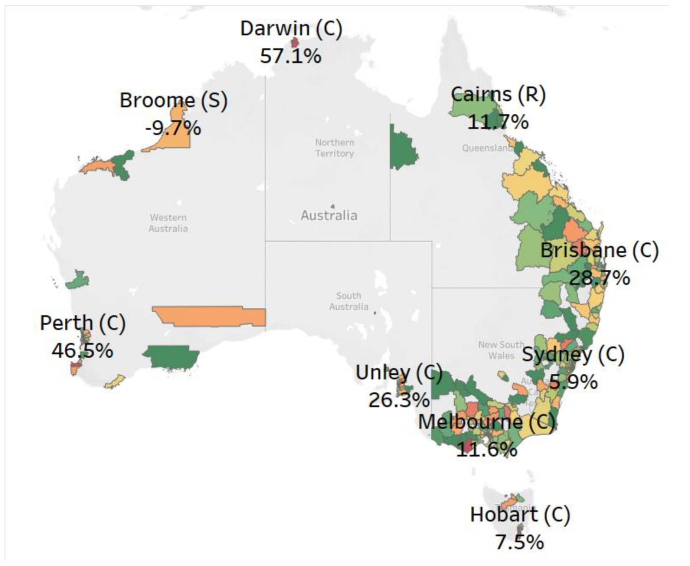
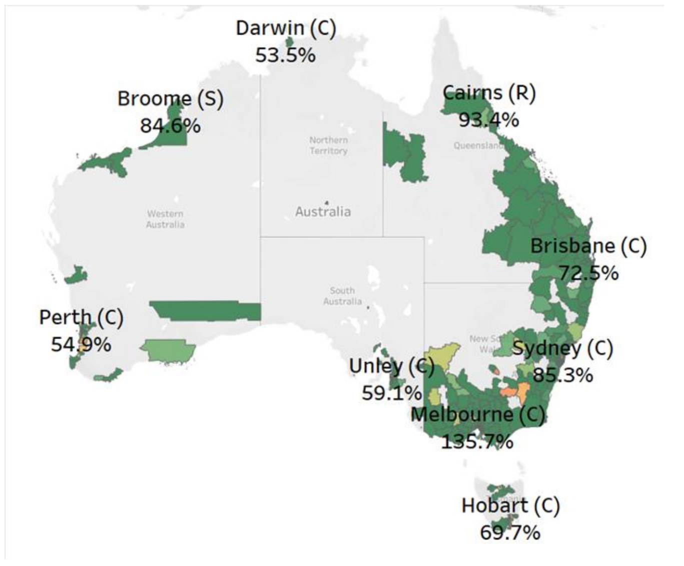


Chart 16: Online retail sales growth by state region, yoy s.a.



A HEATMAP VIEW OF SPEND GROWTH – YEAR ON YEAR – GAMES AND TOYS - BY LOCAL GOVERNMENT AREA

This month we look at games and toys and the year-on-year growth in spend by local government area. The map shows many areas where the growth in spend has accelerated. Unlike some other sectors that are reliant on physical delivery, the maps also show the provision of electronic games was already a feature of many non-metropolitan areas last year. Through this time, the average transaction size for this category across Australia has remained about the same, at around $72 per transaction. It is likely that growth has come mostly from higher volumes within most of these LGAs.

June 2019 - YoY	June 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. Note that the NORSI series prior to December 2018 was using Census Bureau Seasonal adjustment, and a Henderson 13 was applied for trend.

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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