# NAB ONLINE RETAIL SALES INDEX FEBRUARY 2021



NAB Group Economics

- Growth was flat for the NAB Online Retail Sales Index in February (0.1%), from revised growth in January (3.9%), on a month-on-month, seasonally adjusted basis.
- In year-on-year terms, the growth in the NAB Online Retail Sales Index slowed (40.7% y/y). While slower than the record-breaking period between April and November 2020, it remains elevated. In the coming months, we are likely to see the base effects from the abovementioned high sales growth period of 2020 begin to affect the year-on-year comparisons.
- Mixed results this month, with four of eight categories recording sales growth. Strongest growth was recorded by smaller sales category games and toys, and mid-size categories, department stores, fashion, and personal and recreational goods. But this growth was netted by a contraction in the two largest categories, homewares and appliances, and grocery and liquor, along with media, and takeaway food. For more detail, see Charts 3, 5, 7 & 8 and table 3 below.
- In month-on-month terms, growth was recorded in WA, VIC, SA and TAS. The February sales contraction in NSW and ACT follows on from their strong growth in January. Note that February was the period of short 'Circuit breaker' lockdowns for VIC and WA. In year-on-year terms, VIC still leads, along with other large sales state NSW, and WA. See charts 4,6,9-14, and table 3 for more detail.
- Regional areas which had rebounded more strongly in January, did not slow as much as metro areas in February. The headline contraction for NSW and QLD was more pronounced in metro areas. In year on year terms, metro VIC continues to outpace all other areas. Growth in regional WA, NSW and TAS was stronger relative to metro areas in those states. See Charts 15 and 16 for more detail.
- Sales growth was recorded for international merchants in month-on-month terms, with domestic online retailers contracting slightly in the month. Sales growth for domestic merchants was slower in all categories, except media, and personal and recreational goods, in the month. See charts 13 and 14, and table 4 for category growth and share.
- We estimate that in the 12 months to February, Australians spent \$46.9 billion on online retail, a level that is around 13.2% of the total retail trade estimate (Preliminary February 2021, Series 8501, Australian Bureau of Statistics), and about 48.4% higher than the 12 months to February 2020.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (% s.a.)						
	Dec-20	Jan-21	Feb-21			
NAB Online Index	39.8	45.4	40.7			
ABS Traditional Retail	9.6	10.6	8.7*p			

Month-on-month growth (% s.a.)						
	Dec-20	Jan-21	Feb-21			
NAB Online Index	-4.7	3.9	0.1			
ABS Traditional Retail	-4.1	0.5	-1.1*p			

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.)



<sup>\*</sup>p – Preliminary release from the ABS. These data are incorporated into charts 1&2 as preliminary figures.

### NAB Chief Economist, Alan Oster commented:

In month-on-month terms, our NAB Online Retail Sales Index was flat in February, after strong growth in January which outpaced overall retail trade growth. When comparing this February to 2020, i.e. in year-on-year terms, the index continues to grow strongly, just under the pace set between April and November (50% to 60%). It is worth noting however, that in coming months, the year-on-year growth metric will be impacted by the base effects of the initial online spike of March and April 2020. An element of caution and perspective is advised when interpreting the year-on year results over the next few months.

We continue to observe shifts in the relative category share in the index. Games and Toys now represents about 8.9% of the total, adding over a full percentage point in the past year. In 2012, this category was about 5% of the index. For media, its share in the index is now smaller, not helped this month by a large contraction.

All states recorded growth in fashion, and games and toys, but state results were mixed for all other categories. Most states saw a contraction in spend on grocery and liquor, but notably, the circuit breaker states, VIC and WA, recorded growth, along with NT. For NSW and ACT, falls were recorded in most other sectors, particularly large sales categories, homewares and appliance, grocery and liquor, and personal and recreational, which contributed heavily to their monthly result.

As expected, strong online retail sales growth was recorded in the states with the short 'circuit breaker' lockdowns (VIC and WA). This is in stark contrast to total retail trade preliminary February numbers from the ABS, where the instore component for these states is likely to have resulted in a sales growth contraction. For online, the sales growth in these states was netted by a contraction in some other states, particularly NSW and QLD. By region in February, it was metro NSW and QLD which clearly impacted the overall metro result, outweighing strong growth in VIC and TAS. For regional areas, WA has recorded two very strong months of growth, following on from a contraction in December. Over the year though, metro areas are still outpacing regional, led by VIC.

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

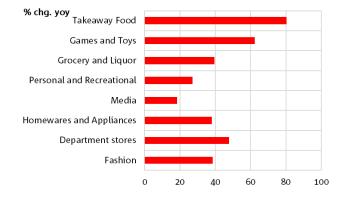


Chart 4: Online retail sales by state, yoy s.a.

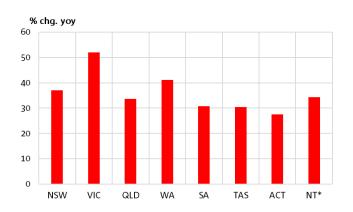


Chart 5: Online retail sales by industry, mom s.a.

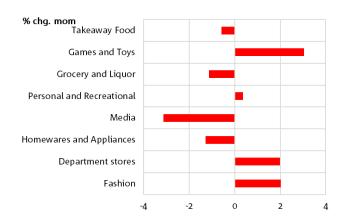
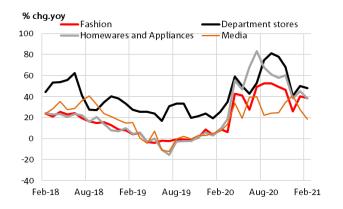


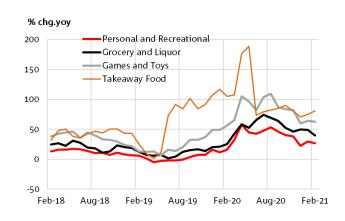
Chart 6: Online retail sales by state, mom s.a.



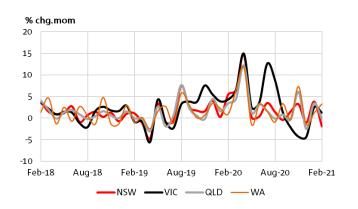
<sup>\*</sup> Note that the series representing Northern Territory is highly variable and should be used with caution.

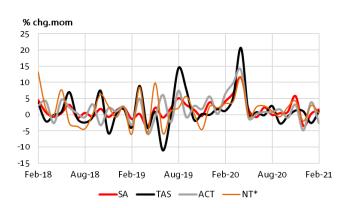
### Charts 7 & 8: Online sales by category, seasonally adjusted





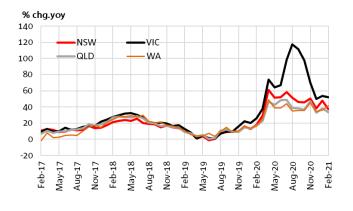
### Charts 9 & 10: Online sales by state, trend

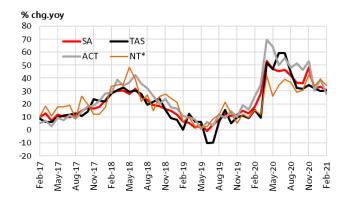




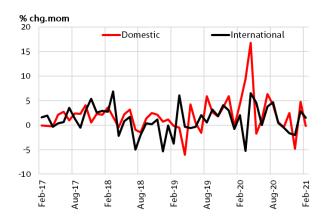
\*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





### Charts 13 & 14: Online sales by merchant location



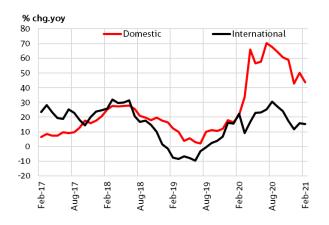


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	1.8	5.5	-12.3	2.9	-4.1	-6.3	8.9	0.0	-2.7
NSW	0.9	0.4	-4.6	-3.7	-1.9	-3.8	0.5	-6.3	-2.4
NT	2.4	0.9	-8.4	-4.0	-6.8	15.3	8.9	-5.6	-0.5
QLD	2.1	1.3	-0.7	-1.3	0.3	-2.1	0.4	-3.1	-0.3
SA	2.0	-1.3	2.6	-0.1	1.6	-1.0	8.9	1.8	1.6
TAS	2.2	-1.4	-0.0	6.4	-1.7	-2.5	7.0	-0.4	0.4
VIC	2.2	3.2	0.5	-5.4	2.9	1.8	5.4	2.5	1.8
WA	5.7	6.7	4.8	-1.8	-1.3	1.0	5.0	9.2	3.5
Total	2.0	2.0	-1.3	-3.1	0.4	-1.1	3.1	-0.6	0.1

Table 4: Online sales by category and merchant location- Domestic, International (Int'l)

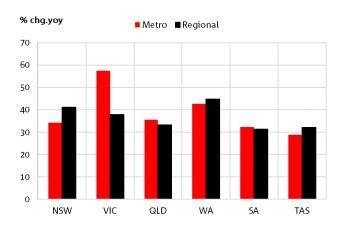
%	Monthly growth – Domestic	Monthly growth – Int'l.	Annual growth – Domestic	Annual growth – Int'l.	Domestic Share of Category Spend	Int'l Share of Category Spend	Overall Category Spend Share
Fashion	1.4	4.5	46.2	24.8	83.5	16.5	10.9
Department stores	2.3	3.7	51.2	24.3	90.8	9.2	14.8
Homewares and appliances	-1.2	1.4	39.7	16.5	96.1	3.9	25.0
Media	-3.1	-5.1	18.5	12.3	91.0	9.0	6.6
Personal and Recreational	0.7	0.5	27.9	15.5	89.1	10.9	13.3
Grocery and Liquor	-1.7	-2.8	41.8	5.5	96.9	3.1	15.2
Games and Toys	1.8	3.2	79.5	13.0	78.9	21.1	8.9
Takeaway Food	-2.1	5.1	82.2	-44.2	99.4	0.6	5.4
All categories	-0.1	1.5	43.6	15.2	91.4	8.6	100

## METROPOLITAN AND REGIONAL SPEND

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

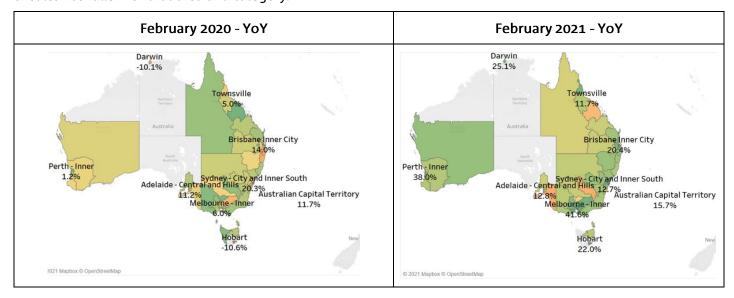


Chart 16: Online retail sales growth by state region, yoy s.a.



## A HEATMAP VIEW OF SPEND GROWTH - 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). Personal and recreational goods is a category with a diverse mix of merchants that are not covered in other categories like games and toys, and fashion and accessories, including pharmacies, health and beauty, cosmetics, florists, sporting and camping goods, and auto parts. The growth comparison here is February 2020 relative to the year prior, and February 2021 relative to February 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 February 2020, growth for the index (+20.2% yoy) had begun to accelerate, albeit moderately, and personal and recreation goods (15.9% yoy) was not far below the overall. In month-on-month terms (i.e. February 2020 vs January 2020), the category rebounded after contracting in January. The maps show that, in some regional areas, growth for this category in 2020 was higher than 2021, especially in regional Queensland. In February 2021, growth for this category has been particularly strong in most metro areas, but particularly VIC, and WA. The general area though, covered by the series (with minimum cut-off applied for display) hasn't changed much for this category, indicating that most of the spread of online for personal and rec goods is well established. Having said that, in the last year, the SA4 for west and north west TAS no longer meets the minimum display cut-off, indicating the volume of sales has fallen for that area and category.



## 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).

### **Group Economics**

Alan Oster Group Chief Economist +(61 0) 414 444 652

Jacqui Brand Executive Assistant +(61 0) 477 716 540

Dean Pearson Head of Behavioural & Industry Economics +(61 0) 457 517 342

# Australian Economics and Commodities

Gareth Spence Senior Economist +(61 0) 436 606 175

Kaixin Owyong Senior Economist +(61 0) 436 679 908

Phin Ziebell Senior Economist +(61 0) 475 940 662

# Behavioural & Industry Economics

Robert De Iure Senior Economist – Behavioural & Industry Economics +(61 0) 477 723 769

Brien McDonald
Senior Economist –
Behavioural & Industry
Economics
+(61 0) 455 052 520

Steven Wu Senior Economist – Behavioural & Industry Economics +(61 0) 472 808 952

### **International Economics**

Tony Kelly Senior Economist +(61 0) 477 746 237

Gerard Burg Senior Economist – International +(61 0) 477 723 768

### Global Markets Research

Ivan Colhoun Global Head of Research +(61 2) 9293 7168

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