# NAB ONLINE RETAIL SALES INDEX JULY 2022



**NAB Group Economics** 

- On a month-on-month, seasonally adjusted basis, growth for the NAB Online Retail Sales Index continued to contract in July (-1.4%), following on from a contraction in June (revised -1.4%, previously -1.5%).
- In year-on-year terms, the NAB Online Retail Sales Index recorded a large contraction in July (-7.3% y/y). It is worth noting that this is compared to a period of exceptionally strong growth in July 2021.
- By category, department stores defied the month-on-month headline contraction, with growth also recorded for media, and games and toys. Personal and recreational goods, which was the only category to record monthly growth in June, contracted the most in July. The largest sales category, homewares and appliances, was in line with the overall contraction in month-on-month terms. In year-on-year terms, takeaway food, and media, continue to grow. For more detail, see charts 3, 5, 7 & 8 and table 3 below.
- The state result was also mixed in the month, with moderate growth for QLD, ACT and WA outweighed by a contraction in NSW and VIC. In year-on-year terms, the larger contraction in NSW and VIC outweighed growth in the other large sales states. Again, some perspective is warranted here, with the comparison made to a period in 2021 of exceptionally high growth. See charts 4, 6, 9-14, and table 3 for more detail.
- The contraction in growth for metro areas contributed heavily to the overall result, while regional areas improved, to record slight growth. NSW played a significant part in this result as well, with metro areas contracting well beyond the overall index, while regional areas for the state recorded growth. In year-on-year terms, growth in metro areas contracted, while regional areas remained positive, albeit slowing. See Charts 15 and 16 for more detail.
- The contraction in monthly growth was attributed to domestic retailers, with international recording slight growth. This was particularly the case for personal and rec, and media. However, growth for department stores, which recorded growth in the month, came from domestic retailers, with international contracting. Over the year, domestic retailers recorded a larger contraction, again, partly reflecting the considerable growth a year prior. See charts 13 and 14, and table 4 for category growth and share.
- NAB estimates that in the 12 months to July, Australians spent \$56.01 billion on online retail, a level that is around 14.5% of the total retail trade estimate (June 2022, Series 8501, Australian Bureau of Statistics), and about 13.6% higher than the 12 months to July 2021.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

| Year-on-year growth (% s.a.) |        |        |        |  |  |  |
|------------------------------|--------|--------|--------|--|--|--|
|                              | May-22 | Jun-22 | Jul-22 |  |  |  |
| NAB Online Index             | 9.7    | -0.2   | -7.3   |  |  |  |
| ABS Traditional Retail       | 10.2   | 12.0   | -      |  |  |  |

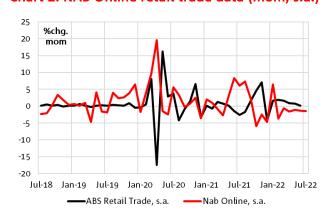
| Month-on-month growth (% s.a.) |        |        |        |  |  |  |
|--------------------------------|--------|--------|--------|--|--|--|
|                                | May-22 | Jun-22 | Jul-22 |  |  |  |
| NAB Online Index               | -1.1   | -1.4   | -1.4   |  |  |  |
| ABS Traditional Retail         | 0.7    | 0.2    | -      |  |  |  |

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 again in July. Apart from the Omicron induced spike in January, the monthly change has generally been negative since October. In year-on-year terms, our series again recorded a contraction, much larger than that recorded in June. It is worth keeping this in context. Most states during the September quarter 2021 experienced some form of lockdown. Online sales growth in July 2021 remained elevated, boosted particularly by NSW. To put this in further perspective, if we compare the current headline total, to that of the same month pre-covid (i.e. July 2022 vs July 2019), total online spend is up about 85%. This compares favourably to broader retail sales, indicating that while there has been weakness in year-on-year terms, the broader long-term strength of online retail remains intact. Indeed, in twelve-months-to terms, growth remains positive (13.6%). Much of this came from growth during the lockdown period in the third, and early fourth, quarters of 2021. In the near term though, using our other measures of consumer spend as a guide, we continue to see moderation.

Three clear standout categories over the past year in terms of contribution to growth (through the year terms) have been department stores, grocery and liquor, and takeaway food. With average higher growth over the period, each of these has gained share in the index. In contrast, homewares and appliances, which is still the largest in share, and personal and recreational goods, contributed less to growth than their share in the index. It remains to be seen whether some of the discretionary elements of home delivery remain in a more constrained budgetary environment.

This month in the heat map section, we zoom in on the latest year-on-year results in New South Wales, for overall NORSI growth, to help visualise the result from the metro and regional areas, given the latest result.

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

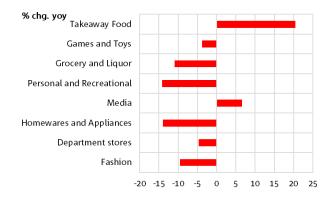


Chart 4: Online retail sales by state, yoy s.a.



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

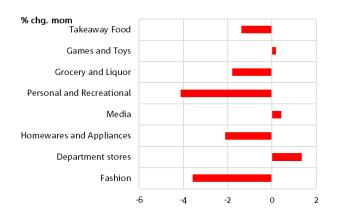
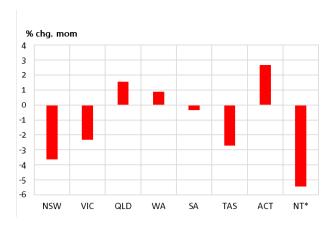
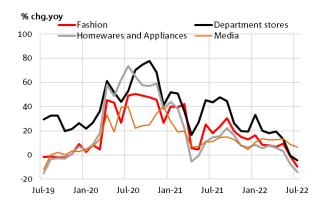


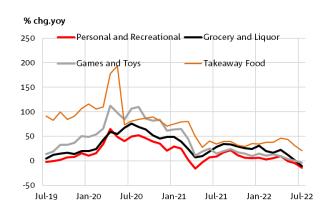
Chart 6: Online retail sales by state, mom s.a.



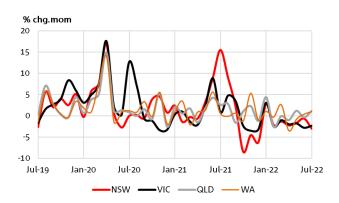
<sup>\*</sup> Note that the series representing Northern Territory is highly variable and should be used with caution.

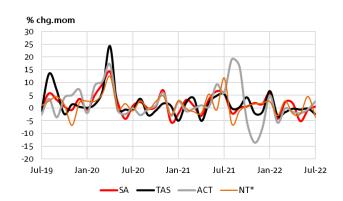
## Charts 7 & 8: Online sales by category, seasonally adjusted





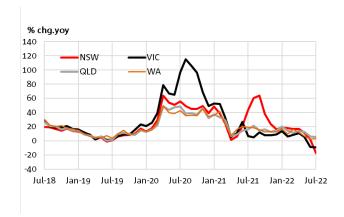
## Charts 9 & 10: Online sales by state, trend

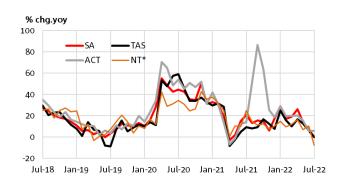




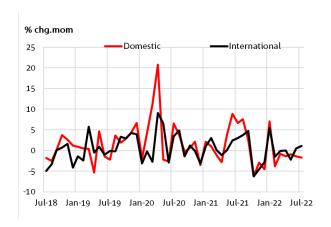
\*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





# Charts 13 & 14: Online sales by merchant location



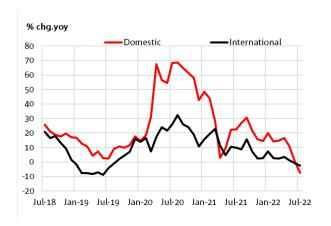


Table 3: Online sales by category and state

| %<br>(mom,s.a.) | Fashion | Dep't<br>stores | Home & appliances | Media | Personal and Rec. | Grocery<br>and<br>Liquor | Games<br>and<br>Toys | T'away<br>Food | Total |
|-----------------|---------|-----------------|-------------------|-------|-------------------|--------------------------|----------------------|----------------|-------|
| ACT             | -0.1    | 1.9             | 8.9               | 3.4   | 0.7               | 2.2                      | -4.1                 | 2.9            | 2.7   |
| NSW             | -5.2    | -0.6            | -3.9              | -0.9  | -7.6              | -5.7                     | -3.3                 | 0.5            | -3.6  |
| NT              | -12.8   | -2.7            | 2.4               | -5.1  | -9.5              | -3.7                     | -13.7                | -4.8           | -5.4  |
| QLD             | -1.1    | 4.8             | 0.2               | -0.1  | -0.4              | 2.5                      | 7.0                  | -2.0           | 1.6   |
| SA              | -0.8    | -3.9            | 5.0               | 1.0   | -1.8              | -1.3                     | 0.9                  | -4.4           | -0.3  |
| TAS             | 2.2     | -1.5            | -12.3             | -0.8  | 0.0               | 2.8                      | 0.9                  | 0.7            | -2.7  |
| VIC             | -4.5    | 1.9             | -4.5              | 1.9   | -5.2              | -2.2                     | -1.6                 | -2.8           | -2.3  |
| WA              | -1.7    | 1.3             | 2.2               | 0.1   | -1.6              | 1.3                      | 4.1                  | -0.0           | 0.9   |
| Total           | -3.6    | 1.3             | -2.1              | 0.4   | -4.1              | -1.8                     | 0.2                  | -1.4           | -1.4  |

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

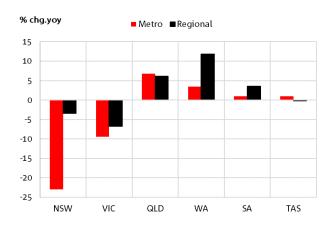
| %                            | Monthly<br>growth –<br>Domestic | Monthly<br>growth –<br>Int'l. | Annual<br>growth –<br>Domestic | Annual<br>growth –<br>Int'l. | Domestic<br>Share of<br>Category<br>Spend | Int'l Share<br>of Category<br>Spend | Overall<br>Category<br>Spend<br>Share |
|------------------------------|---------------------------------|-------------------------------|--------------------------------|------------------------------|---|-------------------------------------|---------------------------------------|
| Fashion                      | -4.3                            | 1.2                           | -12.6                          | 9.1                          | 83.4                                      | 16.6                                | 10.8                                  |
| Department stores            | 1.9                             | -1.5                          | -2.9                           | -18.1                        | 92.0                                      | 8.0                                 | 16.8                                  |
| Homewares and appliances     | -2.0                            | -2.3                          | -13.6                          | -1.3                         | 96.4                                      | 3.6                                 | 22.6                                  |
| Media                        | 0.3                             | 6.0                           | 8.6                            | -12.9                        | 91.5                                      | 8.5                                 | 6.4                                   |
| Personal and<br>Recreational | -6.4                            | -0.2                          | -16.0                          | -9.9                         | 89.7                                      | 10.3                                | 11.6                                  |
| Grocery and Liquor           | -2.3                            | 4.4                           | -10.9                          | 13.3                         | 96.8                                      | 3.2                                 | 16.0                                  |
| Games and Toys               | 0.0                             | 2.8                           | -4.0                           | -0.8                         | 83.4                                      | 16.6                                | 8.8                                   |
| Takeaway Food                | -1.3                            | 8.3                           | 19.4                           | 204.6                        | 99.1                                      | 0.9                                 | 7.0                                   |
| All categories               | -1.7                            | 1.1                           | -7.4                           | -2.6                         | 92.3                                      | 7.7                                 | 100                                   |

# METROPOLITAN AND REGIONAL SPEND

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

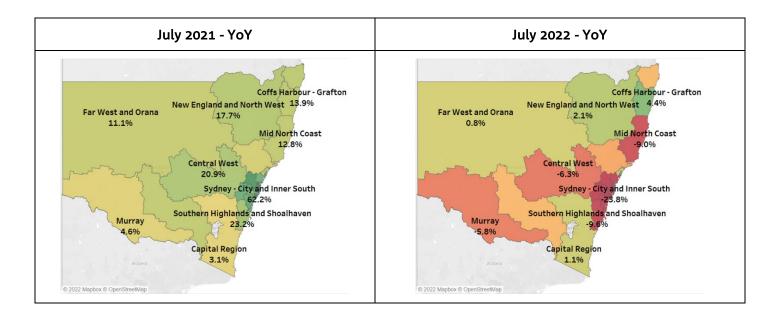


Chart 16: Online retail sales growth by state region, yoy s.a.



# A HEATMAP VIEW OF SPEND GROWTH - NSW ZOOM - YEAR ON YEAR, BY STATISTICAL AREA (SA4)

This month we look at the change in online spend for New South Wales, including all NORSI sales categories. In year-on-year terms, NSW (-17.4%) performed much lower than the national (-7.3%) in this month's results, but we need to apply some context here. This number is relative to a period where national online sales had grown 21.1%, and for NSW it was 43.5%. From the charts above, and the maps below, many areas that had rapid growth in 2021, have recorded strong contractions in 2022. This is particularly the case for Sydney metro areas, where lockdowns were in force. There are, however, some regional areas where growth has remained positive, including Coffs harbour, New England, the Capital region, and the Far west (just).



# 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.

#### **NAB Online Retail Sales Index**

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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