EMBARGOED UNTIL 11:30AM AEDT, Thursday 5th March 2020

NAB ONLINE RETAIL SALES INDEX JANUARY 2020

NAB Group Economics

- **The NAB Online Retail Sales Index contracted in January (-0.5%) on a month-on-month, seasonally adjusted basis. This follows on from strong growth in November (2.6% mom, s.a.) and December (2.0%).**
- **In year-on-year terms, while the growth in the NAB Online Retail Sales Index slowed (+11.7% y/y s.a.) in January, it continues to outpace the broader ABS retail sales series.**
- **Three categories recorded sales growth in month-on-month growth terms.** As this growth was from smaller spend share categories (takeaway food, games and toys, and media), their growth contribution was outweighed by falls in larger sales categories to form the overall index result. Department stores (-4.0% mom, s.a.) led the drop in the month, along with fashion, personal and recreational goods, and the largest sales category, homewares and appliances (-0.95% mom, s.a.). Sales from grocery and liquor were virtually flat in the month. For more detail, see Charts 3, 5, 7 & 8 below.
- **In month-on-month terms, all states and territories except WA and Vic. recorded a contraction in sales growth.** NSW recorded the largest contraction in growth, along with Tas. and the ACT. Vic. still leads in year-on-year terms.
- **Sales growth in metro contracted at a slower rate relative to regional areas on a month-on-month basis.** In year-on-year terms, Vic. was strongest for metro areas, while Qld. was fastest for regional growth. See Charts 15 and 16 for more detail.
- **A larger contraction was recorded by international merchants in January, with sales at domestic merchants contracting at a more moderate rate.** By category, while homewares and appliances contracted at a faster rate, the biggest hit to international retailers was the contraction in fashion, which represents a larger share of sales. For domestic merchants, fashion, and the department store category were a key area of weakness. See charts 13 and 14, and table 3 for category growth and share.
- **We estimate that in the 12 months to January, Australians spent $30.83 billion on online retail,** a level that is around 9.4% of the total retail trade estimate (December 2019, Series 8501, Australian Bureau of Statistics), and about 9.4% higher than the 12 months to January 2019.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

Year-on-year growth (% s.a.)	Nov-19	Dec-19	Jan-20
NAB Online Index	9.9	13.2	11.7
ABS Traditional Retail	3.3	2.7	

Month-on-month growth (% s.a.)	Nov-19	Dec-19	Jan-20
NAB Online Index	2.6	2.0	-0.5
ABS Traditional Retail	1.0	-0.5	

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

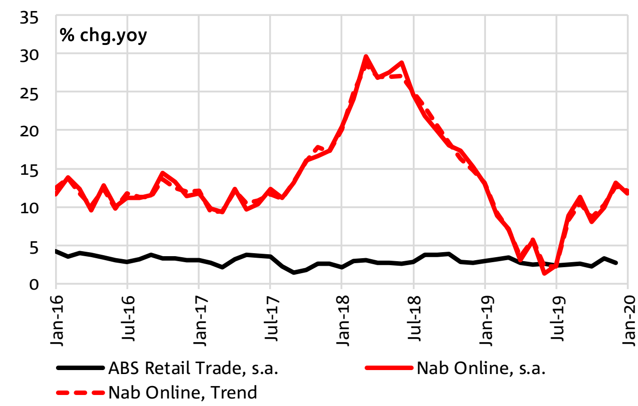
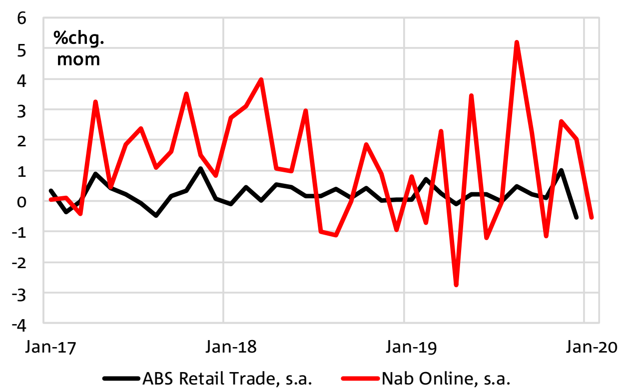


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

Our NAB Online Retail Sales Index data indicates that there was a contraction in online retail sales spend in January relative to December. From the series history, January results have generally recorded online sales growth. However, as discussed in the December in-focus, that months result was exceptionally high given the sales event in the first few days of that month. As such, it is likely that the January result is partly due to post sales reversion. In year-on-year terms, while sales slowed a little, they are still strong, again recording double digit growth.

The smallest sales category, takeaway food, continues to lead growth in both month-on-month and year-on-year terms. This category has grown so rapidly over the past 12 months that its share of online spend has increased from under 3% of sales to over 4%. Grocery, games and toys, and department stores have also increased their share of the index, albeit at more moderate rates of growth. While homewares and appliances recorded a sales contraction in January, it remains the largest sales category, accounting for 1 in 4 dollars spent in the online retail index. Sales for grocery and liquor were relatively flat in January. However, over the year, this mid-sized sales category has performed strongly, particularly for domestic retailers.

The three most populous states represent just over 80% of all online sales, slightly above their share of the population. Of these three states, only Victoria recorded growth in the month, with Queensland slightly negative after strong December sales, and NSW contracting heavily. WA was the only other state to record growth in the month. Victoria continues to lead in year-on-year growth terms.

Representing about two-thirds of all online sales, metropolitan areas performed more strongly than the overall result, while online sales contraction in regional areas was more pronounced, especially in regional NSW. Only Victoria and WA recorded growth in metro areas, in contrast to Tasmania, NSW, Qld. and SA. Regional sales in Tas. performed strongly in the month, with Qld. sales growth also slightly positive. In all other states, sales growth in metro areas was not as weak as in regional areas.

By merchant location, international retailers contracted at a slightly faster rate than the overall index, with domestic retailers recording a milder sales growth contraction. In the month, sales growth performance was much worse for domestic retailers in key categories of fashion and department stores. In January, while international retailers outpaced domestic retailers in the grocery and liquor category, this is a much smaller category for international retailers, and domestic retailers have outperformed in this category over the year. Sales growth in the largest sales category, homewares and appliances, had a smaller sales growth contraction in January relative to international retailers. International retailers have recorded strong growth in this category over the year, but still represent a small portion of category sales.

It is worth noting here that our definition of a domestic online retailer can include those merchants whose parent organisation might be overseas with an Australian subsidiary. Solely using GST as a key defining characteristic of domestic and international is no longer appropriate given changes made in July 2018.

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

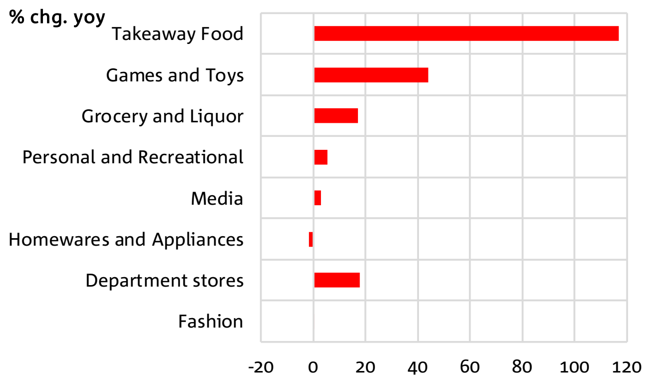


Chart 4: Online retail sales by state, yoy s.a.

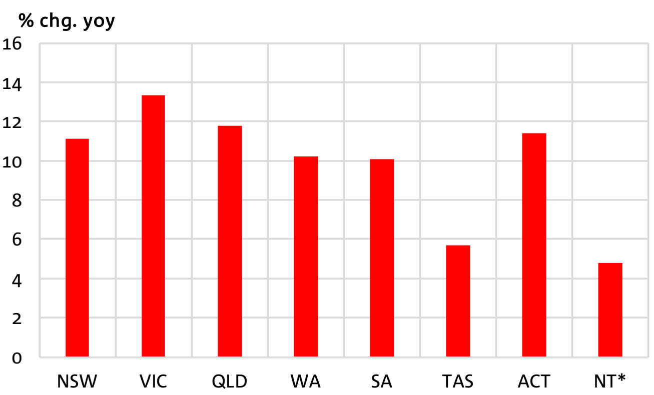


Chart 5: Online retail sales by industry, mom s.a.

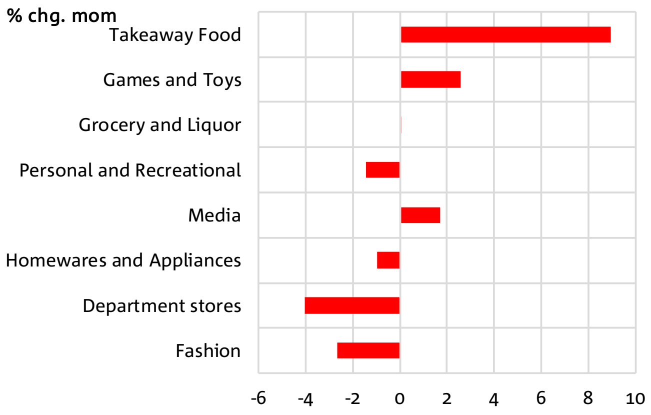
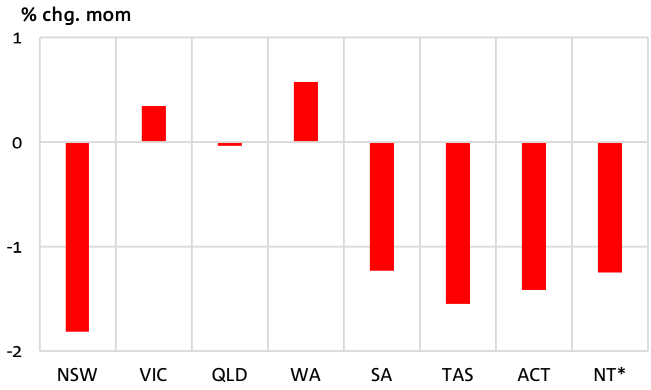
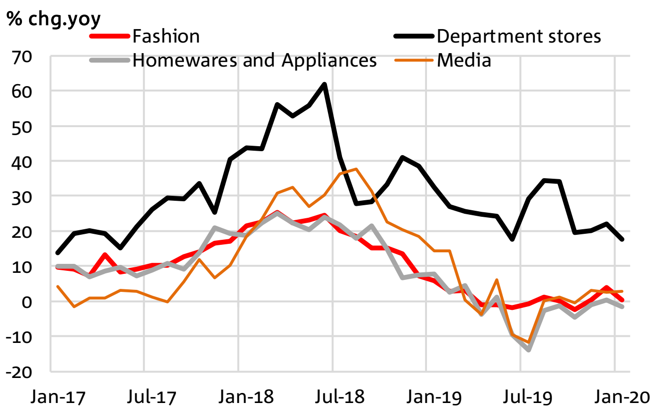


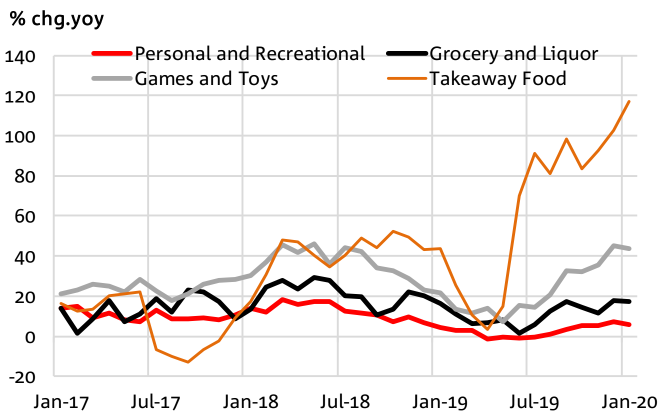
Chart 6: Online retail sales by state, mom s.a.



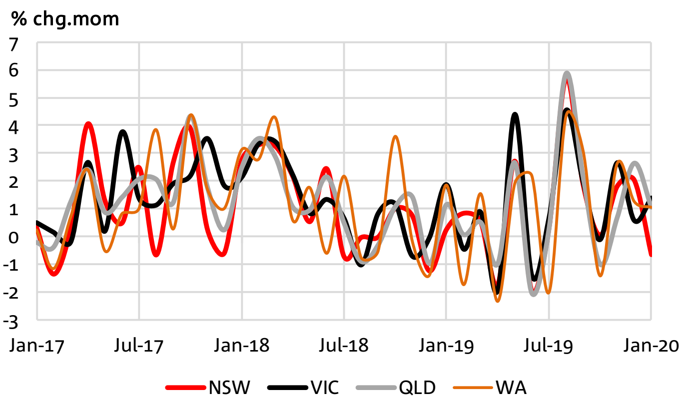
* Note that the series representing Northern Territory is highly variable and should be used with caution.

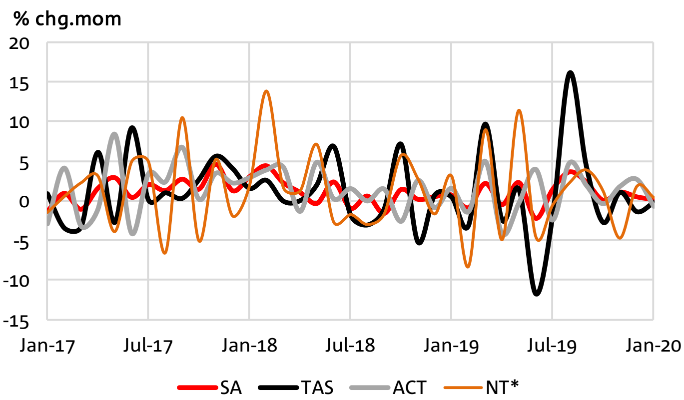
Charts 7 & 8: Online sales by category, seasonally adjusted





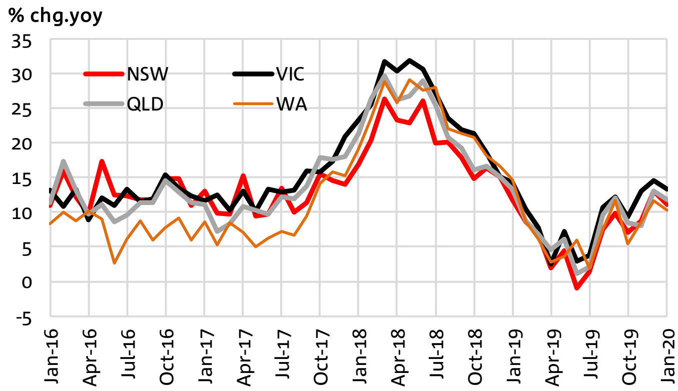
Charts 9 & 10: Online sales by state, trend

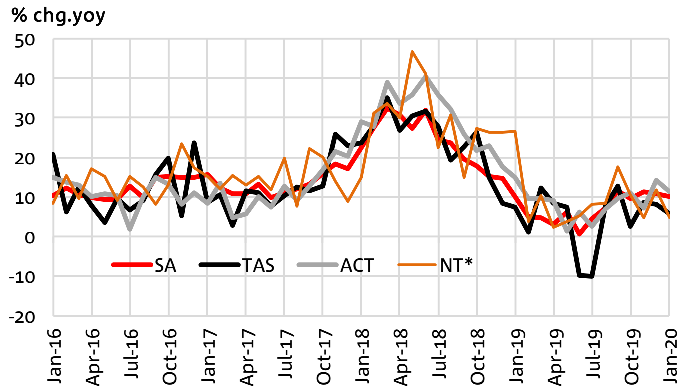




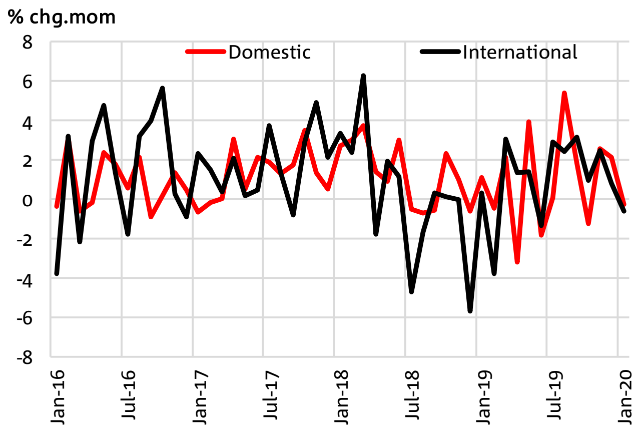
*Note that the series representing Northern Territory is highly variable and should be used with caution.

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





Charts 13 & 14: Online sales by merchant location



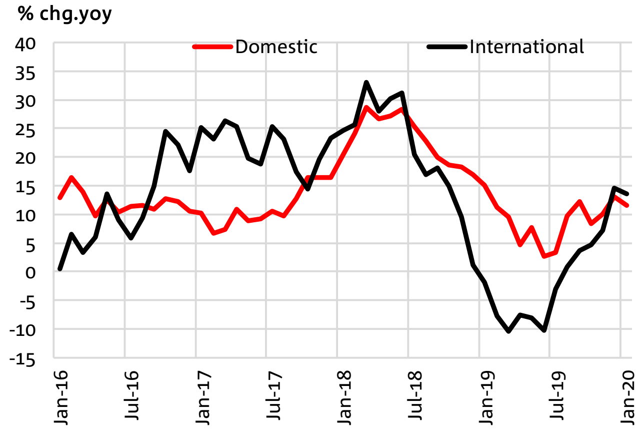


Table 3: Online sales by category and merchant location- Domestic, International (Int'l)

%	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	-3.5	-1.6	-1.1	1.4	78.3	21.7	12.0
Department stores	-3.8	-1.8	20.1	-3.2	87.8	12.2	14.4
Homewares and appliances	-1.2	-3.1	-2.3	15.0	95.4	4.6	25.0
Media	2.7	-1.6	4.0	2.5	90.3	9.7	7.9
Personal and Recreational	-0.6	-1.0	4.7	13.1	86.6	13.4	14.5
Grocery and Liquor	-0.0	6.0	19.0	2.9	95.3	4.7	14.8
Games and Toys	5.4	1.0	40.3	64.2	74.1	25.9	7.2
Takeaway Food	9.2	11.9	116.1	102.1	98.0	2.0	4.1
All categories	-0.3	-0.6	11.6	13.6	89.1	10.9	100

METROPOLITAN AND REGIONAL SPEND

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

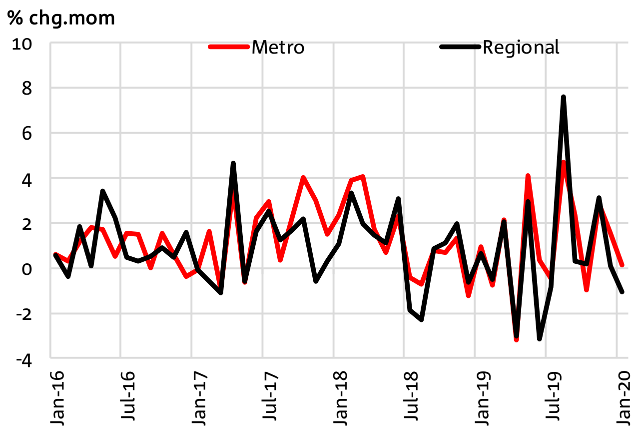
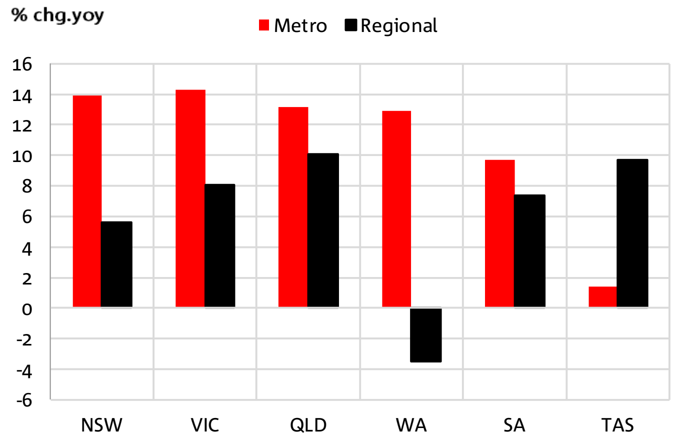
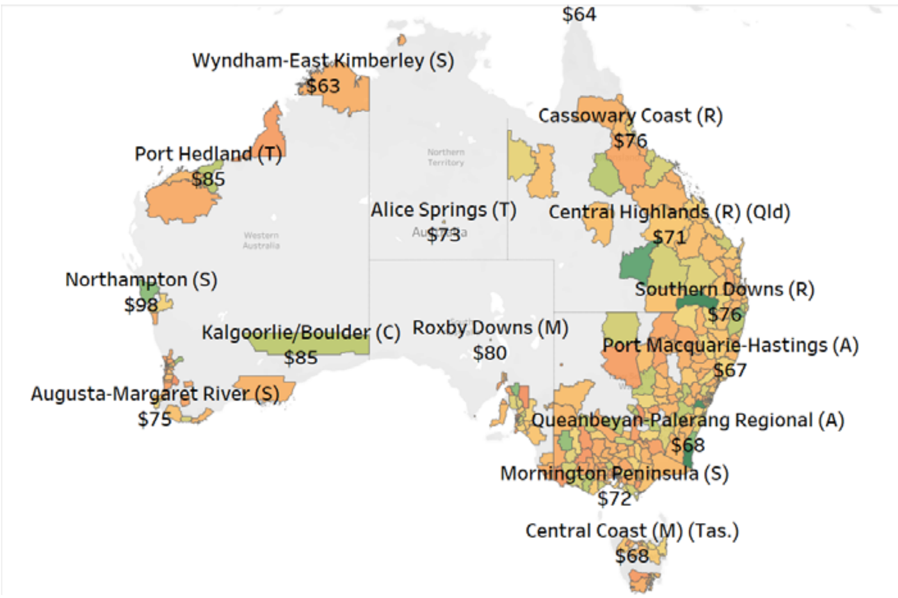


Chart 16: Online retail sales growth by state region, yoy s.a.



A HEATMAP VIEW OF AVERAGE ONLINE SPEND BY LOCAL GOVERNMENT AREA

Online spend can vary depending on where people live. The map below shows average spend for each online transaction. Not all the top average spend areas are in capital cities, nor are they all in remote areas.



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).

Group Economics

Alan Oster
Group Chief Economist
+(61 3) 8634 2927

Dean Pearson
Head of Behavioural & Industry Economics
+(61 3) 8634 2331

John Sharma
Economist
+(61 3) 8634 4514

Jacqui Brand
Executive Assistant
+(61 3) 8634 2181

Australian Economics and Commodities

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

Phin Ziebell
Economist – Australia
+(61 0) 475 940 662

Behavioural & Industry Economics

Robert De Iure
Senior Economist – Behavioural & Industry Economics
+(61 3) 8634 4611

Brien McDonald
Senior Economist – Behavioural & Industry Economics
+(61 3) 8634 3837

Steven Wu
Economist – Behavioural & Industry Economics
+(61 3) 9208 2929

International Economics

Tony Kelly
Senior Economist
+(61 3) 9208 5049

Gerard Burg
Senior Economist – International
+(61 3) 8634 2788

Global Markets Research

Ivan Colhoun
Global Head of Research
+(61 2) 9237 1836