



NAB ONLINE RETAIL SALES INDEX AUGUST 2022

NAB Group Economics

- On a month-on-month, seasonally adjusted basis, the contraction in growth for the NAB Online Retail Sales Index accelerated in August (-3.5%), continuing the recent trend (July revised -1.6%, previously -1.4%).
- In year-on-year terms, the NAB Online Retail Sales Index recorded another large contraction in August (-18.9% y/y). It is worth noting that this is compared to a period of exceptionally strong growth in August 2021.
- Sales contracted across all categories in the month, led by the largest sales category, homewares and appliances, which dropped at a rate much steeper than the overall. Department stores which defied the month-on-month headline contraction in July, was the second worst performing in August. 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 again mixed in the month, with TAS rebounding after last month's drop, along with more moderate growth for NT, WA, and SA. This was outweighed by a contraction in the big three sales states NSW, VIC, and QLD. In year-on-year terms, the larger contraction in NSW, VIC, and ACT outweighed growth in WA, SA, TAS and NT. 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.
- After recording growth in July, regional areas caught up with their metro peers in August, with rates of contraction now similar. Vic metro and NSW regional areas played a significant part in the monthly result. In year-on-year terms, overall growth in both metro and regional areas contracted, albeit, for regional, at about half the rate of metro areas. This was again mostly due to VIC, NSW, and metro QLD. See Charts 15 and 16 for more detail.
- The contraction in monthly growth was attributed to both domestic and international retailers, with the former faring far worse. This was particularly the case for homewares and appliances, department stores, and games and toys. Fashion, and media however, did fare better for domestic retailers in the month. Over the year, domestic retailers recorded a contraction more than double the rate of international, but again, this is partly reflecting the considerable base growth a year prior for domestic retailers. See charts 13 and 14, and table 4 for category growth and share.
- NAB estimates that in the 12 months to August, Australians spent \$54.9 billion on online retail, a level that is around 14.0% of the total retail trade estimate (July 2022, Series 8501, Australian Bureau of Statistics), and about 9.4% higher than the 12 months to August 2021.
- See comments from NAB's Chief Economist, Alan Oster, on page 2.

	Year-on-year growth (% s.a.)		
	Jun-22	Jul-22	Aug-22
NAB Online Index	-0.9	-7.9	-18.9
ABS Retail Trade	12.0	16.5	-

	Month-on-month growth (% s.a.)		
	Jun-22	Jul-22	Aug-22
NAB Online Index	-1.4	-1.6	-3.5
ABS Retail Trade	0.2	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

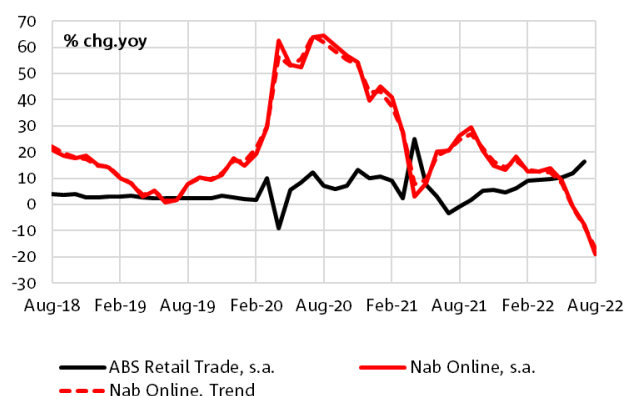
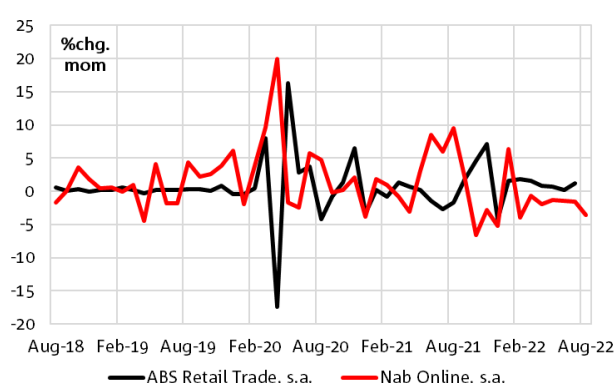


Chart 2: NAB Online retail trade data (mom, s.a.)



NAB Chief Economist, Alan Oster commented:

In month-on-month terms, our NAB Online Retail Sales Index has contracted for a seventh straight month, and apart from the Omicron induced spike in January, the monthly change has been negative since October. These rolling monthly contractions have well and truly caught up with the year-on-year metric. But, as mentioned in July, it is worth keeping this in context. Most states during the September quarter 2021 experienced some form of lockdown.

Online sales growth in August 2021 remained elevated, boosted particularly by NSW, and VIC. To give further perspective, if we compare the current headline total, to that of the same month pre-covid (i.e. August 2022 vs August 2019), total online spend is up about 75%. This compares favourably to broader retail sales (up 26% on July 2019), 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 (9.4%). However, as much of this came from growth during the lockdown period in the third, and early fourth, quarters of 2021, we see a continuation of this moderation if the current monthly results continue.

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. That is, these three, that now make up about 40% share of the index, contributed just over 70% to growth over the past 12 months. In contrast, homewares and appliances, which is still the largest in share, and personal and recreational goods, contributed far less to growth than their share in the index.

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

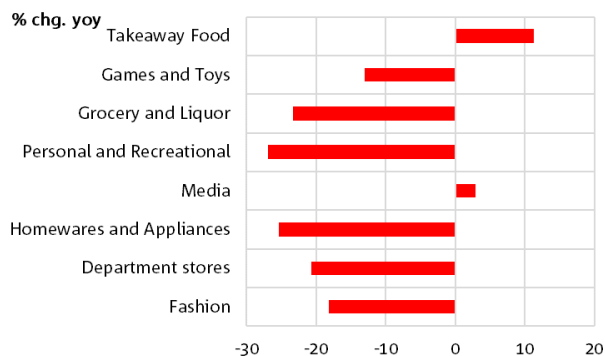


Chart 4: Online retail sales by state, yoy s.a.

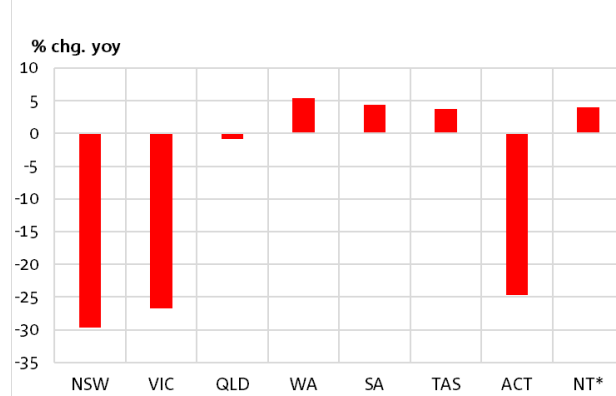
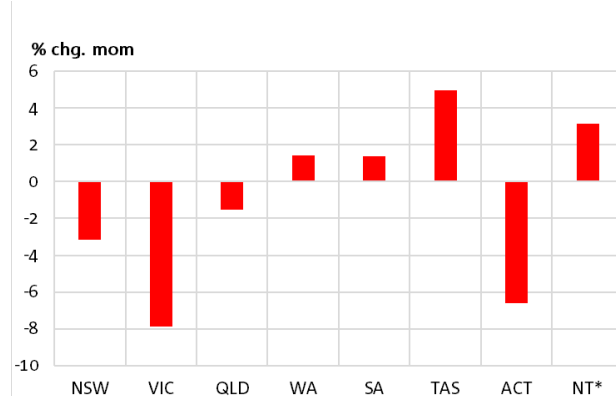


Chart 5: Online retail sales by category, mom s.a.

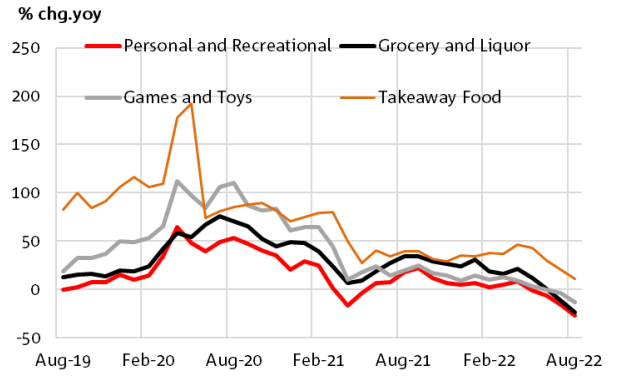
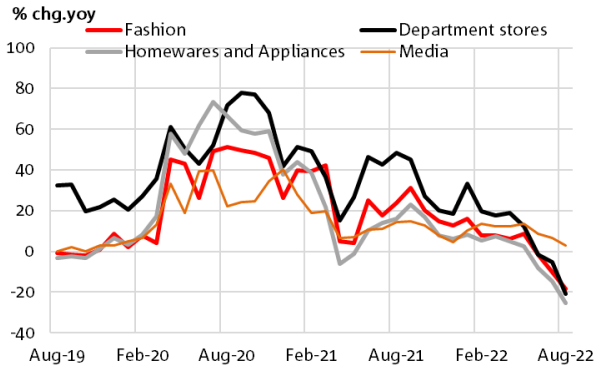


Chart 6: Online retail sales by state, mom s.a.

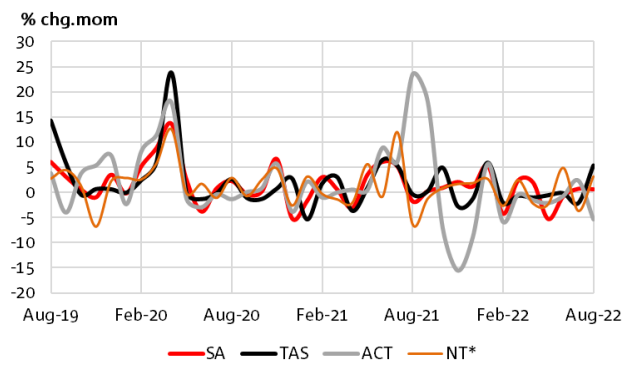
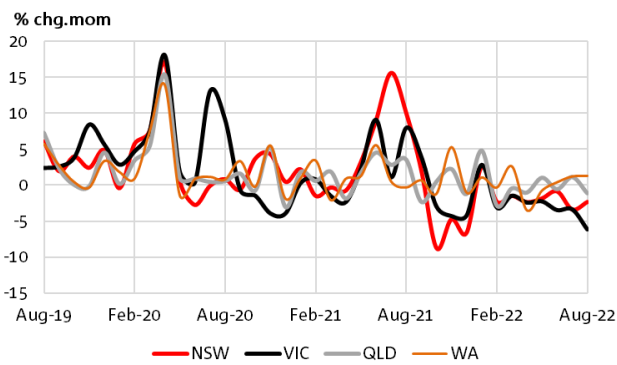


* Note that the series representing Northern Territory is highly variable and should be used with caution.

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

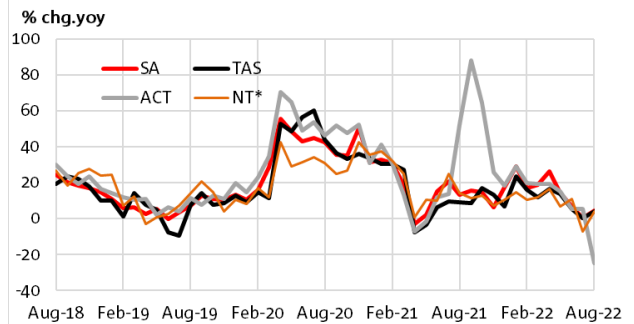
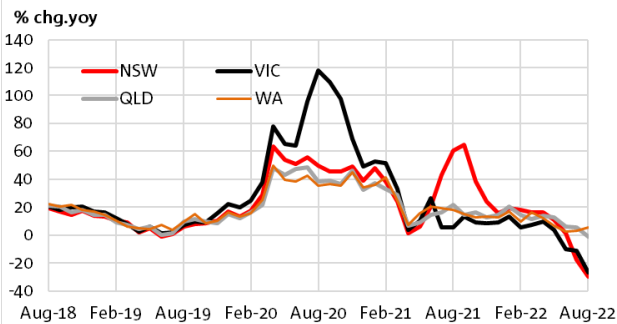


Charts 9 & 10: Online sales by state, trend



*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

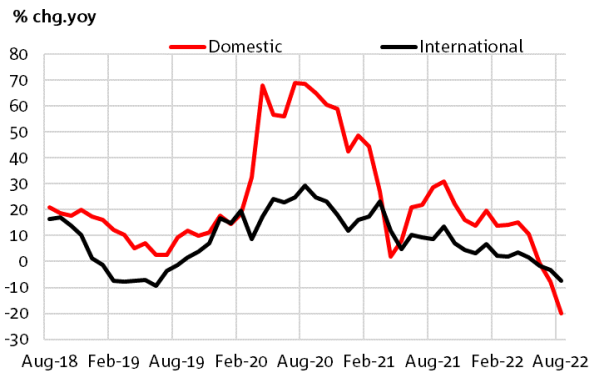
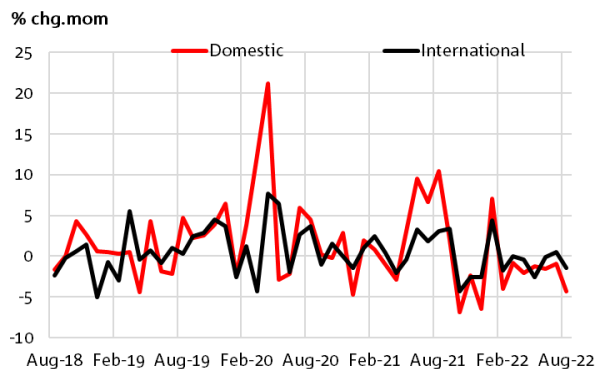


Table 3: Online sales by category and state

% (mom,s.a.)	Fashion	Dep't stores	Home & appliances	Media	Personal and Rec.	Grocery and Liquor	Games and Toys	T'away Food	Total
ACT	-6.6	-3.0	-9.8	-5.2	-9.3	-8.9	-0.9	-5.5	-6.6
NSW	-3.7	-4.6	-4.0	1.8	-6.5	-3.4	-0.4	1.1	-3.1
NT	5.4	-3.2	14.2	-1.3	5.6	2.4	3.5	-4.5	3.1
QLD	1.3	-2.5	-3.6	-0.6	1.1	-3.1	0.7	-0.8	-1.5
SA	2.8	4.4	-4.1	-2.1	2.0	2.4	5.2	3.4	1.4
TAS	2.7	-3.8	17.3	1.8	1.2	1.0	10.7	-1.9	5.0
VIC	-5.0	-8.7	-12.1	-3.1	-10.0	-8.6	-4.8	-3.3	-7.9
WA	6.6	-0.3	-2.7	-0.7	2.8	2.9	4.3	3.5	1.4
Total	-2.0	-4.5	-5.8	-0.8	-4.3	-3.9	-0.7	-0.7	-3.5

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	-2.1	-3.2	-21.7	-1.2	83.1	16.9	10.8
Department stores	-5.3	5.1	-21.5	-13.4	91.9	8.1	16.8
Homewares and appliances	-7.2	-3.9	-26.1	-8.4	96.4	3.6	22.4
Media	-0.1	-2.8	5.6	-20.4	91.7	8.3	6.5
Personal and Recreational	-4.6	-4.1	-28.9	-16.9	89.6	10.4	11.5
Grocery and Liquor	-6.0	-5.3	-24.2	-6.0	96.7	3.3	16.0
Games and Toys	-2.5	1.2	-15.3	-3.5	83.0	17.0	8.9
Takeaway Food	-0.6	0.4	10.3	193.6	99.1	0.9	7.2
All categories	-4.3	-1.4	-20.0	-7.3	92.2	7.8	100

METROPOLITAN AND REGIONAL SPEND

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

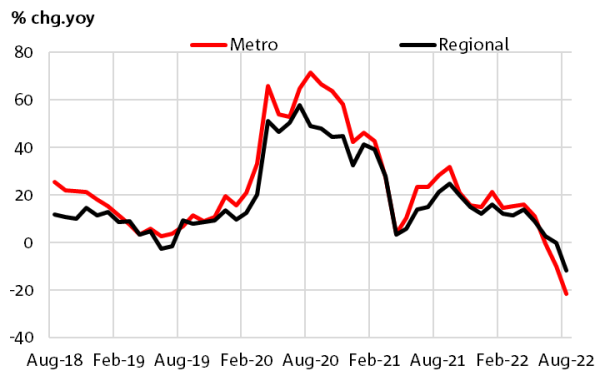
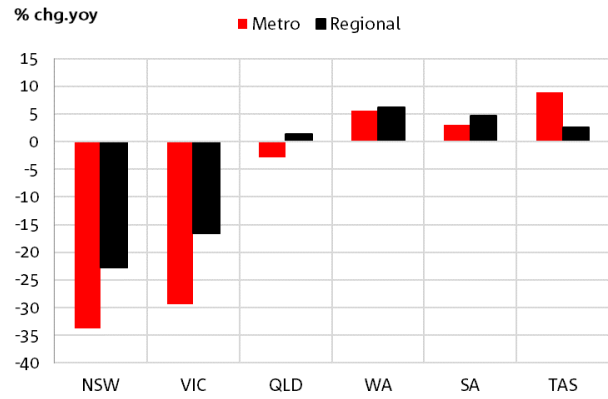


Chart 16: Online retail sales growth by state region, yoy s.a.



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

Brody Viney
Senior Economist
+(61 0) 452 673 400

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
Chief Economist
Corporate & Institutional
Banking
+(61 2) 9293 7168

Skye Masters
Head of Markets Strategy
Markets, Corporate &
Institutional Banking
+(61 2) 9295 1196

Important Notice

This document has been prepared by National Australia Bank Limited ABN 12 004 044 937 AFSL 230686 ("NAB"). Any advice contained in this document has been prepared without taking into account your objectives, financial situation or needs. Before acting on any advice in this document, NAB recommends that you consider whether the advice is appropriate for your circumstances.

NAB recommends that you obtain and consider the relevant Product Disclosure Statement or other disclosure document, before making any decision about a product including whether to acquire or to continue to hold it.

Please click [here](#) to view our disclaimer and terms of use.