

Importance of transparency and communication and the value of scanner data



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Australian Bureau of Statistics
Informing Australia's important decisions



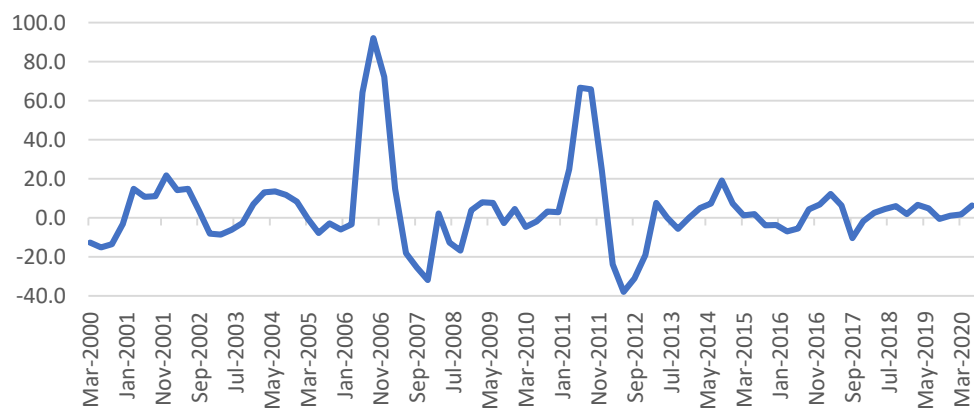
Australian COVID-19 experience

- ▶ International border closures
- ▶ State border closures
- ▶ Schools shut
- ▶ Wage subsidy introduced for the first time
- ▶ Free child care
- ▶ Panic buying at supermarkets
- ▶ Hundreds of other government policies/schemes implemented

- ▶ ABS staff unable to collect prices in the field
- ▶ Some goods and services completely unavailable – imputation vs. re-weighting
- ▶ How to treat free child care, which has 1.2% weight in the CPI
- ▶ Understand impact of panic buying

Reflected on experience in 2006 with bananas

CPI Fruit EC - annual percentage change



Has the banana's impact on the CPI been overestimated?

We're told that the banana price blow-out has hit the Consumer Price Index. According to the Australian Bureau of Statistics, fruit contribute 0.6 percentage points to the 4.0% through-the-year Consumer Price Index increase. And the rise in fruit prices was mainly attributable to an increase of approximately 250% in the price of bananas during the [...]

Inflation stokes rate rise speculation but don't blame the bananas

July 28, 2011 4:00pm AEST

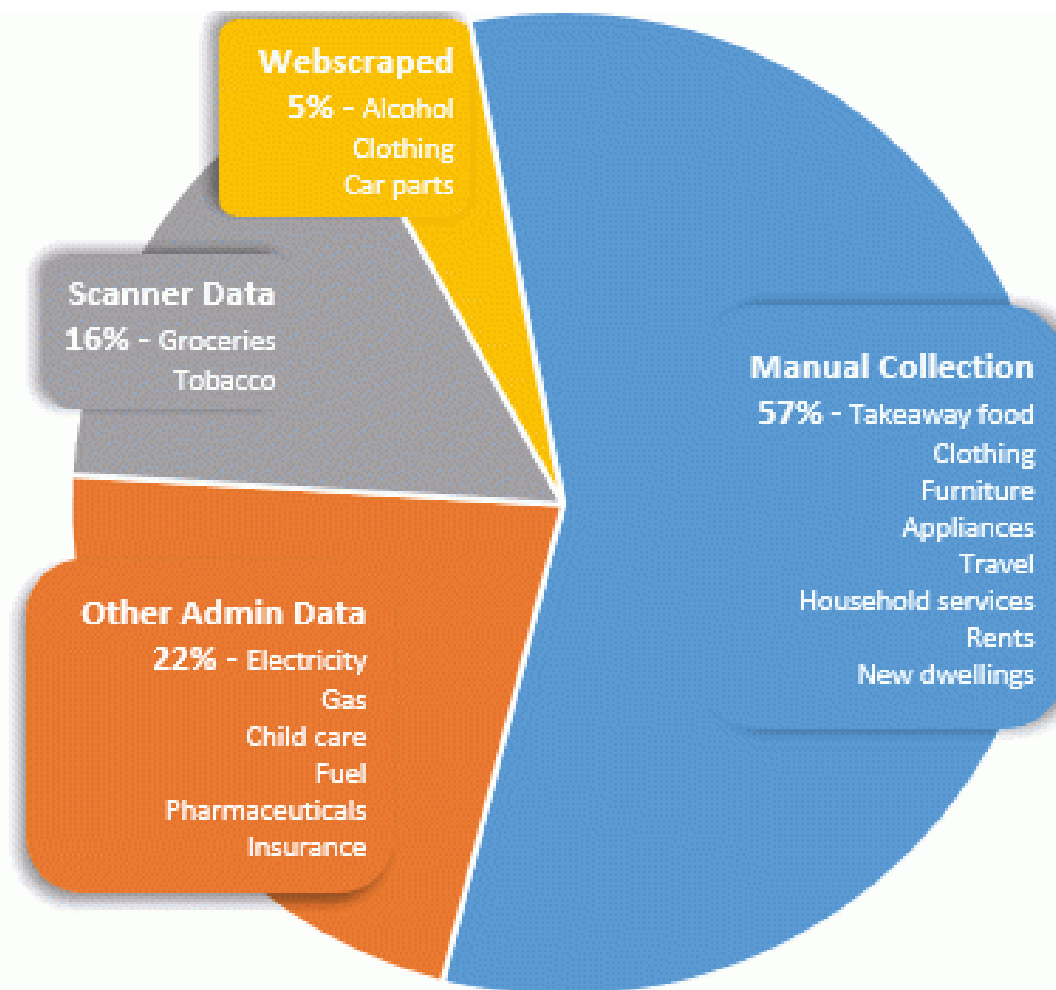


When it comes to bananas, demand outstrips supply. But it won't mean an interest rate rise, AAP

Two key lessons from this experience

1. Importance of transparency and communication.
2. The value of scanner data and the ability to produce new insights into inflation and consumer spending.

Data sources used in the CPI



Initial response in late March

- ▶ Field collection replaced with web/phone collection.
 - only 2% of CPI collection was in-store
 - made greater use of web-scraped data
 - assessed how scanner data captured panic buying (more on this later)
- ▶ Early discussions with key users
- ▶ Published a short note on impact of COVID-19 on the March quarter outputs.
[Note on the impact of COVID-19 on the CPI](#)

Focus in April and May – develop ABS position on how to address CPI measurement challenges

- ▶ Identify and prioritise key measurement challenges
 1. unavailable goods and services, non-standard imputation
 2. free child care
 3. seasonal adjustment
- ▶ Engaged with other National Statistical Organisations and international experts
- ▶ Produced papers and presented to ABS Methods Board
 - members are from Prices, National Accounts and Methodology
 - eight papers presented in a period of six weeks
 - robust discussion; not all in agreement; some topics presented twice

Focus in June – external communication

- ▶ Briefed key stakeholders including Central Bank and National and State Treasuries.
- ▶ Briefed Australian Business Economists – a group of about 30 prominent economists
- ▶ Published note 3 weeks ahead of CPI June quarter release [Measuring the CPI during a time of COVID-19](#)

1. Importance of transparency and communication
2. The value of scanner data and the ability to produce new insights into inflation and consumer spending.

Lesson 1: Be as transparent as possible

- ▶ We were explicit when we briefed key users and published note on decisions and impact ahead of the CPI release

Figure 1 - Child care index in the CPI (2011-12 = 100.0)

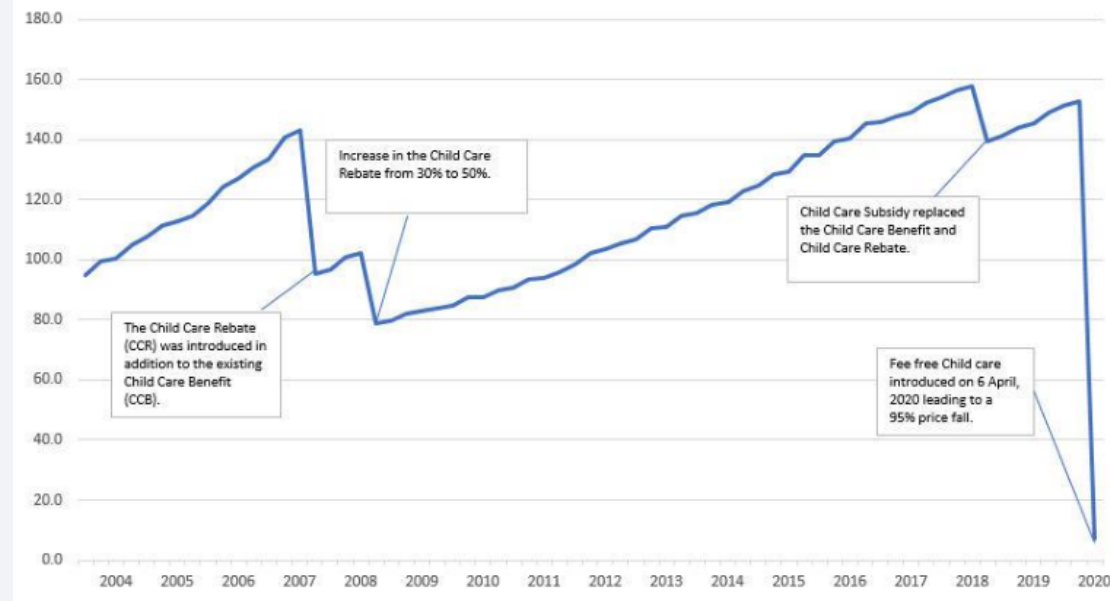
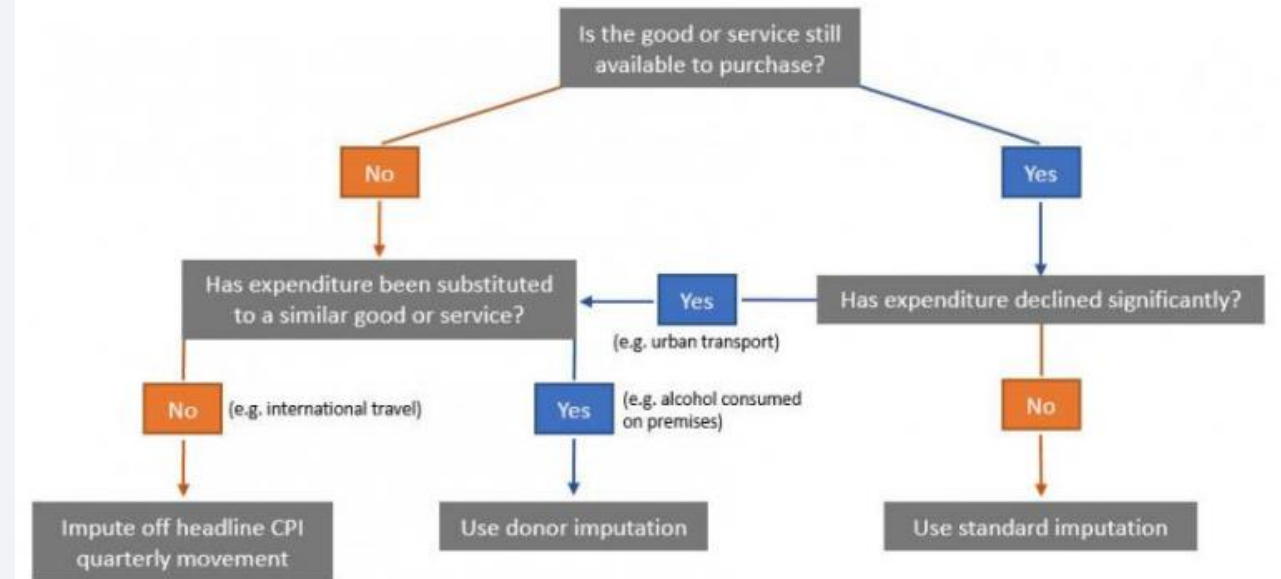



Figure 3 - CPI imputation decision framework



Outcome 1.1: No major surprises when the CPI was released

- ▶ Market forecasts were very close to the record quarterly fall of 1.9%
- ▶ More certainty for policy decisions and financial markets
- ▶ Enhanced ABS's reputation
- ▶ Developed new relationships

 REUTERS		CPI QQ
Period		Q2 2020
Release / Effective Date		29 Jul 2020
Prior		0.3
Median		-2.0
Highest		0.1
Lowest		-2.4
No. of Forecasts		14
ORGANISATIONS		
AMP		-2.0
ANZ Bank		-1.8
BofAML		-1.6
Capital Econ		-1.8
CBA		-1.9
Laminar Cap		0.1
Macquarie Group		-1.9
Morgan Stanley		-2.1
NAB		-2.0
RBC		-2.4
St George Bank		-2.4
TD		-2.0
UBS		-1.7
Westpac		-2.4

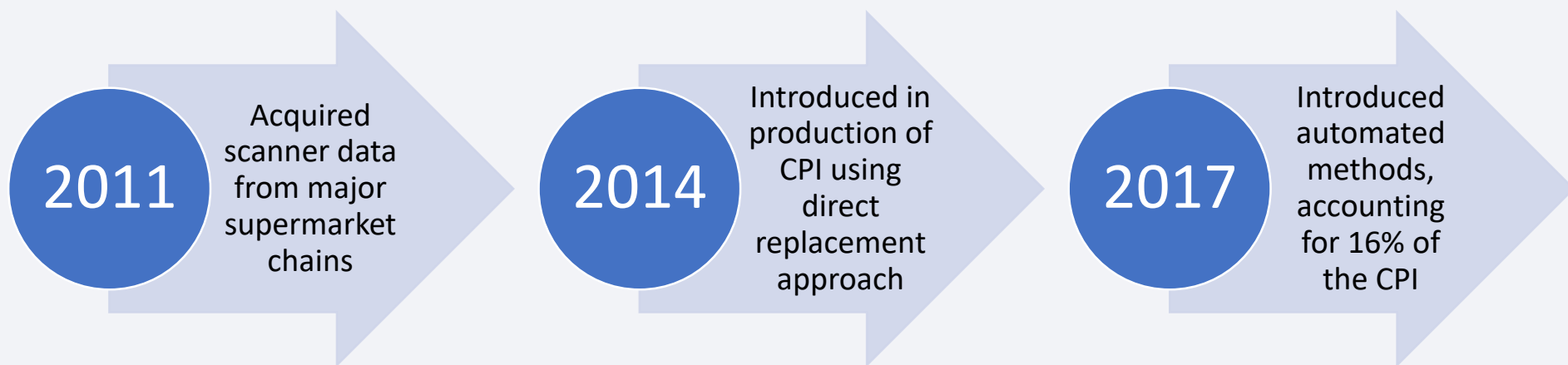
Outcome 1.2: Support for users in how to interpret the CPI

- ▶ Published CPI exclusion measures to remove impacted series

	Quarterly movement (%)	Annual movement (%)
Headline CPI	-1.9	-0.3
CPI excluding child care	-0.8	0.7
CPI excluding automotive fuel	-1.3	0.5
CPI excluding child care and automotive fuel	-0.1	1.6
CPI excluding child care, automotive fuel and preschool & primary education	0.1	1.8

1. Importance of transparency and communication.
2. The value of scanner data and the ability to produce new insights into inflation and consumer spending.

Scanner data in the CPI – a brief history

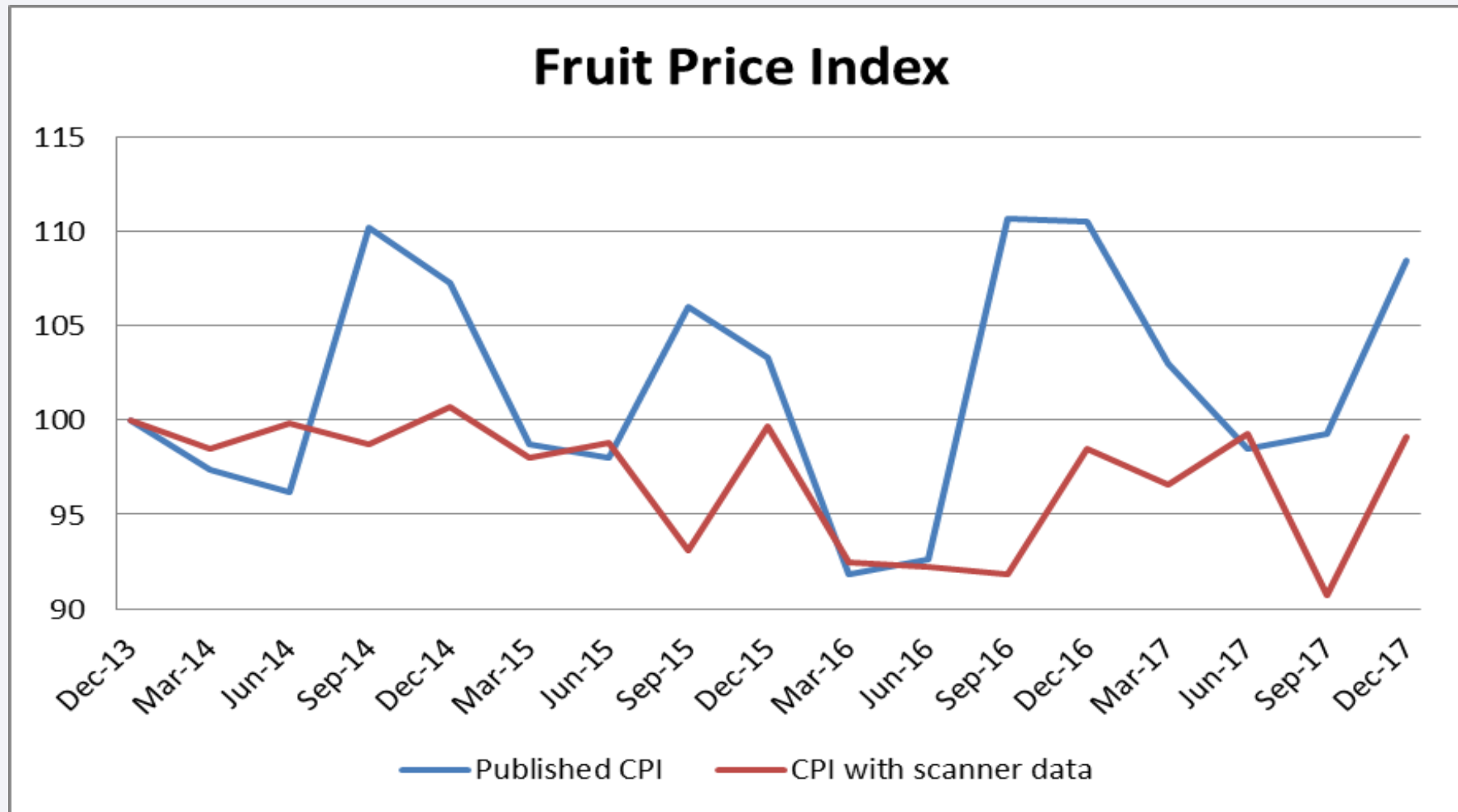


- Use an entire census of data
- Contribution within a component varies depending on relative expenditure
- Provides insight into consumer behaviour

Currently used for the following Expenditure Classes:

- Bread
- Cakes & biscuits
- Breakfast cereals
- Other cereal products
- Beef & veal
- Pork
- Lamb & Goat
- Poultry
- Other meats
- Fish & other seafood
- Milk
- Cheese
- Ice cream & other dairy products
- Fruit
- Vegetables
- Eggs
- Jams, honey & spreads
- Food additives & condiments
- Oils & fats
- Snacks & confectionery
- Coffee, tea & cocoa
- Waters, soft drinks and juices
- Tobacco
- Cleaning and maintenance products
- Personal care products
- Other non-durable household products
- Pets and related products

Lesson 2: Scanner data enhances measurement accuracy and provides additional insights



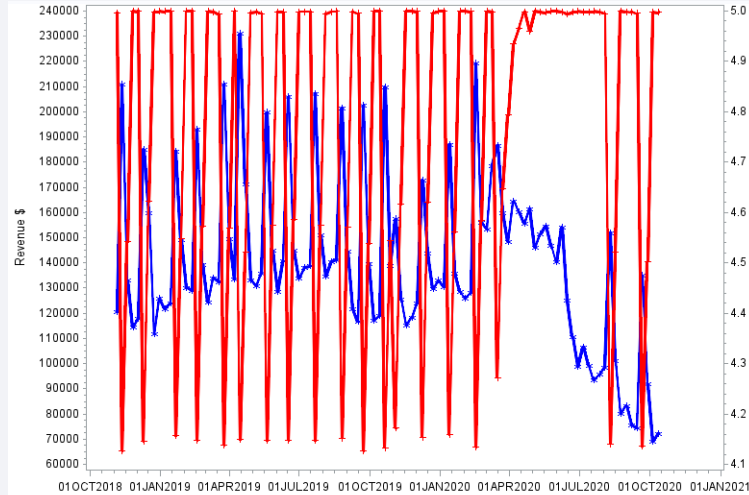
Outcome 2.1: Understanding impact of panic buying on the CPI

	Movement to mid March (11 weeks of data)	Movement to 31 March (13 weeks of data)	Change (%pts)
FOOD & NON-ALC BEVERAGES GROUP	1.5	1.9	+0.4
Bread and cereal products	0.5	1.2	+0.7
Meat and seafoods	1.4	2.0	+0.6
Dairy and related products	0.8	1.1	+0.3
Fruit and vegetables	4.9	6.0	+1.1
Food products n.e.c	1.6	2.3	+0.7
Non alcoholic beverages	1.2	2.0	+0.8

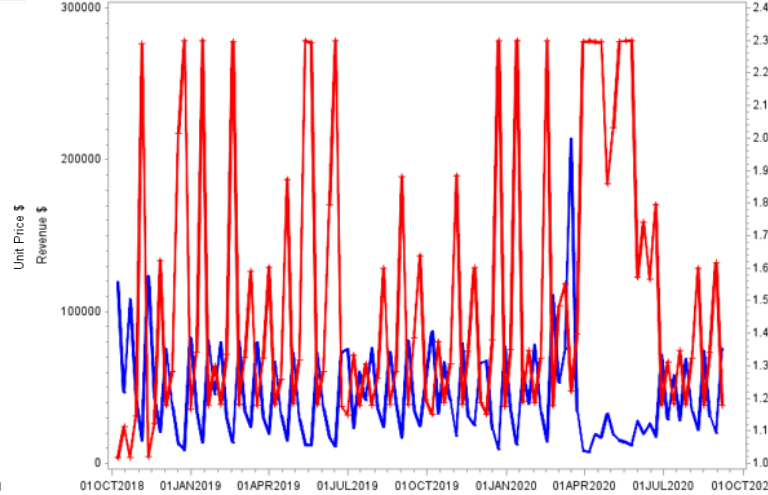
Outcome 2.2: Understanding consumer behaviour

Price
Revenue

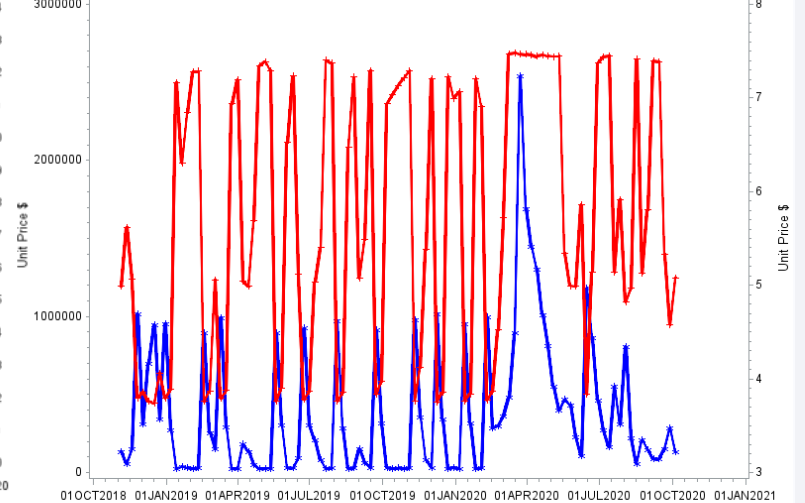
Butter



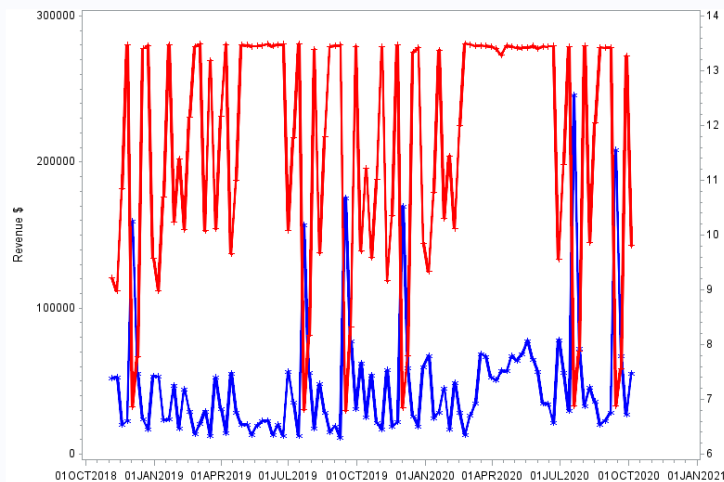
Canned Tuna



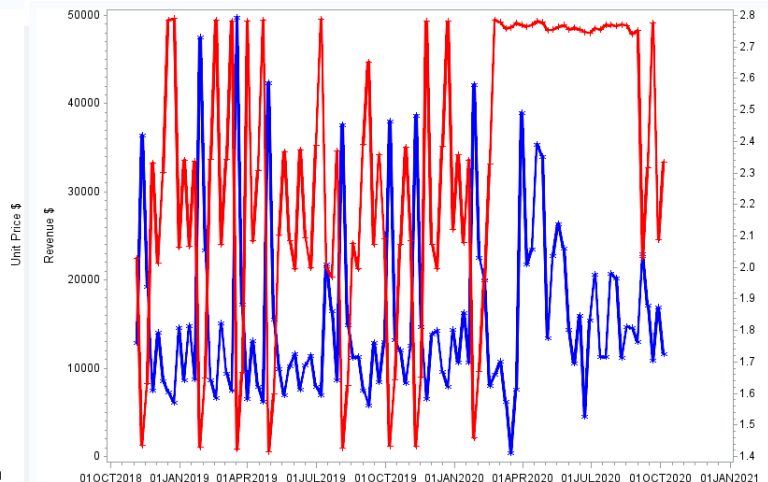
Toilet Paper



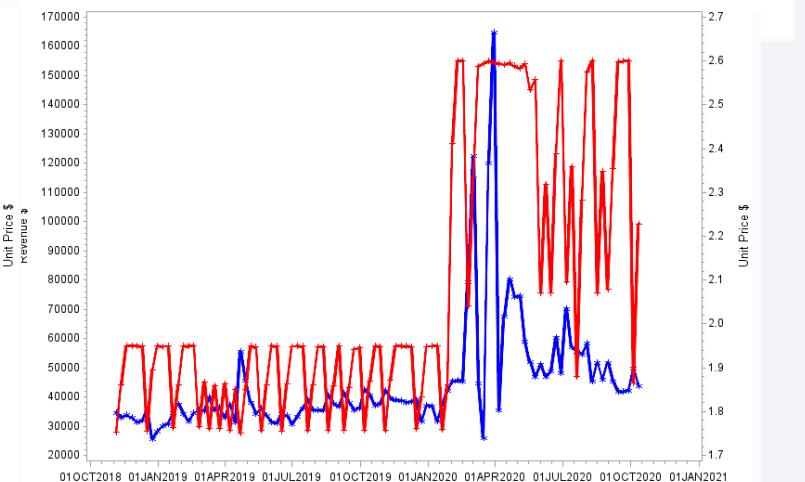
Meat Pies



Hand Soap

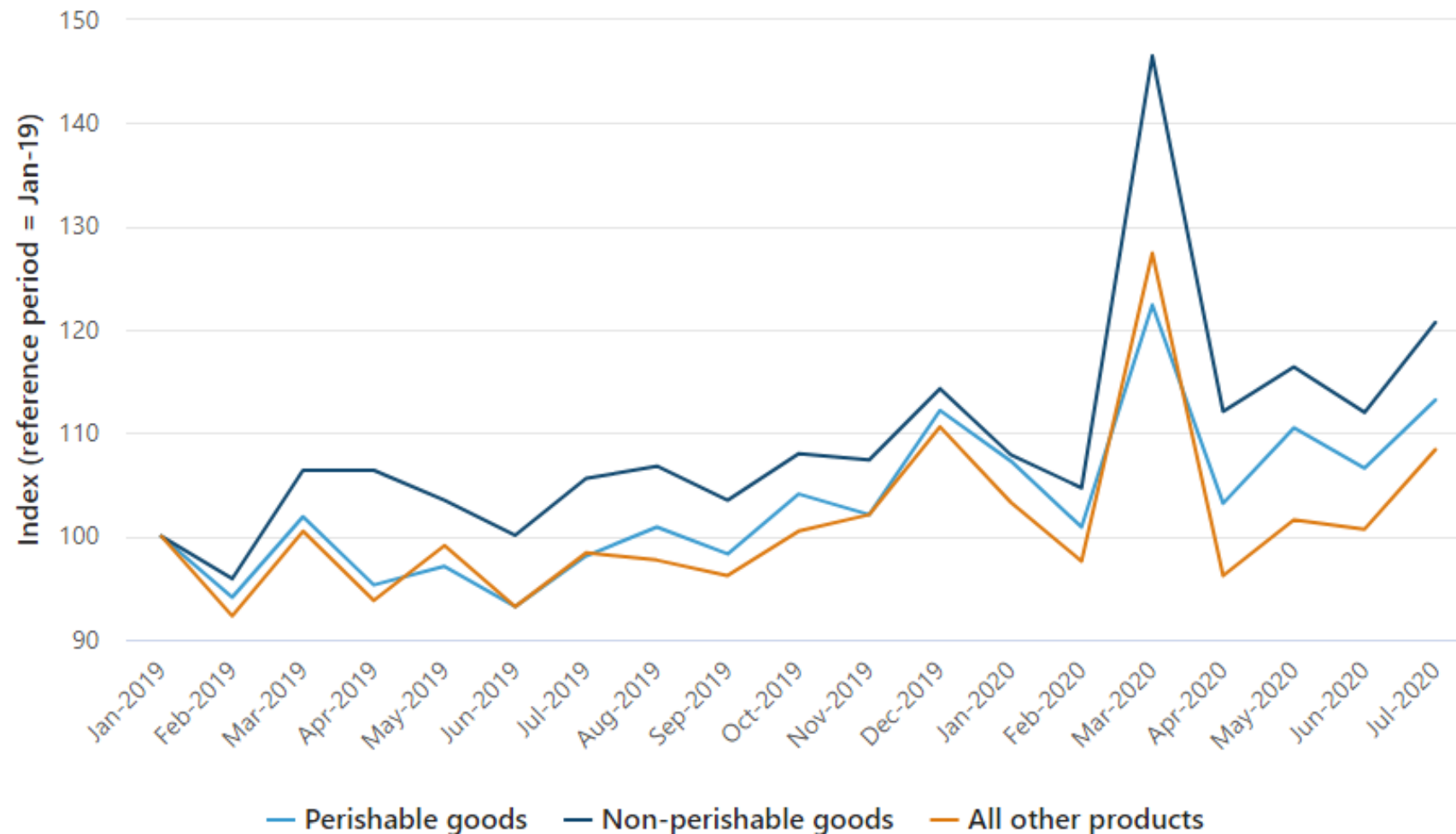


Pasta

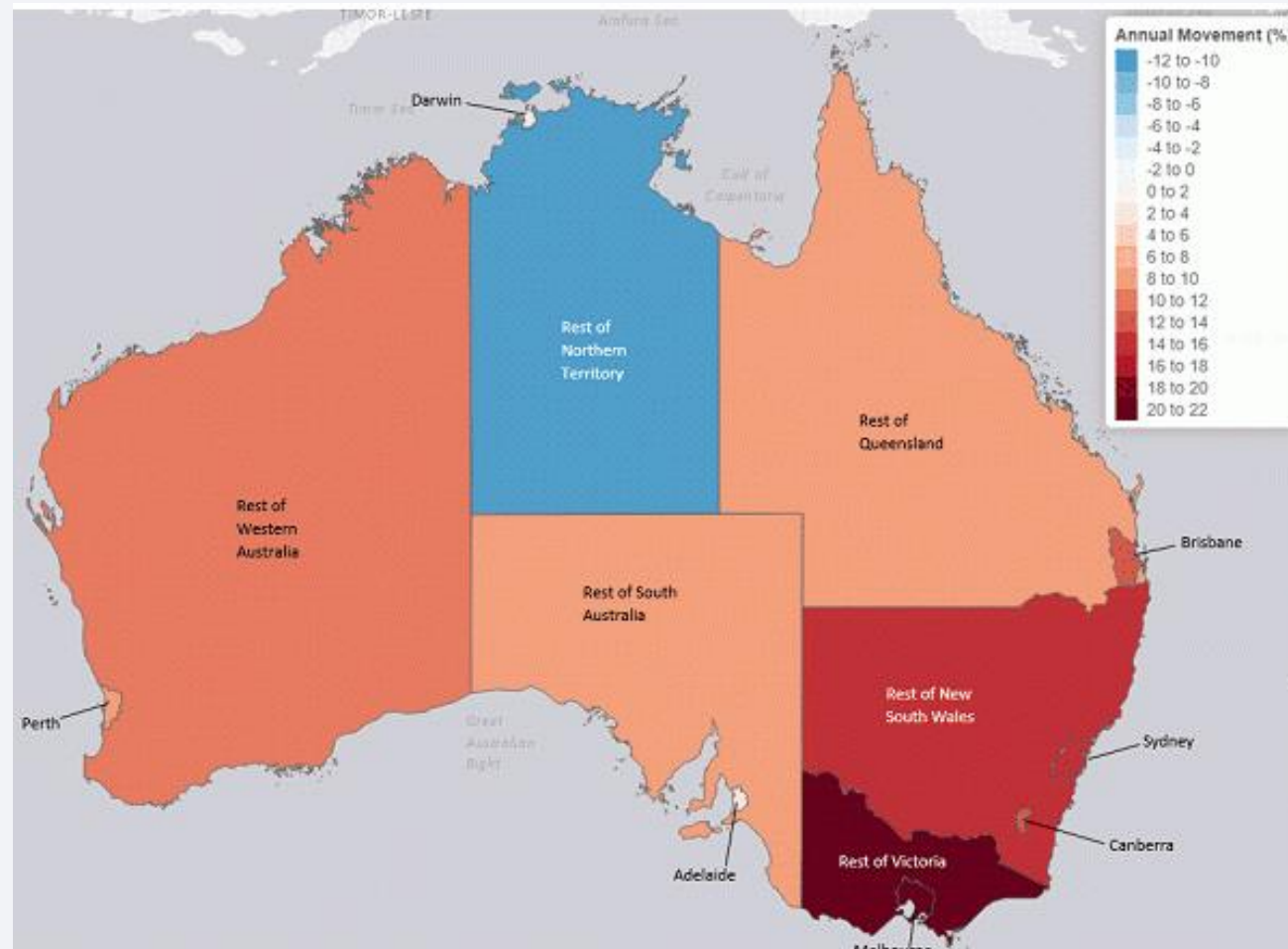
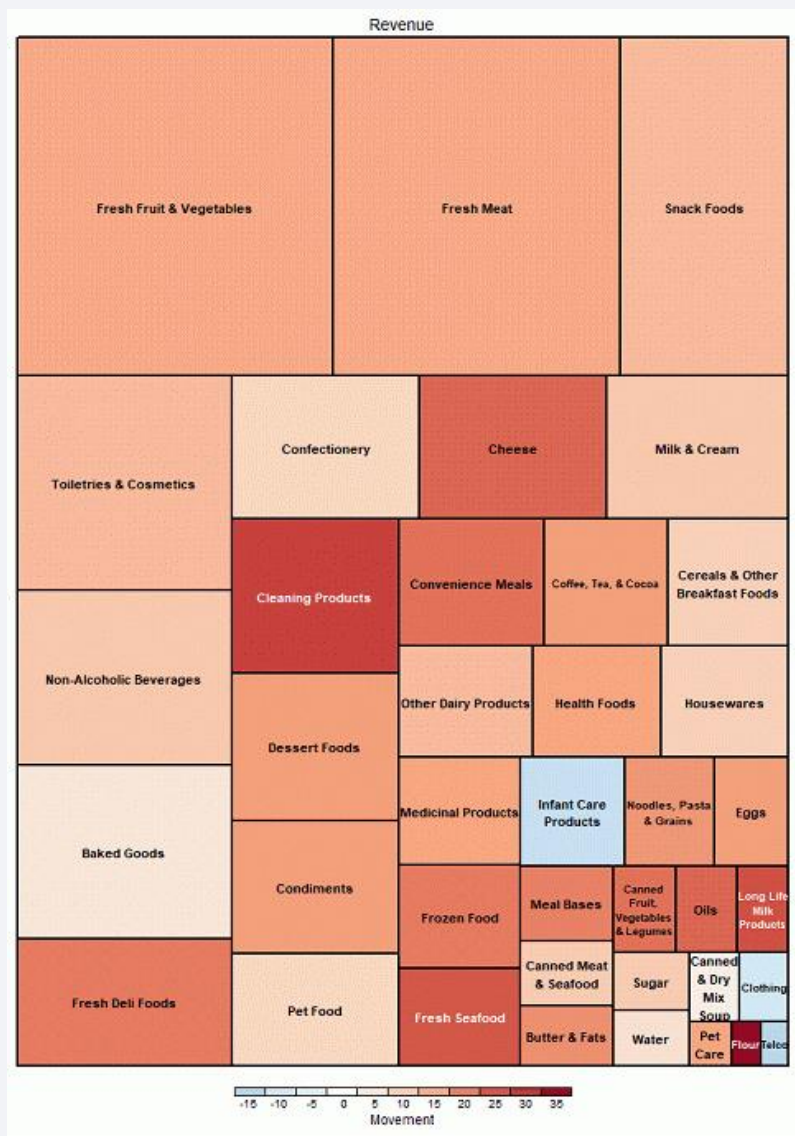


Outcome 2.3: Timely data used to provide near real time statistics

Total revenue - perishable goods vs non-perishable goods vs all other products



Outcome 2.4: Ability to undertake detailed analysis



Questions

- ▶ Thanks for listening