

ABS' statistical response to COVID-19

Background paper for presentation by Dr David Gruen to the UN Friends of the Chair meeting, 29 June 2020.

Executive Summary

1. Governments and the community are keenly interested in up-to-date information on the COVID-19 pandemic on individuals, businesses and the economy.
2. The ABS has announced three tranches of new products (16 March, 30 March and 27 May) and issued a statement (14 April) explaining the range of new information available on the labour market. A dedicated COVID-19 web page has been established.¹
3. New ABS products fall into these categories: (i) additional analysis on existing products; (ii) preliminary estimates of existing products; (iii) new up-to-date information about businesses and individuals; and (iv) an expanded use of ABS DataLab and TableBuilder to facilitate microdata analysis.
4. The ABS has also provided a vast amount of tailored information from existing products to agencies from State/Territory and Commonwealth governments. This information ranges from additional data to advice on data quality, methodology and access.
5. The ABS is investigating administrative/big data sources to support the compilation of existing statistical products, including the National Accounts, and working with peer statistics agencies to address methodological and data-collection challenges.
6. The provision of the additional statistical products required the redeployment of some staff and the pausing some elements of the existing work program.

¹ <https://www.abs.gov.au/COVID-19>

Additional analysis in existing ABS products

1) Additional analysis has included:

- a) analysis of hours worked in *Labour Force, Australia* to provide more fulsome analysis of labour market developments;
- b) international student flows in *Overseas Arrivals and Departures* to show the impact of travel restrictions;
- c) two sets of interactive maps based on small-area-estimates modelling of *National Health Survey 2017-18* providing geographical distributions of age and chronic health conditions to assist in identifying high-risk populations;
- d) interactive maps from *Jobs in Australia 2016-17* to support regional assessments of the potential impact of COVID-19 on employment;
- e) interactive maps examining geographic distribution of people with disability and people providing unpaid care to those with disability from *Survey of Disability, Ageing and Carers 2015* data;
- f) interactive maps examine housing characteristics from *Census 2016* data; and
- g) explanatory material linking the ABS' existing and new labour market products, to guide readers to the best sources of information on different aspects of the labour market.²

Preliminary estimates

2) The ABS has published preliminary or provisional estimates for:

- a) retail trade two weeks before the monthly publication of *Retail Trade, Australia*;
- b) international merchandise trade two weeks before the monthly publication of *International Trade in Goods and Services, Australia*;
- c) overseas travel statistics one month ahead of the release of the monthly *Overseas Arrivals and Departures, Australia* publication;
- d) mortality and cause of death data on a monthly basis (previously annual).

² <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/Measuring%20Labour%20Market%20COVID19>

New statistical outputs

- 3) Two new rapid-response surveys have been introduced to collect information on the impact of the spread of COVID-19 and the societal and government responses to that spread:
 - a) The *Business Impacts of COVID-19* Survey measures the incidence and nature of impacts of COVID-19 on businesses. It provides information from around 1,200 businesses collected over a five-day period, including changes to workforce arrangements, staffing levels, location of work and take up of the JobKeeper payment (the main wage-subsidy payment introduced by the Australian government on 30 March, 2020). There have been five releases to date and the survey will continue to be run (roughly) monthly with a questionnaire that evolves to ensure its continued contemporary relevance.
 - b) The *Household Impacts of COVID-19* Survey has been published six times, providing snapshots of how households have responded to the changing social and economic environment, including information about changes to job status, stimulus packages, financial stress, and concerns about physical, mental health and lifestyle changes. The same 1,000 households are surveyed fortnightly with a new set of questions each cycle. This survey will continue to be published fortnightly.
- 4) The ABS has worked with the Australian Taxation Office (ATO) to access information from the Single Touch Payroll (STP) system. This is a new system used by employing businesses to report their employees' wages, superannuation and tax payments, via the web, to the ATO every payday.
- 5) The resulting *Weekly Payroll Jobs and Wages in Australia* publication provides near real-time economy-wide data on weekly changes in the number of jobs, wages and average weekly wage by job. Releases, of which there have been four so far, are published fortnightly.
- 6) A dedicated taskforce was established to identify and secure new data sources to support the production of existing ABS products, address emerging policy questions and deliver innovative products in the future. The focus of this work to date has been on (a) payments data from Australia's major banks; (b) mobility data to understand changing patterns in the movement of people; (c) energy consumption data as a potential lead indicator for business activity; and (d) data to understand patterns of internet access and use, to address questions raised by the digital divide.
- 7) The ABS is also considering the longer-term demand for a broad suite of more timely indicators, and how long it will take to develop them.

Expanding access to microdata

- 8) The ABS is delivering additional business and person-level microdata from two significant integrated data assets, the Business Longitudinal Analysis Data Environment (BLADE) and Multi-Agency Data Integration Project (MADIP), to the DataLab to enable COVID-19 analysis across a range of new data integration projects.³
- 9) In response to a strong interest for access to confidentialised business microdata, the ABS produced *Businesses in Australia, 2018-19*, which can be accessed free of charge in TableBuilder. This product was created from BLADE business tax data, ABS surveys and other administrative data.⁴

Collaboration

- 10) The ABS is collaborating with domestic economic agencies and the international statistical community on a range of issues, including:
 - a) maintaining survey response rates and developing methods to manage reductions;
 - b) appropriate classification of government stimulus packages in the National Accounts;
 - c) measuring CPI expenditure classes with no expenditure; and
 - d) managing seasonal adjustment.

Changes to the ABS Work Program

- 11) The impact of the pandemic on ABS work practices, including availability of staff, the need to redeploy staff to support critical functions, the additional demands created by new products and increased information requests from agencies, has necessitated changes to the existing statistical program.

³ The ABS DataLab provides online access to ABS microdata for complex analysis. Microdata remains in the secure ABS environment. DataLab users view and analyse de-identified unit record information using software including R, Python, Stata and SAS. All analytical outputs for use outside the DataLab are checked by the ABS before release, to ensure individuals and businesses cannot be identified.

⁴ TableBuilder is an online tool on the ABS website for creating customised tables, graphs and maps using ABS microdata. Census microdata is the most popular dataset accessed by TableBuilder users.

- 12) Face-to-face interviews are not currently being conducted for safety reasons. Data collection is continuing via the web and telephone interviews for the following surveys:
- a) *Monthly Population Survey*, including the *Labour Force Survey*; and
 - b) *Survey of Income and Housing*.
- 13) Field work for these household surveys has been delayed:
- a) *The Longitudinal Study of Australian Children*;
 - b) *Programme for the International Assessment of Adult Competencies*; and
 - c) *Family and Community Experiences Survey*.
- 14) The work program has also been revised to reduce reporting required by businesses, while still meeting critical economic-information needs. The following economic statistics surveys have been delayed:
- a) *Retail Trade Margins Index* survey – delayed for the foreseeable future;
 - b) *Biennial Survey of Employee Earnings and Hours* – from May 2020 to May 2021 (with outputs in January 2022);
 - c) *Periodic Transport Industry and Activity Survey* – from August 2020 to August 2021; and
 - d) *Film, Television and Digital Games Survey* – from August 2020 to August 2021.

The ABS' response to COVID-19 – the story in numbers

The story in numbers

- 64 statistical products delivered in April and May 2020, a 21% increase over 2019.
- 19 new statistical products in response to COVID-19 with 231 new web pages of statistical content.
- 9.3 million page views on the ABS website, a 34% increase over 2019.
- 298 media enquiries received, and 60% over the same period last year.
- 2.7 billion daily observations were extracted from 351 million Single Touch Payroll (STP) transactions provided by the ATO, and used to publish new insights into the labour market.
- COVID-19 survey insights have been drawn from an additional 4,000 household and 5,000 business interviews.
- 93% of ABS staff have worked at home at least some of the time, and 73% of staff working from home all of the time.
- 92% of ABS staff reported they are doing more or the same level of work than three months ago. 91% reported working the same or more hours.
- Almost 20% of managers reported staff productivity had increased since new working arrangements were put in place.