The United Kingdom experience: The Business Impact of Coronavirus Survey

Jon Gough, Emily Hopson, <u>Craig McLaren</u> and Kate Thorsteinsson

Business Impact of Coronavirus Survey (BICS) Team (bics@ons.gov.uk)

Business Impact of Coronavirus Survey (BICS)

- The ONS (UK) created a new innovative fortnightly business survey to monitor the impact of COVID-19
- Started this new online survey quickly and it went live within two weeks. Typically 6+ months.
- The BICS voluntary fortnightly business survey has provided us with a rapid and flexible survey to respond quickly to changing policy needs
- Detailed results are published each fortnight (circa 25 pages) with headline figures published each week in a Faster Indicators bulletin
- Other ONS weekly faster indicators include: traffic data, weekly job adverts, shipping, ...

BICS: Sample and Waves

Wave	Sample size	Actual Response Rate	Collection period
Wave 1	17,786	25.8%	23 March - 5 April 2020
Wave 2	17,735	33.4%	6 - 19 April 2020
Wave 3	17,623	34.7%	20 April - 3 May 2020
Wave 4	18,506	33.5%	4 - 17 May 2020
Wave 5	20,566	30.9%	18 – 31 May 2020
Wave 6	20,548	35.3%	1 – 14 June 2020
Wave 7	<mark>24,473</mark>	<mark>24.2%</mark>	15 – 28 June 2020
Wave 8	24,496	22.6%	29 June – 12 July 2020
Wave 9	24,493	23.9%	13 – 26 July 2020
Wave 10	24,464	23.4%	27 July – 9 August 2020
Wave 11	23,905	24.8%	10 – 23 August 2020
Wave 12	23,904	22.2%	24 August – 6 September 2020
Wave 13	23,000	25.1%	7 – 20 September 2020
Wave 14	23,912	23.1%	21 September – 4 October 2020

- Responses are collected from businesses during a two week period. Now up to Wave 18 with plans to continue.
- We have increased sample size over the waves to improve coverage of regions and business sizes.
- Wave 7 sample re-design implemented to improve coverage of smaller size businesses
- Wave 17 sample boost again and will now go to
 ~38,000 businesses each fortnight
- Wave 17: Response rate 26.8% = 10,377 businesses

Source: Office for National Statistics - Business Impact of Coronavirus (COVID-19) Survey

Capturing data from businesses to meet users diverse needs

- Wave 1 of BICS was implemented rapidly within two weeks:
 - Financial Performance
 - Exports/Imports
 - Prices of Goods and Materials

- Government Schemes
- Workforce
- Other
- Flexibility has meant we can add new questions quickly
- The question bank of all the BICS questions for each wave is publicly available
- With only a two-week window each wave to agree content, design questions and build and test the survey before it goes live

In practice... the questions

- Collaborative approach to question topics, e.g. identified via internal or external requests
- Questions designed through a rapid iterative draft and review process with questionnaire experts and policy users
- Challenge: Timings have meant no opportunity to cognitively user test questions
- To ensure quality and response
 - Questions are mainly categorical (ranges) and we do not ask for detailed financial data
 - Questions can be skipped if responders do not know the answers so we can prevent dropout and minimise burden
 - Improvements are identified through continual review, monitoring survey analytics, respondent feedback and data
- Align with other ONS surveys: Weekly Survey Co-ordination group

In practice... the production

- Challenge: how to develop quickly but maintain outputs and pace
- Production: team of four to derive the estimates and production outputs
- Questionnaire expertise: team of three focused on questionnaire updates
- Systems: team of three to focus on system updates each fortnight (via python code and linked to automatic ingestion of data from the online server)
- Central support for data collection, business liaison, methodological support
- Needed to streamline our approach to innovate rapidly for development and method changes
- While it is a detailed fortnightly release, we have mid-weekly outputs
- To meet our user needs, we needed a rapid production timetable

Rapid production timetable...

- Streamlined our production and management of rapid data and outputs
 - E.g. A new wave went live on Monday 2nd November for Wave 17 to be in the field for two weeks (2nd 15th November)
 - For Wave 17, we produced a first rapid estimate after 3 days response for early sight on Thursday 5th
 - Early sight: A separate slide deck is created to summarise impacts and circulated across government on Friday 6th
 - Tuesday 10th a second estimate created to publish on Thursday 12th (weekly ONS Faster Indicators publication)
- Monday 16th November final results are run and outputs for Wave 17 will be published on Thursday 19th:
 - Detailed data pack including industry, size band and regional breakdowns (70 detailed data tabs)
 - Bulletin (~30 pages), including tables, charts and chart packs
 - Confidentialised microdata uploaded onto the Secure Research Service with a one week delay
- Throughout this period there are ad-hoc data requests

Questionnaire topics now covered

- Financial performance; Exports and Imports; Access to Goods and Materials;
 Prices of Goods and Materials; Government schemes (e.g. application and use);
 Workforce impacts; Footfall; Business resilience; Profit; Expectations, ...
- Collaboration: Consulted widely across different UK organisations to meet their needs: Bank of England, Treasury, Dept. for Business, Dept. for Trade, Tax office, Competition and Marketing Authority, Regional governments
- Some questions are rotated in and out over the waves (detailed list in paper)
- Example as of Wave 14:
 - 21 broad questions, with a total of 72 questions and sub-questions
 - With smart routing, the average time to complete is 14 minutes

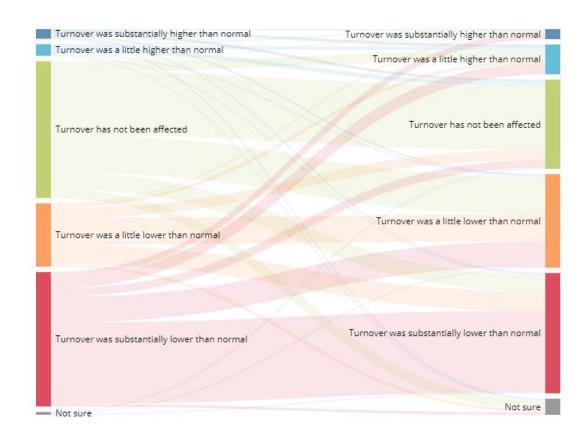
Analysis topics covered so far

- Analysis of the same businesses over time
- Textual responses based on free text answers
- Workforce articles by Labour Market area
- Comparison to separate tax office furlough figures from administrative data





To Wave:

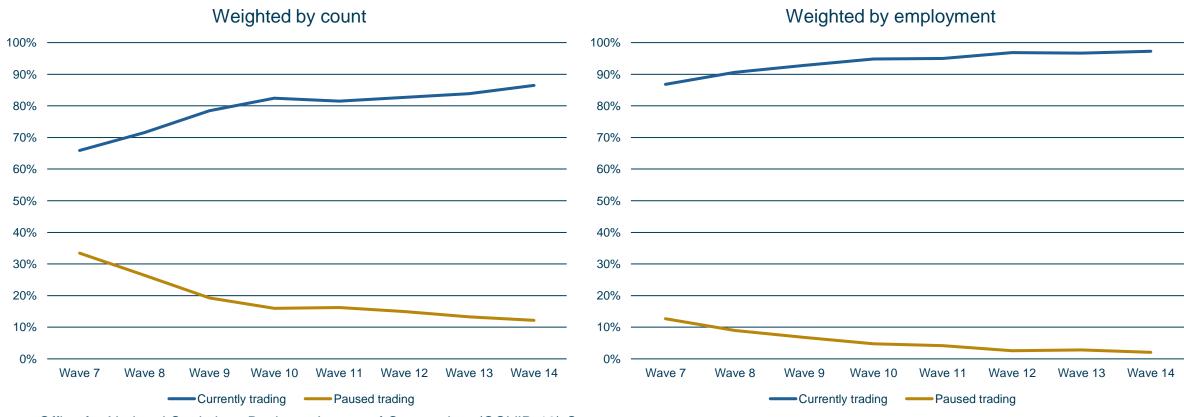


Source: Office for National Statistics – Insights of the Business Impact of Coronavirus (COVID-19) Survey: 23 March to 5 April (Wave 2) to 1 to 14 June (Wave 7) 2020 Impact of Coronavirus (COVID-19) Survey

Weighted BICS Results

- Weighted results allow comparison over time (across waves)
- Initial published results showed weighting by turnover or employment has minimal difference, whilst weighting by count of business has the most significant difference
- Back series available from Wave 7 to current wave:
 - Trading status
 - Financial performance
 - Workforce arrangements (furlough)
- Detailed article with methods and approach available by variable

Weighted BICS Results



Source: Office for National Statistics - Business Impact of Coronavirus (COVID-19) Survey

Users and policy makers

- Outputs from BICS are used extensively across the UK government departments to help inform policy
- Continuing to update, refine and add new questions
- Work closely across government departments to validate the outputs against their requirements
- We load our confidentialised micro-data into a Secure Research Service for approved uses to access (one week time lag)

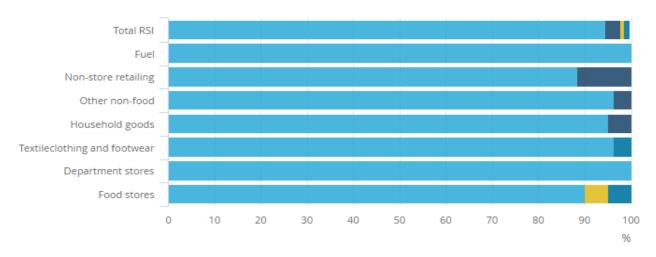
BICS use in regular outputs

- Retail Sales
- Construction
- Production and Services

Feedback from the Business Impact of Coronavirus Survey suggested that many retail businesses were trading in the period that the survey was live – 27 July to 9 August 2020

Wave 10 of the Business Impact of Coronavirus (COVID-19) Survey, UK, survey was live for data collection from 27 July to 9 August 2020

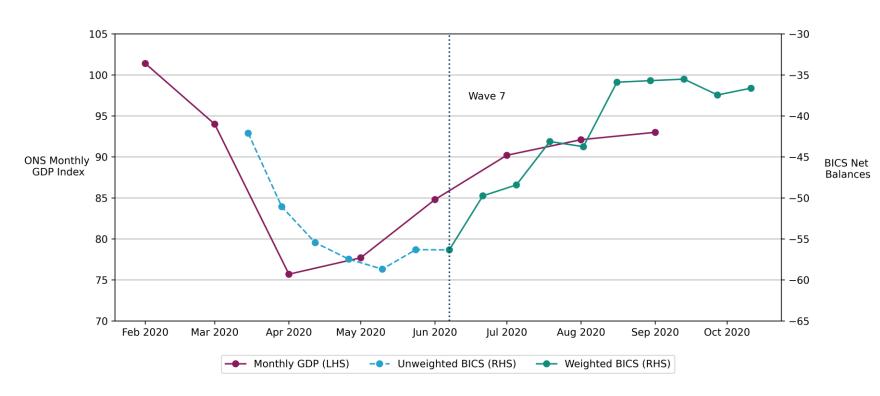
- Paused trading and does not intend to restart in the next two weeks
- Paused trading but intends to restart in the next two weeks
- Started trading within the last two weeks after a pause in trading
- Currently trading and has been for more than the last two weeks



Source: Office for National Statistics – Monthly Business Survey – Retail Sales Inquiry

Source: Office for National Statistics – Business Impact of Coronavirus (COVID-19) Survey

Net balance BICS vs monthly GDP



Trends from businesses in BICS are also seen to be broadly reflect the published UK monthly GDP estimates, where BICS is published much earlier than the official monthly GDP estimate.

Source: Office for National Statistics – Business Impact of Coronavirus (COVID-19) Survey

Emerging data needs

- Increasing need for more detailed breakdowns at a granular level
 - How do we continue to position the survey to provide that information?
- The evolving landscape in the UK will require a shift in emphasis of the type of questions we may want to ask
 - How do we understand the impact of different drivers?
 - Measuring impact of the UK transition period (December 2020+)
- ONS user consultation in August 2020
 - Support to remain fortnightly in the short to medium term and we will continue with detailed publication and accompanying dataset

Conclusion

- BICS has provided us with a timely fortnightly set of indicators to capture business experiences but with real flexibility to meet changing needs
- Future approach is that BICS will continue but likely to be an opinions type business survey so we can quick meet policy needs and cover a wide range of topics
- bics@ons.gov.uk

Further References

- Coronavirus and the economic impacts on the UK
- Coronavirus and the latest indicators for the UK economy and society
- Insights of the Business Impact of Coronavirus (COVID-19) Survey: 23 March to 5 April (Wave 2) to 1 to 14 June (Wave 7) 2020
- Coronavirus and the experiences of UK businesses, textual analysis: March 2020 to June 2020
- Business impact of coronavirus, analysis over time, UK: Waves 2 to 5 panel
- Business Impact of COVID-19 Survey (BICS): Preliminary weighted results
- Comparison of furloughed jobs data: May to July 2020