Office for National Statistics

Article

Business impact of coronavirus, analysis over time, UK: Waves 2 to 5 panel

The indicators and analysis presented in this article are based on selected responses over time from the new voluntary fortnightly business survey, which captures businesses responses on how their turnover, workforce, prices, trade and business resilience have been affected in the two week reference period. This data relates to the period 23 March 2020 to 17 May 2020 (Wave 2 to Wave 5).

Table of contents

1 . Introduction

The Business Impact of Coronavirus (COVID-19) Survey (BICS) was started by the Office for National Statistics (ONS) in response to the coronavirus pandemic. The voluntary fortnightly survey has been crucial in providing timely and relevant information on the impact of businesses, capturing business' views on the impact the coronavirus has had on turnover, workforce, prices, trade and business resilience. The ONS has regularly reviewed and updated the questionnaire to ensure the survey remains relevant for policy and user needs.

Detailed information from the BICS for individual waves is published fortnightly in the Coronavirus and the economic impacts on the UK bulletin and dataset, with flash estimates every second week in Coronavirus and the latest indicators for the UK economy and society .

These data should not be used in place of National Statistics. The survey was designed to give an indication of the impact of the coronavirus on businesses and a timelier estimate than other surveys.

This article looks at those businesses who are common across different waves of the BICS.

More about coronavirus

- Find the latest on coronavirus (COVID-19) in the UK.

- All ONS analysis, summarised in our coronavirus roundup.

- View all coronavirus data.

- Find out how we are working safely in our studies and surveys.

2 . Analysis of waves over time

The Business Impact of Coronavirus (COVID-19) Survey (BICS) questions are reviewed and updated as part of each subsequent fortnightly survey.

Table 1: Reference and collection period for each BICS wave

Wave	Reference period	Collection period
Wave 1	9 to 22 March 2020	23 March to 5 April 2020
Wave 2	23 March to 5 April 2020	6 to 19 April 2020
Wave 3	6 to 19 April 2020	20 April to 3 May 2020
Wave 4	20 April to 3 May 2020	4 to 17 May 2020
Wave 5	4 to 17 May 2020	18 to 31 May 2020

Source: Office for National Statistics – Business Impact of Coronavirus Survey

To meet the rapid needs, we considered Wave 1 of BICS as a pilot study in which we asked high-level questions of businesses to better understand whether we would be able to collect the timely and relevant information that we wanted to provide to our users.

From Wave 2 onwards, more detailed questions were added and refined. For this comparative analysis we use questions that have common response options from Waves 2 to 5. These are the final results for each wave covering the periods 23 March through to 17 May 2020.

Of the 9,036 unique businesses that have responded to BICS over this period, there were 3,521 businesses who responded to every wave. This has allowed us to track this panel of firms over this period of time to see how the impacts of the coronavirus (COVID-19) on their business have evolved.

Of these 3,521 businesses, 72% reported continuing to trade between 23 March and 17 May 2020. The remaining 28% reported they had temporarily closed or paused trading at some point in this period. By Wave 5, 37% of these businesses in the panel had restarted trading. There was also a small number of firms in this sample that had reported that they had permanently ceased trading, less than 1%.

We present the net balances of the panel of businesses that have reported an increase or decrease in their turnover, their expected workforce size and access to supplies within the UK. We also include Sankey diagrams for each of the three topics covered here: turnover, workforce and trade. This allows us to report on how firm-level responses flow from one wave to the next and illustrates how the businesses have changed their experience over time in those periods.

In this article net balances are presented to describe change over waves. More information about the calculation and the methodology used to derive these figures can be found in the Appendix.

The results show how businesses' responses to the coronavirus changed during the period 23 March to 17 May 2020. The largest impact was seen in Wave 2, compared with normal expectations. In Wave 5, businesses were still impacted by the pandemic but less so than in Wave 2.

Additional data are made available for download alongside this article to show how the experiences of businesses have evolved between Waves 2, 3, 4 and 5.

Because of the routing in the questionnaire, only certain businesses answer certain questions. Sample sizes are provided in the footnotes of each figure in the article and Table 2 in the Appendix summarises the routing. Caution should be taken, and reference should be made, to the correct sample population for the question.

3 . Turnover

Overall, of the four waves in this analysis, 91% of those surveyed businesses said their turnover was outside normal range in all of these waves. In Wave 2, 5% of businesses reported turnover was within the normal range and 95% turnover was outside the normal range. These figures were largely unchanged by Wave 5, with 2% of businesses reporting turnover was within the normal range and 97% reporting turnover was outside the normal range, with the remaining percentage not sure.

Of these 91% of businesses, 55% recorded turnover was considered substantially lower than normal across all four waves and 7% reported that turnover was a little lower than normal for the entire period. In Wave 2, 71% of the businesses who were trading, whose turnover was outside the normal range, reported turnover was substantially lower than normal and 25% reported it was a little lower than normal. In Wave 5, these figures were 75% and 18% respectively.

As part of the Business Impact of Coronavirus (COVID-19) Survey (BICS) routing used to manage businesses' response, we have used the question where we asked businesses how their turnover had been affected in the analysis. Businesses were routed to this question if they continued to trade, their financial performance was outside normal expectations and their turnover was outside its normal range. Of the 3,521 who answered the survey over Waves 2 to 5, 1,216 reported that they were continuing to trade and their turnover was outside normal range.

Figure 1: A net negative 88 percentage points of trading businesses where turnover was outside normal range reported turnover was a little lower than normal in Wave 5, largely unchanged from Wave 2

Responding businesses who continued to trade and whose turnover was outside its normal range, UK, 23 March to 17 May 2020

Notes:

1. Final results of Waves 2 to 5 of the Office for National Statistics' (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS) panel (n = 1,216).

2. Businesses had to respond they were trading, and their turnover was outside its normal range in all Waves 2 to 5, to be included in the figure above. This equates to 1,216 businesses who responded out of the total 3,521.

3. Response options for Waves 3 and 5 have been mapped to reflect those of Wave 2, for consistency. Turnover response options for Wave 3 onwards were broken down into more detail, these have been replaced with Wave 2 response options in the figure. Turnover options up to 20% was classified as "turnover was a little higher/lower than normal", while between 20% and 50% and turnover over 50% were classified as "turnover was substantially higher/lower than normal".

4. Results shown exclude businesses who reported "turnover unaffected", or "turnover affected but within normal range", as these were asked in previous questions.

5. The flows in the Sankey diagram show the number of businesses who responded to each option for Wave 2 and separately for Wave 5. A business could have responded with any of the other options in Waves 3 and 4. The different response options across Waves 2 to 5 can be found in the separate dataset.

4 . Workforce

Expected workforce size has varied across each of the waves. Of businesses who continued to trade over this period, a net negative 28 percentage points (ppt) reported a decrease in expected workforce size in Wave 2, compared with negative 1 ppt in Wave 5.

In Wave 2, 30% of these businesses who were trading expected their workforce size to decrease, 2% to increase and 57% expected workforce size to stay the same. There has been some movement over time, as 10% expected their workforce size to decrease, 8% expected it to increase and 75% expected no change for the most recent wave.

Almost one-fifth (19% of the 30%) of businesses that expected their workforce to decrease in size in Wave 2 were still of the view that their workforce would be lower in Wave 5. But over three-fifths (62%) now expected their workforce to stay the same, while 12% expected it now to increase.

Figure 2: In Wave 2, 30% of businesses who continued to trade expected their workforce to decrease, compared with 9% in Wave 5

Responding businesses who continued to trade, expectations of workforce size in the two weeks from completion of each Wave, UK, 23 March to 17 May 2020

Notes:

1. Final results of Waves 2 to 5 of the Office for National Statistics' (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS) panel (n = 2,548).

2. Businesses had to respond they were trading in all Waves 2 to 5 to be included in the figure above. This equates to 2,548 businesses who responded out of the total 3,521.

3. These proportions have not been applied to actual workforce numbers in this article. Analysis to derive a measure of total workforce apportioned to each working status has been published in a dedicated detailed fortnightly BICS bulletin; Coronavirus and the economic impacts on the UK.

4. The flows in the Sankey Diagram show the number of businesses who responded to each option for Wave 2 and separately for Wave 5. A business could have responded with any of the other options in Waves 3 and 4. The different response options across Waves 2 to 5 can be found in the separate dataset.

5 . Trade

Of businesses who continued to trade and whose financial performance were outside normal expectations in Waves 2 to 5 (1,331), a net 36 percentage points (ppt) of businesses could access supplies within the UK in Wave 2, compared with a net 76 ppt in Wave 5. Of the 1,331 businesses, 15% responded they had not been able to get the materials, goods or services they needed in Wave 2, compared with 7% in Wave 5.

Of the 324 businesses, who have exported during the coronavirus (COVID-19), 5% reported exporting had not been affected for all Waves 2 to 5. Meanwhile, 65% reported exporting was adversely affected in Wave 2 and 76% were exporting less than normal in Wave 5.

Of the 434 businesses, who have imported during COVID-19, 12% reported importing had not been affected for all Waves 2 to 5. Meanwhile, 50% reported importing was affected in Wave 2 and 60% were importing less than normal in Wave 5.

Figure 3: A net 36 percentage points (ppt) of businesses who continued to trade and where financial performance was outside normal expectations, could access supplies in the UK in Wave 2 compared with 76 ppt in Wave 5

Responding business who continue to trade and whose financial performance outside normal expectations, UK, 23 March to 17 May 2020

Notes:

1. Final results of Waves 2 to 5 of the Office for National Statistics' (ONS') Business Impact of Coronavirus (COVID-19) Survey (BICS) pane (n = 1,331).

2. Businesses shown had to respond that they were trading, and their financial performance was outside normal expectations in all Waves 2 to 5, to be included in the figure above. This equates to 1,331 businesses who responded out of the total 3,521.

3. The flows in the Sankey Diagram show the number of businesses who responded to each option for Wave 2 and separately for Wave 5. A business could have responded with any of the other options in Waves 3 and 4. The different response options across Waves 2 to 5 can be found in the separate dataset.

6 . Authors

Emily Hopson, Sumit Dey-Chowdhury and Craig McLaren, Office for National Statistics.

7 . Appendix: Response counts and rates, and net balances

Table 2: BICS response sizes for businesses who have responded for Waves 2 to 5, broken down by main trading and turnover status

Common responses over Waves 2 through to 5	Count
Total number of common businesses	3,521
Continuing to trade	2,548
Continuing to trade and financial performance outside of normal expectations	1,331
Continuing to trade and turnover outside normal range	1,216

Source: Office for National Statistics – Business Impact of Coronavirus Survey

Table 3: Number of common businesses who responded to BICS Waves 2 through to 5, broken down by industry

Industry	Count
Mining and quarrying	*
Manufacturing	630
Water supply, sewerage, waste management and remediation activities	36
Construction	157
Wholesale and retail trade; repair of motor vehicles and motorcycles	586
Transportation and storage	157
Accommodation and food service activities	327
Information and communication	224
Real estate activities	43
Professional, scientific and technical activities	434
Administrative and support service sctivities	477
Education	185
Human health and social work activities	61
Arts, entertainment and recreation	165
Other service activities	35
All industries	3,521

Source: Office for National Statistics – Business Impact of Coronavirus Survey

Notes

1. * represents an industry count less than 10 [Back to table](#)

Response rate for Waves 2 to 5

Table 4: Total sample and response rates for each wave of BICS

Wave	9 April 2020 Publication Wave 1	23 April 2020 Publication Wave 2	7 May 2020 Publication Wave 3	4 June 2020 Publication Wave 5	21 June 2020 Publication Wave 5
Sample	17,786	17,786	17,623	18,506	20,566
Response	4,598	6,171	6,114	6,196	6,364
Rate	25.9%	34.7%	34.7%	33.5%	30.9%

Source: Office for National Statistics – Business Impact of Coronavirus Survey

Constructing net balances

Net balances were used in the article by using this formula for each wave:

$$\frac{Count\ of\ Positive\ Response\ Option\,(s) - Count\ of\ Negative\ Repsonse\ Option\,(s)}{Count\ of\ Positive\ Response\ Option\,(s) + Count\ of\ Negative\ Repsonse\ Option\,(s) + Count\ of\ Unchanged\ Respon}$$

Table 5: Response options used in the net balances' calculation

Section	Net Balance Variable	Response Option(s)
Turnover	Positive	Turnover was a little higher than normal, Turnover was substantially higher than normal
	Negative	Turnover was a little lower than normal, Turnover was substantially lower than normal
	Unchanged	Not sure
Workforce	Positive	Expect workforce size to increase
	Negative	Expect workforce size to decrease
	Unchanged	Not sure, expect workforce size to stay the same
Trade	Positive	Yes, but we had to change suppliers or find alternative solutions, Yes, we have been able to get what we needed
	Negative	No, we have not been able to get the materials, goods or services we needed
	Unchanged	Not applicable

Source: Office for National Statistics – Business Impact of Coronavirus Survey

Worked example

Figure 1 shows a net negative 88 percentage points. This is calculated by using this formula in the following way:

$$\frac{Count\ of\ businesses\ who\ repsonded\ turnover\ was\ higher - Count\ of\ businesses\ who\ repsonded\ turnover\ was\ lo}{Count\ of\ businesses\ who\ responded\ turnover\ was\ higher + responded\ turnover\ was\ lower + responded\ not\ sur}$$

$$\frac{52 - 1127}{52 + 1127 + 37} = -0.88$$