

Article

Business Impact of Coronavirus (COVID-19) Survey: preliminary weighted results

Early estimates of weighted responses from the voluntary fortnightly business survey, focusing on businesses' responses on how turnover, workforce and trading status have been affected in two-week reference periods, from Wave 7 (1 to 14 June 2020) to Wave 12 (10 to 23 August 2020).

Contact:
Freddy Farias Arias and Emily
Hopson
bics@ons.gov.uk
+44 (0)1633 456720

Release date:
14 September 2020

Next release:
To be announced

Table of contents

1. [Main changes](#)
2. [Overview of weighting and imputation for BICS](#)
3. [Impact of different forms of weighting](#)
4. [Methodology in detail](#)
5. [Sample size of BICS, Waves 6 to 12](#)
6. [Selected weight for each BICS table](#)
7. [Impact of weighting on businesses with 10 or more employees](#)
8. [Future developments](#)
9. [Related links](#)

1 . Main changes

- We have explored various best practice methods for weighting Business Impact of Coronavirus (COVID-19) Survey (BICS) results, including by turnover, employment and count (that is, to reflect the number of all UK businesses).
- Weighting by turnover or employment has minimal difference when compared to the currently published headline unweighted BICS estimates, such as on trading status, workforce status and financial performance.
- Weighting by count of business has the most significant difference when compared to the currently published unweighted BICS estimates.
- Weighting by count provides a representative assessment for all UK businesses as it scales up responses to reflect all UK businesses, of which most are small businesses with between zero and nine employees.
- More detailed weighted estimates will be available as part of the Wave 13 BICS release, to be published on 24 September 2020.

2 . Overview of weighting and imputation for BICS

The sample design for the Business Impact of Coronavirus (COVID-19) Survey (BICS) was reviewed and refreshed for Wave 7 and went live on Monday 15 June, and it has been the basis for all waves since. ([Section 5: Sample size of BICS, Waves 6 to 12](#) provides an overview of the current sample design by size band.)

Fortnightly questionnaires go out to approximately 24,500 businesses, and the sample redesign at Wave 7 significantly improved our coverage of the smaller-sized businesses. This improvement to our coverage has provided a suitable foundation for weighting to be applied to the currently unweighted estimates.

Currently, unweighted BICS results mean that we can only make inferences about UK businesses in our sample that have responded. Weighting BICS responses will enable us to make inferences about all UK businesses, not just those in the sample and that have responded. This inference requires weighting and imputation methods to account for both unsampled and non-responding businesses. This section summarizes the weighting methods we have explored, with a more detailed methodological overviews available in [Section 4: Methodology in detail](#).

Different weighting methods are appropriate depending on the type of analysis and policy questions being considered, and [Section 6: Selected weight for each BICS table](#) highlights which weights we aim to publish for each BICS table.

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](#).

Weighting by count

Weighting by count scales up responses in BICS to be representative of all businesses in the UK. It scales up responses for all businesses that have between 0 and 249 employees, to the point where the counts of all businesses of this size in the UK are represented. The size band of greater than 250 employees is completely enumerated, so no weighting is applied.

The weight applied to each response in qualitative questions (for example, on trading status) is based on a standard expansion estimation; for example, where the weight applied is the ratio between the UK population size of a stratum (that is, a group of businesses with the same characteristics based on [Standard Industrial Classification \(SIC\) 2007 industry](#), employment size and country) and the responding sample size in a stratum.

Of the weighting methods we have considered, weighting by count results in the largest differences to the currently published headline BICS results (for example, proportion of businesses that are currently trading); this is mainly because of the emphasis of the experiences of small businesses. Responses from businesses with zero to nine employees are scaled up the most, given that they make up 90% of the total number of businesses in the UK but only around 10% of respondents in the BICS (see Table 1 in [Section 3: Impact of different forms of weighting](#)).

Weighting by count provides a good overview of the impact of businesses regardless of their size, allowing for the experience of small businesses to be better represented in headline results (this is particularly important for responses such as “currently paused trading” where small businesses tend to dominate).

To see the difference small businesses make to headline results, see [Section 7: Impact of weighting on businesses with 10 or more employees](#). It shows how when removing the smallest of businesses (that is, businesses with zero to nine employees), the difference between unweighted and weighted estimates significantly decreases.

Weighting by turnover

The value of turnover is derived using the percentage questions asked on the BICS and registered turnover in the Inter-Departmental Business Register (IDBR), which is used to construct the BICS sampling frame. In effect, businesses with larger turnover are given greater emphasis in results. Once the value of the turnover of responding businesses is derived, a standard ratio estimation is then used to calculate the weight applied to a particular stratum. By using turnover as the auxiliary variable, ratio estimation corrects for any imbalances in the selected sample that arise through random chance or non-response.

While turnover is often associated as a proxy for economic output, it is not in this context comparable to gross domestic product (GDP). See [Section 4: Methodology in detail](#) for a more detailed methodological overview on weighting BICS by turnover.

Of the weighting methods we have considered, weighting by turnover results in very small differences to currently published headline BICS results. This is mainly because of medium to large businesses already having a higher proportion of their businesses represented in unweighted BICS responses than smaller businesses (see Table 1 in [Section 3: Impact of different forms of weighting](#)).

Weighting by employment

We first derive counts of employment from the percentage questions asked on the survey (such as on percentage of staff furloughed) and multiply these percentages by the registered employment figure recorded in the IDBR at the time of the sample selection. In effect, the percentages reported by businesses with larger employment sizes are given greater emphasis in the results. These counts are then weighted using standard ratio estimation applied to a particular stratum. By using employment as the auxiliary variable, ratio estimation corrects for any imbalances in the selected sample that arise through random chance or non-response.

See [Section 4: Methodology in detail](#) for a more detailed methodological overview on weighting BICS by employment.

Of the weighting methods we have considered, weighting by employment (like turnover) results in very small differences compared with the currently published headline BICS results. This is mainly because of medium to large business already having a higher proportion of their businesses represented in unweighted BICS responses than smaller businesses (see Table 1 in [Section 3: Impact of different forms of weighting](#)).

Imputation

While results published in this article do not include imputation, work is ongoing to develop imputations for non-responding businesses with more than 250 employees. Based on our methodology, imputations are expected to have a small impact on weighted by count results as businesses with more than 250 employees make up a small proportion of all UK businesses. Imputation is only applied to the larger businesses (those with more than 250 employees) as all these businesses in this population are sampled, and the use of imputation allows for a more representative estimate of these businesses based on their response characteristics from earlier waves where available.

There are various forms of imputation dependent on if the business responded in a previous wave or not, and these are outlined in detail in [Section 4: Methodology in detail](#).

3 . Impact of different forms of weighting

Trading status

Figure 1 shows the trading status of businesses over time, comparing unweighted results with estimates using all three forms of weighting: count, turnover and employment.

[Currently published unweighted estimates](#) show that the proportion of businesses that were currently trading gradually rose from 86% in Wave 7 (1 to 14 June 2020) to 96% by Wave 12 (10 to 23 August 2020). Weighting by either turnover or employment results in very similar proportions to unweighted estimates throughout this time period. This is to be expected, given that unweighted estimates consist of responses mainly from medium to large businesses and therefore results mainly reflect the experiences of medium to larger businesses. Weighting by turnover or employment also has a similar effect as it in effect gives a greater emphasis to the experiences of larger businesses (that is, the larger their turnover or employment level, the larger their weight).

Weighting by count of businesses, however, has a notable downward impact compared with the unweighted proportion of businesses that are currently trading over time. While the overall trend over time is largely similar, using weighted estimates by count, the proportion of businesses that were currently trading gradually rose from 66% in Wave 7 to 83% by Wave 12, compared with unweighted results of 86% and 96%, respectively.

The reason for this is the nature of weighting by count. This approach scales up responses in each of the fortnightly surveys to be representative of all UK businesses, regardless of size or market presence. This is further explained in Figure 1.

Figure 1: Weighting by count has the most significant impact against currently published unweighted estimates on trading status, while other forms of weighting have minimal impact

Percentage of businesses, current trading status, UK, Waves 7 to 12 (1 June to 23 August 2020)

Figure 1: Weighting by count has the most significant impact against currently published unweighted estimates on trading status, while other forms of weighting have minimal impact

Percentage of businesses, current trading status, UK, Waves 7 to 12 (1 June to 23 August 2020)



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

Notes:

1. Final results, Wave 7 to 12 of the Office for National Statistics (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS).
2. Only results from businesses that reported they were currently trading are presented.
3. For presentational purposes, trading for more than the last two weeks and started trading again within the last two weeks after a pause in trading have been combined to currently trading.
4. Businesses were asked for their current trading status and so responses will be from the point of completion of the questionnaire.

Column A in Table 1 shows how the smallest businesses (that is, businesses with zero to nine employees) make up 89.7% of the total UK business population but only around 10% of responses since Wave 7. In effect, weighting by count scales up the responses in the smallest size band the most and, as a result, scales up the experience of small businesses throughout every response category in a question over that of other businesses (Figures 1 and 2 are examples of this).

Table 1: Proportion of responses to BICS by business size (number of employees), and composition of the total UK business population by size

Wave	A (0 to 9)	B (10 to 49)	C (50 to 99)	D (100 to 249)	E (250 and over)	All businesses
Wave 7	10.9%	17.1%	18.2%	14.9%	38.9%	100.0%
Wave 8	9.2%	15.4%	18.0%	16.1%	41.4%	100.0%
Wave 9	10.8%	17.4%	20.1%	14.5%	37.1%	100.0%
Wave 10	11.2%	18.1%	20.5%	14.9%	35.3%	100.0%
Wave 11	8.1%	17.9%	21.0%	15.5%	37.4%	100.0%
Wave 12	8.0%	18.8%	21.3%	15.3%	36.6%	100.0%
Business population	89.7%	8.6%	0.9%	0.5%	0.3%	100.0%

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

Notes

1. Inter-Departmental Business Register (IDBR) business population comprises all known businesses that operate in the UK for use in statistical processes and is regularly updated using a variety of both survey and administrative-based data sources.
2. Each wave will have a different sample size and response by businesses as this is a voluntary fortnightly survey.
3. Percentages presented in the business population row represent the proportion UK businesses in each size band.
4. Rows might not sum to 100% because of rounding.

Table 2 shows how businesses that were currently trading were more often larger businesses (those with more than 250 employees) while those that had temporarily closed or paused trading were mainly small to medium businesses (those with fewer than 250 employees). As a result of the experiences of small to medium businesses being scaled up the most when weighting by count, the number of businesses that had temporarily closed or paused trading is increased to a greater degree than the number of businesses that were currently trading; this results in a higher proportion of businesses that had temporarily closed or paused trading and a reduction in the proportion of businesses that were currently trading.

Table 2: Weighting by count scales up the responses of small businesses the most and, as a result, scaling up response categories where small businesses dominate more

Percentage of businesses responding to the trading status question, by employment size, UK, Waves 7 to 12 (1 June to 23 August 2020)

Responses to currently trading			
Wave	under 250	250 and over	Total
Wave 7	59%	41%	100%
Wave 8	57%	43%	100%
Wave 9	61%	39%	100%
Wave 10	64%	36%	100%
Wave 11	62%	38%	100%
Wave 12	63%	37%	100%

Responses to temporarily closed or paused trading			
	under 250	250 and over	Total
Wave 7	77%	23%	100%
Wave 8	73%	28%	100%
Wave 9	79%	21%	100%
Wave 10	82%	19%	100%
Wave 11	79%	21%	100%
Wave 12	79%	21%	100%

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

Overall, weighting by turnover or employment allows a more appropriate assessment on the impact of the coronavirus (COVID-19) pandemic on the wider UK economy, while weighting by count allows for a more representative assessment of the impact of the pandemic on UK businesses.

Financial performance

Figure 2 shows the proportion of businesses that have been experiencing an increase, decrease or no change in their business turnover (that is, financial performance) since the beginning of June through to August 2020. It compares unweighted results with estimates using all three forms of weighting: count, turnover and employment.

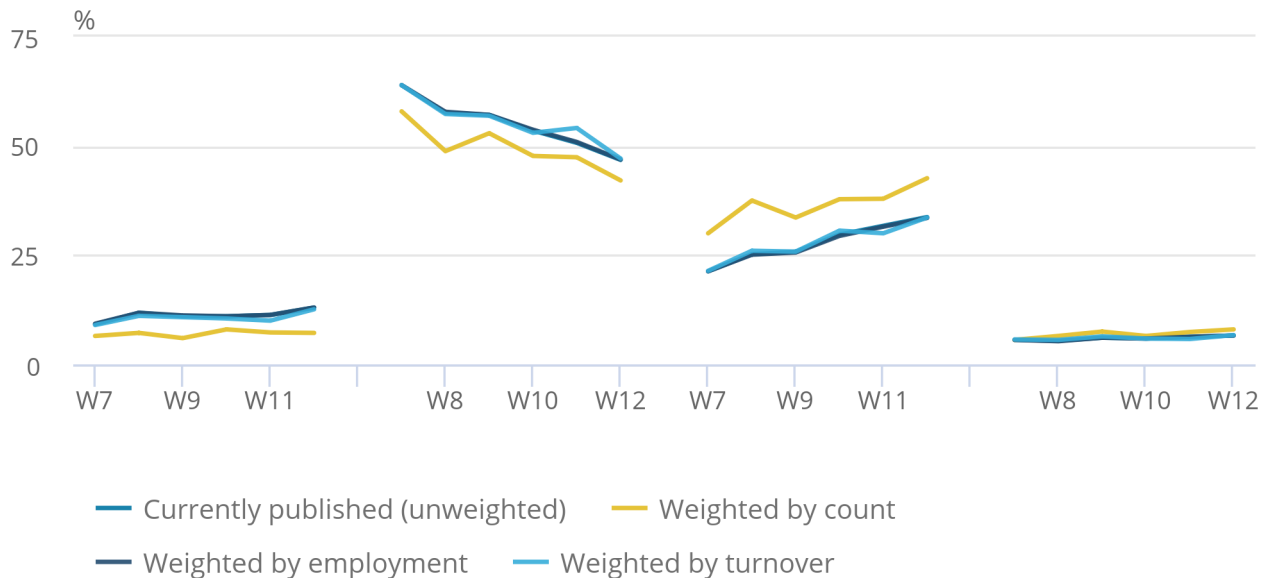
Currently published unweighted estimates show that the proportion of businesses reporting a decrease in turnover in the previous two weeks gradually fell from 64% in Wave 7 (1 to 14 June 2020) to 47% by Wave 12 (10 to 23 August 2020). Weighting by either turnover or employment results in very similar proportions to unweighted estimates throughout this time period and across the different response categories.

Figure 2: Weighting by business turnover, estimates on the impact on businesses' turnover are very similar to currently published unweighted estimates

Effect on turnover, percentage of businesses that are currently trading, UK, Waves 7 to 12 (1 June to 23 August 2020)

Figure 2: Weighting by business turnover, estimates on the impact on businesses' turnover are very similar to currently published unweighted estimates

Effect on turnover, percentage of businesses that are currently trading, UK, Waves 7 to 12 (1 June to 23 August 2020)



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

Notes:

1. Final results, Wave 7 to 12 of the Office for National Statistics (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS).
2. Only results from businesses that reported they were currently trading are presented.
3. For presentational purposes, increased turnover categories and decreased turnover categories have been combined, while “not sure” has been omitted from the figure.

However, estimates weighted by count produce slightly different results because this weighting method scales up the experiences of small businesses the most, and it is likely that the experiences of small businesses are different to that of larger businesses. The proportion of businesses with turnover unaffected is at a higher level throughout the waves, and there is a reduction in the other response categories as small businesses dominate this response category the most.

Workforce

Figure 3 shows the breakdown of businesses' workforce status over time, since the beginning of June through to August 2020. It compares currently published results on proportions furloughed and working normally or remotely with estimates using all three forms of weighting: count, turnover and employment (grossed to provide a UK-wide estimation).

Currently published workforce proportions are based on the responses provided by businesses, which are then apportioned to derive proportions of employees in those businesses using the employment recorded for each reporting unit on the [Inter-Departmental Business Register \(IDBR\)](#). The currently published apportionment of workforce methodology used for these data does not involve weighting to make a UK-wide estimation; therefore, findings have not been fully representative of the UK workforce. Using this currently published method, proportions of the workforce furloughed within responding businesses that had not permanently stopped trading fell from 23% in Wave 7 to 11% in Wave 12, while the proportion working at their normal place of work or working remotely rose from 72% in Wave 7 to 85% in Wave 12.

Using the weighting by employment estimate allows for the grossing up to provide a UK-wide estimation. Using this method, results are broadly similar to those currently published apportioned estimates with the proportion of the workforce furloughed falling from 32% in Wave 7 to 16% in Wave 12, while the proportion working at their normal place of work or remotely rose from 66% in Wave 7 to 82% in Wave 12. The main reason for the small differences between the apportioned and weighted estimates is that apportioned estimates do not take into account non-responders, while weighted estimates do.

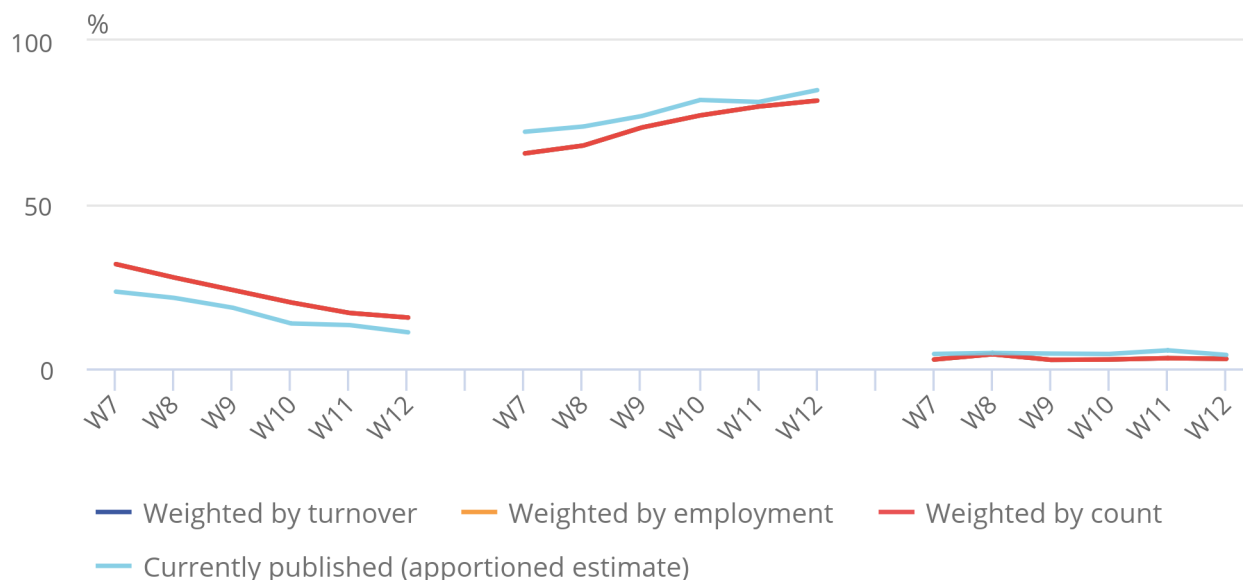
Weighting by either turnover or count results in almost identical proportions compared with employment weighted estimates throughout this time period and across the different response categories.

Figure 3: Comparing currently published apportioned estimates on workforce status with different weighting methods

Working arrangements, percentage of businesses that have not permanently stopped trading, UK, Waves 7 to 12 (1 June to 23 August 2020)

Figure 3: Comparing currently published apportioned estimates on workforce status with different weighting methods

Working arrangements, percentage of businesses that have not permanently stopped trading, UK, Waves 7 to 12 (1 June to 23 August 2020)



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

Notes:

1. Final results, Wave 7 to 12 of the Office for National Statistics (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS).
2. Only results from businesses that have not permanently stopped trading are presented.
3. The currently published figures represent the proportion of responses to each question from businesses, apportioned using the employment recorded for each Reporting Unit on the Inter-Departmental Business Register (IDBR).
4. “Other” is a combination of the other options businesses had to provide a proportion for: “off sick or in self-isolation due to coronavirus (COVID-19) with statutory or company pay”, “made permanently redundant” and “other”.

4 . Methodology in detail

Weighting by count

The Business Impact of Coronavirus (COVID-19) Survey (BICS) sample design selects a random sample from the four smallest size bands, that is, businesses with 0 to 9, 10 to 49, 50 to 99 and 100 to 249 employees, across all industries (note that businesses with more than 250 employees are separately completely enumerated within the BICS sample). With a responding sample size of “n” in a stratum (that is, a group of businesses in the same size band and industry where the industry grouping is based on [Standard Industrial Classification \(SIC\) 2007](#)) and a population size of “N”, the methods required are as follows.

For weighting by count, the weight applied to each response is a standard expansion estimation:

$$w_h = \frac{N_h}{n_h}$$

where w_h is the weight in stratum h , N_h is the population size in stratum h , and n_h is the responding sample size in stratum h .

Weighting by turnover

For weighting by turnover, the weight applied to each response from the four smallest size bands is a standard ratio estimation:

$$w_h = \frac{\sum_N IDBR_{turnover}}{\sum_n IDBR_{turnover}}$$

where the summation over N means for all businesses in the stratum, and over n means for all businesses in the responding sample.

In other words, it is the ratio of the population’s registered turnover over the responding businesses’ registered turnover, calculated and applied per stratum.

Weighting by employment

For weighting by employment, the weight applied to each response from the four smallest size bands is a standard ratio estimation:

$$w_h = \frac{\sum_N IDBR_{employment}}{\sum_n IDBR_{employment}}$$

where the summation over N means for all businesses in the stratum, and over n means for all businesses in the responding sample.

In other words, it is the ratio of the population’s registered employment over the responding businesses’ registered employment, calculated and applied per stratum.

Imputation

The BICS sample design also selects all businesses with employment greater than 250, across all industries (based on [SIC 2007](#)). In this case, the non-responding businesses in each wave need to be imputed. While the imputation design is at five-digit SIC level, imputation “classes” may be at two-digit level or industry section if not enough responses exist (that is, if there are fewer than 10 responses).

For qualitative questions, the imputation method will be “hot deck” imputation, where a random selection is made from what is called a “hot deck” of valid responses already available. The details of the method depend on whether there is a previous response for the non-responder.

Where there is no previous response or there is a new question, the “hot deck” is all responses in the imputation class, in the current period. For example, if response options are A, B or C, and the numbers responding to each were A:5, B:10 C:35, the random selection has probability of 0.1 of selecting A, 0.2 of selecting B and 0.7 of selecting C.

Where there is a previous response (that is, in the wave prior), the “hot deck” is all responses in the imputation class, in the current period, for businesses with the same¹ response in previous period as the non-responder. For example, if non-responder chose “A” in the previous period, then the “hot deck” is all businesses that chose “A” in the same previous period and that also responded in the current period.

For quantitative questions, the imputation method will be ratio of means, which calculates an imputation link and applies it to the non-responder. The details of the method depend on whether there is a previous response for the non-responders. Where there is no previous response or there is a new question, the link is:

$$\frac{\sum_i y_t}{\sum_i IDBR_{employment}}$$

where y is the response for a responding business, and summation is over all responses in the imputation class (i).

For example, if the imputation link is 0.2, this is multiplied by the Inter-Departmental Business Register (IDBR) employment of the non-responder to impute the response.

Where there is a previous response (that is, in the wave prior) the link is:

$$\frac{\sum_i y_t}{\sum_i y_{t-1}}$$

where t refers current period, $t - 1$ to the previous period, and summation is over all matched responses, that is, only including businesses that responded in both periods.

For example, if the imputation link is 1.2, this is multiplied by the previous response of the non-responder to impute the response.

Notes for: Methodology in detail

1. For workforce percentage questions, the hot deck will have to be defined based “On furlough leave”.

5 . Sample size of BICS, Waves 6 to 12

The sample design for the Business Impact of Coronavirus (COVID-19) Survey (BICS) was reviewed and refreshed for Wave 7 and went live on Monday 15 June, and it has been the basis for all waves since. Table 3 provides an overview of the current sample design by size band.

Table 3: Sample size of Business Impact of Coronavirus (COVID-19) Survey for Waves 6 to 12
Number of businesses sampled, by employment size, Waves 6 to 12 (18 May to 23 August 2020)

Sample Size	Wave 6	Wave 7	Wave 8	Wave 9	Wave 10	Wave 11	Wave 12
0 to 9	1,409	5,229	5,263	5,292	5,314	4,727	4,730
10 to 19	758	2,841	2,827	2,802	2,757	2,784	2,796
20 to 49	865	2,077	2,095	2,102	2,121	2,114	2,101
50 to 99	796	4,325	4,318	4,309	4,279	4,287	4,294
100 to 249	9,393	2,699	2,696	2,697	2,717	2,718	2,718
250 and over	7,327	7,302	7,297	7,291	7,276	7,275	7,265
All size bands	20,548	24,473	24,496	24,493	24,464	23,905	23,904

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

6 . Selected weight for each BICS table

Different weighting methods are appropriate depending on the type of analysis and policy questions being considered, and Table 4 highlights which weights we aim to publish for each Business Impact of Coronavirus (COVID-19) Survey (BICS) table.

Table 4: Selected weighting method to be published for each BICS table, based on tables in Wave 12

Wave 12 tab number	BICS table	Weight	Wave 12 tab number	BICS table	Weight
1	Read me	-	33	Financial Assistance (1)	Count
2	Sample Size	-	34	Financial Assistance (2)	Count
3	Response Rates	-	35	Cash Flow	Count
4	Response Rates for Each Wave	-	36	Insolvency (1)	Count
5	Trading Status (1)	All	37	Insolvency (2)	Count
6	Trading Status (2)	All	38	Vouchers for Bookings (1)	Count
7	Business Sites Location (1)	Count	39	Vouchers for Bookings (2)	Count
8	Business Sites Location (2)	Count	40	Invoice Payments (1)	Count
9	Financial Performance	Turnover	41	Invoice Payments (2)	Count
10	Turnover vs Operating Costs	Turnover	42	Invoice Payments (3)	Count
11	Business Interest	Count	43	Invoice Payments (4)	Count
12	Footfall	Count	44	Proportion Furloughed (1)	Employment
13	Online Challenges	Count	45	Proportion Furloughed (2)	Employment
14	Exported in Last 12 Months	Count	46	Proportion Furloughed (3)	Employment
15	Exporting Effect	Count	47	Proportion Furloughed (4)	Employment
16	Imported in Last 12 Months	Count	48	CJRS Top Ups (1)	Count
17	Importing Effect	Count	49	CJRS Top Ups (2)	Count
18	Access to goods and materials	Count	50	CJRS Top Ups (3)	Count
19	Logistics (1)	Count	51	Return from Furlough (1)	Employment
20	Logistics (2)	Count	52	Return from Furlough (2)	Employment
21	Choice of Suppliers	Count	53	Return from Furlough (3)	Employment
22	Businesses Selling Similar	Count	54	Return from Furlough (4)	Employment
23	Prices Bought	Count	55	Recruitment (1)	Employment
24	Prices Sold	Count	56	Recruitment (2)	Employment
25	Stock Levels	Turnover	57	Safety Measures	Count
26	Schemes Applied	Count	58	Operating Costs	Turnover
27	Received Funds	Count	59	Business Expansion Plans (1)	Count
28	CJRS Intending	Count	60	Business Expansion Plans (2)	Count
29	Schemes Intending	Count	61	Site Closures	Count
30	Initiatives (1)	Count	62	Site Closure Workforce Effect	Count
31	Initiatives (2)	Count	63	Ad-Hoc_1	Count
32	Initiatives (3)	Count			

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

7 . Impact of weighting on businesses with 10 or more employees

Tables 5 to 7 show results of weighting when the smallest businesses (that is, businesses with zero to nine employees) are removed from headline Business Impact of Coronavirus (COVID-19) Survey (BICS) results, compared with currently published unweighted and weighted results for all size-bands. These highlight that the main driver of the level difference between unweighted estimates and estimates weighted by count are small businesses.

Table 5: Weighted results on businesses' trading status, and estimates after removing the effect of small businesses (those with zero to nine employees).

		All businesses				Businesses with 10 or more employees			
		Currently published (unweighted)	Weighted by count	Weighted by employment	Weighted by turnover	Unweighted	Weighted by count	Weighted by employment	Weighted by turnover
Currently trading	Wave 7	86	65.8	86.3	84.2	88.6	79.7	88.7	87.5
	Wave 8	88.9	71.5	89.1	87.6	90.6	81.7	90.6	89.7
	Wave 9	92.5	78.5	92.7	91	94.3	89.0	94.4	93.9
	Wave 10	93.7	82.4	93.9	92.4	95.1	92.2	95.2	94.7
	Wave 11	95.2	81.5	95.2	94.9	96.5	94.0	96.5	96.2
	Wave 12	95.6	82.7	95.6	90.8	96.8	95.1	96.8	96.3
Temporarily has closed or paused trading	Wave 7	13.5	33.4	13.2	15.2	10.9	19.5	10.9	12.1
	Wave 8	10.6	26.4	10.4	11.8	9.0	17.7	9.0	9.8
	Wave 9	6.8	19.3	6.6	8.2	5.1	9.8	5.1	5.6
	Wave 10	5.7	16	5.4	6.9	4.3	7.2	4.3	4.7
	Wave 11	4.2	16.3	4.1	4.4	3.0	5.2	3.0	3.3
	Wave 12	3.6	15	3.6	8.3	2.5	3.7	2.5	3.0

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

Notes

1. Final results Wave 7 to 12 of the Office for National Statistics (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS).
2. Only results from businesses that reported they were currently trading are presented.
3. For presentational purposes, trading for more than the last two weeks and started trading again within the last two weeks after a pause in trading have been combined to currently trading.
4. Businesses were asked for their current trading status and so responses will be from the point of completion of the questionnaire.
5. All businesses includes businesses across all industries and employment size bands (that is, with 0 to 9, 10 to 49, 50 to 99, 100 to 249 and 250 or more employees).

Table 6: Weighted results on business financial performance, and estimates after removing the effect of small businesses (those with zero to nine employees).
Effect on turnover, percentage of businesses that are currently trading, UK, Waves 7 to 12 (1 June to 23 August 2020)

		All businesses			Businesses with 10 or more employees				
		Currently published (unweighted)	Weighted by count	Weighted by employment	Weighted by turnover	Unweighted	Weighted by count	Weighted by employment	Weighted by turnover
Turnover increased	Wave 7	9.2	6.5	9.3	9	9.4	8.2	9.5	9.3
	Wave 8	11.8	7.2	11.8	11.1	12.0	11.4	12.0	11.4
	Wave 9	11	6	11.2	10.8	11.5	10.4	11.5	11.4
	Wave 10	11	8	11	10.5	11.3	9.7	11.3	10.7
	Wave 11	11.3	7.3	11.3	10	11.6	10.0	11.7	11.3
	Wave 12	13	7.2	13	12.6	13.5	11.6	13.5	13.3
Turnover decreased	Wave 7	63.9	57.9	63.9	63.9	64.5	66.2	64.4	64.4
	Wave 8	57.6	48.8	57.8	57.3	58.4	58.3	58.4	58.4
	Wave 9	57.1	52.9	57.1	56.9	57.6	57.4	57.6	57.6
	Wave 10	53.5	47.7	53.7	53	54.2	54.6	54.2	54.2
	Wave 11	50.7	47.4	50.9	54.1	51.1	51.1	51.2	51.3
	Wave 12	46.8	42.1	46.9	47.1	47.3	50.1	47.3	48.0
Turnover unaffected	Wave 7	21.3	30	21.3	21.4	20.5	19.9	20.5	20.5
	Wave 8	25.2	37.5	25.1	26	24.3	24.9	24.3	24.8
	Wave 9	25.8	33.6	25.6	25.8	25.0	24.8	24.9	24.9
	Wave 10	29.7	37.8	29.4	30.6	28.7	28.4	28.7	29.4
	Wave 11	31.7	37.9	31.5	30	31.0	30.9	30.9	31.2
	Wave 12	33.7	42.6	33.5	33.6	32.9	31.7	32.8	32.4
Not sure	Wave 7	5.6	5.6	5.6	5.7	5.7	5.7	5.6	5.8
	Wave 8	5.4	6.5	5.3	5.6	5.3	5.4	5.3	5.4
	Wave 9	6.1	7.5	6.1	6.4	6.0	7.4	5.9	6.0

Wave 10	5.9	6.5	5.9	5.9	5.8	7.2	5.8	5.7
Wave 11	6.3	7.4	6.3	5.8	6.3	8.1	6.2	6.1
Wave 12	6.6	8	6.6	6.7	6.4	6.7	6.4	6.3

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

Notes

1. Final results, Wave 7 to 12 of the Office for National Statistics (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS).
2. Only results from businesses that reported they were currently trading are presented.
3. For presentational purposes, increased turnover categories and decreased turnover categories have been combined, while “not sure” has been omitted from the figure but is available in the accompanying dataset.
4. All businesses includes businesses across all industries and employment size bands (that is, with 0 to 9, 10 to 49, 50 to 99, 100 to 249 and 250 or more employees).

Table 7: Weighted results on workforce status, and estimates after removing the effect of small businesses (those with zero to nine employees).

Working arrangements, percentage of businesses that have not permanently stopped trading, UK, Waves 7 to 12 (1 June to 23 August 2020)

	Wave	All businesses				Businesses with 10 or more employees				
		Currently published (apportioned)	Currently published (unweighted)	Weighted by count	Weighted by employment	Weighted by turnover	Unweighted	Weighted by count	Weighted by employment	Weighted by turnover
On furlough	Wave 7	23.4	33.8	31.8	31.8	31.8	33.8	31.7	31.7	31.7
	Wave 8	21.5	29.1	27.7	27.7	27.7	29.0	27.6	27.6	27.6
	Wave 9	18.5	25.1	23.9	23.9	23.9	25.0	23.9	23.9	23.9
	Wave 10	13.7	21.1	20.1	20.1	20.1	21.1	20.1	20.1	20.1
	Wave 11	13.2	17.7	16.9	16.9	16.9	17.6	16.9	16.9	16.9
	Wave 12	11.0	16.3	15.5	15.5	15.5	16.0	15.5	15.5	15.5
Working (at normal place of work or remotely)	Wave 7	72.2	62.4	65.6	65.6	65.6	63.5	65.6	65.6	65.6
	Wave 8	73.8	65.7	68.0	68.0	68.0	66.6	68.1	68.1	68.1
	Wave 9	77.0	71.3	73.5	73.5	73.5	72.4	73.6	73.6	73.6
	Wave 10	81.9	75.0	77.2	77.2	77.2	76.2	77.2	77.2	77.2
	Wave 11	81.3	78.5	79.9	79.9	79.9	79.2	80.0	80.0	80.0
	Wave 12	84.9	80.3	81.7	81.7	81.7	81.1	81.7	81.7	81.7
Other	Wave 7	4.4	3.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	Wave 8	4.7	5.2	4.3	4.3	4.3	4.4	4.3	4.3	4.3
	Wave 9	4.5	3.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5
	Wave 10	4.4	3.9	2.7	2.7	2.7	2.8	2.7	2.7	2.7
	Wave 11	5.5	3.8	3.1	3.1	3.1	3.2	3.1	3.1	3.1
	Wave 12	4.1	3.4	2.9	2.9	2.9	2.9	2.9	2.9	2.9

Notes

1. Final results Wave 7 to 12 of the Office for National Statistics (ONS) Business Impact of Coronavirus (COVID-19) Survey (BICS).
2. Only results from businesses that have not permanently stopped trading are presented.
3. The currently published figures represent the proportion of responses to each question from businesses, apportioned using the employment recorded for each Reporting Unit on the Inter-Departmental Business Register (IDBR).
4. “Other” is a combination of the other options businesses had to provide a proportion for: “off sick or in self-isolation due to coronavirus (COVID-19) with statutory or company pay”, “made permanently redundant” and “other”.
5. All businesses includes businesses across all industries and employment size bands (that is, with 0 to 9, 10 to 49, 50 to 99, 100 to 249 and 250 or more employees).

8 . Future developments

This article covers the general impact that the different weighting methods have on some of our main currently published unweighted Business Impact of Coronavirus (COVID-19) Survey (BICS) variables, ahead of releasing a full suite of weighted results on a regular basis. Furthermore, this preliminary analysis looks at the impacts of weighting without taking into account imputation for non-responding businesses with more than 250 employees.

Our methodology will allow estimates to be derived for the different size bands. For example, weighted estimates for small (0 to 9 employees), medium (9 to 249 employees) and large (more than 250 employees) businesses. This can also allow the creation of specific combinations, for example, weighted estimates for more than 10 employees for specific variables (see [Section 7: Impact of weighting on businesses with 10 or more employees](#), where preliminary results are available for the main questions).

While regional weighted estimates can be derived using the same methodological approach, we are continuing further work in this area. Weighted regional estimates may separately be available via the devolved administrations on a case by case basis.

While different weighting methods have their value and use, they are not all necessary for every table in the fortnightly BICS tables. Different policy questions can be aided using different weighting methods on the same variable. We plan to weight by count for most tables in the BICS, although we will publish some variables based on weights taking account of turnover or employment, whichever is most appropriate to the question.

Table 4 (see [Section 6: Selected weight for each BICS table](#)) shows our initial approach to which weighting method will be used for each table in the BICS. We will present a selection of these weighted estimates for the next fortnightly BICS release to be published on 24 September 2020.

Acknowledgements

Freddy Farias Arias and Emily Hopson, Office for National Statistics.

9 . Related links

[Coronavirus and the economic impacts on UK: 10 September 2020](#)

Bulletin | Released 10 September 2020

Latest analysis on responses from the voluntary fortnightly Business Impact of Coronavirus (COVID-19) Survey (BICS), which captures businesses' responses on how their turnover, workforce prices, trade and business resilience have been affected.

[Coronavirus \(COVID-19\) latest data and analysis](#)

Web page | Updated as and when data become available

Latest data and analysis on the coronavirus in the UK and its effect on the economy and society.

[Business Impact of Coronavirus \(COVID-19\) Survey questions: 10 to 23 August 2020](#)

Article | Released 10 August 2020

Questions from the BICS for the period 27 July to 9 August 2020 relating to the Coronavirus and the latest indicators for the UK economy and society weekly bulletin.

[Deaths registered weekly in England and Wales, provisional: week ending 28 August 2020](#)

Bulletin | Released 8 September 2020

Provisional counts of the number of deaths registered in England and Wales, including deaths involving COVID-19, by age, sex and region, in the latest weeks for which data are available.

[Business impact of coronavirus, analysis over time, UK: Waves 2 to 5 panel](#)

Article | Released 9 June 2020

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. The data relate to the period 23 March to 17 May 2020 (Waves 2 to 5).

[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](#)

Article | Released 8 July 2020

Impact of the coronavirus on businesses' turnover, cash flow and workforce: analysis on responses to our new voluntary fortnightly business survey and how these have been affected in each two-week reference period. Covers the period 23 March to 14 June 2020.