

Statistical bulletin

Coronavirus, the UK economy and society, faster indicators: 9 April 2020

New data and experimental indicators on the UK economy and society, including information related to the coronavirus (COVID-19). Indicators are constructed from rapid response surveys, novel data sources and experimental methods.

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Next release: 16 April 2020

Correction

17 April 2020 12:30

The labelling in Figure 1 and also the BICS dataset tab 'Financial performance' has been updated to reflect the correct labels. The underlying data remain unchanged. We apologise for any inconvenience caused.

Notice

20 April 2020

Online price change of high-demand products

Because of the way our automated web-scrapers collected prices from one particular high-street retailer, our new, experimental price indices have been overstating online price changes for some categories of high-demand products.

We are temporarily suspending publication of these figures to give us time to improve price collection from this retailer. We will correct these indices and resume publication of these data as soon as possible. This only effects the online price change of high-demand products section of this release; the other indicators are not affected.

These data are experimental statistics and this error has no impact on any of our regular consumer price statistics. This will not affect our use of web-scraped data in our future transformation plans.

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1. Other pages in this release

More detailed commentary on the social impacts of the coronavirus (COVID-19) pandemic is available on the following page:

Coronavirus and the social impacts on Great Britain: 9 April 2020

2. Weekly indicators in response to coronavirus

This weekly release contains data and experimental indicators about the condition of the UK society and economy and the impact of the coronavirus (COVID-19) pandemic.

Today's publication contains a new indicator: social impacts of the coronavirus (COVID-19), which will be repeated in subsequent releases.

This bulletin contains the following.

- Initial results from the new Opinions and Lifestyle (OPN) Survey covering the period 20 March to 30 March 2020; these are to help understand the impacts of the coronavirus pandemic on people, households and communities in Great Britain. The 10-day data collection period spans the introduction of the Stay At Home-measures by the government on Monday 23 March. Over three-quarters of responses were collected before this date, with the results more likely to reflect opinions at this time.
- Results from the <u>Business Impact of Coronavirus (COVID-19) Survey (BICS)</u> for 9 March to 22 March 2020; this release includes results from an increased number of businesses and low-level industry and employment size-band analysis for the responding businesses.
- Experimental online price indices for several high-demand products (HDPs) for 16 March to 5 April 2020, covering items such as long-life food, health, and household and hygiene products.
- Weekly shipping data for the UK.

These data are <u>Experimental Statistics</u> and have been developed to provide early indicators of the impact of the coronavirus in a timely way.

3. Main points

- Of the 4,598 businesses that responded to the Business Impact of Coronavirus (COVID-19) Survey (BICS), 29% reported having to reduce staff numbers in the short-term; those within the accommodation and food services sector, the administrative and support services sector and the arts, entertainment and recreation sector reported the largest proportions of reducing staff numbers in the short-term for the period 9 March to 22 March 2020.
- Of the businesses who responded to the BICS, 40% reported they were confident they could continue operating during the COVID-19 pandemic, for the period 9 March to 22 March 2020.
- Overall, online prices of items in the high-demand products (HDP) basket have increased by 1.5% over the period week 2 (23 to 29 March) to week 3 (30 March to 5 April).
- In the week commencing 23 March, the number of unique visits by ships to UK ports fell by 7.3%; total visits to UK ports decreased by 12.4% in the same period.
- The Opinions and Lifestyle (OPN) Survey reported over 8 in 10 people (85.7%) said they were either very worried or somewhat worried that they or someone in their family would be infected by the coronavirus (COVID-19).
- Nearly all adults in the OPN either cancelled or postponed plans (89.2%) because of the coronavirus, or did not have plans in the previous seven days.

Online price change analysis is experimental and should not be compared with our regular consumer price statistics. The Business Impact of COVID-19 Survey is new and voluntary and so may only reflect the characteristics of those who responded; results are experimental. The OPN Survey results are for 20 to 30 March 2020 and so some results will relate to the period before lockdown.

4. Business impact of the coronavirus

Financial performance

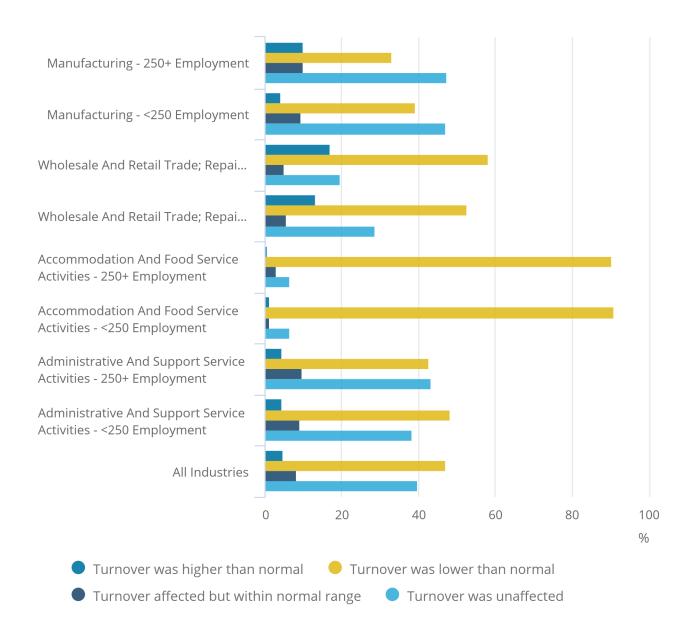
Of the businesses that responded to the Business Impact of Coronavirus (COVID-19) Survey, 47% reported that their turnover was lower than normal for the period 9 March to 22 March 2020. For accommodation and food service activities (regardless of employment size) over 90% of responding businesses reported that turnover was lower than normal for this period.

Figure 1: The direction by which turnover was affected differs little between employment size-bands across businesses within the main sectors who responded

Effect on turnover, percentage of all responding businesses, UK, 9 March 2020 to 22 March 2020

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Effect on turnover, percentage of all responding businesses, UK, 9 March 2020 to 22 March 2020



Source: Office for National Statistics

Notes:

1. Real Estate Services, Other Services and Mining and Quarrying data have been removed from the industry breakdown due to the quality of response rates, but these sectors are included in the industry total.

The main sectors from those surveyed who have seen turnover lower than normal and attributed this as a result of the coronavirus (COVID-19) were:

- manufacturing
- · wholesale and retail trade
- · accommodation and food services
- administrative and support services

The main sectors that reported unaffected turnover in this period were:

- · professional, scientific and technical activities
- information and communication services

The difference between size band of an industry shows little change from the overall pattern of the industry.

Of the total number of businesses that responded their turnover had been abnormally affected, 98% of these businesses attributed the coronavirus as the main reason for their abnormal turnover for the period.

Some businesses attributed the coronavirus as a reason for an increase in turnover in the recent period, which may be attributed to a surge in demand and some consumer stockpiling during the coronavirus pandemic.

More about coronavirus

- Find the latest on <u>coronavirus (COVID-19) in the UK.</u>
- All ONS analysis, summarised in our <u>coronavirus roundup</u>.
- View <u>all coronavirus data</u>.

Workforce

Figure 2: Measures taken to cope with the impact of COVID-19 on the workforce, split by industry, percentage of responding businesses

Percentage of responding businesses, UK, 9 March 2020 to 22 March 2020

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Percentage of responding businesses, UK, 9 March 2020 to 22 March 2020



Source: Office for National Statistics

Notes:

- 1. Real Estate Services, Other Services and Mining and Quarrying data have been removed from the industry breakdown due to the quality of response rates, but these sectors are included in the industry total.
- 2. The percentages in this chart will not sum to 100 as businesses were able to select multiple options.

Of businesses that responded to our survey, 48% reported encouraging their staff to work from home between 9 March and 22 March 2020, with 29% reported having to reduce staff numbers in the short-term. Businesses within the accommodation and food services sector, administrative and support services sector, and the arts, entertainment and recreation sector reported the largest proportions of having to reduce staff numbers in the workforce.

The accommodation and food services sector, alongside the arts, entertainment and recreation sector saw the largest number of firms who had decreased staff working hours, of the sectors who responded, as a means of responding to the coronavirus. More industry breakdowns are available in the dataset section of this bulletin.

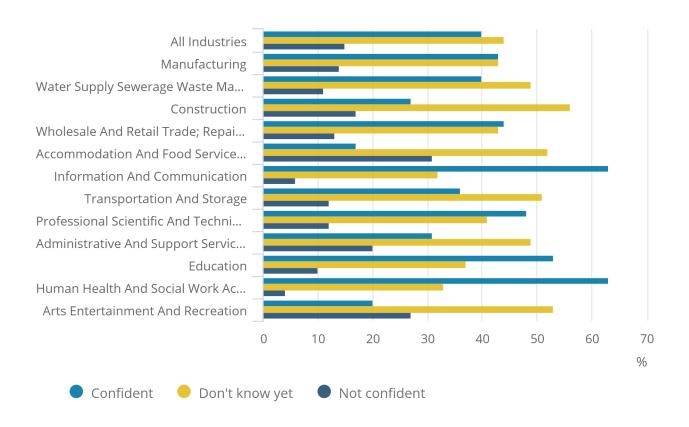
Business confidence

Figure 3: Business confidence in their financial resources to continue operating through the coronavirus (COVID-19) pandemic, split by industry

UK, 9 March 2020 to 22 March 2020

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UK, 9 March 2020 to 22 March 2020



Source: Office for National Statistics

Notes:

1. Real Estate Services, Other Services and Mining and Quarrying data have been removed from the industry breakdown due to the quality of response rates, but these sectors are included in the industry total.

Of all businesses that responded, 40% reported that they were confident that they would be able to continue operating throughout the coronavirus pandemic, while 15% said they were not confident and 44% said they did not know.

The main sectors, from those sampled, to report that they were not confident that they would be able to continue operating were from businesses within the accommodation and food service sectors and the arts, entertainment and recreation sector.

5. Online price change for high-demand products

A timely indication of price change for high-demand products (HDP) has been developed by the Office for National Statistics (ONS), covering the period 16 March to 5 April 2020. These indices are produced using different methods, data and quality thresholds to the regular ONS consumer price statistics and only cover a small proportion of the total Consumer Prices Index including owner occupiers' housing costs (CPIH) basket of items.

As such it is not appropriate to compare these movements to the headline CPIH, which incorporate a broader range of goods and services, such as housing. They should also not be used to pre-empt any future publication of consumer price statistics, because of the differences in methods and sources.

A GEKS-Jevons weekly index has been produced for each of these items. For this release, three weeks of data are available: 16 March to 22 March (week 1), 23 March to 29 March (week 2) and 30 March to 5 April (week 3). More information on retailers and items included within the HDP basket is available in the "Measuring the data" section. This section also includes details on the methods and data sources used for these price indices.

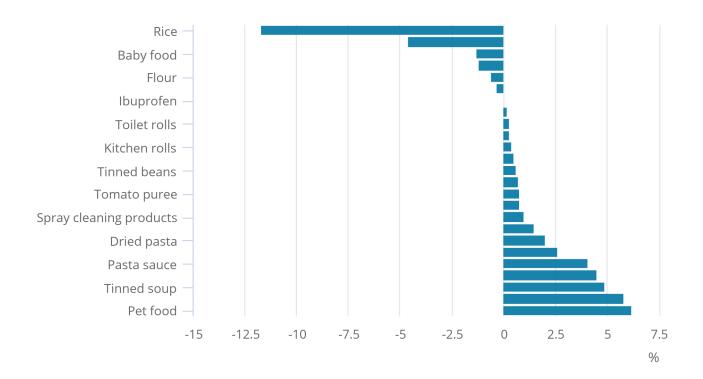
The price change from week 2 to week 3 for each item is presented in Figure 4.

Figure 4: Overall, online prices of items in the high-demand product (HDP) basket have increased by 1.5% over the period week 2 to week 3

Online price change of high-demand products: percentage change between week 2 (23 March to 29 March) and week 3 (30 March to 5 April), UK

Figure 4: Overall, online prices of items in the high-demand product (HDP) basket have increased by 1.5% over the period week 2 to week 3

Online price change of high-demand products: percentage change between week 2 (23 March to 29 March) and week 3 (30 March to 5 April), UK



Source: Office for National Statistics

Notes:

1. These statistics are experimental, and should not be used instead of official statistics.

Figure 4 shows that there was a wide range of price movements for items in the HDP basket. At the higher end, prices for pet food and nappies rose by 6.2% and 5.8% respectively over the period from week 2 to week 3, for the retailers sampled. In contrast, prices of rice fell by 11.7%.

Because of the number of retailers sampled for some items, large price movements in a single retailer can contribute to substantial movements at the item level.

Aggregate indices were also produced for all items in the HDP basket, all long-life food items, and all household and hygiene items. These aggregate indices show that overall, online prices of items in the HDP basket have increased by 1.5% over the period for the retailers sampled. For long-life food, and household and hygiene items, prices have remained fairly stable, with overall price increases of 0.8% and 0.7% respectively.

Figure 5 presents price movements for the full three weeks of data for the following:

- all HDP items
- · all long-life food items
- all household and hygiene items
- · pet food
- rice
- · cough and cold medication

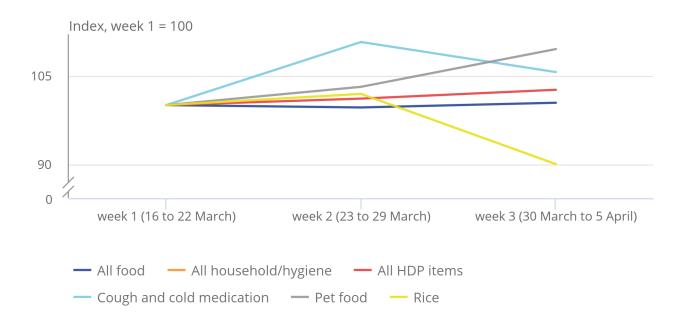
Movements in the all-HDP items index show a stable increase over time, with an increase of 2.6% since week 1. However, Figure 5 shows that for some items these movements are more volatile. For example, prices for cough and cold medication rose by 10.7% from week 1 to week 2, but fell by 4.6% from week 2 to week 3 (Figure 4), resulting in an overall change from week 1 to week 3 of 5.6%.

Figure 5: Item-level indices can show volatile price movements over the longer time series

Online price change of high-demand products: index week 1 (16 to 22 March) = 100, UK

Figure 5: Item-level indices can show volatile price movements over the longer time series

Online price change of high-demand products: index week 1 (16 to 22 March) = 100, UK



Source: Office for National Statistics

Notes:

1. These statistics are experimental, and should not be used instead of official statistics.

6. Shipping indicators

This section discusses the shipping indicators based on counts of all vessels, cargos and tankers up to the week commencing 23 March 2020 for weekly data, and up to 4 April 2020 for daily data.

The data for shipping presented here are not comparable with those given in previous releases because of the addition of Portsmouth and Tyne to the dataset.

Following a review, we have changed the source of these data and improved the methodology used to produce them. We aim to increase the length of all time series in future releases.

As discussed in <u>Faster indicators of UK economic activity: shipping</u>, we expect the shipping indicators to be related to the import and export of goods.

Figure 6: Both unique visits and total visits decreased in the week commencing 23 March 2020

Number of visits, UK, week commencing 2 December 2019 to week commencing 23 March 2020

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Number of visits, UK, week commencing 2 December 2019 to week commencing 23 March 2020



Source: Office for National Statistics

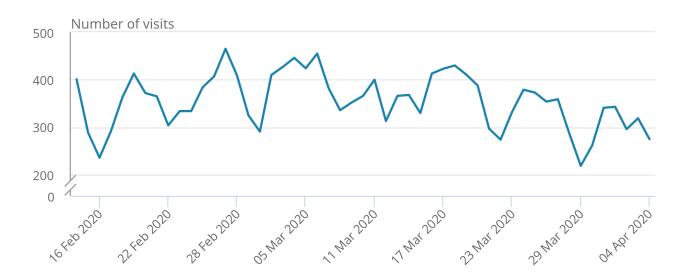
In the week commencing 23 March 2020, the number of unique visits to UK ports fell by 7.3%. Total visits to UK ports decreased by 12.4% in the same period.

Grimsby and Immingham was the port with the highest number of unique visits, with a growth of negative 2.7% in the week commencing 23 March 2020. The number of visits in the same period declined in seven other ports, including London, Southampton and Portsmouth.

We have now started to include daily shipping indicators for the ship visits. We will look to include more daily data in future releases.

Figure 7: Daily movements in shipping visits, 14 February 2020 to 4 April 2020, UK

Figure 7: Daily movements in shipping visits, 14 February 2020 to 4 April 2020, UK



Source: Office for National Statistics

These data are available up to 4 April 2020, showing UK total visits for all ships.

7. Coronavirus and the social impacts on Great Britain

People's concerns about the coronavirus pandemic

Over 8 in 10 people (85.7%) say they were either very worried or somewhat worried that they or someone in their family would be infected by the coronavirus (COVID-19). This was higher for "at risk" groups, that is, those aged 70 years and over (91.7%) and those with underlying health conditions (90.4%).

Figure 8: How worried or unworried are you that you or someone in your family will be infected by the coronavirus (COVID-19)?

Great Britain, 20 to 30 March 2020

Understanding information about the coronavirus

Just over 3 in 4 adults (77.4%) said they had enough information about how to protect themselves from the coronavirus. This figure was slightly higher for the at-risk groups, rising to 86.8% for those with an underlying health condition and 91.3% for those aged 70 years and over.

TV or radio were the most popular sources of information having been accessed by 71.2% of all adults.

Figure 9: Where have you found information about the coronavirus (COVID-19)?

Great Britain, 20 to 30 March 2020

Notes:

Respondents were asked to select all that apply.

Actions undertaken to prevent the spread of the coronavirus

People were also asked about the actions they were personally taking to protect themselves and others against the coronavirus. The Opinions and Lifestyle Survey was launched before the Stay At Home measures were introduced, so information has not been collected on compliance with this guidance here but will follow in subsequent weeks.

One of the official main messages on stopping the spread of the coronavirus was for people to practice social distancing.

Nearly all adults either cancelled or postponed plans (89.2%) because of the coronavirus or did not have plans in the past seven days. This included not meeting up with people in public or a personal place. Nearly 53.1% said they have postponed or cancelled taking part in regular activities such as exercise classes or attending places of worship.

Figure 10: In the past seven days, have any of your plans been postponed or cancelled because of the coronavirus (COVID-19) outbreak?

Great Britain, 20 to 30 March 2020

Notes:

Respondents were asked to select all that apply.

Community support networks

Just over half (50.6%) of all adults said someone has offered to organise or bring food and other essentials if they needed to self-isolate or became unwell. This rose to 83.3% for those aged 70 years and over.

Figure 11: Who has offered to help you?

Great Britain, 20 to 30 March 2020

Notes:

Respondents were asked to select all that apply.

8. Coronavirus, the UK economy and society, faster indicators data

Weekly shipping indicators

Dataset | Released 9 April 2020

The weekly shipping indicators dataset associated with the faster indicators of UK economic activity.

Business Impact of Coronavirus (COVID-19) Survey (BICS)

Dataset | Released 9 April 2020

Initial results from the new BICS. This qualitative fortnightly survey covers business turnover, workforce, prices and trade. These data are not <u>official statistics</u> but have been developed to deliver timely indicators to help understand the impact of the coronavirus (COVID-19) in a timely way.

9. Glossary

Faster indicator

A faster indicator provides insights into economic activity using close-to-real-time big data, administrative data sources, rapid response surveys or Experimental Statistics, which represent useful economic and social concepts.

High-demand product (HDP) basket

A HDP basket means everyday essential items that currently have a high consumer demand, including items from food, health and hygiene categories. The selection of these items was based on anecdotal evidence on patterns of consumer spend. The basket does not cover all items within these categories.

10. Measuring the data

Shipping

These weekly faster shipping indicators data are created through new <u>experimental</u> methods and are not <u>official</u> <u>statistics</u>. More quality and methodology information is available in <u>Faster indicators of UK economic activity:</u> <u>shipping</u>.

Business Impact of Coronavirus (COVID-19) Survey

Table 1: Business impacts of coronavirus survey sample, returns and response rates for each release

2 April 2020 Publication 9 April 2020 Publication

Sample 17786 17786

Return 3642 4598

Rate 20.50% 25.90%

Source: Office for National Statistics

The indicators and analysis presented in this bulletin are based on responses from the new voluntary fortnightly business survey, which captures business' views on impact on turnover, workforce prices, trade and business resilience. These data relate to the period 9 March 2020 to 22 March 2020.

The questions for this survey are available in <u>Business Impact of Coronavirus (COVID-19) Survey questions: 9</u> <u>March 2020 to 22 March 2020</u>.

The survey was sent to around 17,800 UK businesses and results presented in this release are based on a limited number of responses, around 25.9% (4,598) of all businesses surveyed who responded. This is an increase of 956 responses from the <u>preliminary results</u> published on 2 April 2020.

Estimates from the Business Impact of Coronavirus (COVID-19) Survey (BICS) are currently unweighted and should be treated with caution when used to evaluate the impact of the coronavirus across the UK economy. Each business was assigned the same weight regardless of turnover, size or industry, and the data in the latest period are preliminary.

Caution should be taken when evaluating the impact of measures introduced on 20 March 2020 as the current survey asks businesses for responses for the entire two-week time period.

Online price change for high demand-products (HDPs)

Prices were scraped daily from a number of large online UK retailers (typically supermarkets and other prominent high-street chains with an online presence) over the period 16 March to 5 April 2020 for selected items chosen to form the HDP basket (Table 1). An average weekly price was then calculated for each unique product, with three weeks in total: 16 March to 22 March (week 1), 23 March to 29 March (week 2) and 30 March to 5 April (week 3).

Table 2: Items in the high-demand products (HDP) basket

Long-life food Household & hygiene products Health

Other

Dried pasta Antibacterial wipes – hand Ibuprofen Pet food

Long-life milk Antibacterial wipes – surface Paracetamol

Pasta sauce Handwash Cough and cold Medication

Rice Kitchen rolls Vitamin C

Tinned beans Tissues

Tinned soup Toilet rolls

Baby food Spray cleaning products

Flour Nappies

Tomato puree

Source: Office for National Statistics

Notes

 Items such as face masks and hand sanitizer were also chosen in the initial basket but ongoing stock level issues and low sample sizes meant that these indices were too volatile to include in this analysis. <u>Back to table</u>

Because of the nature of these data and the impact that daily changes in product availability can have on chain drift within a chained Jevons series (the original intended methodology), we have chosen to apply a GEKS-Jevons index to these data instead. For more information on the GEKS method and our wider research into suitable index methodology for alternative data sources such as web-scraped data, please see our latest project update The winning formula? A framework for choosing an appropriate index method for use on web-scraped and scanner data (PDF, 434KB).

It is not appropriate to compare these movements with the headline CPIH, which is produced using different methods, data and quality thresholds, and incorporates a broader range of goods and services, such as housing.

Strengths and limitations of these data sources and methods are covered in the next section.

OPN – social impact of the coronavirus

The Opinions and Lifestyle Survey (OPN) is a weekly omnibus survey currently being used to collect data on the impact of the coronavirus on day-to-day life in Great Britain.

The sample size for the OPN is 2,010 individuals per week, with a response rate of 79% (or 1,588 individuals) for the survey conducted from 20 to 30 March 2020. The survey is a nationally representative sample for Great Britain and data are collected using an online self-completion questionnaire.

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the Opinions and Lifestyle Survey QMI.

A sample of 2,010 households were randomly selected from Wave 3 of the Labour Market Survey (LMS). From each household one adult was selected at random but with unequal probability. Younger people were given higher selection probability than older people because of under-representation in the sample available for the survey.

The responding sample contains 1,588 individuals. Survey weights were applied to make estimates representative of the population.

Weights were first adjusted for non-response and attrition. Subsequently, the weights were calibrated to satisfy population distributions with respect to the following factors: sex by age, region, tenure and highest qualification. For age, sex and region, population totals based on projections of mid-year population estimates for March 2020 were used. The resulting weighted sample is hence representative of the Great Britain adult population by a number of socio-demographic factors and geography.

11 . Strengths and limitations

Business Impact of Coronavirus (COVID-19) data

The data from wave 1 of the new fortnightly Business Impact of Coronavirus (COVID-19) Survey (BICS) are based on a final response rate of 25.9% and cover the period 9 March to 22 March 2020, across all business sectors covered by the Monthly Business Survey (including retail sales index and construction).

Real estate services, other services, and mining and quarrying data have been removed from the industry breakdown because of the low numbers of responses but these sectors are included in the industry totals.

The survey is voluntary and the data are businesses' qualitative responses, which should be treated with caution as results reflect the characteristics of those who responded and not necessarily the wider business population.

The questions used in the survey ask respondents to categorise where turnover, workforce, prices or trade are "usual" for the period. Where these are not, they are asked to categorise if the changes are because of the coronavirus or otherwise.

The survey is designed to give an indication of the impact of the coronavirus on businesses and a timelier estimate than other surveys. These should not be used in place of official statistics for such estimates, but instead they are included to support more timely information on the UK economy.

Online price change for high-demand products (HDP)

It is not appropriate to compare these movements with the headline Consumer Prices Index including owner occupiers' housing costs (CPIH), which is produced using different methods, data and quality thresholds, and incorporates a broader range of goods and services, such as housing.

There are a number of caveats that should be applied to the data sources and methods used to produce these experimental price indices.

- No comparable replacement or quality adjustments have been applied, which may lead to downward bias in the indices.
- Because of the nature of web-scraped data, there are no expenditure weights available at the product level. Therefore, there is no accounting for consumer substitution within these items. As we follow the same unique product over time, any substitution towards cheaper or more expensive items will not have an impact on the index, unless these types of products follow a different price change trend.
- For retailers that have a clear label indicating that a product is out of stock, we have removed those products from the analysis. However, other retailers may not have a clear indication of this, so there may be products currently out of stock that have still been included.
- Limited sample size and daily changes in product availability may result in volatility at the item level.

OPN Survey – social impact of coronavirus (COVID-19)

The main strengths of the Opinions and Lifestyle (OPN) Survey include:

- it allows for quick turnaround of data
- it meets data needs: the questionnaire is developed with customer consultation and design expertise is applied in the development stages
- robust methods are adopted for the survey's sampling and weighting strategies to limit the impact of bias
- it is accurate and reliable; the questionnaire is rigorously tested and the data are quality assured
- other strengths can be found in the <u>Quality and Methodology Information</u>.

The main limitations of the OPN include:

- the sample size is relatively small: 2,010 individuals per week with fewer completed interviews, meaning that detailed analyses for subnational geographies and other sub-groups are not possible
- the mode is online only so the sample may be subject to more bias than usual

Ongoing publication of coronavirus (COVID-19) related data

We will be publishing this faster indicator bulletin on a weekly basis during the coronavirus (COVID-19) pandemic. This is to ensure we are meeting user needs for more timely data. We will be adding new data and experimental indicators as and when data become available each week.

This publication will include regular updated data from the new fortnightly survey, BICS, online prices for HDPs and weekly indicators from the OPN survey on social impact of the coronavirus.

12. Related links

Coronavirus (COVID-19) latest data and analysis

Web page | Updated as and when data become available

Latest data and analysis on the coronavirus (COVID-19) in the UK and its effect on the economy and society.

Business Impact of Coronavirus (COVID-19) Survey questions: 9 March 2020 to 22 March 2020

Article | Released 9 April 2020

Questions from the Business Impact or COVID-19 Survey for the period 9 March to 22 March 2020 (wave 1). Questions are reviewed for each wave and will likely contain changes. They will be included in this section in each release.

Deaths registered weekly in England and Wales, provisional: week ending 27 March 2020

Bulletin | Released 7 April 2020

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