

Article

Firms and industries where turnover was resilient during the coronavirus (COVID-19) pandemic

Industries and firms that saw growth or relatively small falls in turnover during the coronavirus (COVID-19) pandemic. This is an Economic Review article.

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1 . Main points

- Around one in five low-level industries saw growth in turnover greater than or equal to negative 2% between March to December 2019 and March to December 2020 and were labelled as resilient.
- A firm's industry was the most important factor in determining its “resilience”.
- People employed in resilient industries made up 12.4% of total employment based on data from the 2019 Annual Population Survey (APS).
- Workers holding university degrees, masters or doctorates made up almost 50% of all the workforce in resilient industries.

2 . Turnover in resilient industries in 2020

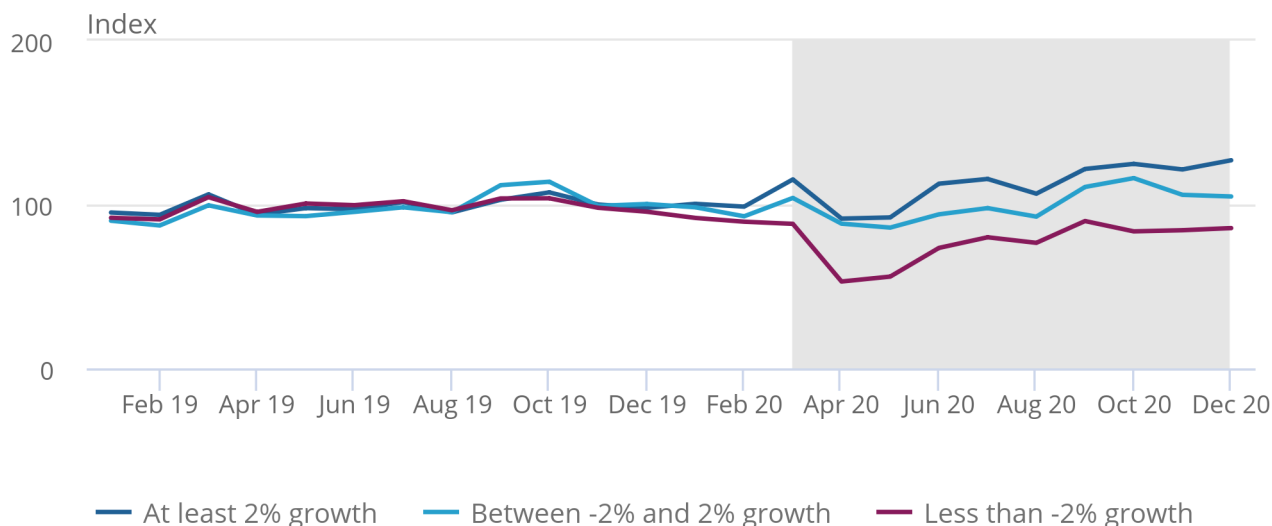
Figure 1 shows how industries that we have defined as resilient (see [Section 6: Glossary](#)) performed during 2019 and 2020 compared with other industries, relative to the average turnover between March and December 2019. Here, resilient industries have been split into two groups based on their growth rate between March and December 2019 and the same months of 2020; first where growth was between negative 2% and 2%, and second, greater than 2%. This is to distinguish between industries that have coped through the pandemic period and those that have seen the strongest turnover growth.

Figure 1: Industries classified as resilient saw an increase in turnover in March 2020 and a smaller fall in April compared to other industries

Aggregate turnover in different growth rate bands (March to December 2020 turnover), indexed to mean turnover March to December 2019

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Aggregate turnover in different growth rate bands (March to December 2020 turnover), indexed to mean turnover March to December 2019



Source: Office for National Statistics – Monthly Business Survey

All three groups of industries behaved broadly similarly throughout most of 2019, but the two groups classified as resilient saw a large increase in turnover in March 2020 coinciding with the beginning of the pandemic, while other industries saw turnover fall, following a steady decline from levels seen in October 2019. This decline was broad-based, with 85% of these industries seeing a fall in turnover between October 2019 and February 2020. The largest contribution to this fall came from wholesale of solid, liquid and gaseous fuels and related products. This may be linked to falling crude oil prices in February and March 2020.

Industries related to the manufacture and wholesale of motor vehicles were also among those that saw turnover fall towards the end of 2019 and early 2020. The Society of Motor Manufacturers and Traders (SMMT) reported that economic and political uncertainty was impacting on [car manufacturers](#) and [traders](#), particularly in October and November 2019. In addition, early November 2019 saw planned car factory shutdowns to mitigate against disruption from the potential exit from the EU without a deal.

The spike in turnover in March 2020 for the high-growth grouping may be partially attributed to the coronavirus (COVID-19) pandemic and the movement of large parts of the workforce to home-working. The largest contributions to month-on-month growth in this group in March 2020 came from wholesale of computers, computer peripheral equipment and software.

Following the sharp declines in turnover in April 2020, resilient industries had much less ground to make up to get back to the average level for March to December 2019, whereas the other industries have barely exceeded the level of turnover seen in February 2020, immediately before the pandemic.

Industries related to pharmaceuticals saw higher turnover in March to December 2020 compared with the same months of 2019. Turnover grew by 19.4% in the manufacture of pharmaceutical preparations industry, and by 13.5% in the wholesale of pharmaceutical goods industry.

While the retail industry, online or in stores, is not included in this analysis, other industries may have benefitted from shops being closed. Turnover growth in the other postal and courier activities (16%) and cargo handling (8.4%) industries could be related to the increase in online sales during the pandemic. However it should be noted that some of this change may be attributed to the EU exit and [stockpiling of goods and services by businesses](#).

Table 1 shows the low-level industries with the highest growth rate between March to December 2019 and March to December 2020, along with the industries with the lowest growth rates over the same period. Three of the highest growing industries are within the wholesale sector and could be linked to home and garden improvements undertaken during 2020. Industries with the lowest growth rate were among those most exposed to restrictions because of the coronavirus pandemic.

Table 1: Industries with the highest and lowest growth rates
Based on turnover growth between March to December 2019 and March to December 2020

Industry	
Highest growth industries	Remediation activities and other waste management services
	Agents involved in the sale of furniture, household goods, hardware and ironmongery
	Agents involved in the sale of timber and building materials
	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting
	Wholesale of flowers and plants
Lowest growth industries	Tour operator activities
	Motion picture projection activities
	Travel agency activities
	Support activities to performing arts
	Other reservation service and related activities

Source: Office for National Statistics - Monthly Business Survey

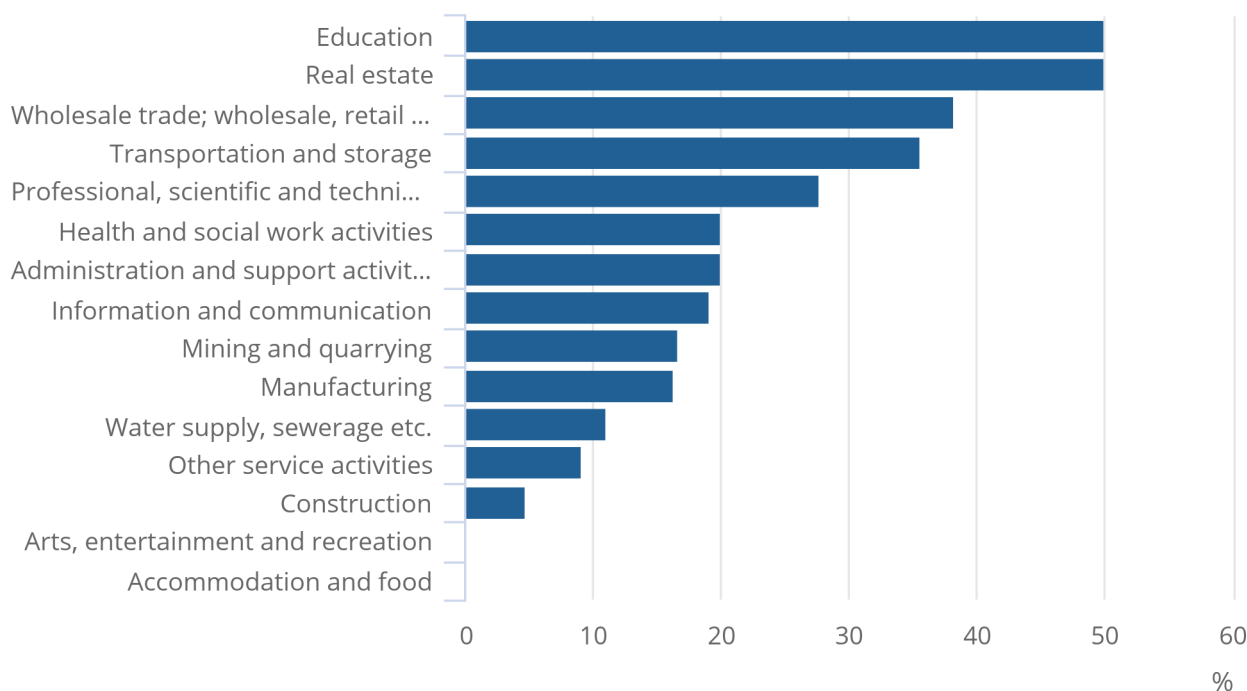
Figure 2 shows the proportion of low-level industries defined as resilient within higher level sectors of the economy. Some of the sectors shown contain small numbers of low-level industries so this should be borne in mind when interpreting the results. Half of the industries included in the analysis within the education sector were resilient during the pandemic. Conversely, no industries in the accommodation and food service activities, and arts, entertainment and recreation sectors were resilient. These are two sectors that have been hit especially hard throughout the pandemic and lockdown measures introduced by the government.

Figure 2: No industries related to hospitality and leisure were classified as resilient, likely because of COVID-19 restrictions throughout much of 2020

Percentage of four-digit industries labelled as resilient, by sector

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Percentage of four-digit industries labelled as resilient, by sector



Source: Office for National Statistics – Monthly Business Survey

Notes:

1. Only sectors where the dataset included more than two four-digit industries have been included.

3 . Firm characteristics

Analysis was also undertaken at the firm level, using a panel of firms continuously sampled on the Monthly Business Survey and the same definition of resilience. In addition, the Inter-Departmental Business Register (IDBR) was used to provide data on a variety of firm characteristics. Regression analysis showed that the industry section in which a firm operates had a statistically significant impact on turnover growth and whether it was classed as resilient.

To see how much firms’ growth rates varied within industries, we:

1. ranked firms by their growth rate between March to December 2020 compared with the same period of 2019
2. split them into deciles (groups of 10% of the number of firms)
3. averaged the growth rate in each decile

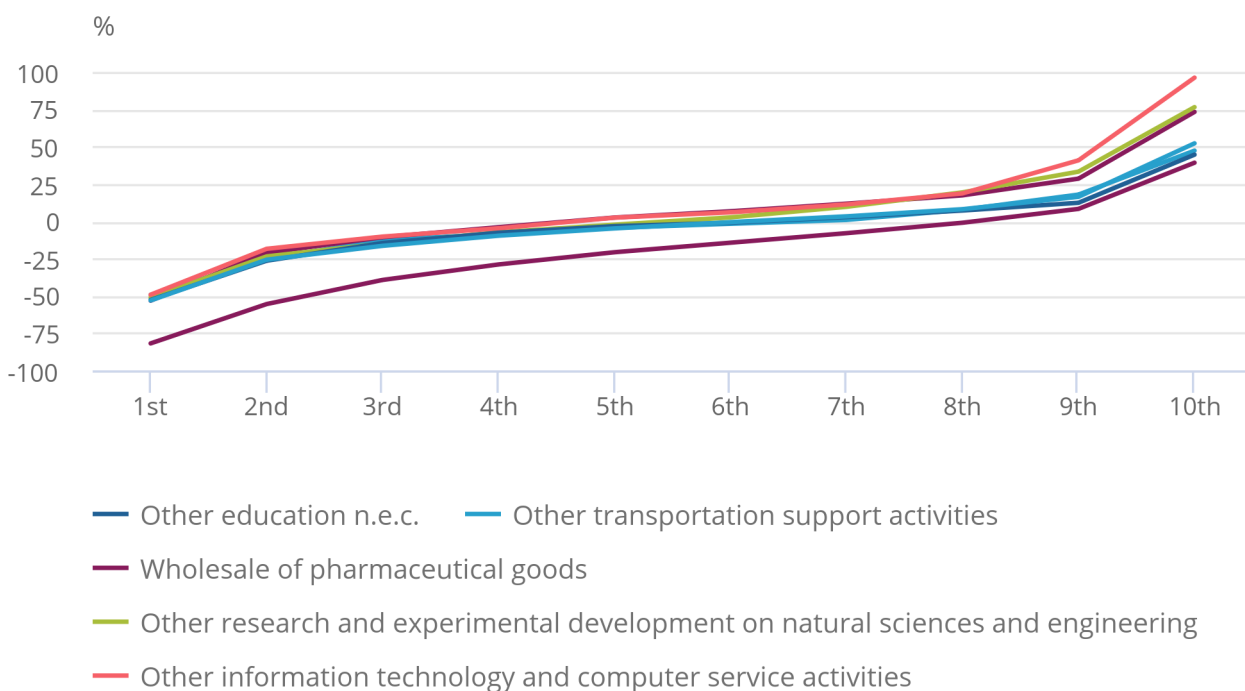
Only industries with more than 100 firms were included, to ensure a minimum of 10 firms in each decile. Figure 3 shows how growth rates vary by growth decile across six industries in our data. These were the six largest industries, based on total turnover between March and December 2020, which saw turnover increase by more than 2% in this period compared with March to December 2019.

Figure 3: Turnover in other transportation support activities was 19.9% higher during the pandemic period despite over half of firms seeing turnover fall

Average growth rate of turnover in six high growth industries, all resilient industries and other industries by decile, between March to December 2019 and March to December 2020

Figure 3: Turnover in other transportation support activities was 19.9% higher during the pandemic period despite over half of firms seeing turnover fall

Average growth rate of turnover in six high growth industries, all resilient industries and other industries by decile, between March to December 2019 and March to December 2020



Source: Office for National Statistics – Monthly Business Survey

Notes:

1. Firms with a turnover growth rate of more than 200% have been classed as outliers and excluded.
2. “Other industries” are industries included in the analysis not classified as resilient.

In the wholesale of pharmaceutical goods industry, the average growth rates in the top six deciles were positive. This is an example of an industry where the overall growth rate is more representative of all firms.

In contrast, other education not elsewhere classified is an example of an industry where growth is concentrated in a smaller number of firms, as only the highest four deciles of firms in this industry saw average growth above 0%. This may be expected given the variety of services within this industry, such as computer training, academic tutoring and lifeguard training.

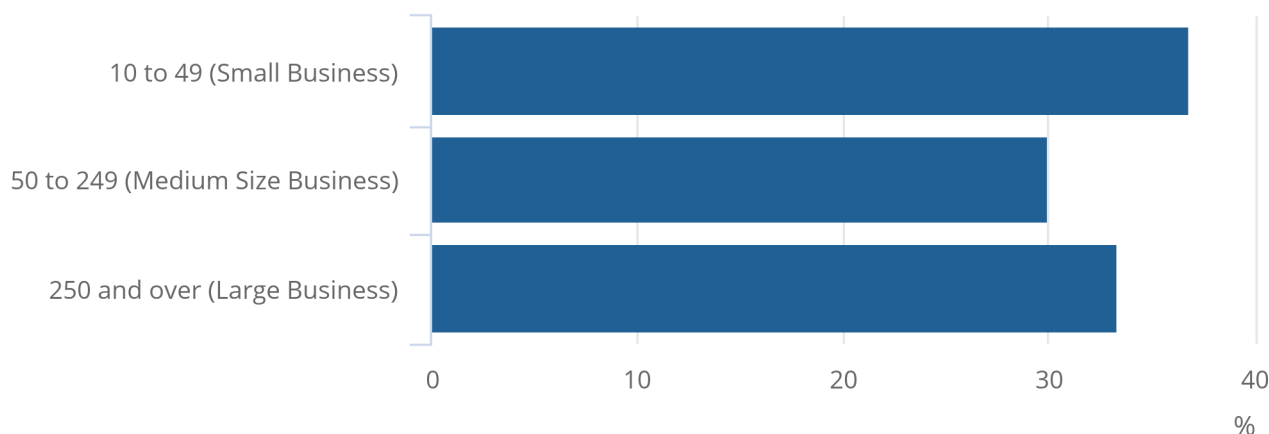
Employment size band was the other significant variable in explaining a firm's growth rate. Figure 4 shows that 36.8% of small business across the panel were labelled resilient, as were a third of large businesses. However, medium sized business performed worse with 30.0% of firms being defined as resilient. This can be partially attributed to the types of firms in this size band, such as hotels and restaurants which were particularly impacted by restrictions during the pandemic. It should be noted that smaller firms with zero to nine employees are more likely to rotate out of the sample and thus there are not many that consistently appear in the panel for them to be included in this analysis.

Figure 4: The highest percentage of firms defined as resilient was among small businesses

Percentage of resilient firms by employment size band

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Percentage of resilient firms by employment size band



Source: Office for National Statistics – Monthly Business Survey and Inter-Departmental Business Register

Other variables used in the regression models to explain turnover growth and whether or not a firm was defined as resilient, but were not found to be statistically significant were:

- age of business
- number of sites
- productivity decile
- country of residence of ultimate parent company

4 . Labour market analysis

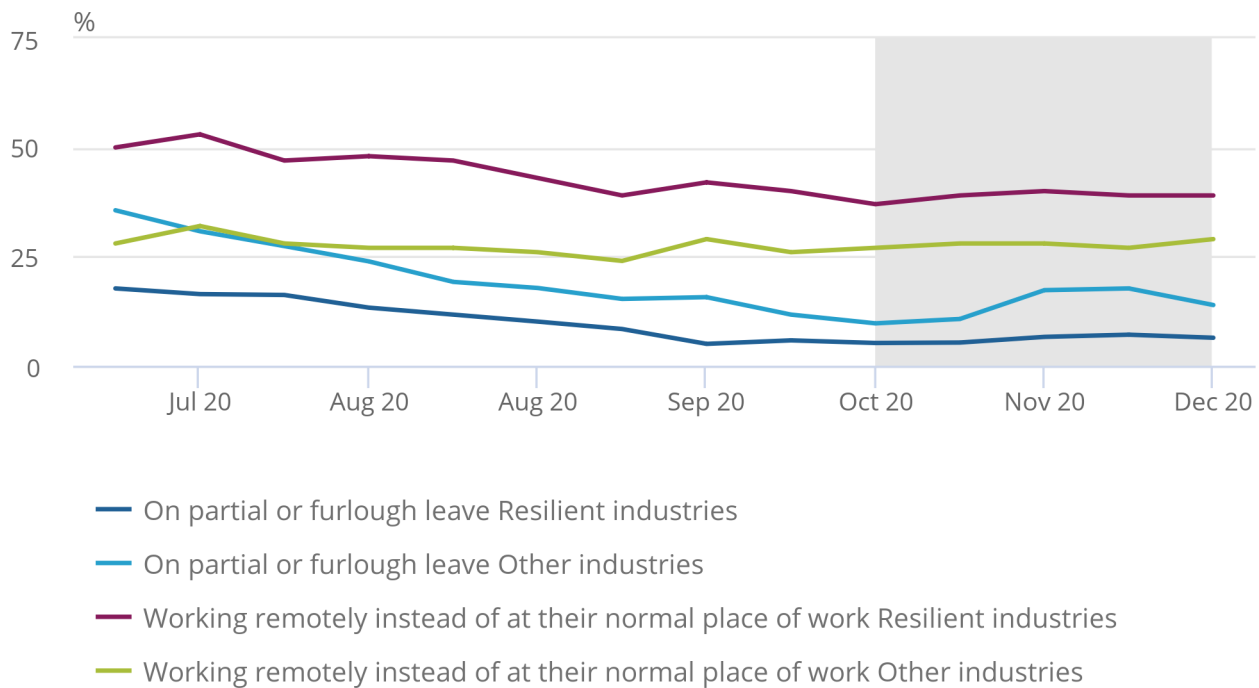
Data from the Business Insights and Conditions Survey (BICS) can be used to provide information on the workforce of firms in industries labelled as resilient. Figure 5 shows that a lower proportion of the workforce in resilient industries were on partial or furlough leave between June 2020 and December 2020, when compared with other industries. The increase in workers on furlough in resilient industries when tighter restrictions were introduced in late 2020 is also less pronounced than in other industries. Figure 5 also shows that firms in industries labelled as resilient had a higher percentage of their workforce working remotely, rather than their usual place of work.

Figure 5: Workers in resilient industries were less likely to be on furlough during the pandemic

Proportion of workforce in resilient and non-resilient industries on partial or furlough leave, or working remotely instead of their normal place of work

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Source: Office for National Statistics – Business Insights and Conditions Survey

Data from the 2019 Annual Population Survey (APS) was used to capture labour market characteristics prior to the coronavirus (COVID-19) pandemic. According to the 2019 APS figures, 12.4% of all employees worked in industries defined here as resilient. These industries accounted for 20.3% of employees in industries covered in this analysis (retail industries, finance, agriculture and the public sector are not included). The dominant resilient industries, in terms of employment, were tertiary education and computer consultancy activities. Tertiary education includes first-degree level higher education and post-graduate level higher education. Computer consultancy activities includes the planning and designing of computer systems including computer hardware, software and communication technologies.

Table 2: Selected labour market characteristics in 2019

		Resilient	Non-resilient	Statistically significant difference
Sex	Male	57.8%	60.7%	Yes
	Female	42.2%	39.3%	Yes
Working pattern	Full-time	79.4%	76.5%	Yes
	Part-time	20.6%	23.5%	Yes
Employment type	Employee	85.3%	79.2%	Yes
	Self-employed	14.4%	20.5%	Yes
	Other	0.3%	0.4%	No
Average gross weekly pay		£628.89	£550.08	Yes

Source: Office for National Statistics - Annual Population Survey

In industries labelled resilient, the proportion of people employed that were female was higher than in other industries.

The percentage of people working full time was also higher in resilient industries, and people in these industries were more likely to be employees, and less likely to be self-employed than people working in other industries. This is supported by the London School of Economics, who found that [the self-employed have been hit particularly hard by the coronavirus \(COVID-19\) crisis \(PDF, 1.82MB\)](#).

95% confidence intervals were calculated for the estimates in Table 2. These showed that the differences between the workforce in industries labelled resilient and other industries were statistically significant for all characteristics shown, with the exception of those with employment types other than “employee” or “self-employed”.

Prior to the pandemic, workers aged 25 years and younger and those aged 60-years-old and over accounted for a lower percentage of people employed within the resilient industries compared with non-resilient industries (Figure 6). Existing evidence suggests that young workers [have been most negatively economically impacted by the coronavirus outbreak](#). The 95% confidence intervals show that there is a statistically significant difference between industries labelled resilient and other industries for all but the 60 years and over age group.

Figure 6: Before the pandemic, mid-career workers were more likely to be in a resilient industry whereas younger workers were more likely to be in a non-resilient industry

Proportion of young, mid-career and old workers within resilient and non-resilient industries in 2019

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Proportion of young, mid-career and old workers within resilient and non-resilient industries in 2019



Source: Office for National Statistics – Annual Population Survey

When looking at workers by their countries of birth, those born in the UK accounted for a higher proportion in non-resilient industries. Workers born in Poland, India and “other” countries were more likely to be working in a resilient industry prior to the pandemic. Workers born in Poland accounted for 14.3% of employment in the warehousing and storage industry, the sixth largest resilient industry by employment.

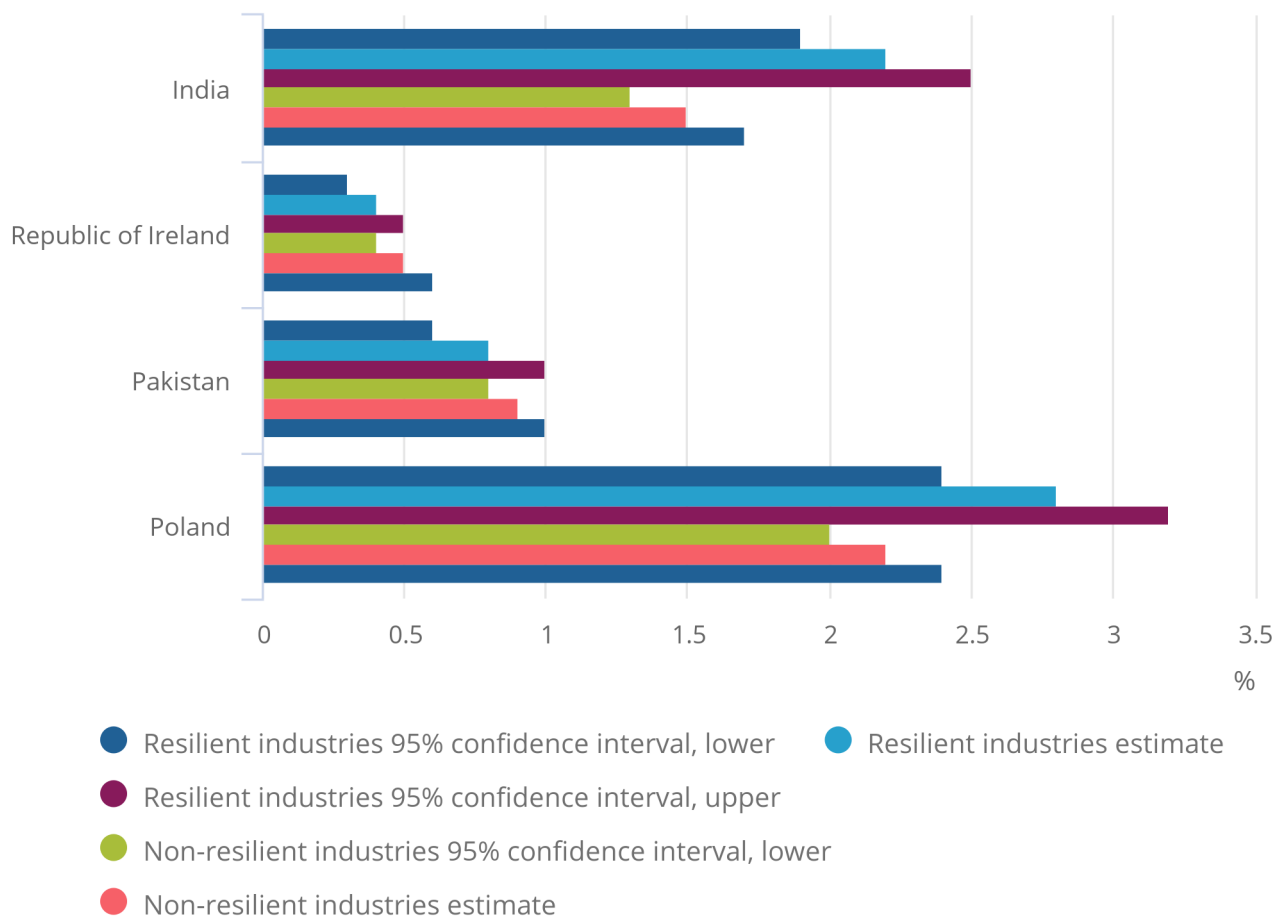
In the computer consultancy industry, 8.0% of workers were born in India. This is the second largest resilient industry by employment with 10.0% of total employment within resilient industries.

Figure 7: Workers born in Poland and India disproportionately worked in resilient industries

Proportion of workers in resilient and non-resilient industries according to their country of birth (excluding UK/Britain and 'Other' countries)

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Proportion of workers in resilient and non-resilient industries according to their country of birth (excluding UK/Britain and 'Other' countries)



Source: Office for National Statistics – Annual Population Survey

Notes:

- Workers born in UK and 'Other' are not included in the chart for presentational purposes.

Average gross weekly pay was higher in resilient industries. This is supported by existing evidence, which explains that [low paid workers are more likely to work in sectors most affected by restrictions and less likely to be able to work from home](#).

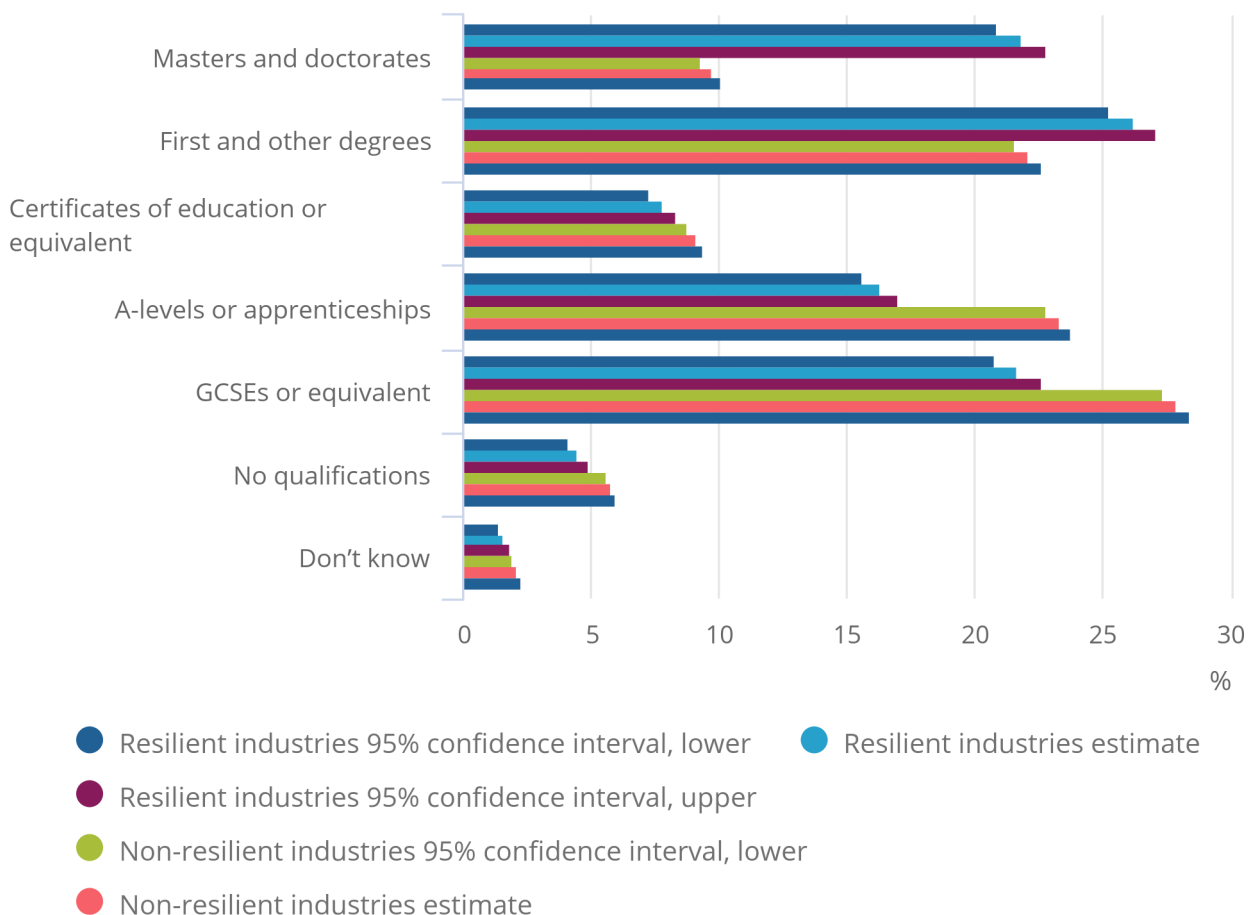
This can also be linked to the qualifications held by workers. Workers holding the highest levels of qualifications accounted for a higher percentage of workers in resilient industries.

Figure 8: Workers with higher qualifications achieved are more likely to be in a resilient industry

Proportion of workers in resilient and non-resilient industries according to their maximum qualification achieved.

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Proportion of workers in resilient and non-resilient industries according to their maximum qualification achieved.



Source: Office for National Statistics – Annual Population Survey

[A study by McKinsey and Company](#) suggests that the worst hit industries, such as hospitality, account for a small proportion of workers with high qualifications. According to 2019 APS data, in industries such as tertiary education and computer consultancy a total of 78.4% and 64.4% respectively had a degree or higher-education qualification. This could explain why higher qualified workers are more likely to be part of a resilient industry during the pandemic.

5 . Glossary

Resilient

Industries or firms with a turnover growth rate of greater than negative 2% in March to December 2019 compared with the same period in 2019 are resilient. It should be noted that for the purposes of this analysis, the term “resilient” refers only to industries’ or firms’ turnover growth, and not other factors that may impact on performance such as expenditure or cash reserves.

Using the method described, 88 of the 446 industries (19.7%) meet the definition of resilient.

6 . Data sources and quality

In order to measure the performance of different industries in the economy, this analysis draws on data on firms' turnover in current prices, collected by the [Monthly Business Survey \(MBS\)](#). This survey, and therefore this analysis, covers around 60% of the economy but excludes retail industries, finance, agriculture and the public sector because of data coverage.

Using data in current prices means that the effects of inflation are included within growth rate estimates, and this should be borne in mind when interpreting the analysis. However, inflation was relatively low during the period covered by this analysis; average prices between March and December 2020 were 0.8% higher than the same months in 2019 as measured by the Consumer Prices Index including owner occupiers' housing costs (CPIH).

The definition of resiliency throughout this article is a growth rate in current price turnover greater than or equal to negative 2.0%. This figure was chosen because it captures not only the industries that have grown throughout the pandemic, but also those that have fared relatively well given that across the MBS, the overall fall in turnover was 15.9% in the reference period. It also allows for some volatility in the monthly turnover data.

To prevent statistical disclosure, industries were only included if the dataset contained at least 15 firms per month on average, and at least 10 in any given month.

Unless otherwise stated, an "industry" corresponds to its four-digit standard industry classification (SIC 2007). This level of detail enables identification and analysis of specific parts of the economy that have performed relatively well compared to other industries during the coronavirus (COVID-19) pandemic.

Analysis of the labour market characteristics in resilient industries has been conducted using the 2019 Annual Population Survey (APS). The analysis should be interpreted with some caution however as the industry a respondent works in is based on their views about the organisation for which they work. This may not be the same as the industry in which organisations are classified in estimates of the national accounts.

In order to obtain the regression analysis results a standard ordinary least squares method (OLS) was implemented. In addition, when resiliency (can only take one of two values) is the dependent variable both probit and logit models were used which gave the same results as OLS. The following were used as independent variables in the models:

- SIC 2007 section
- age of business
- employment size band
- number of sites
- productivity decile
- country of residence of ultimate parent company