Office for National Statistics

Article

Research Output: Economic activity, faster indicators, UK: January 2020

This is a timely release of new, faster indicators of economic activity constructed from novel data sources.

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1 . Disclaimer

These Research Outputs are part of the [faster indicators of UK economic activity](#) project and are not [official statistics](#) but still in development.

It should be noted that these indicators are not intended to be an early measure or predictor of gross domestic product (GDP) and their potential relationship with headline GDP should be interpreted with caution. Instead they provide an early picture of a range of activities that are likely to have an impact on the economy, supplementing official economic statistics.

The data on ships that usually feature in both the faster indicators of UK economic activity release and associated datasets have been removed from this release, along with the related weekly shipping indicators, to allow for further quality assurance following the identification of a number of anomalies in the dataset. As this is a Research Output, these data will still be available in previous releases, but we advise that users treat the data with caution until this review is complete. We will aim to reinstate both the ships data that form part of this release and the weekly shipping figures as soon as possible.

2 . Main points

- In January 2020, of the available industry sectors, agriculture had a large increase in its diffusion index, where 61% of businesses showed an increase in turnover.

- Construction had a large decrease in its diffusion index, with only 27% of businesses reporting an increase in turnover in January 2020.

- In December 2019, the month-on-month turnover and expenditure diffusion indices for the all-industry indicator moved in opposite directions for the first time, with expenditure increasing and turnover decreasing, although both remained negative.

- The number of new Value Added Tax (VAT) reporters decreased slightly in January 2020.

- The amount of large vehicles over 11.66 metres on major roads in England grew in December 2019.

3 . VAT data

VAT heatmap and commentary

The heatmap is a useful visualisation tool to look across the indicators for a common signal and to identify changes in particular indicators.

The heatmap colour codes the Value Added Tax (VAT) indices based on their standard deviation from the mean across the entire time series. The largest changes will be coloured either dark red (above long-term average) or dark teal (below long-term average). All of the VAT diffusion indices are in current prices.

Only three industries have a sufficient number of reporters to be able to compile monthly diffusion indices within a month of the reporting period (January 2020 in this release):

- agriculture, forestry and fishing

- construction

- wholesale and retail trade

Monthly diffusion indices for other industries and the all-industries measure, containing many more VAT reporters, are available up to December 2019 in this release.

Quarterly data are not yet available for 2020.

Figure 1: In January 2020, agriculture was higher than average when compared to the previous month, and construction was higher when compared to the same month a year ago

When compared with the previous month (month-on-month), in January 2020 the agriculture diffusion index was significantly higher than its historical average, the construction index was slightly lower and retail was around its historical average.

When compared with the same month a year ago (month-on-year ago), the construction diffusion index was significantly higher than its historical average, the index for retail was slightly lower than its historical average and the index for agriculture was around its historical average.

The December 2019 diffusion index shows that month-on-month was slightly lower than its historical average and month-on-year ago was around its average.
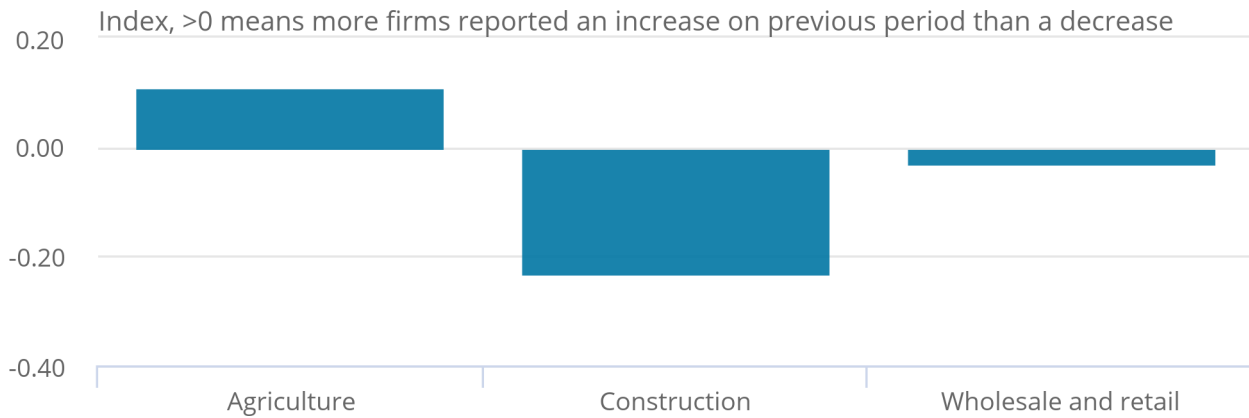
January monthly data

Only wholesale and retail trade, construction, and agriculture have monthly VAT diffusion indices for January 2020 in this release. Note that the number of VAT reporters in the latest period will be considerably smaller than the number of reporters in the previous periods and will be revised in subsequent releases. These early estimates can be volatile until they are revised next month.

Figure 2: The turnover diffusion index for agriculture increased in January 2020, while construction fell

Month-on-month turnover diffusion indices, seasonally adjusted, January 2020

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Month-on-month turnover diffusion indices, seasonally adjusted, January 2020

Index, >0 means more firms reported an increase on previous period than a decrease

Source: HM Revenue and Customs – Value Added Tax returns

Notes:

1. All industries are unweighted: each firm contributing to the index has the same weight regardless of turnover, size or industry.

Figure 2 shows the provisional (month 1) estimates for January 2020.
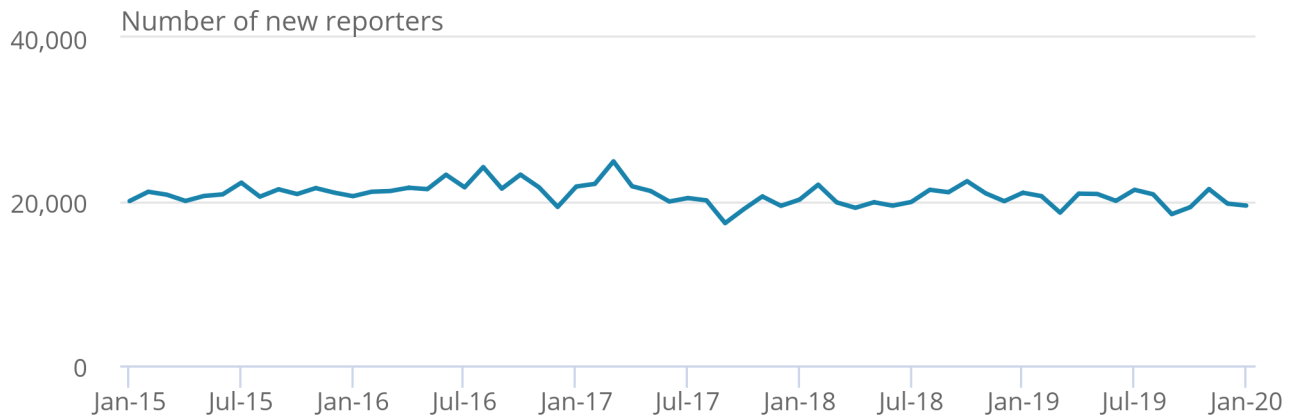
Of the available sectors, agriculture had a large increase in its diffusion index, to 0.11, while construction had a large decrease, to negative 0.23. Wholesale and retail remained relatively stable at negative 0.03.

Figure 3: The number of new VAT reporters decreased in January 2020

Number of new VAT reporters, seasonally adjusted, all industries, January 2015 to January 2020

Figure 3: The number of new VAT reporters decreased in January 2020

Number of new VAT reporters, seasonally adjusted, all industries, January 2015 to January 2020

Source: HM Revenue and Customs – Value Added Tax returns

These data relate to the number of new businesses that have registered for VAT in this period and are thought to relate to the overall creation and increase of business activity in the economy. The amount of new VAT reporters decreased slightly in January 2020 for the second consecutive month.

December monthly data

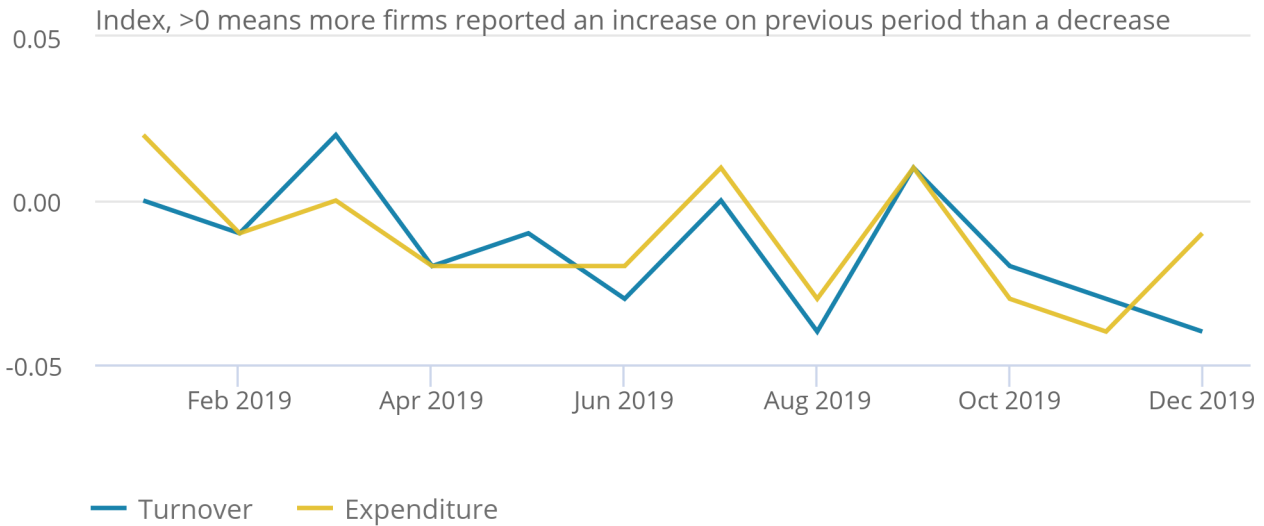All-industry data are available for December 2019.

It should be noted that monthly data are biased towards industries that make monthly repayment claims. Therefore, the all-industry figures are not necessarily representative of the entire economy. More information on the use of VAT data here can be found in a separate article.

Figure 4: The all-industry month-on-month turnover and expenditure diffusion indices moved in opposite directions in December 2019

Month-on-month turnover and expenditure diffusion indices, seasonally adjusted, January 2019 to December 2019

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Month-on-month turnover and expenditure diffusion indices, seasonally adjusted, January 2019 to December 2019

Index, >0 means more firms reported an increase on previous period than a decrease

Source: HM Revenue and Customs – Value Added Tax returns

Notes:

1. All industries are unweighted: each firm contributing to the index has the same weight regardless of turnover, size or industry.

The month-on-month turnover and expenditure diffusion indices for the all-industry indicator moved in opposite directions in December 2019, although both remained negative. The turnover index fell further from November 2019, to negative 0.04 and the expenditure index increased to negative 0.01.

At the sector level, the real estate industry had the lowest turnover diffusion index in December 2019, at negative 0.09, and mining and quarrying had the highest, at 0.06.
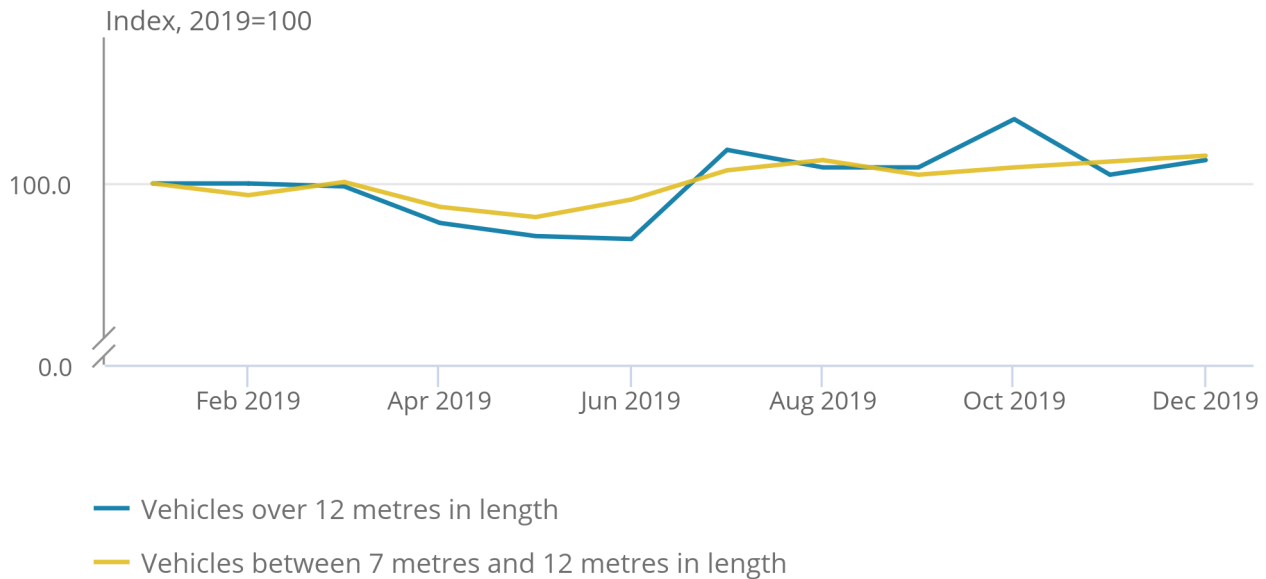
4 . Road traffic data

Figure 5: The number of large vehicles on English roads rose in December 2019

Index of average road traffic counts, January 2019 = 100 , seasonally adjusted, January 2019 to December 2019

Figure 5: The number of large vehicles on English roads rose in December 2019

Index of average road traffic counts, January 2019 = 100 , seasonally adjusted, January 2019 to December 2019

Index, 2019=100

- Vehicles over 12 metres in length
- Vehicles between 7 metres and 12 metres in length

Source: Highways England – Road traffic sensor data

Notes:

1. Data are for vehicles over 11.66 metres in length and between 6.6 metres and 11.66 metres in length.

We expect larger vehicles (over 6.6 metres in length) such as lorries to be more closely related to the movement of goods than smaller vehicles (such as cars), as found in Faster indicators of UK economic activity: road traffic in England.

In December 2019, the average traffic counts of vehicles over 11.66 metres on major roads in England grew by 1.0%. The counts of vehicles between 6.6 metres and 11.66 metres remained relatively stable and grew by 0.4%. The average traffic counts for all vehicles grew by 1.8%.

5 . What are faster indicators?

This release is part of the Faster indicators of UK economic activity project. The project is delivering new, faster indicators of economic activity constructed from innovative data sources. These indicators are available up to one month in advance of official estimates of gross domestic product (GDP).

The release includes indicators constructed from the Indicators from HM Revenue and Customs (HMRC) Value Added Tax (VAT) returns dataset and traffic flow data from Highways England.

Although some of the indicators we have developed track GDP and other headline economic statistics relatively well over some periods, there is sufficient difference that none should be used to predict these economic statistics on their own. Rather, by exploring big, closer-to-real-time datasets of activity likely to have an impact on the economy, we provide an early picture of a range of activities that supplement official economic statistics and may aid economic and monetary policymakers and analysts in interpreting the economic situation.

A full description of the data, methodology and economic analysis, describing the time series, can be found in Faster indicators of UK economic activity and associated articles.

6 . Quality and methodology

A full Quality and Methodology Information (QMI) report is currently in development for this release. In the meantime, quality and methodology information can be found in Faster indicators of UK economic activity.

7 . Feedback

We welcome feedback and comments on these indicators, including on presentation, further development or other data sources to investigate. Feedback can be sent by email to Faster.Indicators@ons.gov.uk.