Office for National Statistics

Article

Research Output: Economic activity, faster indicators, UK: December 2019

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

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Next release:
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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 are 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 economic activity statistical bulletin and associated data tables 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 these 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

- Monthly Value Added Tax (VAT) turnover indicators for construction and services were around their historical averages in December 2019, but agriculture was considerably lower than its historical average.

- In November 2019, both the month-on-month and the month-on-month a year earlier turnover diffusion indices for the all-industries aggregate were slightly below their historical averages.

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

3 . What's new in this release?

For this release, we have amended the format to give a more concise analysis of the latest data. If you have any comments on the new format, or would like to see something that we have not presented here, please send feedback to Faster.Indicators@ons.gov.uk.

4 . 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. The levels of the month-on-year ago (MoY) indicator for agriculture is slightly lower than its historical average (light red), retail is around its historical average, and construction is considerably higher than its historical average.

Figure 1: The balance of VAT indicators shows a broadly stable picture in December 2019

The quarterly VAT indicators show a broadly stable picture in Quarter 4 (Oct to Dec) 2019. Figure 1 shows that only agriculture was slightly below its Quarter 1 (Jan to Mar) 2008 to Quarter 3 (July to Sept) 2019 average. Production, construction and services were around their historical averages (grey). No values were considerably above (dark teal) or below (dark red) their historical averages.

The month-on-month (MoM) turnover diffusion indices show the same pattern as the quarterly data in December 2019, with agriculture considerably below its historical average (dark red). Construction, and wholesale and retail trade were around their historical averages (light grey) in December 2019.

Only three industries have a sufficient number of reporters to be able to compile monthly diffusion indices within a month of the reporting period (December 2019 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 November 2019 in this release. In November 2019, both the MoM and the MoY all-industries turnover diffusion indices were slightly below their historical averages (light red).

Quarterly data

Figure 2: The VAT quarter-on-quarter turnover diffusion indices were slightly negative for production, construction and agriculture in Quarter 4 2019

Quarterly VAT turnover diffusion index, Quarter 1 (Jan to Mar) 2018 to Quarter 4 2019 (Oct to Dec), seasonally adjusted, current prices

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Quarterly VAT turnover diffusion index, Quarter 1 (Jan to Mar) 2018 to Quarter 4 2019 (Oct to Dec), seasonally adjusted, current prices

Index, >0 = More firms reported an increase on previous period than a decrease
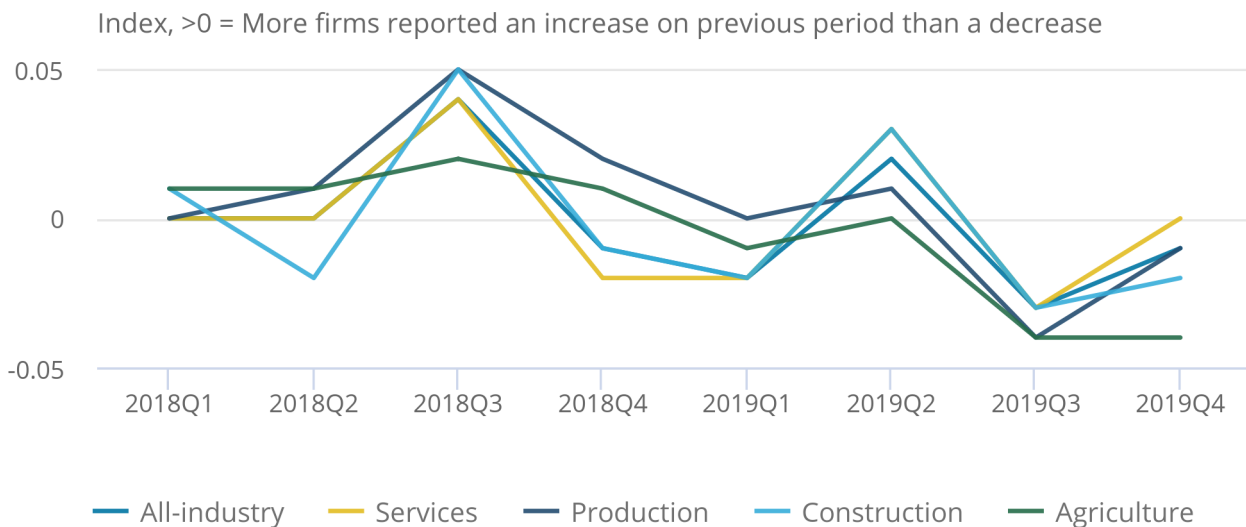
Source: HM Revenue and Customs – Value Added Tax returns

Notes:

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

The quarter-on-quarter VAT turnover diffusion indices shown in Figure 2 for agriculture, production and construction were all below their historical averages in Quarter 4 2019, with more firms reporting a decrease in turnover in this period than those who reported an increase. The index for services was slightly higher than its historical average at zero. Of the quarter-on-quarter a year earlier indices, all series were above or equal to their historical averages.

December monthly data

Figure 3: The agriculture and wholesale and retail trade diffusion index fell in December 2019, while construction increased after a fall in the previous month

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

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Month-on-month turnover diffusion indices, seasonally adjusted, January 2019 to December 2019
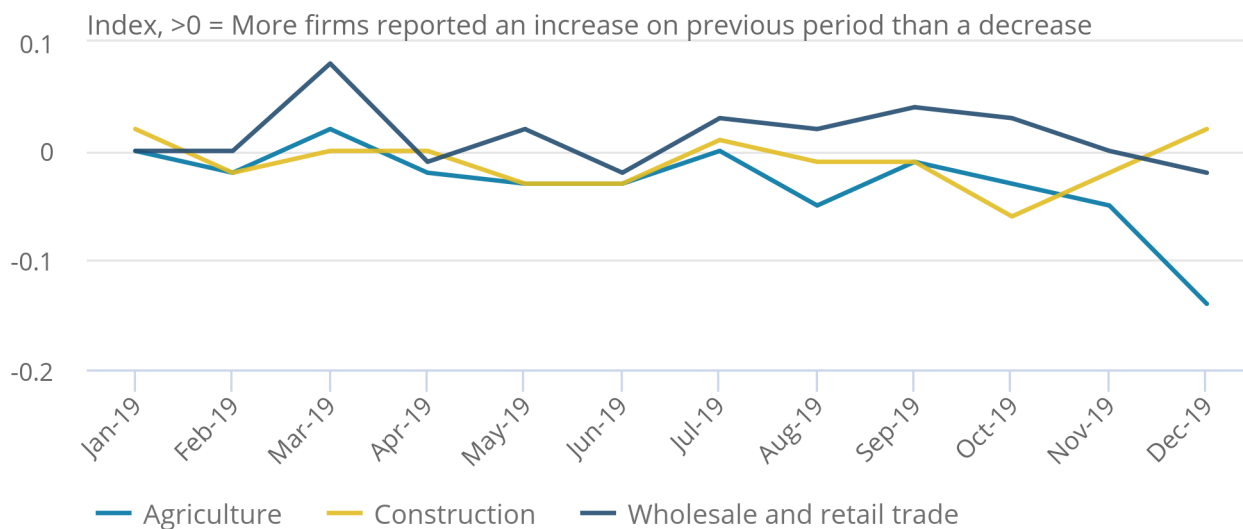
Source: HM Revenue and Customs – Value Added Tax returns

Notes:

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

2. Data in the latest period is preliminary, and is likely to be revised in subsequent releases.

Only wholesale and retail trade, construction, and agriculture have monthly VAT diffusion indices for December 2019 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. Of these sectors, only agriculture is considerably below its historical average, while construction, and the wholesale and retail trade are around their historical averages.

Figure 4: The number of new VAT reporters decreased in December 2019

Number of new VAT reporters, seasonally adjusted, all industries, November 2014 to December 2019

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Number of new VAT reporters, seasonally adjusted, all industries, November 2014 to December 2019
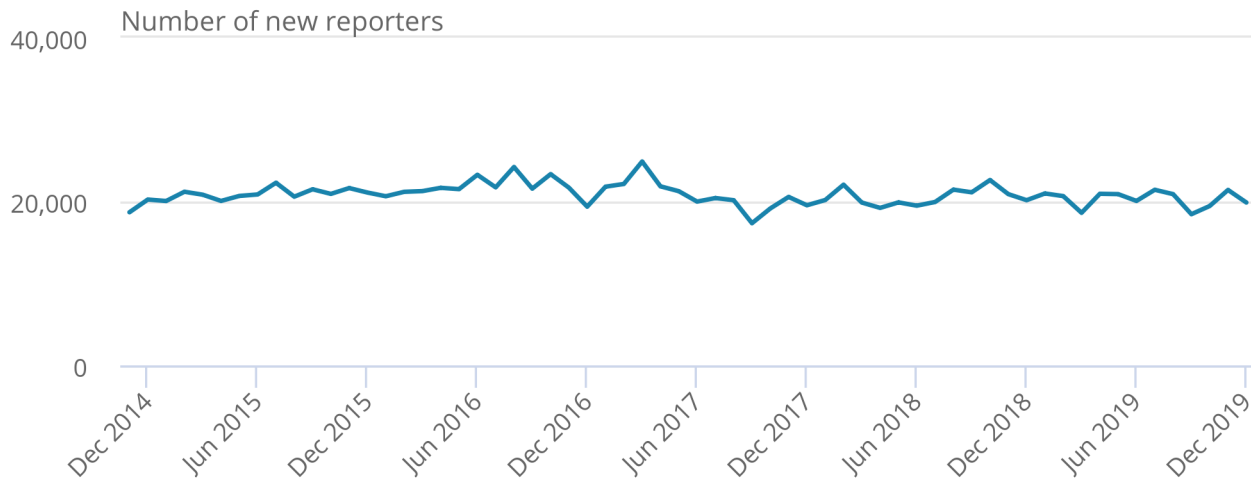
Source: HM Revenue and Customs – Value Added Tax returns

As seen in Figure 4, the amount of new VAT reporters decreased slightly in December 2019 but has not seen any major fluctuations in the past two years. 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.

November monthly data

All-industry data are available for November 2019. For month-on-month, the turnover and expenditure diffusion indices for the all-industry aggregate fell below their historical averages, having decreased for the second consecutive month following a strong performance in September 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 is available.

Figure 5: The all-industry month-on-month turnover and expenditure diffusion indices were negative in November 2019

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

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

Index, >0 = More firms reported an increase on previous quarter than a decrease

— Turnover — Expenditure
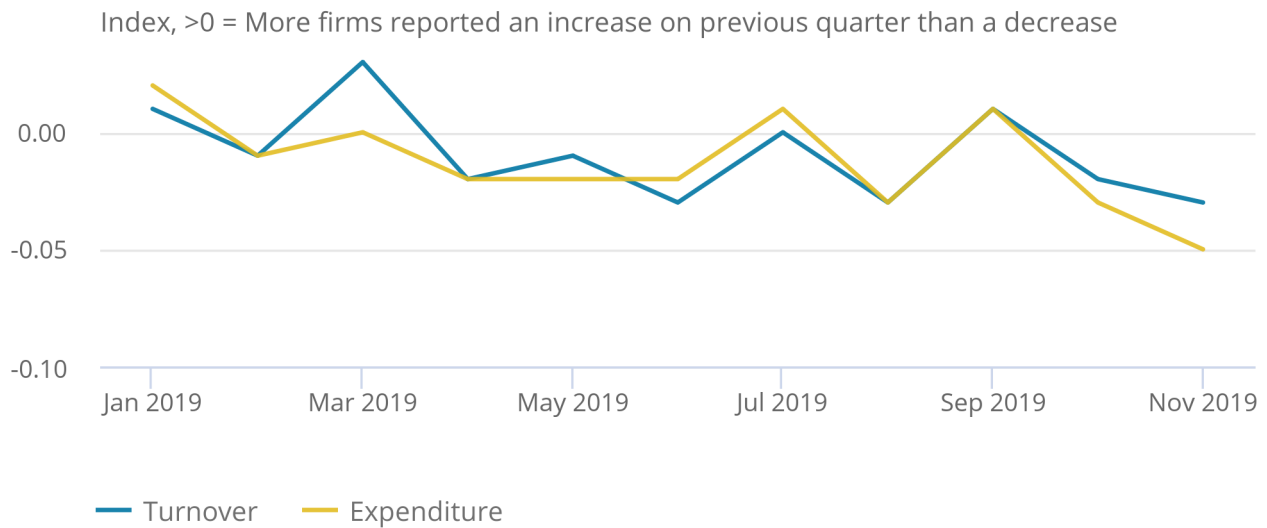
Source: HM Revenue and Customs – Value Added Tax returns

Notes:

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

At the sector level, the turnover diffusion indices for the manufacturing and water supply industries were markedly lower than their historical averages. Compared with its historical average, the education sector exhibits both the most positive turnover and most negative expenditure diffusion indices for November 2019.
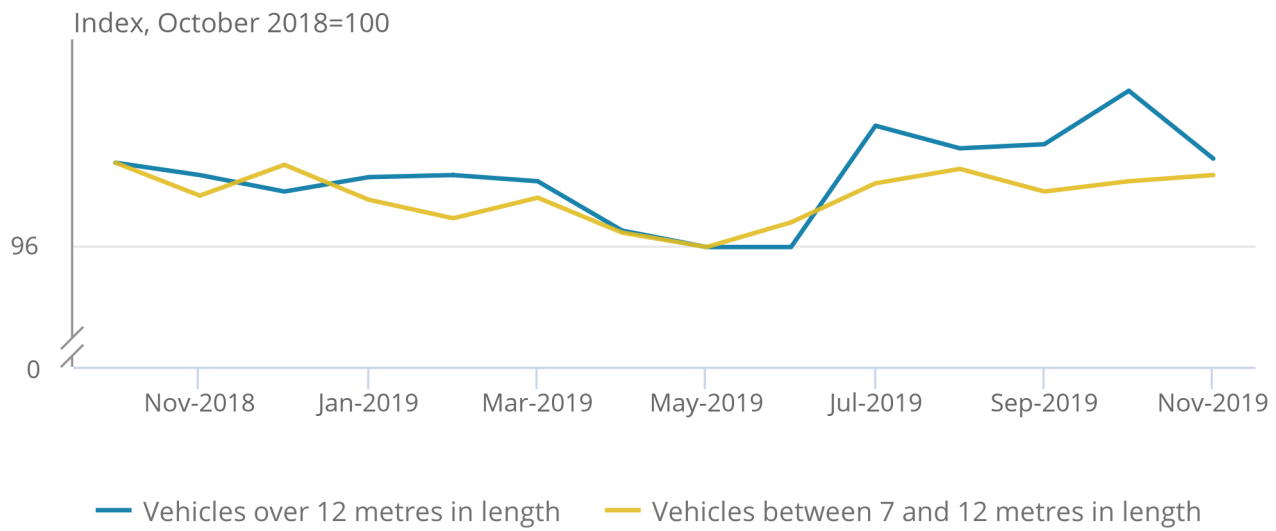
5 . Road traffic data

Figure 6: The amount of large vehicles over 11.66m on English roads fell in November

Index of average road traffic counts, October 2018 = 100, seasonally adjusted, October 2018 to November 2019

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Index of average road traffic counts, October 2018 = 100, seasonally adjusted, October 2018 to November 2019

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.

In November 2019, the average traffic counts of vehicles over 11.66 metres on major roads in England fell by 3.2%. The counts of vehicles between 6.6 metres and 11.66 metres remained relatively stable at 0.3%. The average traffic counts for all vehicles fell by 0.8%.

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.

6 . 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.

7 . 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.

8 . 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.