Article

Labour productivity, UK: July to September 2026

Labour productivity estimates for Quarter 3 (July to Sept) 2026, based on the gross domestic product (GDP) first quarterly estimate and labour market statistics.

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1 . Main points

- From this release onwards, the component approach becomes our headline measure of labour productivity, replacing the Pay As You Earn (PAYE) Real Time Information- (RTI-) based estimates; we informed users that the new measure is superior to our previous, direct Labour Force Survey (LFS) approach in our How the ONS measures productivity blog, published on 16 June 2026

- With the introduction of the component approach, there will no longer be a distinction between flash estimates and overview estimates; this bulletin presents data up to Quarter 3 (July to Sept) 2026, and each subsequent bulletin will include an additional quarter alongside revisions to previous quarters.

- The component approach will create revisions for all periods back to 1997; whole economy estimates in this bulletin have been revised on this basis for the full period from 1997 onwards, and revisions at the industry level for the period from 1997 to 2024 will be presented in a subsequent publication early next year.

- The first quarterly estimate of labour productivity for Quarter 3 (July to Sept) 2026 shows that output per hour and output per worker were 2.5% and 2.0% higher, respectively, than a year earlier.

2 . Changes to the component approach methodology

From this release onwards, we are using the component approach as the headline measure of labour productivity. We developed the approach to address challenges associated with labour measurement and to improve the way that different sources of labour market data are brought together. This was explained in our How the ONS measures productivity blog, published on 16 June 2026.

We explain the methodology and present annual estimates from 1997 to 2024 in our Component approach to measuring labour productivity, UK: 1997 to 2024 methodology, published in September 2026. This release marks the introduction of the quarterly component approach estimates into our regular labour productivity statistics.

We have made changes to the component approach following a period of user consultation and final quality assurance between the release of our component approach methodology and this quarterly release. These include the methodological improvements described in this section.

The New Earnings Survey is now used as a data source for paid usual hours between 1997 and 2004. This source is used to help improve the full- and part-time splits during this period.

For the first quarterly labour productivity estimate, we use some alternative data sources and methodologies to account for standard data sources not yet being available. For employee jobs, because of a lack of workforce jobs data, we apply the quarter-on-year growth rate from Pay As You Earn (PAYE) Real Time Information (RTI) to calculate employee jobs for the latest quarter. We then combine this with the latest quarterly estimate of Labour Force Survey (LFS) self-employment jobs, to give an estimate of total jobs.

We derive average actual hours worked using the latest LFS and Annual Survey of Hours and Earnings data, as usual. However, where LFS reference weeks do not cover the full calendar quarter, we adjust the latest-quarter estimate to capture the effects of events close to the end of the quarter, such as New Year's Eve, on working patterns.

We use seasonal adjustment models to account for recurring seasonal and calendar effects. We will continue to review these models as the component approach develops, which may result in further refinements in future releases.

The publication date for our upcoming Labour productivity, UK: October to December 2026 and July to September 2026 release has changed from 16 February 2027 to 4 March 2027.

We will update our quality and methodology information to incorporate the component approach alongside our upcoming release on 4 March 2027. The release will also extend the component approach to include industry-level estimates. Further information on the methodology and its impacts is available in our Component approach to measuring labour productivity, UK: 1997 to 2024 methodology.

Our new productivity estimates, using the component approach, will expand the amount of productivity data available on a one-quarter lag. Previously, only the whole-economy first quarterly estimate was available on this timetable. The new estimates will also include industry data on a one-quarter lag.

The revised publication date will allow additional time for the production and quality assurance of these expanded statistics before publication.

3 . Latest productivity estimates for Quarter 3 2026

Background

The component approach estimates presented in this release are now our headline measure of whole-economy labour productivity. The move from the direct Labour Force Survey (LFS) approach to the component approach does not change the statistical status of our labour productivity estimates, which continue to be labelled "official statistics in development".

In this release, we continue to present the direct LFS and Real Time Information- (RTI-) based measures as comparators to help users understand differences between labour market data sources and methods, but these are shown for analytical purposes only. We are continuing to develop the component approach and plan to publish a full industry breakdown using the new methodology in March 2027, when we also intend to move to publishing labour productivity estimates using only the component approach. More information on the RTI-based approach is available in our Productivity flash estimate and overview, UK: January to March 2025 and October to December 2024 article.

The comparator LFS-based direct estimates in this release are consistent with the latest labour market data. Our gross value added (GVA) estimates underlying all measures incorporate the latest Blue Book 2026 revisions. These revisions are reflected throughout the quarterly productivity time series, up to the latest period.

The component approach incorporates the Annual Survey of Hours and Earnings (ASHE) estimates from our Employee earnings in the UK: 2026 bulletin, published on 22 October 2026. It also incorporates the latest available labour market data required for its calculation.

Latest productivity estimates

Output per hour worked growth, which is now produced using the component approach, was 8.8% above its pre-coronavirus (COVID-19) pandemic levels (2019 average level) in Quarter 3 (July to Sept) 2026 (Table 1). This growth was caused by a 7.9% increase in GVA and a 0.9% decrease in hours worked over this period.

Output per hour worked increased by 2.5% in Quarter 3 (July to Sept) 2026 compared with the same quarter a year ago, reflecting a 2.0% increase in GVA and a 0.5% decrease in hours worked.

Output per worker increased by 2.0% in Quarter 3 2026 compared with the same quarter a year ago. This was its strongest growth since Quarter 1 (Jan to Mar) 2018, excluding the pandemic period.

Table 1: Latest estimates of labour productivity
UK, Quarter 3 (July to Sept) 2025 to Quarter 3 2026

	Output per hour growth rates			Output per worker growth rates		
	Quarter vs 2019 level (%)	Quarter-on-year ago (%)	Quarter-on-quarter (%)	Quarter vs 2019 level (%)	Quarter-on-year ago (%)	Quarter-on-quarter (%)
Period						
2025 Q3	6.2	4.1	0.5	3.5	1.6	0.5
2025 Q4	6.3	1.6	0.1	3.6	1.7	0.1
2026 Q1	7.3	1.5	0.9	4.1	1.4	0.5
2026 Q2	7.5	1.7	0.2	4.7	1.6	0.5
2026 Q3	8.8	2.5	1.3	5.6	2.0	0.9

Source: Labour productivity, UK from the Office for National Statistics

Notes

1. Comparisons with pre-coronavirus (COVID-19) pandemic levels use average 2019 levels as the base period.

2. An operational issue affected Labour Force Survey (LFS) data collection during Quarter 2 (Apr to June) 2026. Further information is available in Section 8: Data sources and quality.

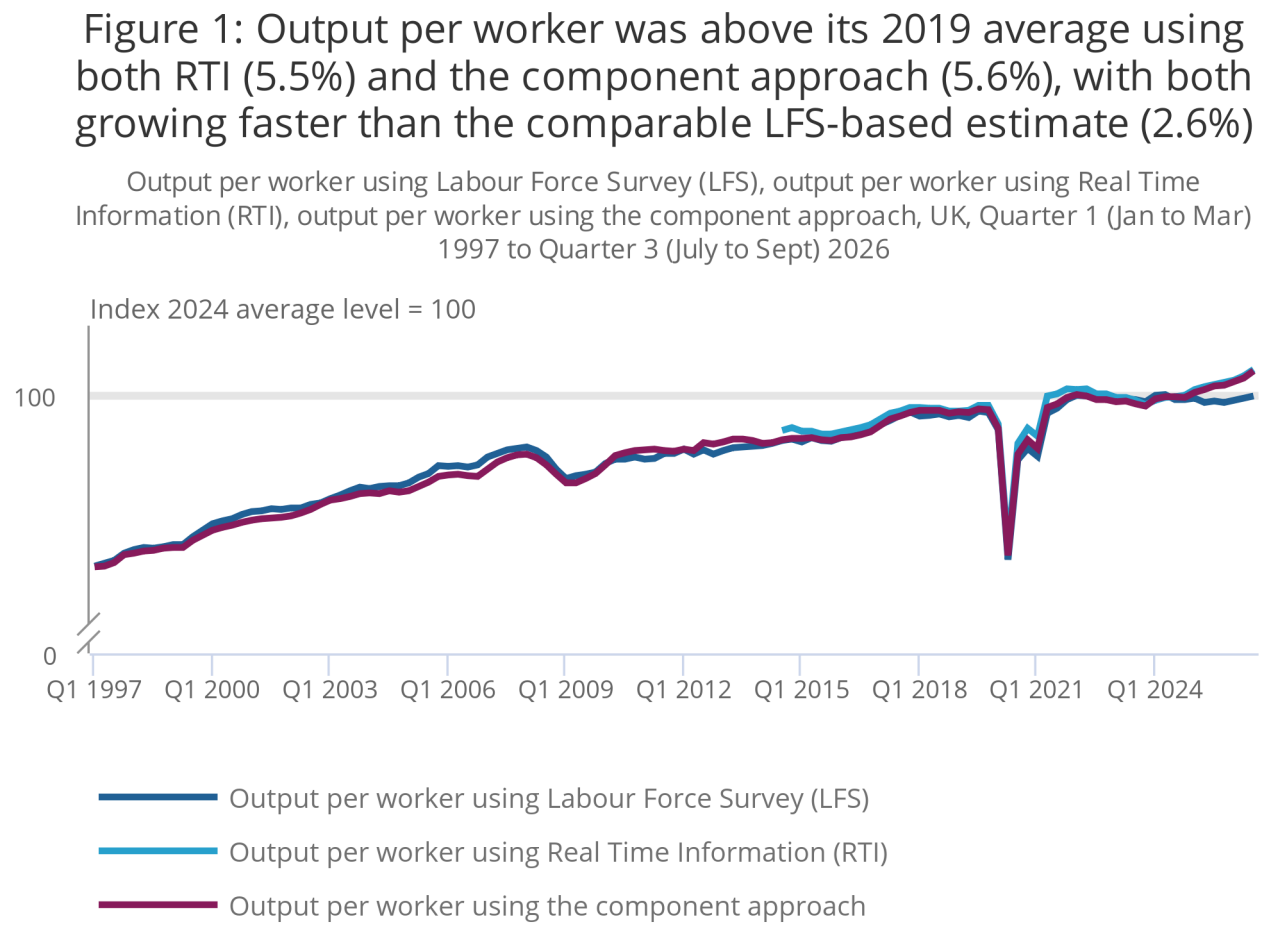
Figure 1 compares our headline component approach estimate of output per worker with the RTI and the previous, direct LFS measures. While over the long term, since 1997, all three measures have shown similar trends, divergences have appeared since 2024. Recent estimates for the component and RTI approaches have been similar, with both showing stronger growth relative to 2019 than the LFS-based measure.

In Quarter 3 2026, output per worker was 5.5% above its 2019 average using RTI and 5.6% above it using the component approach, compared with 2.6% using the LFS measure. This shows that, despite being constructed using different sources and methods, the RTI and component approaches have produced a similar picture of productivity growth in recent periods.

The divergences partly reflect improvements in the quality of the LFS in 2024 and 2025. These improvements increased the survey's ability to capture people in employment, bringing employee levels closer to that of the Pay As You Earn (PAYE) RTI's. More recently, LFS employee growth has been stronger than RTI's, and we are continuing to investigate the reasons for this difference.

Figure 1: Output per worker was above its 2019 average using both RTI (5.5%) and the component approach (5.6%), with both growing faster than the comparable LFS-based estimate (2.6%)

Output per worker using Labour Force Survey (LFS), output per worker using Real Time Information (RTI), output per worker using the component approach, UK, Quarter 1 (Jan to Mar) 1997 to Quarter 3 (July to Sept) 2026



Source: Labour productivity, UK from the Office for National Statistics

Notes:

1. RTI worker estimates are supplemented by LFS self-employed data, minus working proprietors (that is, self-employed individuals who are sole directors of their own limited business).

2. No adjustment is made for those that are employed but not part of Pay As You Earn (PAYE).

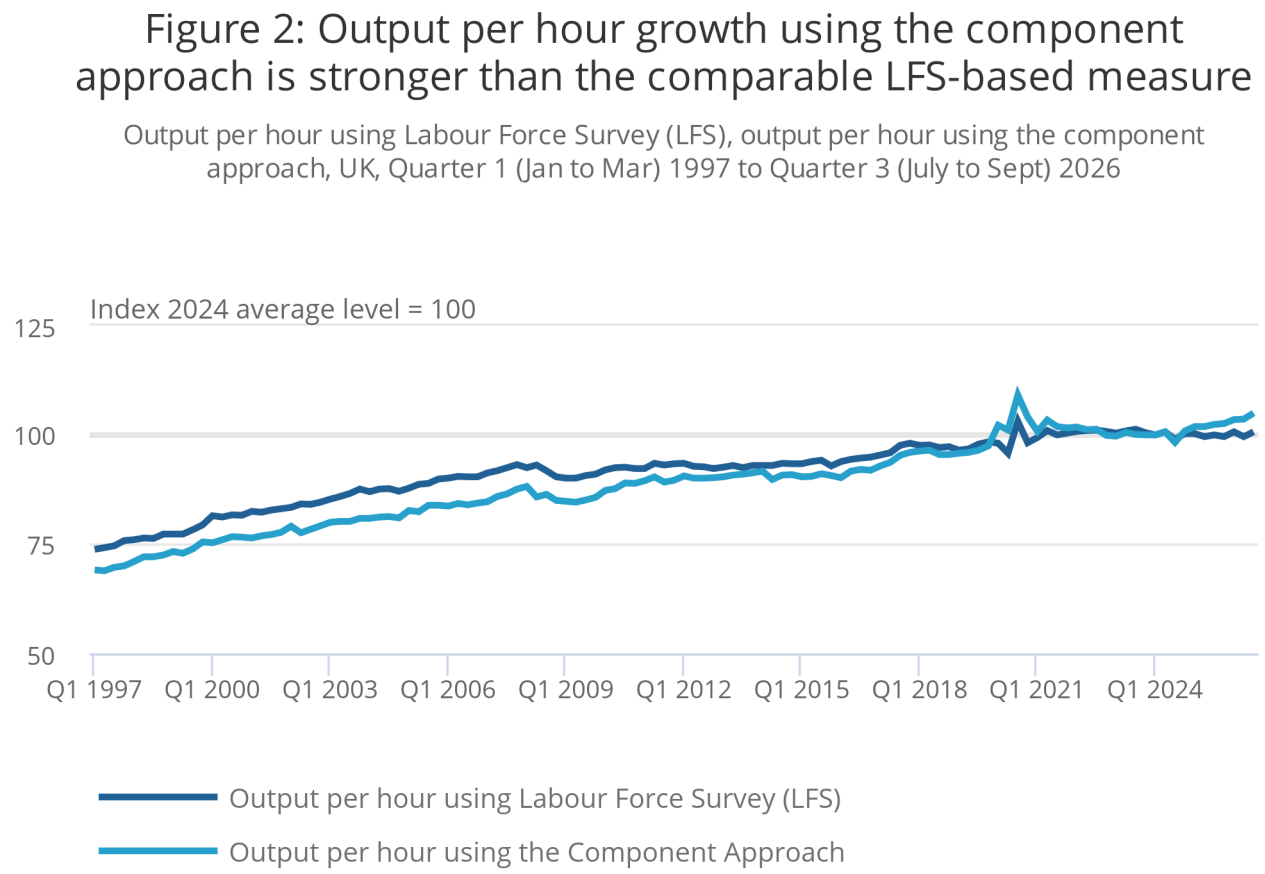
3. Any individual who has a main job outside of the PAYE scheme and a second job on the PAYE scheme will be categorised as only having a main job.

Figure 2 shows our headline component approach estimate of output per hour alongside our previous, direct LFS-based measure. In contrast to output per worker, the two series have diverged over a longer period. In general, component approach output per hour has grown more strongly than the comparable direct LFS-based measure since the financial crisis, in 2008 to 2009. This reflects a growing divergence in total hours (Figure 3), which is in turn because of diverging trends in average hours (Figure 4).

Focusing on the more recent period, in Quarter 3 2026, output per hour using the component approach was 8.8% above its 2019 average, compared with 3.4% using the LFS-based measure.

Figure 2: Output per hour growth using the component approach is stronger than the comparable LFS-based measure

Output per hour using Labour Force Survey (LFS), output per hour using the component approach, UK, Quarter 1 (Jan to Mar) 1997 to Quarter 3 (July to Sept) 2026



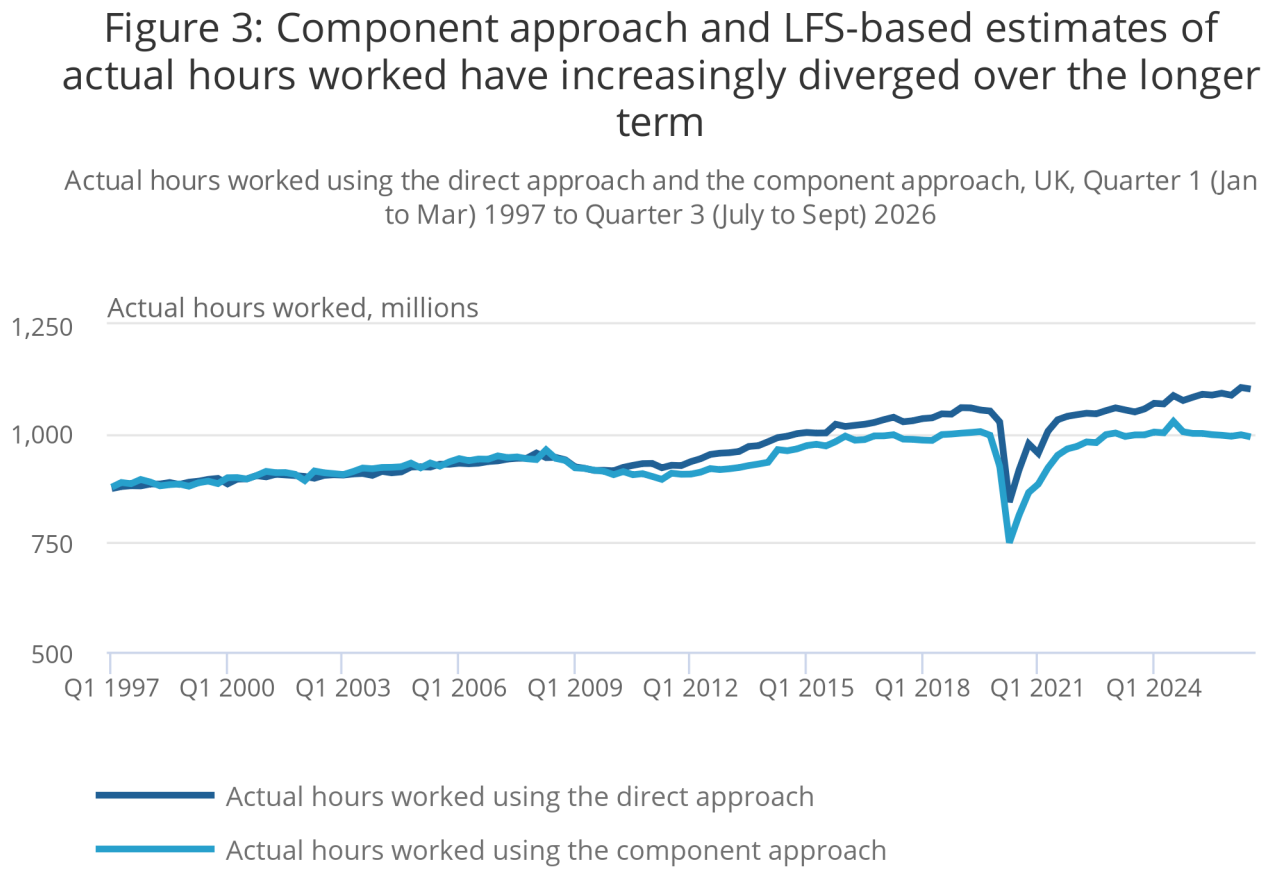
Source: Labour productivity, UK from the Office for National Statistics

As the GVA data underlying each measure are the same, differences in output per hour between the two measures in Figure 2 are because of differences in their measurement of hours. Figure 3 draws these differences out by comparing estimates of total actual hours worked per week using the direct LFS and the component approach.

Latest productivity hours estimate

Figure 3: Component approach and LFS-based estimates of actual hours worked have increasingly diverged over the longer term

Actual hours worked using the direct approach and the component approach, UK, Quarter 1 (Jan to Mar) 1997 to Quarter 3 (July to Sept) 2026



Source: Labour productivity, UK from the Office for National Statistics

The two estimates follow a broadly similar path before the 2008 financial crisis but increasingly diverge afterwards. This longer-run divergence reflects differences in how average actual hours are estimated, with the component approach seeking to address known limitations in the direct LFS measure.

Rather than relying directly on reported actual hours from the LFS, the component approach uses an accounting framework that starts with usual hours and makes explicit adjustments for factors that cause actual hours to be higher or lower than usual. Our previous analysis, published in September 2026, showed that differences in average hours between the direct and component approaches were particularly associated with benchmarking paid usual hours worked to the Annual Survey of Hours and Earnings and the explicit treatment of annual leave.

Focusing on the headline component approach, total hours worked levelled off around 2023 and subsequently declined slightly in 2025. This reflects weak growth in the number of jobs, but also the impact of a continuing long-run decline in average hours worked per job in the component approach.

Section 4 examines this long-run decline in more detail by decomposing the contributions to component approach average actual hours worked per job.

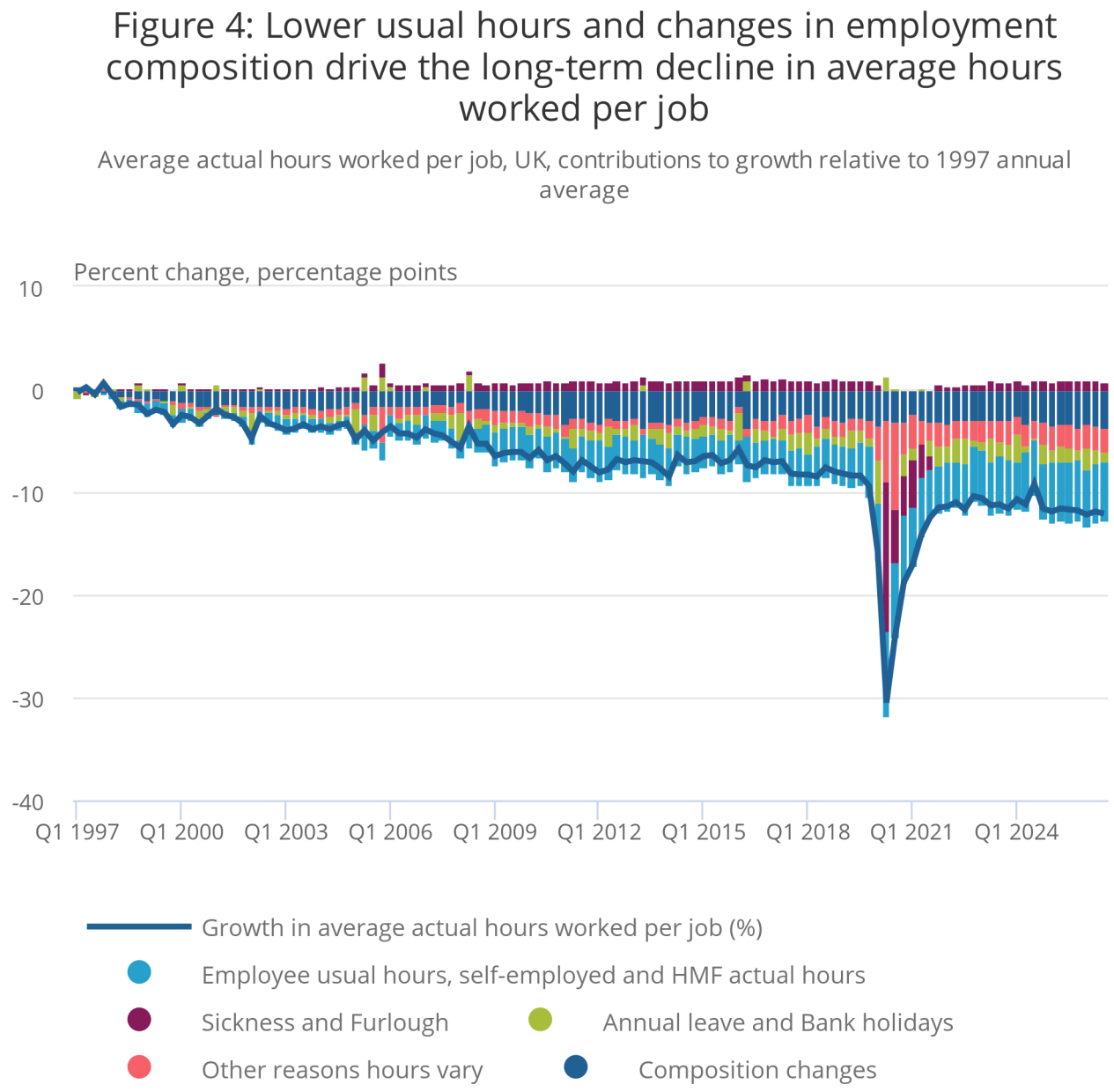
4 . Average actual hours

Average actual hours per job have shown a sustained decline relative to the 1997 annual average. Figure 4 shows this downward trend and provides a breakdown of factors driving the decline. While the fall was fairly consistent and steady, the coronavirus (COVID-19) pandemic period stands out as an aberration.

In Quarter 2 (Apr to June) 2020, average hours declined sharply with the onset of lockdowns and stood 30.5% below their 1997 annual average. Sickness and furlough contributed negative 14.6 percentage points, almost half of the overall gap. As lockdowns were lifted, average hours recovered substantially but remained below their pre-pandemic level, before returning to their previous downward trend. By Quarter 3 (July to Sept) 2026, they were 12.1% below the 1997 annual average.

Figure 4: Lower usual hours and changes in employment composition drive the long-term decline in average hours worked per job

Average actual hours worked per job, UK, contributions to growth relative to 1997 annual average



Source: Labour productivity, UK from the Office for National Statistics

Usual-hours-related effects made the largest contribution to the long-term decline. In Quarter 3 2026, employee usual hours (combined with actual hours worked in self-employment and HM Armed Forces) contributed negative 5.7 percentage points relative to the 1997 annual average, accounting for around 47% of the fall. Changes in employment composition contributed a further negative 3.7 percentage points, or around 31% of the decline. Together, these categories explained approximately 78% of the fall in average hours relative to 1997.

Several other reasons make up the final 22%, although each has a smaller impact. Annual leave and bank holidays contributed negative 1.1 percentage points, reflecting increased annual leave entitlements. Other reasons for hours differing from usual, which include unpaid overtime and parental leave among other reasons, contributed negative 2.2 percentage points. Sickness and furlough partly offset these effects, contributing positive 0.7 percentage points.

Focusing on the more recent period between 2019 and Quarter 3 2026, the shortfall against the 1997 annual average widened from 8.6% to 12.1%. This reflects a 3.9% fall in average actual hours per job over this period. Usual-hours-related effects accounted for 1.5 percentage points of this widening, while employment composition accounted for 1.0 percentage point, and other reasons for hours differing from usual accounted for 0.8 percentage point. Therefore, other reasons played a larger proportional role in the decline since 2019 than in the longer-term shortfall.

5 . International Comparisons

Over the long term, output per hour growth in the UK has been relatively strong compared with other large economies. Figure 5 shows this by comparing output per hour growth relative to 1997 in G7 economies. While international comparability between productivity growth rates should be treated with some caution, because of differences in measurement methodology, the UK's growth since 1997 being the second highest among this group suggests that productivity growth over the past three decades has been stronger than previously perceived. However, it is still materially lower than that observed in the US.

Figure 5: Output per hour growth in the UK between 1997 and 2025 was second fastest in the G7

Output per hour, G7 nations, 1997 to 2025

Downloac

This result, of relatively strong UK productivity growth, holds true for more medium-term periods of analysis as well. In the 10 years to 2007, 10 years to 2017, and 10 years to 2025, productivity growth in the UK was consistently second among this group. In each period, the only nation with faster growth was the US.

More analysis of these international trends will be presented in a future International comparisons of productivity statistical bulletin, which will further improve international comparability and enable analysis of shorter-term movements and comparisons of productivity levels.

6 . Data on labour productivity

Output per hour worked, UK
Dataset | Released 17 November 2026
Estimates for gross value added (GVA), hours worked and output per hour worked for whole economy. Contains annual and quarterly statistics.

Output per worker, UK
Dataset | Released 17 November 2026
Estimates for gross value added (GVA), workers, and output per worker for the whole economy and bespoke industry (market sector). Contains annual and quarterly statistics.

Output per job, UK
Dataset | Released 17 November 2026
Estimates for gross value added (GVA), jobs and output per job. Contains annual and quarterly statistics.

Labour costs and labour income, UK
Dataset | Released 17 November 2026
Unit labour cost, average labour compensation per hour worked, labour share and unit wage cost for the whole UK economy, and unit wage cost for manufacturing.

7 . Glossary

Gross value added

Gross value added (GVA) is the value generated by any unit engaged in production and the contributions of individual sectors or industries to gross domestic product (GDP).

Labour productivity

Labour productivity measures how many units of output are produced for each unit of labour input and is calculated by dividing output by labour input.

Labour inputs

The preferred measure of labour input is hours worked ("productivity hours"), but workers and jobs ("productivity jobs") are also used.

Output

Output refers to gross value added (GVA), which is an estimate of the volume of goods and services produced by an industry and in aggregate for the UK.

8 . Data sources and quality

Quality and methodology information (QMI) for the labour productivity data is available in our Labour productivity QMI .

From this release onwards, quarterly labour productivity estimates are produced using the component approach as our headline measure. These estimates were previously presented in our Component approach to measuring labour productivity, UK: 1997 to 2024 methodology and have been developed further following a period of user consultation.

Our quarterly labour productivity estimates continue to be labelled "official statistics in development", reflecting the continued development and evaluation of the new methodology. In March 2027, we also plan to publish industry-level productivity estimates using the component approach, providing further detail on productivity movements across the economy.

Gross value added (GVA) estimates used in this release incorporate revisions introduced as part of Blue Book 2026. The impact of these revisions can be seen throughout the productivity estimates presented in this release. Further information on the Blue Book 2026 revisions to GVA is available in our GDP revisions in Blue Book: 2026 article . As productivity is a structural feature of the economy, we continue to advise users to focus on longer-term trends rather than movements in individual quarters.

The Pay As You Earn (PAYE) Real Time Information (RTI) comes from our monthly Earnings and employment from Pay As You Earn Real Time Information, UK bulletin, with estimates of payrolled employees and their pay from HM Revenue and Customs (HMRC). More information on the methods used to derive monthly employee and earnings estimates from PAYE RTI administrative data is available in our New methods for monthly earnings and employment estimates from PAYE RTI data: December 2019 article.

Users should be aware that an operational issue affected Labour Force Survey (LFS) data collection during Quarter 2 (Apr to June) 2026. Analysis suggests that the impact on headline productivity estimates was small. Further information on the issue and its estimated impact is available in our Productivity flash estimate and overview, UK: April to June 2026 and January to March 2026 release and our Labour Force Survey quality update: October 2026.

Accredited official statistics

Our GVA estimates and PAYE RTI estimates for payrolled employees were independently reviewed by the Office for Statistics Regulation, in March 2015 for GVA and July 2025 for RTI. They comply with the standards of trustworthiness, quality, and value in the Code of Practice for Statistics and should be labelled "accredited official statistics".

Official statistics in development

The labour market and productivity statistics in this article are labelled "official statistics in development". Until October 2023, these were called "experimental statistics". Read more about the change in our Guide to official statistics in development.

To help us meet user needs, please email productivity@ons.gov.uk with any feedback on our statistics.

9 . Related links

GDP first quarterly estimate, UK: July to September 2026
Bulletin | Released 12 November 2026
First quarterly estimate of gross domestic product (GDP). Contains current and constant price data on the value of goods and services to indicate the economic performance of the UK.

Labour market overview, UK: November 2026
Bulletin | Released 17 November 2026
Estimates of employment, unemployment, economic inactivity, and other employment-related statistics for the UK.

GDP quarterly national accounts, UK: April to June 2026
Bulletin | Released 30 September 2026
Revised quarterly estimate of gross domestic product (GDP) for the UK. Uses additional data to provide a more precise indication of economic growth than the first estimate.

Earnings and employment from Pay As You Earn Real Time Information, UK: November 2026
Bulletin | Released 17 November 2026
Monthly estimates of payrolled employees and their pay from HM Revenue and Customs' (HMRC's) Pay As You Earn (PAYE) Real Time Information (RTI) data. This is a joint release between HMRC and the Office for National Statistics (ONS).

Component approach to measuring labour productivity, UK: 1997 to 2024
Methodology | Released 17 September 2026
An assessment of the methods and impacts of the new component approach to labour productivity measurement in the UK. These are not official statistics.

How the ONS measures productivity
Blog | Released 16 June 2026
Richard Heys explains the different labour productivity measures the ONS calculates as well as which gives the best indication of recent changes in the UK economy.

Public service productivity, quarterly, UK: April to June 2026
Bulletin | Released 6 November 2026
UK total public service and healthcare productivity, inputs, and output, to provide a short-term, timely indicator of annual productivity estimates. These are official statistics in development.

10 . Cite this article

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