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UK national productivity trends: getting the data right – November 2026 update

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Abstract
We compare estimates of UK labour productivity derived using labour inputs sourced from the Labour Force Survey (LFS) with estimates that use administrative data: our earlier measure based on Real Time Information (RTI), and the "component approach" newly released by the Office for National Statistics. Both administrative estimates point to a meaningful productivity pickup in recent years. Between 2024 Q2 and 2026 Q3, output per worker increased at an annualised rate of 1.6 per cent, and output per hour at 1.9 per cent, compared with no growth under LFS-based measures. Given that administrative data currently provide the most reliable measure of labour input growth, productivity estimates using such data provide a more accurate picture of recent developments.

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Introduction

In this note, we compare estimates of UK labour productivity derived using labour inputs sourced from the Labour Force Survey (LFS) with estimates that make use of administrative data: the interim measure based on Real Time Information (RTI) that underpinned our earlier publications, and the newly released "component approach", now recommended as the headline measure by the ONS (ONS, 2026). Extending the series to 2026 Q3, we show that administrative estimates continue to show a significant recent pick-up in productivity, and that this finding is robust to the latest methodological changes underlying the component approach.

We update the national productivity trends in our original paper: CEP occasional paper No 74. UK national productivity trends: getting the data right, which used data up to 2026 Q1. We present the productivity trends (Figure 1 and 2) and the associated growth rates (Table 1 and 2) using updated data for 2026 Q3 for the output per worker *and* output per hour series respectively.

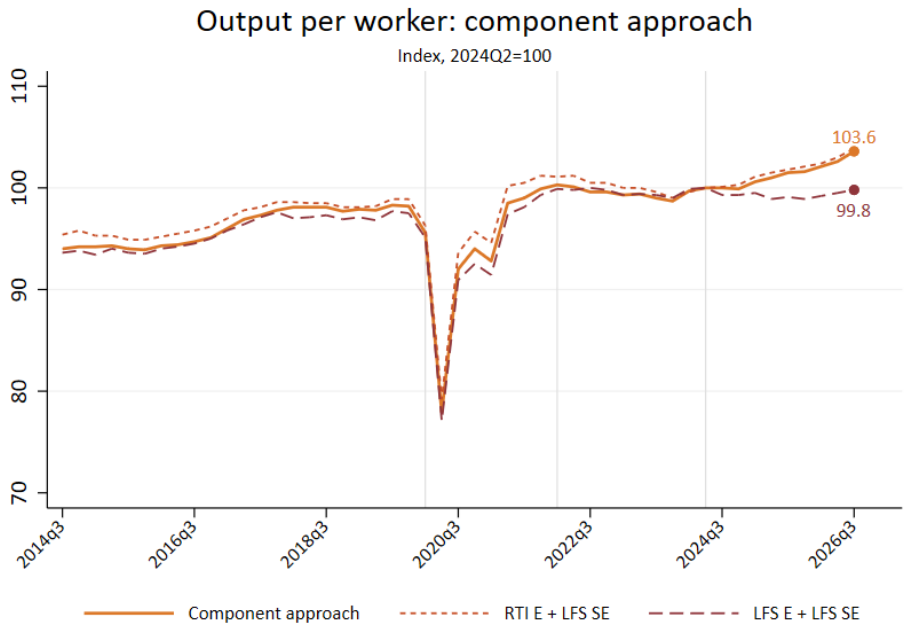
Productivity based on Output per worker

Figure 1 shows alternative measures of output per worker since 2014 (indexed at 2024 Q2 = 100). All are constructed using the same numerator, inflation-adjusted gross value added ("real GVA"), but three alternative measures of labour input in the denominator.

The LFS-based productivity measure (LFS E + LFS SE) *fell* by 0.2 per cent between 2024 Q2 and 2026 Q3 ("E" stands for Employees and "SE" for the Self-Employed). This is far lower than the 3.6 per cent *increase* recorded over the same period using the preferred "component approach", based on Workforce Jobs, RTI employees and LFS self-employment. As noted in our earlier reports, LFS has suffered from falling response rates. The other administrative estimate that we used in the earlier report based on RTI employees and LFS self-employment (RTI E + LFS SE) shows essentially the same productivity trends. Appendix A reports details on the differences in the construction of these two administrative measures.

Table 1 compares growth rates over different periods implied by the three alternative productivity estimates. The administrative-based estimates suggest that productivity growth has been materially stronger than the LFS-based measure in the period since 2024 Q2. We use the "component approach" from the ONS as the new baseline productivity measure, which has grown by an annualized 1.6 per cent (similar to the 1.7 per cent using our earlier administrative measure). This compares with only 0.6 per cent over the decade preceding 2024 Q2.

Figure 1: Productivity trends (output per worker, alternative estimates)



Notes: All series use the same real GVA series (Chained Volume Measure), but different labour input measures. "Component approach" uses workforce jobs and RTI employees and LFS self-employed; "RTI E + LFS SE" uses RTI employees and LFS self-employed; "LFS E + LFS SE" uses LFS employees and LFS self-employed; vertical lines indicate the start of Covid (2020 Q1), Ukraine war (2022 Q1) and the election of the Labour government (2024 Q2), respectively. For detailed sources and construction, see Appendix A.

Table 1: Productivity growth rates (output per worker, alternative estimates)

	Annualised productivity growth rate (%)		Productivity growth (%)
Approach to compute productivity	**2014 Q3 to 2024 Q2**	**2024 Q2 to 2026 Q3**	**2024 Q2 to 2026 Q3**
Component approach	**0.64**	**1.58**	**3.60**
RTI E + LFS SE	0.48	1.71	3.90
LFS E + LFS SE	0.68	-0.09	-0.20

Notes: Annualised and total productivity growth by selected time windows, as shown. For description of series, see Figure 1 notes. For detailed sources and construction, see Appendix A.

Productivity based on Output per hour

The latest ONS release also updates the longer-run output per hour series from 1997 through to 2026 Q3. Figure 2 shows alternative measures of output per hour (indexed at 2009 = 100), and Table 2 reports annualised growth rates for selected windows. Again, both series use the same numerator, but different labour input denominators. The "LFS approach" uses LFS data to measure hours worked. The "component approach" is primarily based on the administrative data, but benchmarks LFS hours to ASHE and applies further adjustments as described in Appendix A.

At least two things stand out under the component approach.

First, as with the output per worker series, we see that productivity growth has picked up since the second half of 2024. This represents an annualised growth of 1.9 per cent in output per hour between 2024 Q2 and 2026 Q3, compared to just 1.1 per cent over the preceding decade. Tables 3 and 4 in Appendix B replicate this analysis using 2024 Q3 instead of 2024 Q2 (which yields a higher annualised growth rate due to the dip in the per hour series in 2024 Q3 evident in Figure 2).

Second, the post-Global Financial Crisis (GFC) slowdown appears less pronounced than in the LFS-based series. Pre financial crisis, both series showed productivity growth of around 2 per cent. After the crisis, annualised growth was 1.1 per cent using the component approach compared to 0.4 per cent under LFS-based estimates.

We also include the 2014 Q3 to 2026 Q3 period separately in the last rows of Table 2 so it can be compared directly with the per worker series in Table 1. Post 2024 Q2 hourly productivity rose by an annualised 1.9 per cent in the component approach compared to 1.1 per cent in the prior period. The misleading LFS series actually records a slowdown, with zero productivity growth in the last two years.

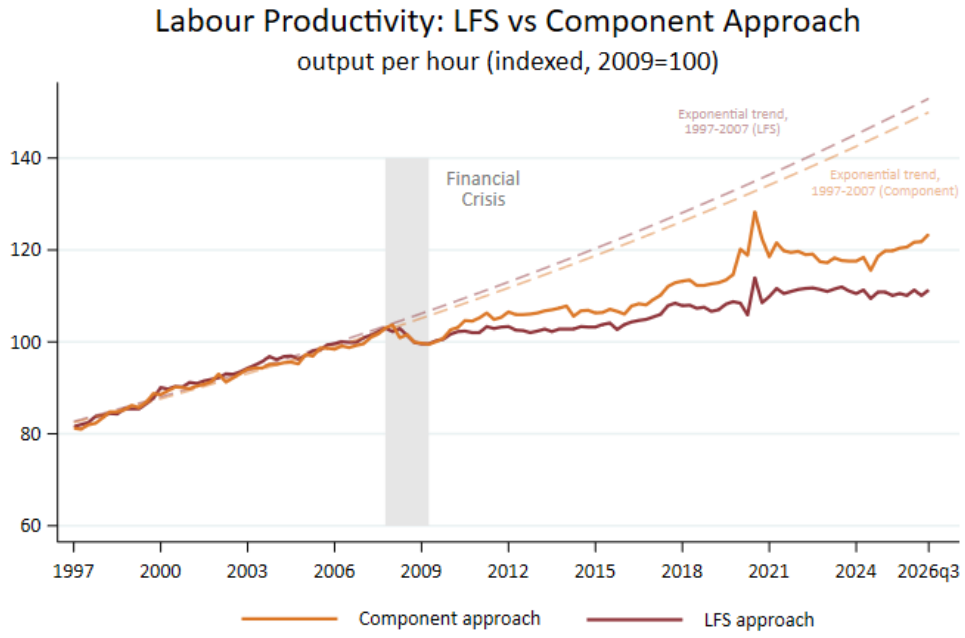
Summary

The latest ONS releases have moved away from relying on the LFS and shifted towards a greater use of administrative data (the 'component' approach) when measuring productivity, as we have recommended. Output per worker growth shows a substantial increase in productivity in the last two years, consistent with our previous reports using administrative RTI data. Even stronger growth is seen in the output per hour series.

Looking at the entire period since the GFC in Figure 2, UK hourly productivity growth halved compared to pre-crisis trends. This slowdown is much less severe than that implied by LFS-based estimates and suggests more underlying strength for the UK economy than previously thought. Indeed, productivity growth over the last two years of 1.9 per cent per annum is similar to that in the pre-crisis years. Figure 2 does show, however, that the 2019-2024 period had essentially zero productivity growth. This was the period when the UK left the European Union,

consistent with a negative economic effect of Brexit (see, for example, Sampson, 2026), as well as the pandemic, energy crisis and Truss "mini budget".

Figure 2: Productivity trends (output per hour, alternative estimates)



Notes: All series use the same real GVA series (Chained Volume Measure), but different labour input measures for workers and hours. "Component approach" uses workforce jobs and RTI employees, LFS self-employed, and ASHE and LFS hours; "LFS approach" uses LFS employees, LFS self-employed and LFS hours. For detailed sources and construction, see Appendix A.

Table 2: Productivity growth rates (output per hour, alternative estimates)

Annualised productivity growth rate (%)			
		Component	**LFS**
Pre-GFC	**1997 Q1 to 2008 Q2**	1.94	2.09
Post-GFC	**2008 Q2 to 2026 Q3**	1.11	0.43
	2014 Q3 to 2024 Q2	1.07	0.76
	2024 Q2 to 2026 Q3	**1.88**	0.00

Notes: Annualised productivity growth by selected time windows, as shown. For description of series, see Figure 2 notes. For detailed sources and construction, see Appendix A.

Appendix

A. Data sources and construction

We start from the sources and construction of the series underlying Figure 1, highlighting the difference between "RTI E + LFS SE" and the "component approach" in computing the underlying number of workers (ONS, 2026).

"RTI E + LFS SE" computes workers by (roughly) summing payrolled employees from PAYE RTI to the self-employed from LFS, and removing working proprietors. In our previous publications, we showed that different treatments of the self-employment component (resulting in series "RTI E + HMRC SE" and "RTI E") do not significantly affect trends and estimates. For more details on these measures, see CEP occasional paper No 74. UK national productivity trends: getting the data right.

The "component approach" computes workers in a conceptually similar way, but in the spirit of using a blend of the best data sources for different components. Total workers are obtained by multiplying total filled jobs by worker-to-job ratios, with the latter aiming to capture the prevalence of people holding multiple jobs.

Total filled jobs are computed by adding employee jobs and self-employment jobs. Self-employment jobs come from the LFS. Employee jobs are constructed using a blend of Quarterly Business Survey (QBS) workforce jobs (WFJ), the Business Register and Employment Survey (BRES) and RTI. Employee workforce jobs are obtained from QBS as a snapshot during the third month of each quarter and this is benchmarked annually to BRES, the register. There is a linear interpolation between the QBS workforce jobs to obtain estimates for the first and second month of each quarter. Since RTI is available monthly, its trend is used to scale the estimated workforce jobs values. Monthly adjusted workforce jobs are then averaged over the three months to obtain quarterly estimates.

Note two things. First, the benchmarking to BRES happens annually in December, meaning that it cannot be used for the most recent quarters, where revisions can become important. Second, workforce jobs and RTI have slightly different coverage, as RTI exclusively captures payrolled employees.

Worker-to-job ratios are estimated separately for employees and self-employed. Employee ratios come from the Annual Survey of Hours and Earnings (ASHE). Self-employment ratios come from the LFS.

The two measures are therefore similar in the spirit of integrating administrative data, but while RTI E + LFS SE is mostly based on RTI, the component approach integrates multiple data sources, using RTI to borrow the monthly trend but QBS and BRES to anchor levels. Ultimately, Figure 1 and Table 1 show that these changes make little substantive difference in the trends.

Moving to the sources and construction of the series underlying Figure 2, we highlight how the "component approach" measures hours (ONS, 2026). Total hours worked are computed as the product of average actual hours per job and total jobs filled. Average actual hours per job are derived from a measure of paid usual hours per week, plus a series of adjustments from a range of sources (including annual leave, bank holidays, civil service sickness, NHS sickness and furlough etc.). Paid usual hours per week are again obtained separately for the employees and self-employed. The self-employed estimate is based on the LFS. The employees estimate uses ASHE as an annual benchmark level, and interpolates quarterly movements from the LFS, in a similar spirit to the filled jobs methodology described above.

B. Productivity tables: robustness to the choice of quarters

This section replicates Table 1 and Table 2 using 2024 Q3 instead of 2024 Q2 and using 2007 Q1 instead of 2008 Q2 to evaluate the pre financial crisis period.

We chose to use the starting point of 2024 Q2 as the basis of headline estimates because the 2024 Q3 data point in the output per hour "component approach" series exhibits a dip, implying that the growth rate computed using that quarter as a base are inflated. If we choose 2024 Q3 as a starting point (as we did in our prior publications), annualised growth in output per hour looks higher, at 3.4 per cent (versus 1.9 per cent using 2024 Q2 as the starting point in Table 2).

We note that this dip is not present in the output per worker series (see Figure 1) and makes little difference to the growth rates: the annualized growth rate over the period 2024 Q3 to 2026 Q3 is 1.8 per cent (Table 3) versus 1.6 per cent starting at 2024 Q2 (Table 1).

Table 3: Productivity growth rates (output per worker, alternative estimates)

	Annualised productivity growth rate (%)		Productivity growth (%)
Approach to compute productivity	**2014 Q3 to 2024 Q3**	**2024 Q3 to 2026 Q3**	**2024 Q3 to 2026 Q3**
Component approach	**0.62**	**1.78**	**3.60**
RTI E + LFS SE	0.48	1.88	3.80
LFS E + LFS SE	0.59	0.25	0.50

Notes: Annualised and total productivity growth by selected time windows, as shown. For description of series, see Figure 1 notes. For detailed sources and construction, see Appendix A.

Table 4: Productivity growth rates (output per hour, alternative estimates)

Annualised productivity growth rate (%)			
		Component	**LFS**
Pre-GFC	**1997 Q1 to 2008 Q2**	1.94	2.09
	1997 Q1 to 2007 Q1	2.06	2.15
Post-GFC	**2008 Q2 to 2026 Q3**	1.11	0.43
	2014 Q3 to 2024 Q3	0.80	0.57
	2024 Q3 to 2026 Q3	3.35	0.85

Notes: Annualised productivity growth by selected time windows, as shown. For description of series, see Figure 2 notes. For detailed sources and construction, see Appendix A.