

Article

UK productivity flash estimate: July to September 2019

Flash estimate of labour productivity for Quarter 3 (July to September) 2019 based on latest data from GDP first quarterly estimate and labour market statistics.

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1 . UK productivity flash estimate: July to September 2019

The latest data from [labour market statistics](#) and [gross domestic product \(GDP\) first quarterly estimate](#) indicate that labour productivity, measured as output per hour, showed no growth, at 0%, in Quarter 3 (July to Sept) 2019 compared with the same quarter a year ago. This was a marginal increase from the 0.5% fall seen in Quarter 2 (Apr to June) 2019. Output per worker also showed no growth, at 0%, in Quarter 3 2019, compared with the same quarter in the previous year.

2 . Output per hour and output per worker

Output per hour in Quarter 3 (July to Sept) 2019 remained unchanged, compared with the same quarter a year ago. This was a result of both total weekly hours worked and gross value added (GVA), growing equally by 1%, during the same period. GVA is a measure of the production of goods and services in the economy and is closely aligned to gross domestic product (GDP).

The increase in total weekly hours worked was driven by a 1.0% increase in total employment as average actual weekly hours remained unchanged.

For output per worker, total employment and GVA grew equally by 1% in Quarter 3 2019, compared with the same quarter a year ago. As a result, output per worker showed no growth during this period.

The growth in employment was driven by a strong increase in the number of people who were self-employed, along with moderate growth in the number of employees, which increased by 4.1% and 0.4% respectively.

As an alternative to measuring growth relative to the same quarter a year ago, growth can also be measured relative to the previous quarter. Quarterly movements in labour productivity can be volatile and may not indicate the long-term trend of labour productivity growth in the UK. In this release we present the latest quarter growth rates compared with the same period a year ago to also facilitate comparison with the [Labour productivity statistics](#).

Output per hour grew by 0.3% during Quarter 3 2019 compared with the previous quarter. This follows a fall of 0.2% in Quarter 2 (Apr to June) 2019. During the same period, output per worker grew by 0.5%, in contrast to the fall of 0.6% seen in Quarter 2 2019.

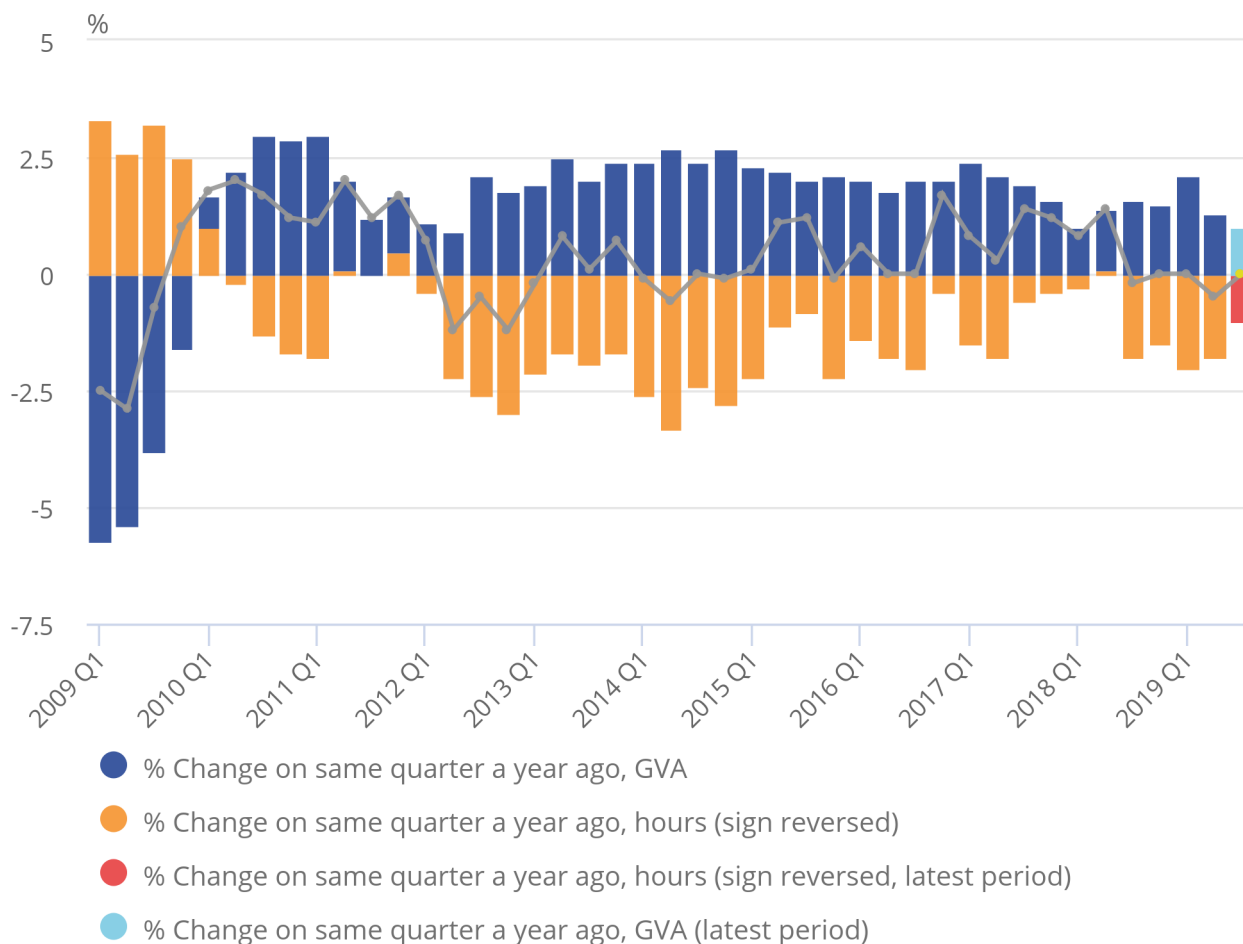
This flash estimate of UK productivity uses the first available information on output and labour inputs for the latest quarter; earlier quarters are consistent with the [Labour productivity statistics](#). The latest flash estimate data have been appended onto previous productivity statistics. These data may be revised in subsequent months. As such, we release the more detailed Labour productivity bulletin after the publication of [GDP quarterly national accounts](#).

Figure 1: Compared with the same quarter in the previous year, output per hour remained unchanged in Quarter 3 2019 as hours worked and gross value added grew at the same pace

Seasonally adjusted, Quarter 1 (Jan to Mar) 2009 to Quarter 3 (July to Sept) 2019, UK

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Seasonally adjusted, Quarter 1 (Jan to Mar) 2009 to Quarter 3 (July to Sept) 2019, UK



Source: Office for National Statistics

Notes:

1. Estimates of hours worked have had their sign reversed to reflect how they affect output per hour. An increase in hours worked will contribute negatively to output per hour; while a decrease in hours worked will contribute positively to output per hour.

Figure 1 shows contributions to growth in output per hour since 2009.

Productivity remained unchanged in Quarter 3 2019, compared with the same quarter a year ago, with negative or no growth during the last five quarters.

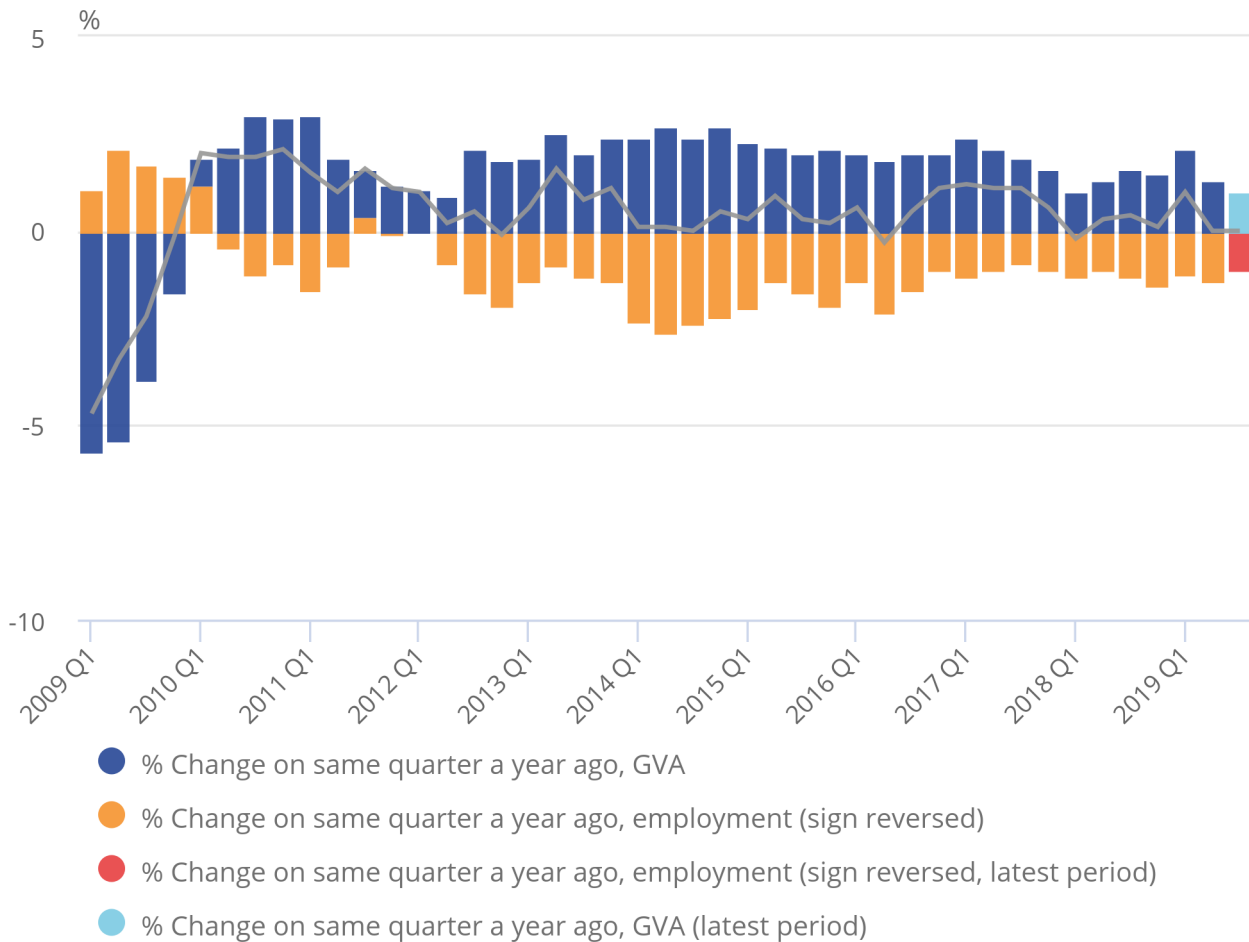
Over a longer period, UK productivity growth has been relatively weak – in particular, since the onset of the economic downturn in Quarter 1 (Jan to Mar) 2008 – because GVA has grown at a more moderate pace compared with labour inputs during this period (Figure 2).

Figure 2: Compared with the same quarter in the previous year, output per worker remained unchanged in Quarter 3 2019 as employment and gross value added grew at the same pace

Seasonally adjusted, Quarter 1 (Jan to Mar) 2009 to Quarter 3 (July to Sept) 2019, UK

Figure 2: Compared with the same quarter in the previous year, output per worker remained unchanged in Quarter 3 2019 as employment and gross value added grew at the same pace

Seasonally adjusted, Quarter 1 (Jan to Mar) 2009 to Quarter 3 (July to Sept) 2019, UK



Source: Office for National Statistics

Notes:

1. Estimates of employment have had their sign reversed to reflect how they affect output per worker. An increase in employment will contribute negatively to output per worker; while a decrease in employment will contribute positively to output per worker.

Table 1: Headline labour productivity indicators for the UK, Quarter 4 (Oct to Dec) 2016 to Quarter 3 (July to Sept) 2019, seasonally adjusted

UK, Quarter 4 (Oct to Dec) 2016 to Quarter 3 (Jul to Sept) 2019, seasonally adjusted

Whole economy

Quarter on same quarter in previous year Quarter on previous quarter

	Output per hour (growth %)	Output per worker (growth %)	Output per hour (growth %)	Output per worker (growth %)
2016 Q4	1.7	1.1	0.3	0.6
2017 Q1	0.8	1.2	-0.1	0.3
2017 Q2	0.3	1.1	-0.3	-0.1
2017 Q3	1.4	1.1	1.3	0.3
2017 Q4	1.2	0.6	0.2	0.1
2018 Q1	0.8	-0.2	-0.4	-0.5
2018 Q2	1.4	0.3	0.4	0.4
2018 Q3	-0.2	0.4	-0.3	0.5
2018 Q4	0.0	0.1	0.4	-0.2
2019 Q1	0.0	1.0	-0.5	0.3
2019 Q2	-0.5	0.0	-0.2	-0.6
2019 Q3	0.0	0.0	0.3	0.5

Source: Office for National Statistics

Notes

1. Quarter 3 2019 contains data from the first available information on output and labour inputs. Data for the earlier quarters are consistent with the labour productivity National Statistic. [Back to table](#)

Both employment – which captures the total number of people in work – and total hours – which captures both changes in employment and working patterns – fell in the course of the economic downturn, though total hours fell further reflecting a fall in the average hours of those in employment.

However, gross value added (GVA) fell by a larger proportion in the economic downturn than either hours or employment and has grown slowly by historical standards during the recovery. In consequence, productivity growth has been subdued since the downturn and has recovered more slowly compared with previous downturns.

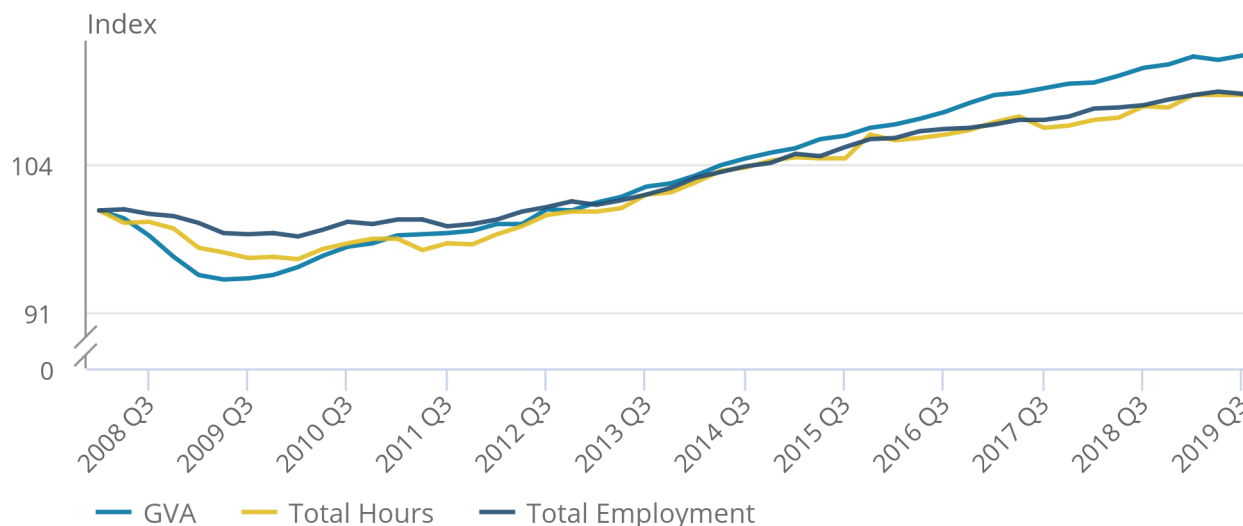
Figure 3 shows these relative movements over the post-downturn period. It indicates that in Quarter 3 2019, all three economic indicators were above their pre-recession levels, with GVA, hours and employment being up by 13.7%, 10.2% and 10.3% respectively.

Figure 3: Gross value added, total hours worked and employment are all over 10% above their pre-downturn levels

Seasonally adjusted, Quarter 1 (Jan to Mar) 2008 to Quarter 3 (July to Sept) 2019, UK

Figure 3: Gross value added, total hours worked and employment are all over 10% above their pre-downturn levels

Seasonally adjusted, Quarter 1 (Jan to Mar) 2008 to Quarter 3 (July to Sept) 2019, UK



Source: Office for National Statistics

Growth in GVA during Quarter 3 2019, compared with the same quarter a year ago, was because of growth in services and construction, which contributed 1.1 and 0.1 percentage points respectively. In contrast, production reduced GVA by 0.2 percentage points.

3 . Things you need to know about this release

This flash estimate of UK productivity uses the first available information on output and labour input for the latest quarter, Quarter 3 (July to Sept) 2019. These data may be revised in subsequent months. As such, we release the more detailed [Labour productivity bulletin](#) after the publication of [GDP quarterly national accounts](#).

This release uses gross value added (GVA) to determine growth in output for the latest quarter and uses the latest estimates from the [GDP first quarterly estimate](#) released just before this publication. Estimates of earlier quarters are consistent with the [Labour productivity National Statistics](#).

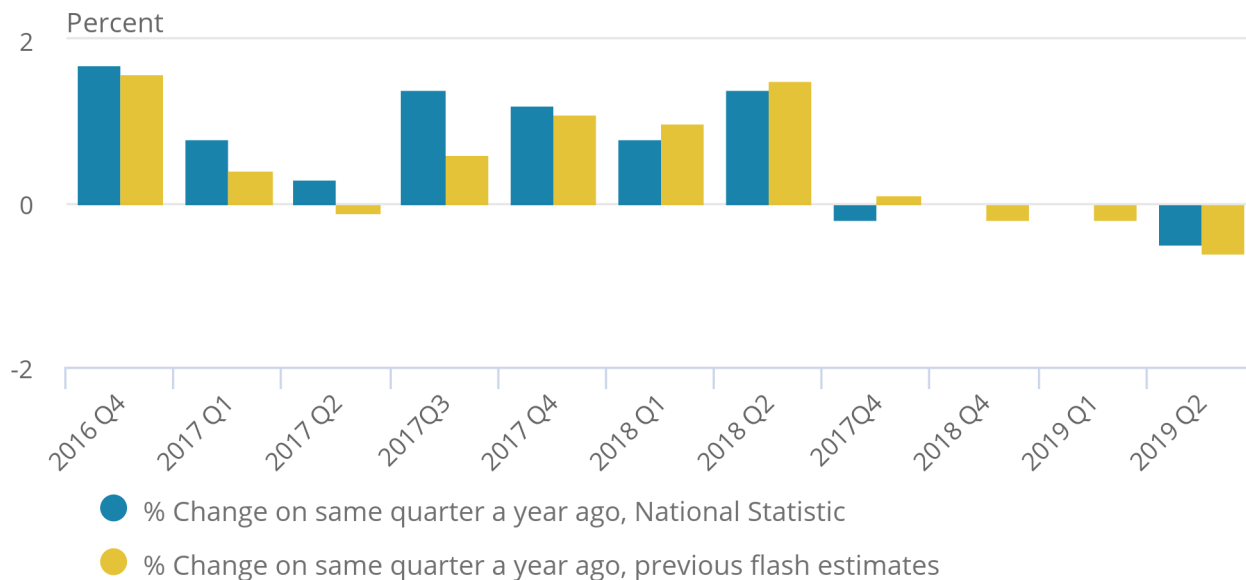
4 . Data sources and revisions

Gross domestic product (GDP) data for Quarter 3 2019 are from the [GDP first quarterly estimate, UK: July to Sept 2019](#), published on 11 November 2019.

Contributions are to output gross value added (GVA) and therefore may not sum to the percentage change in GDP. More information on how GDP and GVA are measured can be found in the [Short Guide to National Accounts](#).

Figure 4: Output per hour flash estimate revisions, Quarter 4 (Oct to Dec) 2016 to Quarter 2 (Apr to June)

Figure 4: Output per hour flash estimate revisions, Quarter 4 (Oct to Dec) 2016 to Quarter 2 (Apr to June)



Source: Office for National Statistics

Labour market data, for the same period are from the [Labour market statistics – November 2019 statistical bulletin](#), published on 12 November 2019.

Data for the earlier quarters, Quarter 1 2008 until Quarter 2 2019, are consistent with the [Labour productivity National Statistics](#). Figure 4 shows revisions to growth rates on the quarter a year ago compared with the first flash estimates published for the corresponding period. The aim is to show the reliability of the initial flash estimates over time.

Details of the [policy governing the release of new data](#) are available from the [UK Statistics Authority](#).