Office for National Statistics

Article

UK productivity flash estimate: April to June 2022

Flash estimate of labour productivity for Quarter 2 (April to June) 2022 based on the latest data from the gross domestic product (GDP) first quarterly estimate and labour market statistics.

Contact:
Robert Mwemeke and Benedetta Bello
productivity@ons.gov.uk
+44 1633 455086

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1 . Main points

- Output per hour worked remained unchanged between Quarter 1 (Jan to Mar) 2022 and Quarter 2 (Apr to Jun) 2022, with quarter-on-quarter growth of 0.0%.
- Output per hour worked in Quarter 2 2022 was 1.7% above its pre-coronavirus (COVID-19) pandemic level.
- Relative to pre-coronavirus pandemic level, output per worker grew by 0.8%, with growth driven by a 0.8% increase in gross value added (GVA) as the number of workers was unchanged.
- Within industry productivity effects continued to be the main driver of overall productivity growth relative to the pre-coronavirus pandemic level in the quarters following the last lifting of the lockdown restrictions.

2 . Latest statistics

The labour productivity flash estimate uses the latest labour market statistics and the gross value added (GVA) first quarterly estimates to provide the first look at UK productivity for Quarter 2 (Apr to Jun) 2022.

The headline statistics we report compare UK productivity with its pre-coronavirus (COVID-19) pandemic level, when productivity growth was more stable. This provides a useful perspective on how the coronavirus pandemic has affected UK productivity as the data in 2020 and 2021 are volatile. We recommend looking at longer-term trends.

Table 1: The latest productivity statistics
UK, Quarter 1 (Jan to Mar) 2020 to Quarter 2 (Apr to June) 2022

	Output per hour worked growth rates			**Output per worker growth rates**		
Period	Quarter vs 2019 pre-pandemic level (%)	Quarter-on-year (%)	Quarter-on-quarter (%)	Quarter vs 2019 pre-pandemic level (%)	Quarter-on-year (%)	Quarter-on-quarter (%)
2020 Q1	-0.5	-0.1	-0.9	-2.9	-2.9	-2.7
2020 Q2	-2.5	-2.3	-2.0	-20.8	-20.6	-18.4
2020 Q3	6.3	6.1	8.9	-6.2	-6.5	18.4
2020 Q4	2.0	1.6	-4.0	-4.2	-4.0	2.0
2021 Q1	2.5	3.0	0.5	-5.4	-2.6	-1.2
2021 Q2	2.7	5.3	0.2	-0.6	25.5	5.1
2021 Q3	1.0	-4.9	-1.6	-0.5	6.0	0.0
2021 Q4	2.3	0.3	1.2	0.8	5.3	1.4
2022 Q1	1.7	-0.8	-0.6	1.4	7.2	0.6
2022 Q2	1.7	-1.0	0.0	0.8	1.4	-0.6

Source: Office for National Statistics – UK productivity flash estimate

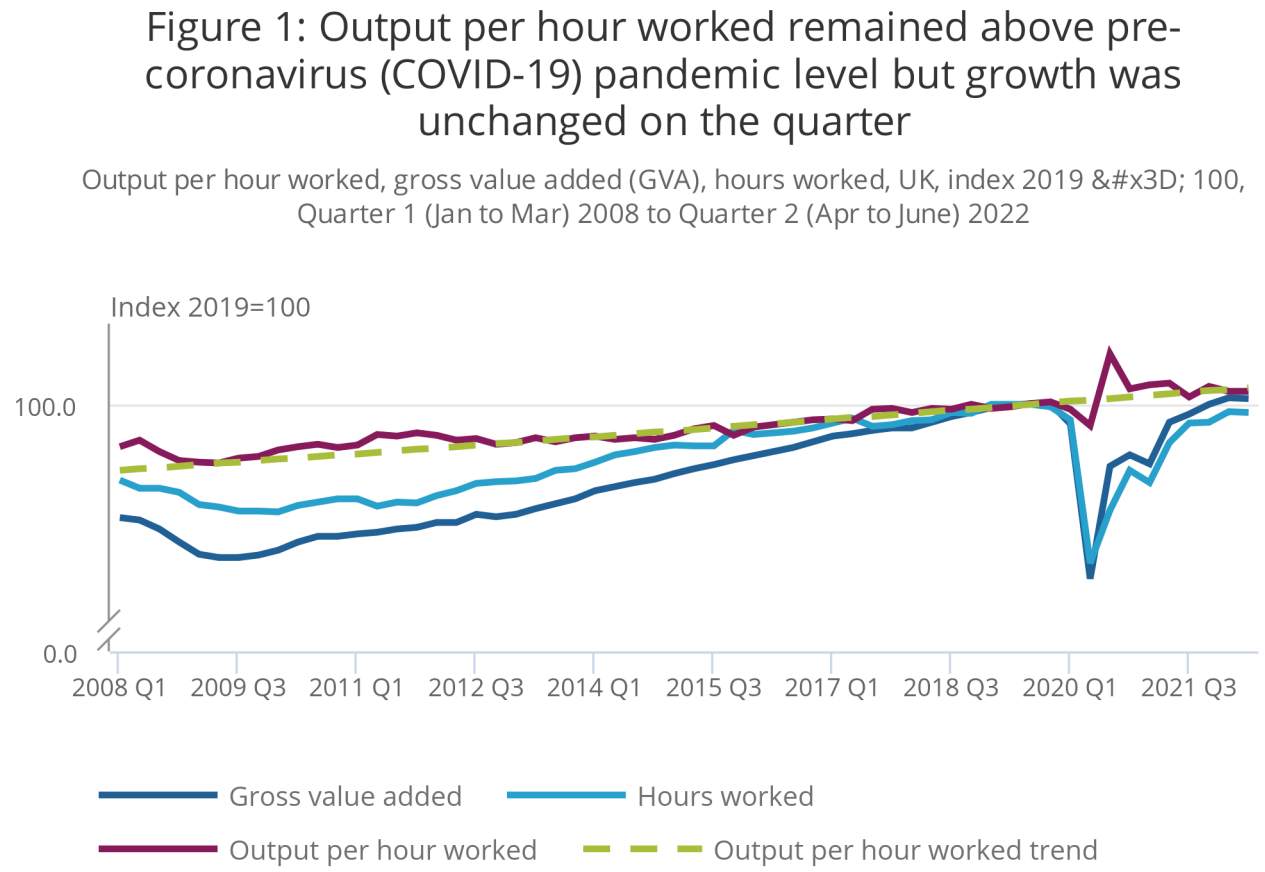
Output per hour worked

Output per hour worked remained unchanged between Quarter 1 (Jan to Mar) 2022 and Quarter 2 2022, but was 1.7% above its pre-coronavirus pandemic level.

Quarter-on-quarter, output per hour was unchanged reflecting a fall of equal magnitude, negative 0.1%, in gross value added (GVA) and the number of hours worked. Relative to a year earlier, Quarter 2 2021, output per hour worked fell by 1.0% as the growth of 3.9% in the number of hours worked was greater than the growth in GVA of 2.9%.

Figure 1: Output per hour worked remained above pre-coronavirus (COVID-19) pandemic level but growth was unchanged on the quarter

Output per hour worked, gross value added (GVA), hours worked, UK, index 2019 = 100, Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June) 2022



Source: Source: Office for National Statistics – UK productivity flash estimate

Notes:

1. Average growth between Quarter 2 2009 (the low point after the 2008 economic downturn) and Quarter 4 2019 (the highpoint before the coronavirus pandemic) is used as the trend as this is a long enough period to establish a trend line. Productivity growth has been consistently slower since the 2008 economic downturn, so using trend growth from earlier years would be suitable.

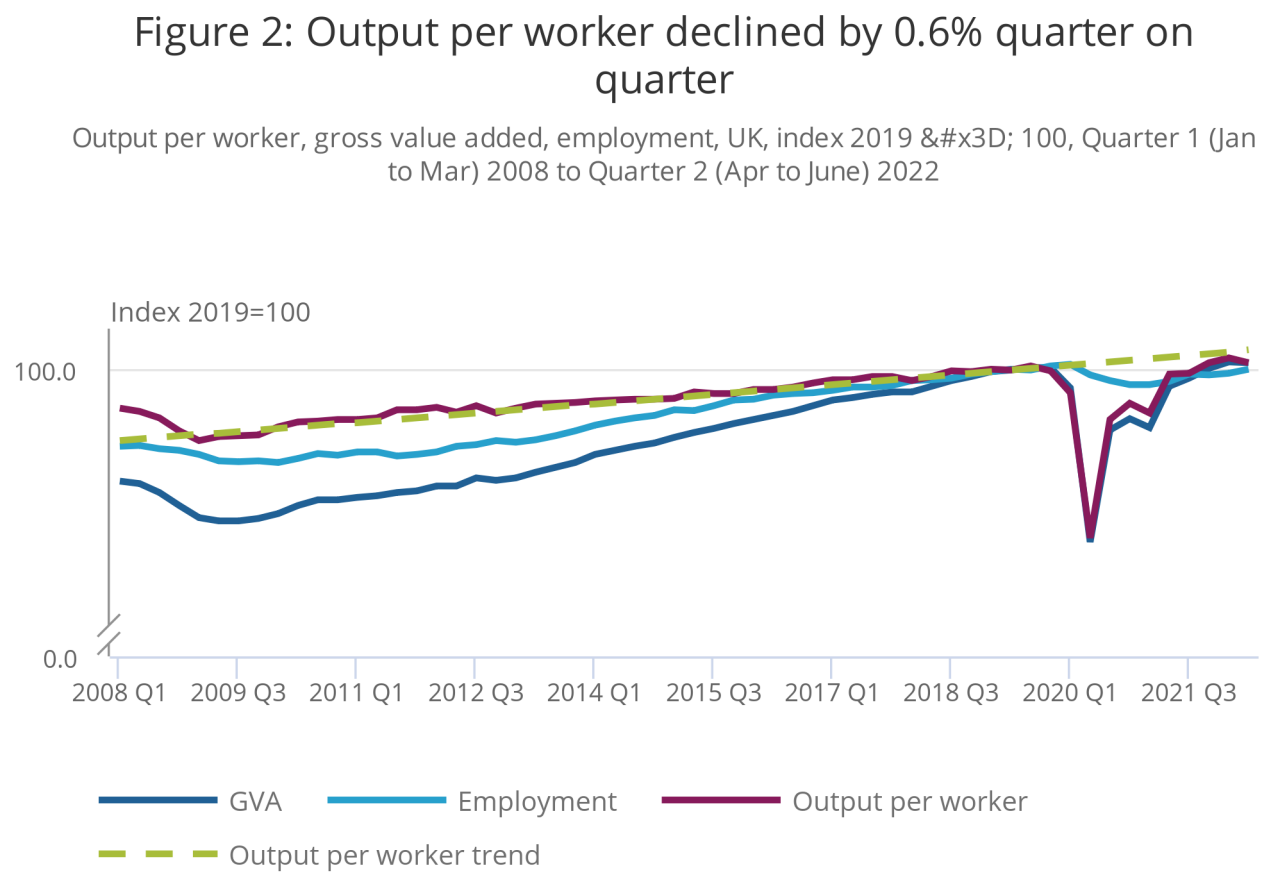
Users should note that Labour Force Survey (LFS) responses have been reweighted using updated HM Revenue and Customs (HMRC) Real Time Information (RTI). For more information, see our Impact of reweighting on Labour Force Survey key indicators: 2022 article. There are differences in our estimates reported in the Productivity overview: UK January to March 2022 and our latest estimates. The differences reflect an update to the initial estimates of gross domestic product (GDP) in Quarter 1 2022 and the reweighting of key indicators in the LFS.

3 . Output per worker

We also report output per worker as a measure of productivity. This is the ratio of total output relative to the number of workers. Output per worker fell by 0.6% in Quarter 2 (Apr to Jun) 2022 relative to Quarter 1 (Jan to Mar) 2022. Relative to its pre-coronavirus (COVID-19) pandemic level, productivity as measured by output per worker grew by 0.8%. This increase was driven by growth in gross value added (GVA) as the number of workers was unchanged.

Figure 2: Output per worker declined by 0.6% quarter on quarter

Output per worker, gross value added, employment, UK, index 2019 = 100, Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June) 2022



Source: Office for National Statistics – UK productivity flash estimate

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4 . Productivity changes within industry and between industry contributions

Changes in labour productivity growth can be driven by:

- changes within industries (the within industry effect)

- shifts in the structure of the economy between more or less productive industries (the between-industry allocation effect)
- a combination of both

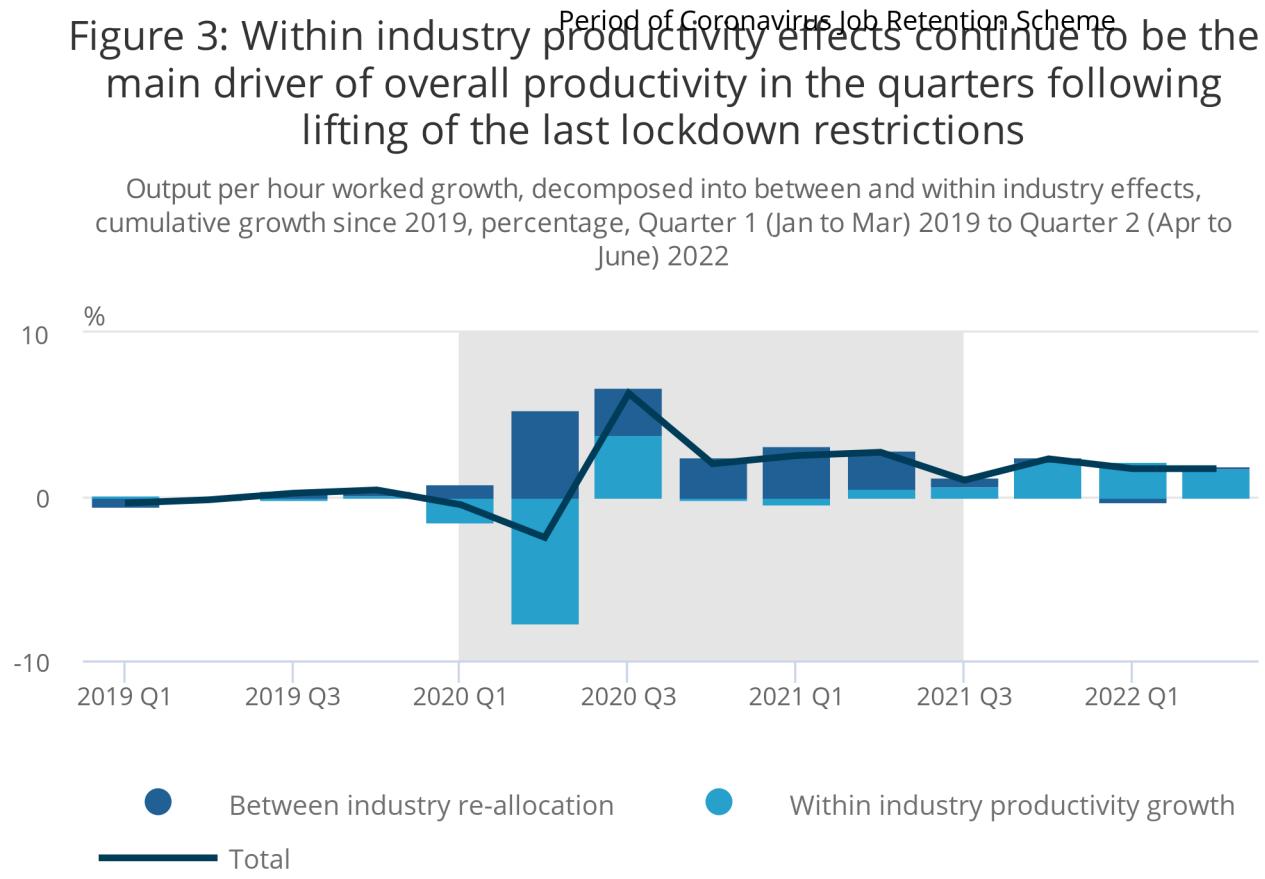
Throughout the coronavirus (COVID-19) pandemic period, growth in productivity as measured by output per hour worked was driven by between industry allocation effects, as furlough schemes more heavily affected lower productivity sectors.

The recent declines in the contribution of the between industry allocation effects to productivity changes reflect the return to work of workers in these sectors following the end of the furlough scheme and the lifting of all coronavirus pandemic restrictions.

Within industry productivity growth has continued to be the main driver of productivity growth relative to pre-coronavirus pandemic level in the quarters following the lifting of the lockdown restrictions.

Figure 3: Within industry productivity effects continue to be the main driver of overall productivity in the quarters following lifting of the last lockdown restrictions

Output per hour worked growth, decomposed into between and within industry effects, cumulative growth since 2019, percentage, Quarter 1 (Jan to Mar) 2019 to Quarter 2 (Apr to June) 2022



Source: Office for National Statistics – UK productivity flash estimate

Notes:

1. The between industry allocation effect is calculated across 26 industry sections. Slightly different results may be obtained depending on the industry granularity entered into the analysis.
2. The between industry allocation effect and growth within industries may not add up to the output per hour total. This is because of the exclusion of the National Accounts balancing value.

5 . Output per hour worked by industry

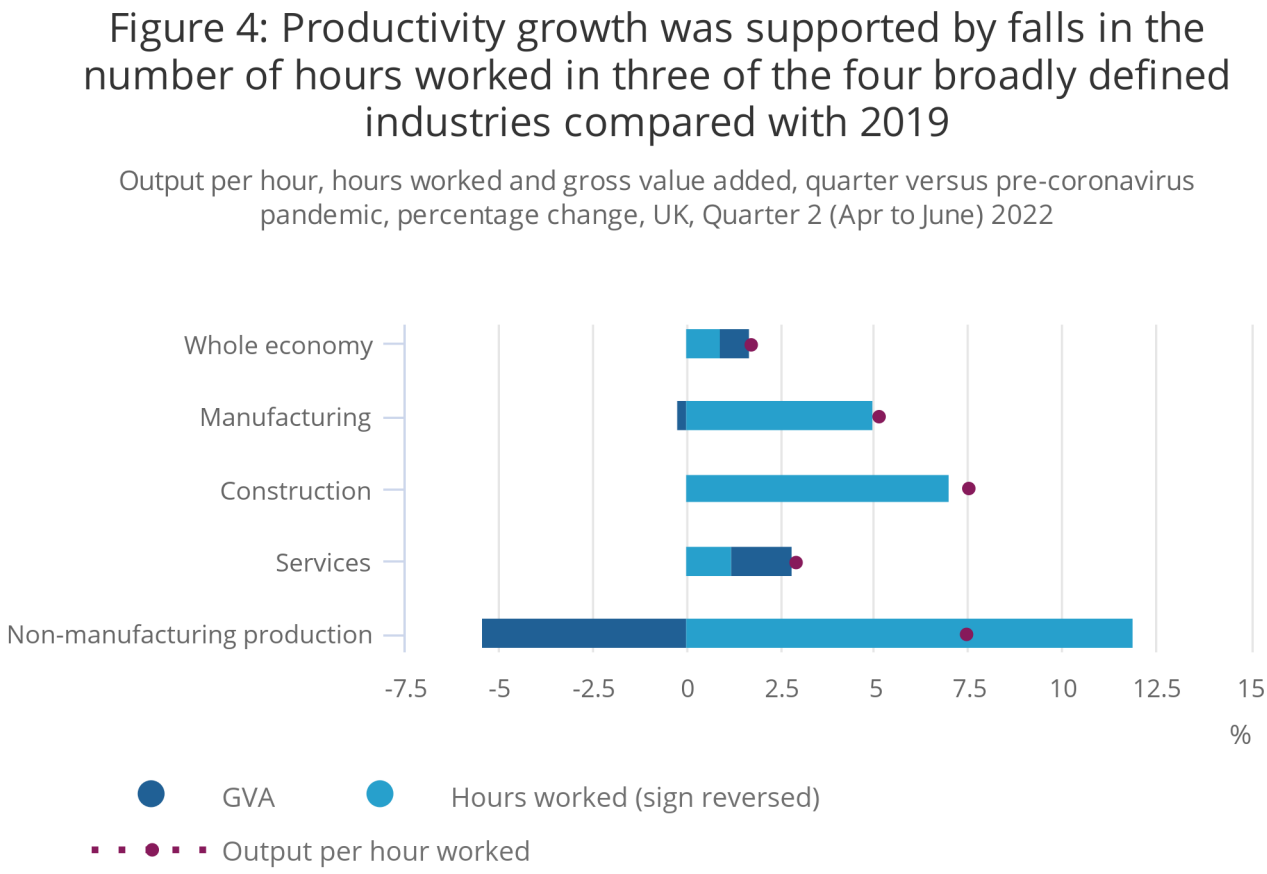
The UK economy can be split into four broadly defined industries:

- construction
- non-manufacturing production
- manufacturing
- services

Output per hour worked in Quarter 2 (Apr to Jun) 2022 increased in all four industries compared with 2019 pre-coronavirus (COVID-19) pandemic level. In the construction, non-manufacturing production and production industries, which are a smaller proportion of the UK economy than the services industry, the growth in productivity was driven by the fall in the number of hours worked.

Figure 4: Productivity growth was supported by falls in the number of hours worked in three of the four broadly defined industries compared with 2019

Output per hour, hours worked and gross value added, quarter versus pre-coronavirus pandemic, percentage change, UK, Quarter 2 (Apr to June) 2022



Source: Source: Office for National Statistics – UK productivity flash estimate

6 . UK productivity flash estimate data

Flash productivity by section
Dataset | Published 16 August 2022
F lash estimate of labour productivity by section. The latest data are from the gross domestic product (GDP) first quarterly estimate and labour market statistics.

7 . Glossary

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 sometimes workers or jobs ("productivity jobs") are also used.

Output

Output is measured by gross value added (GVA) in chained volume measures (CVM), which is an estimate of the volume of goods and services produced for final use by an industry, and in aggregate for the UK, after adjusting for price changes. It is calculated as turnover (sales) minus purchases (intermediate consumption).

Allocation effect

An allocation effect represents changes in the mix of activities in the economy between firms or industries that have various levels of productivity. Resources moving from low to high productivity industries creates a positive allocation effect, while movement from high to low productivity industries creates a negative allocation effect.

8 . Data sources and quality

This release uses the first available information on output and labour input for Quarter 2 (Apr to Jun) 2022. These data may be revised when we release the more detailed Productivity overview in October 2022.

This release uses gross value added (GVA) from the gross domestic product (GDP) first quarterly estimate to determine output. Labour market data are from the Labour market overview, UK: July 2022 statistical bulletin. Estimates of the productivity time series for previous time periods have been revised, and therefore may not be consistent with the Labour productivity National Statistics.

First quarter estimates of GVA are subject to change. This reflects the use of new data and methods, but also challenges in reconciling quarterly and annual data. As productivity is a structural feature of the economy, we continue to advise users to focus on long-term trends of productivity.

More details on the flash by industry methodology is described in the guidance tab of the accompanying dataset.

9 . Related links

Productivity overview, UK: January to March, 2022
Bulletin | Released 7 July 2022
The main findings from official statistics and analysis of UK productivity, presenting a summary of recent developments.

GDP first quarterly estimate, UK: January to March, 2022
Bulletin | Released 12 May 2022
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: July 2022
Bulletin | Released 19 July 2022
Estimates of employment, unemployment, economic inactivity, and other employment-related statistics for the UK.