

Statistical bulletin

# Labour costs and labour income, UK: 2022

Labour share of income, unit labour costs (ULCs), unit wage costs (UWCs) and average labour compensation per hour worked (ALCH), broken down by industry.



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# 1 . Main points

- Nominal unit labour costs (ULCs) grew by 0.9% quarter-on-quarter in Quarter 4 (Oct to Dec) 2021 and were 9.6% higher than their 2019 levels.
- Relative to their pre-coronavirus (COVID-19) levels, ULCs increased across all industries except for the human health and social work industry, where they fell by 5.4%.
- The growth in whole economy ULCs reflects a higher growth in total employment costs (9.8%) and within that, compensation of employees grew by 11.1%.
- Real gross value added (GVA) only marginally increased by 0.1% relative to its 2019 levels.
- The UK labour share of income was 59.8% in Quarter 4 2021, compared with an average of 59.0% pre-coronavirus; on a calendar year basis, the labour share of income ticked up for the fifth consecutive year to reach 60.0%.

## 2 . Labour costs

We use unit labour costs (ULCs) as the metric to measure labour costs within the economy. ULCs measure the nominal cost of labour input per unit of real (inflation-adjusted) economic output. They are the ratio of total nominal employment costs relative to output (real gross value added (GVA)).

This is our first reporting of ULCs following the close of the Coronavirus Job Retention Scheme (CJRS) which ended in Quarter 3 (July to Sept) 2021. ULCs for the whole economy increased by 0.9% quarter-on-quarter in Quarter 4 (Oct to Dec) 2021 and were 9.6% higher than their pre-coronavirus (COVID-19) 2019 average.

The increase in ULCs relative to their pre-coronavirus levels reflect a combination of low real GVA growth and high growth in employment costs. Relative to the 2019 average, total nominal employment costs - which consist of compensation of employees plus the share of mixed income allocated to labour minus employment subsidies - grew by 9.8%. This was a similar growth to ULCs, while real GVA only grew by 0.1% over the same period.

The largest component of total nominal employment costs is compensation of employees which accounted for 95.0% of total employment costs in Quarter 4 2021. Compensation of employees grew by 11.1% between Quarter 4 2019 and Quarter 4 2021. The growth in compensation of employees was similar to the growth in total nominal employment costs and is also consistent with the ONS most recent [Labour market overview](#). This reported growth in whole economy average weekly earnings (total pay) which increased by 10.0% over the same period. Employment in the whole economy fell by 1.0% over the same period.

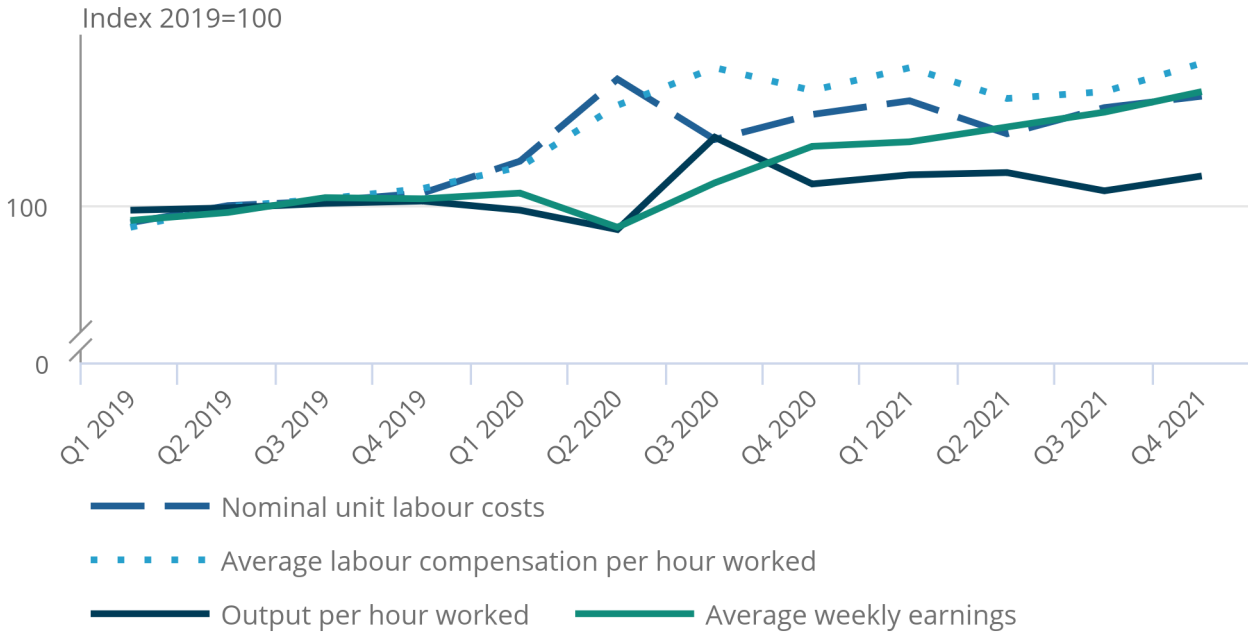
The recorded increases in both ULCs and average weekly earnings may reflect compositional effects in the employee workforce during and following the coronavirus pandemic, for example, a fall in the number of part-time jobs and a higher number of employees with a degree.

**Figure 1: Unit labour costs and average labour compensation per hour worked have increased substantially since 2019**

Output per hour worked, unit labour costs, average labour compensation per hour worked, UK, index 2019 = 100, Quarter 1 2019 to Quarter 2 2021

Figure 1: Unit labour costs and average labour compensation per hour worked have increased substantially since 2019

Output per hour worked, unit labour costs, average labour compensation per hour worked, UK, index 2019 = 100, Quarter 1 2019 to Quarter 2 2021



Source: Office for National Statistics - unit labour costs

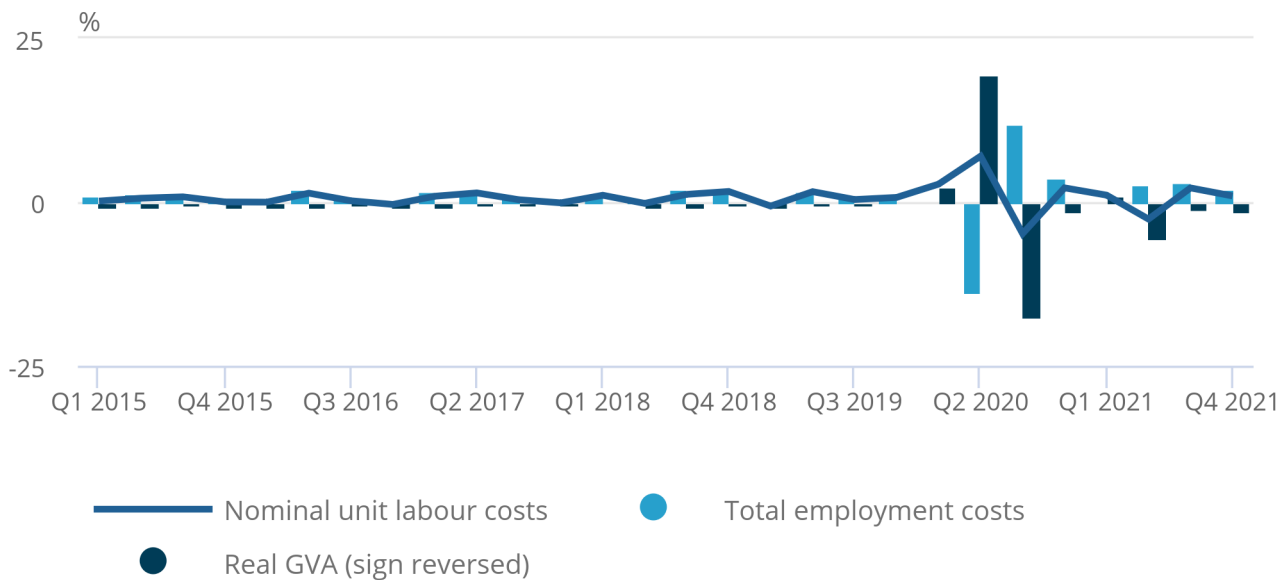
Figure 2 shows the trend in ULCs decomposed into changes in total employment costs and real GVA. The growth in ULCs over Quarter 3 and Quarter 4 2021 was driven by growth in total employment costs exceeding the growth in real GVA. This is in contrast with a fall in ULCs in Quarter 3 2021. This was following the easing of coronavirus restrictions, when the growth in real GVA was larger than the increase in total employment costs.

**Figure 2: The increase of unit labour costs has been driven by higher growth in total employment costs in comparison with real GVA**

Total employment costs, real GVA (sign reversed) nominal unit labour costs, UK, Quarter 3 to Quarter 4 2021

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Total employment costs, real GVA (sign reversed) nominal unit labour costs, UK, Quarter 3 to Quarter 4 2021



Source: Office for National Statistics - unit labour costs

### 3 . Industry breakdown

The growth in total nominal employment costs for the whole economy were primarily driven by the growth in total nominal employment costs in services. The service sector accounts for 80.7% of the UK economy total nominal employment costs. Total nominal employment costs in the services sector grew by 10.8%. This growth was broad based across sections of the services sector. In two service industry sections, real estate activities and office administration services, total nominal employment costs grew by 14.3% and 12.5%, respectively. Although, these sections only accounted for less than 8% of total nominal employment costs in the whole economy.

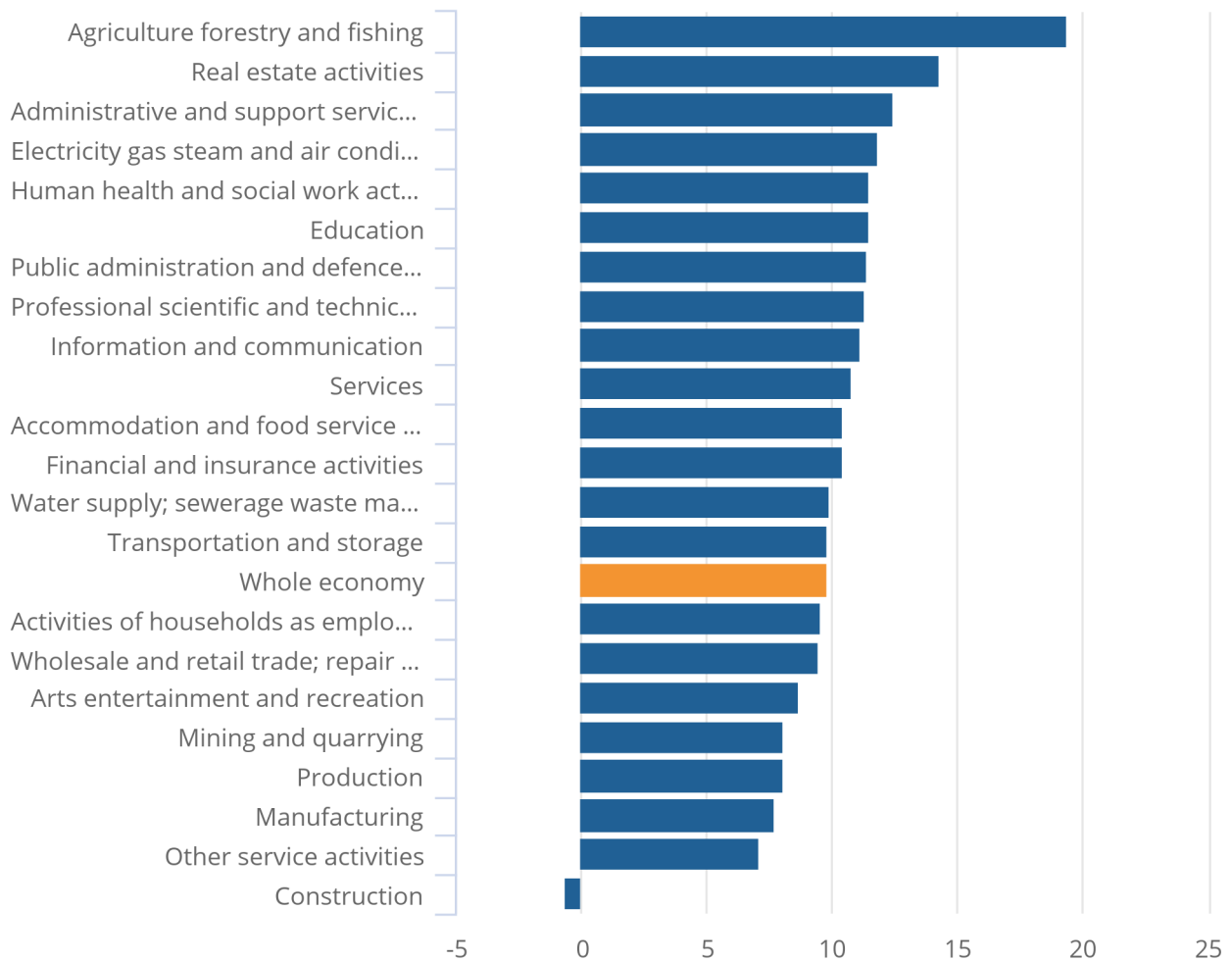
Over the same period, total nominal employment costs in the manufacturing industry section rose by 7.7%. Combined with a contraction in real gross value added (GVA) of 1.6%, this resulted in a rise in unit labour costs (ULCs) of 9.5%. This was similar to the whole economy rise in ULCs of 9.6%.

**Figure 3: Most industries within the services sector saw similar increases in total employment costs**

Percentage change in unit labour costs compared with the 2019 levels, UK, Quarter 4 2021

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Percentage change in unit labour costs compared with the 2019 levels, UK, Quarter 4 2021



Source: Office for National Statistics - unit labour costs

## 4 . Labour share of income

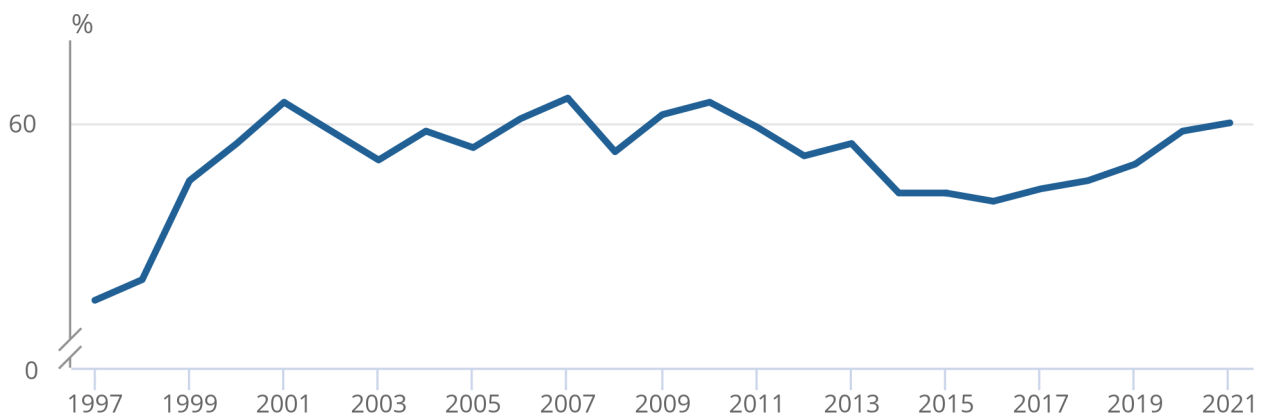
The labour share measures the share of production income received in exchange for labour. The labour share of income rose for the fifth consecutive year, marginally increasing from 59.8% in 2020 to 60% in 2021. This trend contrasts with the fall in the labour share of income after 2010 following the 2008 financial crisis. However, the labour share of income declined by 1.0 percentage point in Quarter 4 (Oct to Dec) 2021 relative to Quarter 3 (July to Sept) 2021. It was down 0.2 percentage points relative to Quarter 4 2020.

**Figure 4: Labour share of income of income on a calendar year basis has increased by two percentage points since 2016**

Labour share of income for the whole economy, UK, percentage (%)

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Labour share of income for the whole economy, UK, percentage (%)



Source: Office for National Statistics – Unit labour costs, UK



## 5 . Data revisions

Revisions have been made to important variables in the dataset. The largest revisions to unit labour costs (ULCs) and the labour share of income, resulted from replacing mixed income data with HM Revenue and Customs payments data. This was for the allocation pattern for Self-Employment Income Support Scheme (SEISS) payments. For more information, see [Measuring the data](#).

The largest revisions were to Quarter 2 (Apr to June) 2020 estimates. The industries most affected by this change, in terms of the labour share of income, were agriculture, forestry and fishing (revised up by 12.8 percentage points), construction (revised down by 8.8 percentage points), and transportation and storage (revised down by 2.4 percentage points).

Revisions to ULCs and the labour share of income resulting from revisions to input data were largest in Quarter 3 (July to Sep) 2021. The most affected industries were agriculture, forestry and fishing (down by 15.2 percentage points in Quarter 3 (Jul-Sep) 2021) and arts, entertainment and recreation (up by 7.6 percentage points in the same quarter).

Most of these revisions are a result of taking on new data sources to calculate real gross value added (GVA) by industry.

## 6 . Data

[Labour costs and labour income, UK](#)

Dataset | Released 13 May 2022

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

### Average labour compensation per hour (ALCH)

ALCH measures the average cost of purchasing an hour of labour. It covers all costs of labour to employers, including wages and salaries, overtime payments, bonuses and arrears, pension contributions, employers' national insurance contributions, and other costs associated with employing labour. It does not cover subsidised labour compensation.

### Compensation of employees

Total remuneration payable to employees in cash or in kind. Includes the value of social contributions payable by the employer.

### Employment subsidies

Subsidies paid to businesses by the government directly based on how many employees they employ or how much they pay employees. The furlough schemes implemented during the coronavirus (COVID-19) pandemic are considered employment subsidies.

### Gross operating surplus

The balance on the generation of income account, before deduction of consumption of fixed capital. Conceptually, the surplus arising from the production of goods and services before considering flows of property income. In rare cases this variable may be negative.

## **Labour inputs**

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

## **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 share of income**

Labour share measures the share of production income received in exchange for labour.

## **Mixed income**

The operating profit of unincorporated businesses owned by households. Household members often provide unpaid labour inputs to the business. The profit is therefore a mixture of labour remuneration and return to the owner as entrepreneur. In rare cases this variable may be negative.

## **Unit labour costs (ULCs) - nominal**

ULCs measure the nominal cost of labour input per unit of real (inflation-adjusted) economic output.

## **Unit wage costs (UWCs) - nominal**

UWCs measure the nominal cost of labour input per unit of real (inflation-adjusted) economic output, taking only wages into account and not non-wage employer labour costs. For example, employers' pension contributions.

## **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.

## **Real wages**

Real wages refer to average weekly earnings adjusted for inflation. It measures earnings adjusted for the purchasing power of those earnings.

## **Total employment costs**

Total employment costs represent the total costs of purchasing labour in the economy, not including any such costs funded by employment subsidies.

For more information, see our [Blue Book glossary](#).

# **8 . Measuring the data**

## Changes to methods in this release

In the allocation to industries of payments made in the whole economy under the Self-Employment Income Support Scheme (SEISS), mixed income has been replaced with HM Revenue and Customs (HMRC) monthly data on Self-Employment Income Support Scheme (SEISS) payments.

The pattern used to interpolate pre-2020 annual estimates of gross operating surplus by industry to derive quarterly estimates of gross operating surplus by industry, has been changed to whole economy gross operating surplus (GOS) (CDID: ABNG) from GOS of corporations (CDID: CGBZ).

For the first time, estimates are published for the individual sections within government services: public administration and defence, education, and human health services. Previously, data for government services as a whole were published and the individual sections were not separated out.

For the first time, estimates are published for other services and for the activities of households as employers of domestic staff separately. Previously, data for the sum of these two sections were published.

All indices are now calculated relative to the annual value for 2019 for that variable, rather than the simple average across the quarters of 2019.

## Methodology in this release

Nominal unit labour costs (ULCs) are calculated as total employment costs divided by output. Average labour compensation per hour (ALCH) is calculated as total employment costs divided by total hours worked.

Total employment costs are calculated as compensation of employees, plus part of mixed income, minus employment subsidies. Only part of mixed income is added because only unpaid labour inputs by unincorporated business owners or their household members are part of employment costs; returns paid for owning the business are excluded. For each industry, the share of mixed income considered to be part of total employment costs is set at the labour share in that industry. Compensation of employees, mixed income and gross operating surplus are part of the Supply Use framework. The data used for this release are consistent with our [UK National Accounts. The Blue Book: 2021 compendium](#).

Labour share is calculated as compensation of employees divided by compensation of employees plus gross operating surplus. It measures what share of each unit of output is received by employees (including some of the self-employed). It is calculated for each industry separately. In rare cases where gross operating surplus is negative, labour share may be greater than one. Labour share is related to [compensation of employees as a percentage of Gross Domestic Product](#). However, unlike the time series, it includes part of the mixed income in the numerator and does not include taxes less subsidies on production in the denominator. For our previous work on labour share, see our [Estimating the impact of the self-employed in the labour share methodology](#).

To fully understand trends in the labour share, labour costs (ULCs and ALCH) must be considered. Labour share is relevant to ULCs and ALCH because its numerator is similar to total employment costs and its denominator is similar to nominal GVA. ULCs are defined as total employment costs divided by real GVA.

Expressed mathematically, with COE denoting compensation of employees, GOS denoting gross operating surplus, and MI denoting mixed income:

$$\text{Labour Share} = \frac{\text{Total Employment Costs (inc Subsidies)}}{\text{COE} + \text{GOS} + \text{MI}}$$

$$\cong \frac{\text{Total Employment Costs}}{\text{Nominal GVA}}$$

$$= \frac{\text{Total Employment Costs}}{\text{GVA Deflator} \times \text{Real GVA}}$$

$$= \frac{1}{\text{GVA Deflator}} \times \frac{\text{Total Employment Costs}}{\text{Real GVA}}$$

$$= \frac{1}{\text{GVA Deflator}} \times \text{ULCs}$$

This means that it should approximate ULCs divided by the implied GVA deflator, which can be understood as ULCs in real (inflation-adjusted) terms. Different changes of ULCs and the labour share can then be related to changes in the GVA deflator. However, the approximation is less precise the higher employment subsidies are.

Employment subsidies are calculated from data provided by HM Treasury. Coronavirus (COVID-19)-related subsidies, Coronavirus Job Retention Scheme (CJRS) and Self-Employment Income Support Scheme (SEISS) are supplied by HMRC. Regular subsidies data are available for the whole economy only, and the subsidies are allocated to industry sections using each industry's proportion of compensation of employees. Industry data are available from HMRC for CJRS payments. SEISS payments are allocated to industry sections using each industry's share of mixed income. As with mixed income, only part of SEISS payments are included in employment subsidies. The share of SEISS payments that is deducted from total employment costs is set at the same value. It is assumed that no SEISS payments were received by partners in registered partnerships.

## 9 . Strengths and limitations

### Strengths

Unit labour costs (ULCs) and average labour compensation per hour (ALCH) have been calculated using data consistent with each other and with output per hour worked. This consistency allows users to compare changes in the three series without the comparison being invalidated by different measurements and coverage of the components. This improves analytical usefulness.

ULCs for the whole economy are now consistent with ULCs for industry sections. This allows valid comparison of data for an industry section with the whole economy. It also means that the mixed income component of total employment costs is calculated using the labour share for each industry. This is weighted by that industry's share of mixed income. It means that labour shares in industries with no mixed income do not adversely affect the estimate of total employment costs for the whole economy.

### Limitations

This methodology does not represent the final effect of changes in the labour market. For example, increases to ULCs may lead to employers increasing prices to compensate, potentially leading to inflation and no increase in labour share or real wages.

## 10 . Related links

### [Productivity overview, UK: April to June 2021](#)

Article | Released 7 October 2021

Economic productivity measures, including output per hour, output per job and output per worker for the whole economy and a range of industries. This includes productivity in the public sector and international comparisons of productivity across the G7 nations.

### [Productivity development plan: 2021 to 2023](#)

Article | Released 6 October 2021

This development plan builds on recent improvements to the Office for National Statistics (ONS) productivity statistics. It looks at introducing new outputs, further improving our productivity statistics and consolidating our improvements to date.

### [GDP quarterly national accounts, UK: April to June 2021](#)

Bulletin | Released 30 September 2021

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.

### [Index of Labour Costs per Hour, UK: July to September 2020](#)

Bulletin | Released 15 December 2020

Changes in the costs of employing labour, analysed by sector and industry. Experimental Statistics.