

Article

# Trends in the UK labour share: 1997 to 2023

Over the last two-and-a-half decades, the share of total UK income going to workers has increased by just under 6 percentage points; this not only partly reverses the long-run decline in the labour share experienced by most advanced countries, but sets the UK apart as a nation where the labour share has shown a marked increase.

Contact:  
Macroeconomic Insights team  
economic.advice@ons.gov.uk  
+44 1633 651833

Release date:  
25 November 2024

Next release:  
To be announced

## Table of contents

1. [Main points](#)
2. [An overview of the labour share](#)
3. [Accounting for the rise in the UK labour share](#)
4. [The labour share, productivity, the terms of trade and real wages](#)
5. [Data on trends in the UK labour share](#)
6. [Data sources and quality](#)
7. [Related links](#)
8. [Cite this article](#)

# 1 . Main points

- Over the last two-and-a-half decades, the share of total UK income going to workers has increased by just under 6 percentage points; this not only partly reverses the long-run decline in the labour share experienced by most advanced countries, but sets the UK apart as a nation where the labour share has shown a marked increase.
- The rise in the UK labour share likely reflects a number of economy-wide factors including: the introduction of the National Minimum Wage and its subsequent uprating; a tight labour market with strong employment growth; rising numbers of graduates who earn a wage premium over non-graduates; and higher pension contributions by employers reflecting auto-enrollment and moves to plug deficits in employer-sponsored schemes.
- There has been a shift in the relative size of industrial output towards services activities where the labour share tends to be higher, particularly the professional and administrative support, and the government, health and education industries.
- The UK has not experienced the decoupling between pay and productivity reported in other advanced countries; in fact, the rise in the labour share has supported growth in average real labour compensation in excess of productivity growth and changes in the terms of trade.

## 2 . An overview of the labour share

### The ONS approach to measuring the labour share

The labour share is the proportion of national income that is received by workers, whether as employees or from self-employment.

National income or gross domestic product (GDP) is the sum of the following items:

- compensation of employees (CoE): the total wage and non-wage income earned by employees of businesses and organisations
- mixed income (MI): the income of the self-employed generated by sole proprietorships and unincorporated businesses operated by households; as such, it consists both of remuneration for labour and profit as an entrepreneur
- gross operating surplus (GOS): the gross profit of enterprises derived from the goods and services they produce less the cost of raw materials, services and overheads, and labour costs; this also includes the imputed rents received by households associated with owner-occupied housing
- taxes minus subsidies on production: the net income generated by capital and labour that is transferred to the government

The labour share of income is usually stated as a proportion of gross value added (GVA) at factor cost, which is GDP excluding the value of taxes minus subsidies. This is the value of income that is available to be distributed as either compensation for labour or as a return on capital invested, such that:

Labour share is equal to the sum of compensation of employees and a proportion ( ) of mixed income divided by GVA at factor cost

The main complication in calculating the labour share, however, is how to apportion mixed income between labour income and capital income accordingly. Our [Estimating the impact of the self-employed in the labour share](#) article suggests five possible methods.

- Method 1: this is the "all to capital" approach where  $\alpha = 0$  so none of mixed income is allocated to labour.
- Method 2: where two-thirds of mixed income is allocated to labour,  $\alpha = 0.66$ , reflecting the long-run share of income in the United States and which has come to be a widely used proportion in the economics literature.
- Method 3: the "all to labour" approach where  $\alpha = 1$  so the entirety of mixed income is allocated to labour.
- Method 4: total labour income is calculated as CoE multiplied by total employment divided by total employees, where total employment is the sum of self-employment and total employees. This approach does not look to apportion mixed income by itself, but to scale up CoE to reflect the numbers of self-employment relative to the number of employees. This approach is useful when, as is the case for several countries, mixed income is not published separately from GOS.
- Method 5: mixed income is allocated in the same proportion as  $\alpha = \text{CoE} / (\text{CoE} + \text{GOS})$ . This means that the split to labour income will not be a fixed proportion but will vary with the relative sizes of CoE and GOS over time. This is the Office for National Statistics's (ONS's) preferred approach to calculating the labour share and forms the basis of the measures published in our [Labour costs and labour income](#) statistical bulletin.

The calculation of the labour share using each of these five approaches is presented in Figure 1. The level of the labour share largely depends on the relative proportion of mixed income allocated to labour.

The ONS's preferred measure (Method 5) tends to give a similar estimate of the labour share to Method 2 where  $\alpha = 0.66$ . Method 4 gives the highest estimate of the labour share, very similar to the "all to labour" approach ( $\alpha = 1$ ), reflecting the relatively large size of self-employment in the UK.

However, all five approaches to measuring the labour share show the same patterns over time, notably:

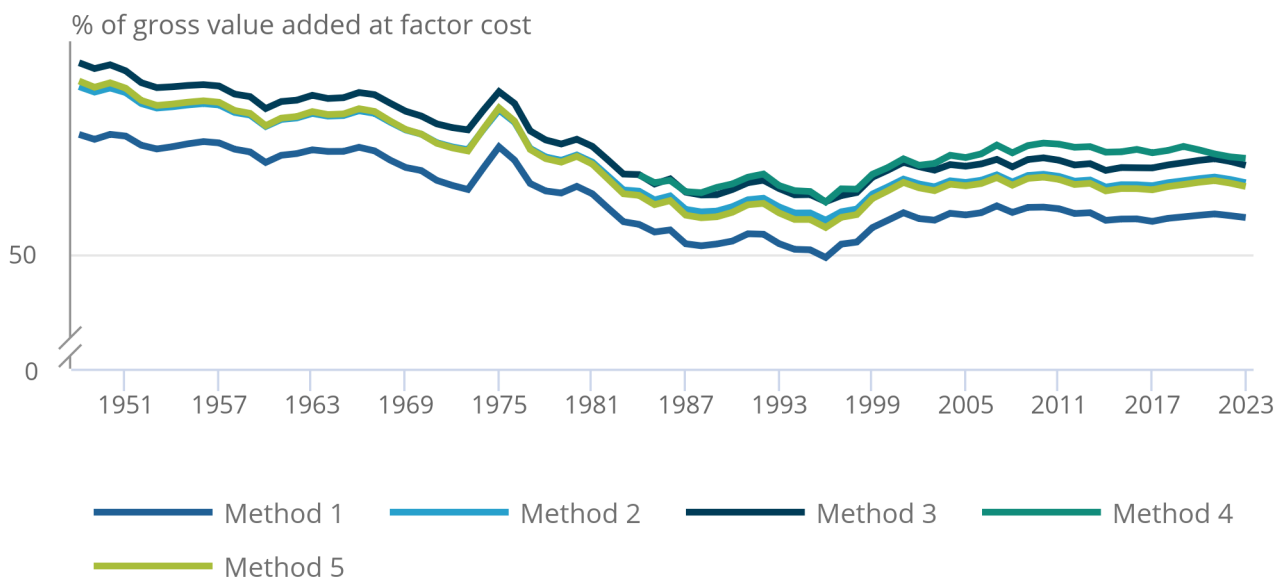
- a long downward fall in the labour share between 1948 and 1996, with a relatively rapid fall during the 1980s; followed by
- a recovery in the labour share starting in 1997 by around 5.5 percentage points, particularly in the years up to 2001, after which the labour share has been fairly stable

**Figure 1: The labour share has increased by between 5 and 6 percentage points since 1996**

The labour share of income, UK, 1948 to 2023

Figure 1: The labour share has increased by between 5 and 6 percentage points since 1996

The labour share of income, UK, 1948 to 2023



Source: UK National Accounts, The Blue Book: 2024 from the Office for National Statistics

**Notes:**

1. Methods 1 to 5 are described in the article text.
2. The time series for Method 4 starts in 1984 reflecting the availability of labour market statistics on employees and self-employment.
3. Estimates of the labour share in 2023 are subject to higher uncertainty, as these estimates have not yet been fully balanced in the Supply and Use Table framework. There is some additional uncertainty around the employees estimates used to underpin our figures of wages and salaries. Additional information from our Pay As You Earn Real Time Information has informed these early estimates produced in the national accounts.

The 5 to 6 percentage point increase in the UK labour share since 1996 was broadly similar across each of the five methods. This partly reverses the long-run downward trend, which has been, and continues to be, a feature of the labour share in most advanced countries. This has been attributed to the following factors:

- the increase in offshoring of the labour-intensive components of production chains, in particular to lower-wage emerging market countries; see the Brookings Institute [The decline in the US labor share](#) article
- the widespread adoption of information and communication technologies (ICT) and other intangible capital assets, which substitute for low and intermediate skilled workers; see the Kings College London [Capital heterogeneity and decline in the labour share \(PDF, 782KB\)](#) article
- the rise of "superstar firms", where globalisation and technology have enabled industries to become increasingly dominated by firms with high profit margins and a smaller share of labour in sales; see the Centre for Economic Performance [The fall of the labor share and the rise of superstar firms \(PDF, 5.64MB\)](#) article

To understand the factors behind the recovery in the labour share starting in 1997, Figure 2 shows the relative changes in the components of total GVA at factor cost. Between 1996 and 2023, total labour income increased by 230% whereas gross operating surplus (GOS) grew by just over 160% and total GVA (at factor cost) by 200%. The faster growth of labour income relative to GOS accounts for the rise in the labour share.

Looking at the components of labour income: wages and salaries (220%) and mixed income allocated to labour (210%) have grown at similar rates, but employers' social contributions have shown a much faster increase (340%). These consist of payments made by employers for the benefit of their employees to insurers, whether social security funds or private funded schemes such as healthcare, life insurance and pensions. Several factors may have contributed to the large increase including:

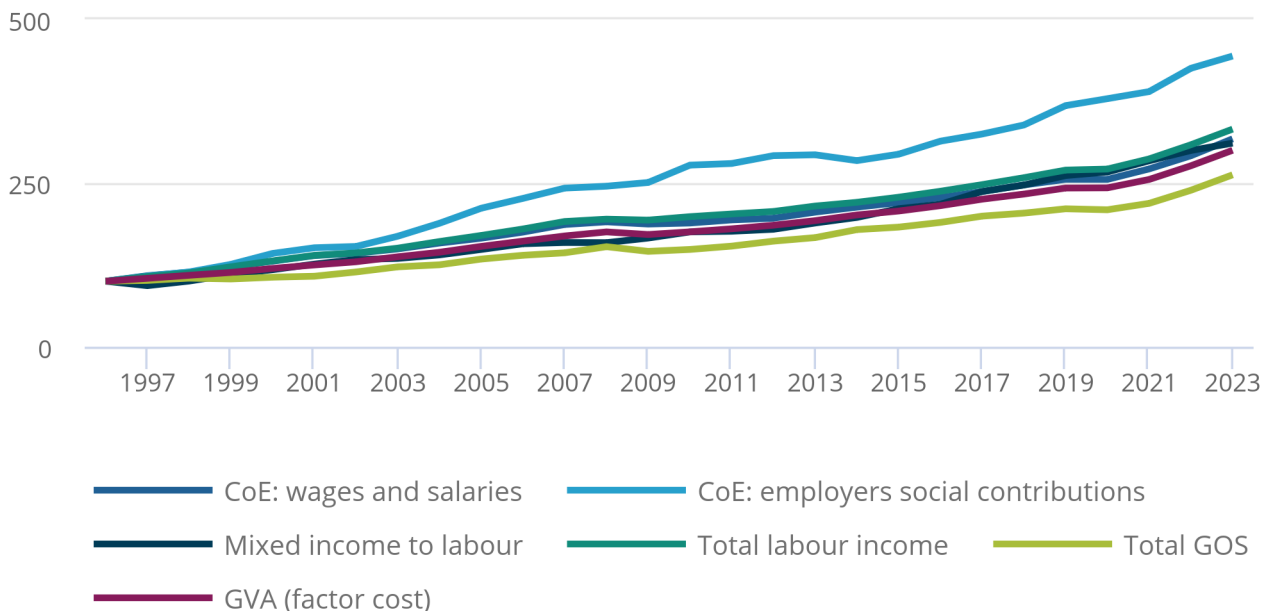
- an increase in the participation rate in workplace pension schemes from 47% in 2012 to 79% in 2021 after the phased introduction of auto-enrolment between October 2012 and April 2018; see our [Employee workplace pensions in the UK](#) statistical bulletin
- payments of deficit reduction contributions to reduce the shortfall and risk in employer-sponsored pension funds; see our [Funded occupational pension schemes in the UK](#) statistical bulletin
- higher contribution rates of employer National Insurance contributions (NICs), changes in income thresholds, and the phasing out of rebates for employers offering "contracted out" pension schemes

**Figure 2: A strong increase in employers' social contributions has supported the rise in the labour share since 1996**

The components of gross value added (GVA) at factor cost, UK, 1996 to 2023

## Figure 2: A strong increase in employers' social contributions has supported the rise in the labour share since 1996

The components of gross value added (GVA) at factor cost, UK, 1996 to 2023



Source: UK National Accounts, The Blue Book: 2024 from the Office for National Statistics

**Notes:**

1. Total labour income is the sum of compensation of employees (CoE) and the share of mixed income allocated to labour.
2. Total gross operating surplus (GOS) is the sum of gross operating surplus and the share of mixed income allocated to profits.
3. Gross value added (GVA) at factor cost is the sum of total labour income and total GOS.

## Other measures of the labour share

It is debated that the denominator in standard measures of the labour share results in downward bias because gross value added (GVA) overstates the extent to which total income is available for consumption, whether it be by the owners of labour or capital. This is because part of the income attributed to capital reflects compensation for the depreciation of capital assets, that is, the wear and tear, and obsolescence of buildings, vehicles, machinery, computer hardware and software among others.

Net value added (NVA) corrects for this by subtracting the consumption of fixed capital or depreciation from GVA. This correction might also have become more important as the capital stock increasingly consists of shorter-lived assets such as information and communication technologies (ICT) and intangibles resulting in faster rates of depreciation.

The total gross and net measures of the labour share are:

- total gross labour share = total compensation of employees (CoE) divided by GVA at factor cost
- total net labour share = total CoE divided by NVA at factor cost, where NVA is equal to GVA minus depreciation

Another issue that could affect ONS's labour share measures is the difficulty in dealing with self-employment, which was raised by The Centre for Economic Performance in their article [Have productivity and pay decoupled in the UK? \(PDF, 1.26MB\)](#). This reported that self-employed workers in the UK have seen pay growth rise less quickly than for employees. This reflects a greater fall in hours worked by the self-employed and strong growth in the numbers of solo self-employed who tend to have lower than average compensation.

Using microdata, the average self-employed workers have seen their income grow by only 50% over the last four decades compared with 80% for the average employee. This would suggest that some approaches to estimating the labour share might result in an overestimate by assuming too high growth in the labour compensation of the self-employed.

The use of corporate labour share measures helps to partly mitigate the difficulties in dealing with self-employment. This measure also excludes the gross operating surplus (GOS) in the household sector associated with the imputed rental income from owner-occupied housing, which can push labour share measures downwards.

Gross and net measures of the corporate labour share are defined as follows:

- corporate gross labour share = corporate CoE divided by corporate GVA at factor cost
- corporate net labour share = corporate CoE divided by corporate NVA at factor cost, where corporate NVA is equal to corporate GVA minus corporate depreciation

The four measures of the labour share defined in this subsection of the article relating to total and corporate, and gross and net measures are presented in Figure 3. The main findings are:

- net measures of the labour share are greater than gross measures as depreciation reduces the value of total income for consumption in the denominator
- corporate measures of the labour share are greater than total measures, reflecting the relatively high proportion of GOS in the household sector relating to owner-occupied housing

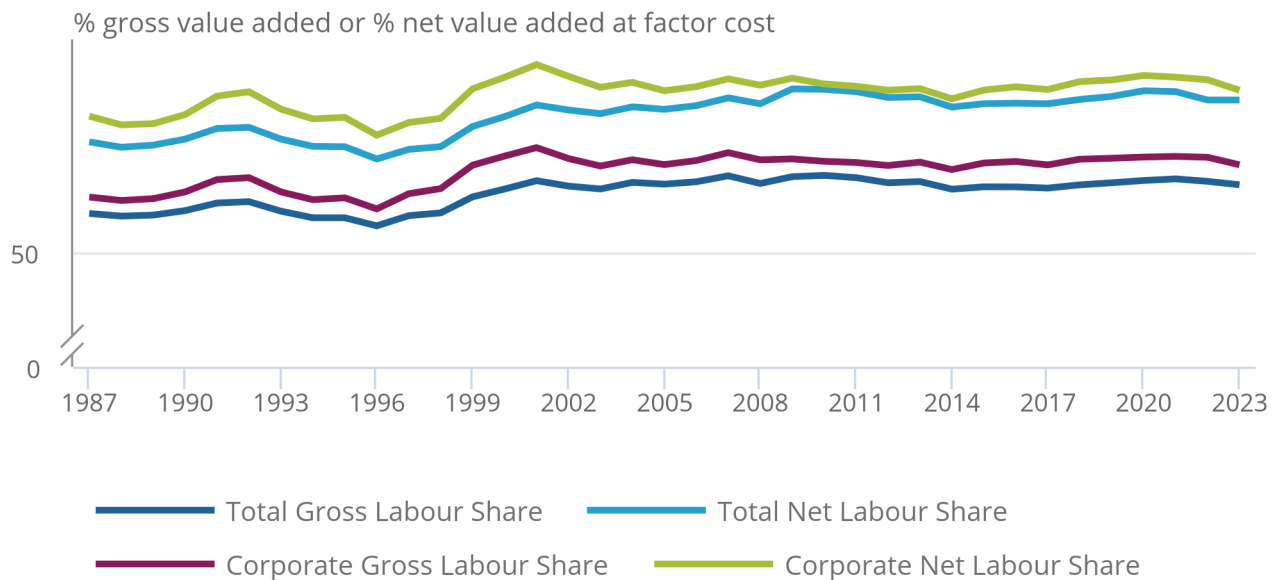
However, despite these differences, the overall trend in each of the four labour share measures follows the same trends as the measures presented in Figure 1, with the total increase in labour shares between 1996 and 2023 in the range of 5.8 to 8.3 percentage points.

**Figure 3: Corporate and net-of-depreciation measures of the labour share show an increase starting in 1997**

Corporate and net labour shares, UK, 1987 to 2023

Figure 3: Corporate and net-of-depreciation measures of the labour share show an increase starting in 1997

Corporate and net labour shares, UK, 1987 to 2023



Source: UK National Accounts, The Blue Book: 2024 from the Office for National Statistics

## International comparisons

Changes in the labour share since 1995 across G7 countries are presented in Figure 4 where the data time series for each country has been indexed so that its value in 1995 equals 100. The main observations are:



- Japanese and United States labour shares have continued to trend downwards, falling by around 5% and 10%, respectively between 1995 and 2023
- the labour share in the three main European economies, Germany, France and Italy, have been relatively stable, for the most part remaining in the range positive to negative 5% of the share in 1995
- the UK labour share was around 8% higher in 2023 than in 1995

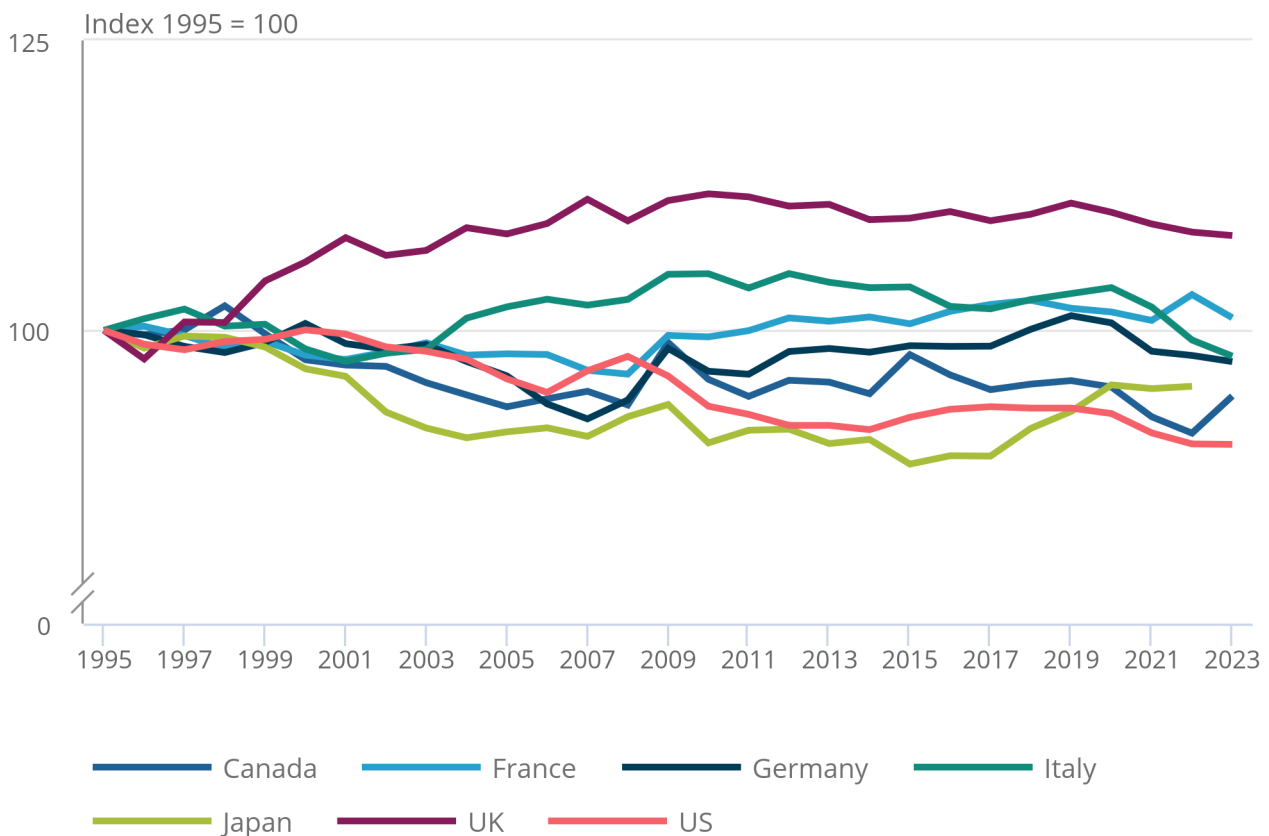
These international comparisons highlight the significance of the rise in the UK labour share since the mid-1990s. While the major part of this increase occurred between 1997 and 2001, the higher labour share has been subsequently maintained over the next two decades, while the labour share measures in other G7 countries have shown greater fluctuations.

**Figure 4: The UK labour share has shown a marked increase since the mid-1990s compared with other G7 countries**

Labour share index for G7 countries, 1995 to 2023

Figure 4: The UK labour share has shown a marked increase since the mid-1990s compared with other G7 countries

Labour share index for G7 countries, 1995 to 2023



Source: Data Explorer from the Organisation for Economic Co-operation and Development (OECD)

Notes:

1. Labour share for G7 countries calculated using Method 4 as for several countries there are not separate time series for gross operating surplus and mixed income.



### 3 . Accounting for the rise in the UK labour share

Accounting for the rise in the UK labour share since the mid-1990s can be investigated by looking at the changes in labour shares across industries.

Figure 5 shows the labour share in 1997 and 2022 for the major industry groups, where it can be seen that the labour share typically increased across all industries, except for production, construction, and government health and education.

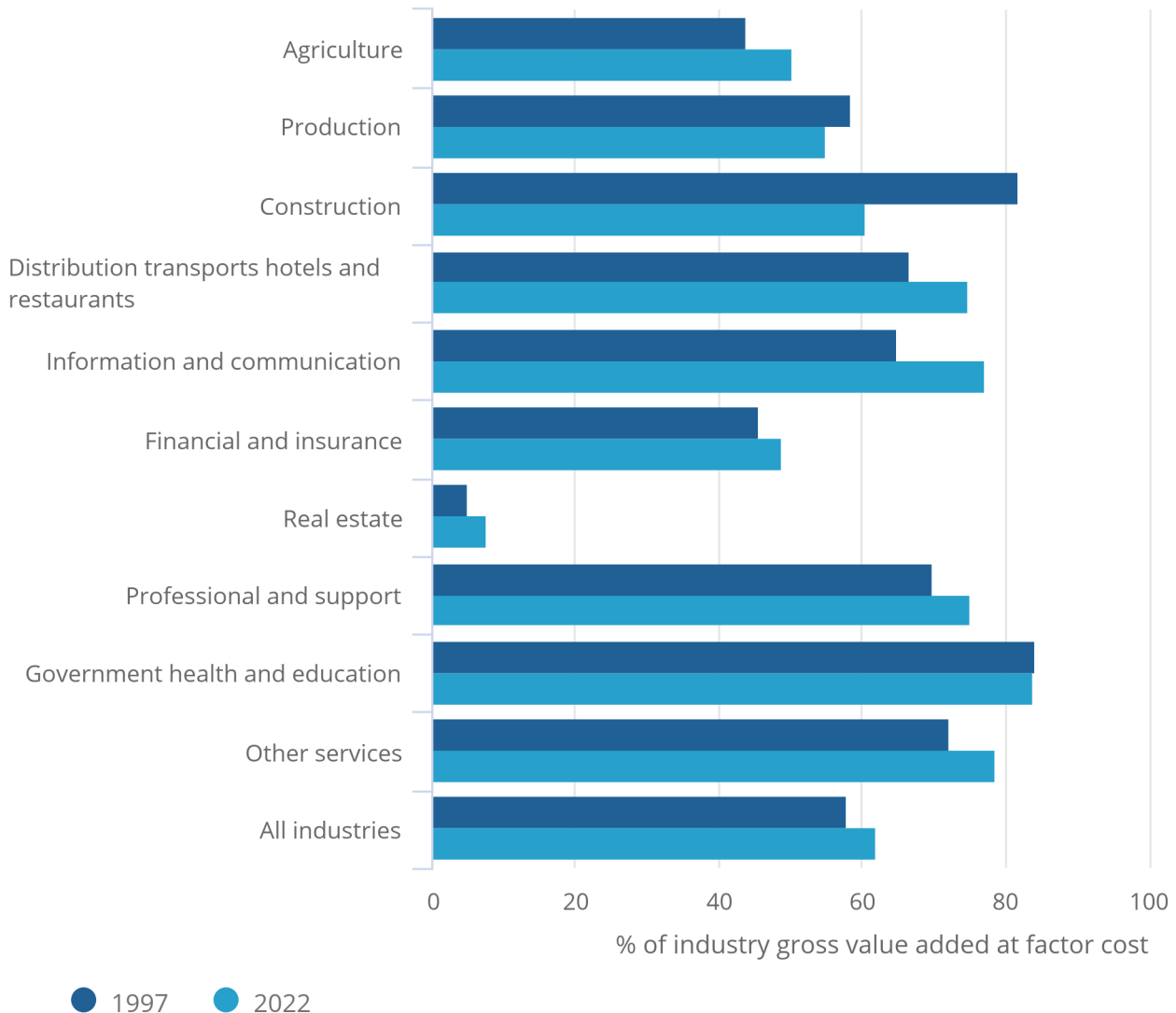
Figure 5 also shows how the labour share varies across industries. A potential factor explaining the overall change in the labour share may be compositional changes in the shares of each industry in total gross value added (GVA), for instance, a shift in the structure of the UK economy towards industries where the labour share is higher.

**Figure 5: The labour share has increased in most UK industries since 1997**

Industry labour shares, UK, 1997 and 2022

Figure 5: The labour share has increased in most UK industries since 1997

Industry labour shares, UK, 1997 and 2022



Source: UK National Accounts, The Blue Book: 2024 from the Office for National Statistics

**Notes:**

1. The increase in the “All industries” labour share in this chart is smaller than the reported increase in the UK labour share in Figure 1. This mainly reflects the availability of data for industrial analyses published in the Blue Book that starts in 1997. Therefore, these figures do not include the increase in the labour share between 1996 and 1997.

The total change in the labour share across all industries between 1997 and 2022 was 4.3 percentage points (an increase from 57.9% to 62.1%). Shift-share analysis is a simple technique that can break down the changes in an economic indicator into its sources of growth and decline. In this case, shift effects reflect the weighted contribution of changes in the labour share in each industry to the overall change in the labour share.

As Figure 6 shows, positive shift effects were recorded across all but one of the services industries, particularly distribution, transport, hotels and restaurants, and professional and support activities. There were negative shift effects in production and construction.

There are several factors that might account for rising labour share across the UK services industries:

- the introduction and relatively fast increase in the National Minimum Wage and National Living Wage; for more information see our [Low and high pay in the UK](#) statistical bulletin
- rising numbers of graduates and a significant wage premium for graduates over non-graduates; for more information see our [Graduates in the UK labour market](#) statistical bulletin and the Department for Education's [Graduate labour market statistics](#) publication
- a tight labour market consisting of low unemployment and labour hoarding resulting in stronger labour power in wage bargains; these factors are discussed in our [The employment-population ratio and changes in the UK labour market](#) article

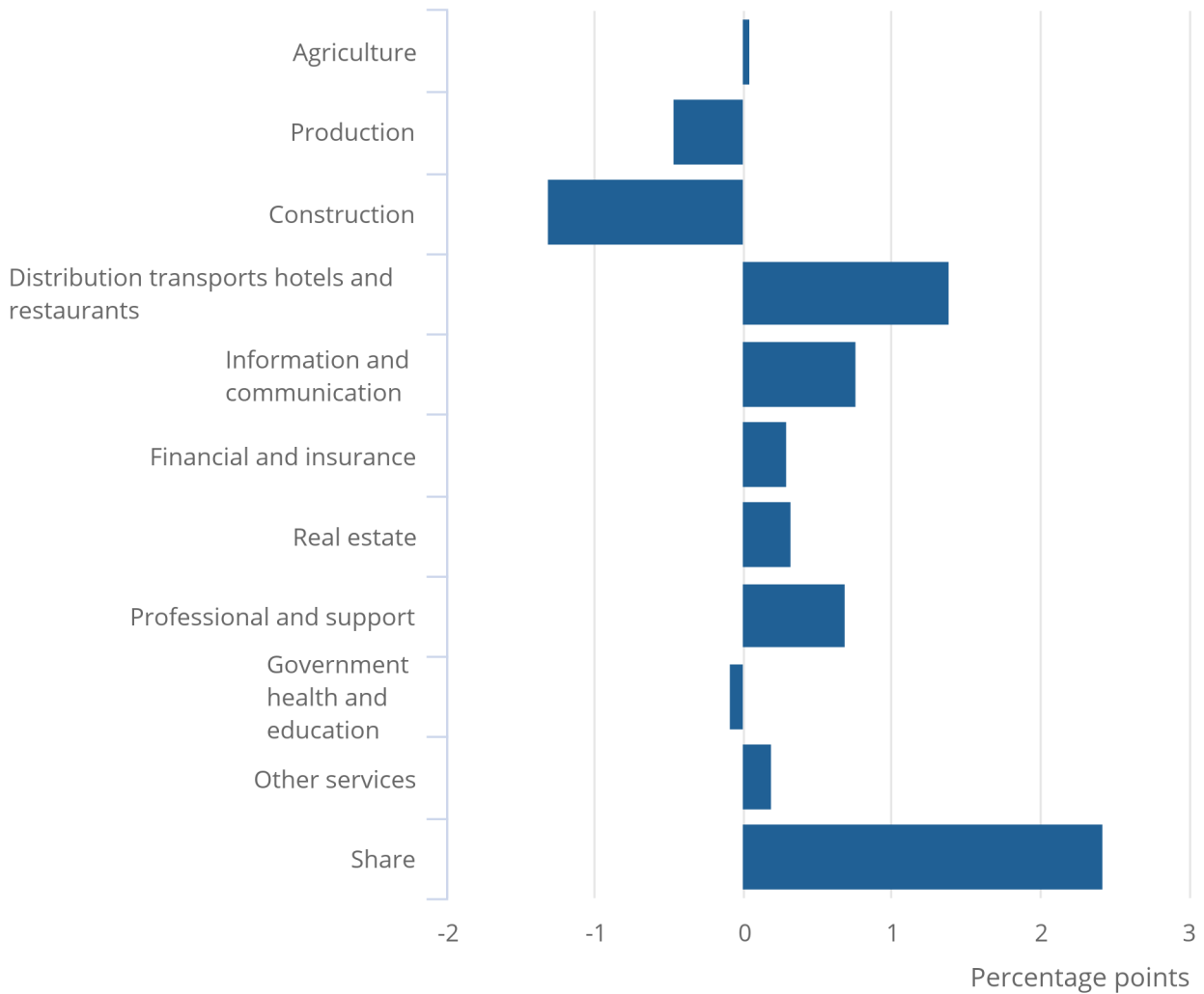
In contrast, share effects measure the impact of compositional changes on the all-industries labour share. Between 1997 and 2022, these were important, accounting for over half (2.4 percentage points) of the total increase in the all-industries labour share of 4.3 percentage points. This largely reflects a shift in relative size of industry GVA towards services activities where the labour share tends to be higher, particularly the professional and support, and the government, health, and education industries.

**Figure 6: Over half of the increase in the labour share is because of a shift in industrial structure to services**

The contribution of shift and share effects to the 4.3 percentage point rise in the all-industries labour share, UK, between 1997 and 2022

Figure 6: Over half of the increase in the labour share is because of a shift in industrial structure to services

The contribution of shift and share effects to the 4.3 percentage point rise in the all-industries labour share, UK, between 1997 and 2022



Source: UK National Accounts, The Blue Book: 2024 from the Office for National Statistics

## 4 . The labour share, productivity, the terms of trade and real wages

Over time, changes in the labour share reflect how the real average labour compensation per person in employment relates to:

- labour productivity measured in terms of real output per person in employment
- terms of trade, measured as the ratio of the gross domestic product (GDP) deflator to the household consumption deflator; this reflects the relative purchasing power of domestic income over goods and services in global markets

An improvement in either labour productivity or the terms of trade increases the scope to raise real labour compensation. However, the extent to which this changes relative to these two factors has implications for the labour share.

For instance, if real labour compensation increases at a faster pace than allowed for by changes in productivity and the terms of trade, the higher real wage is implicitly funded by a transfer from profits or capital income resulting in a rise in the labour share. The same is true in reverse, where slower growth in real labour compensation relative to labour productivity and the terms of trade would infer a transfer from workers to profits and a fall in the labour share.

In many advanced countries, with the United States the most notable example, the fall in the labour share since the 1980s has coincided with a decoupling of real average wages and labour productivity. The failure of real wage growth to keep pace with labour productivity growth has generally been attributed to the effects of globalisation and technology, and also the diminution of worker power.

However, a report from the Centre for Economic Performance on [Evidence for decoupling between pay and productivity in the UK \(PDF, 1.26MB\)](#) concludes the evidence for pay decoupling to be much weaker in the UK. Figure 7 shows the cumulative changes in the labour share, average real labour compensation, labour productivity and the terms of trade between 1997 and 2023. The main observations are:



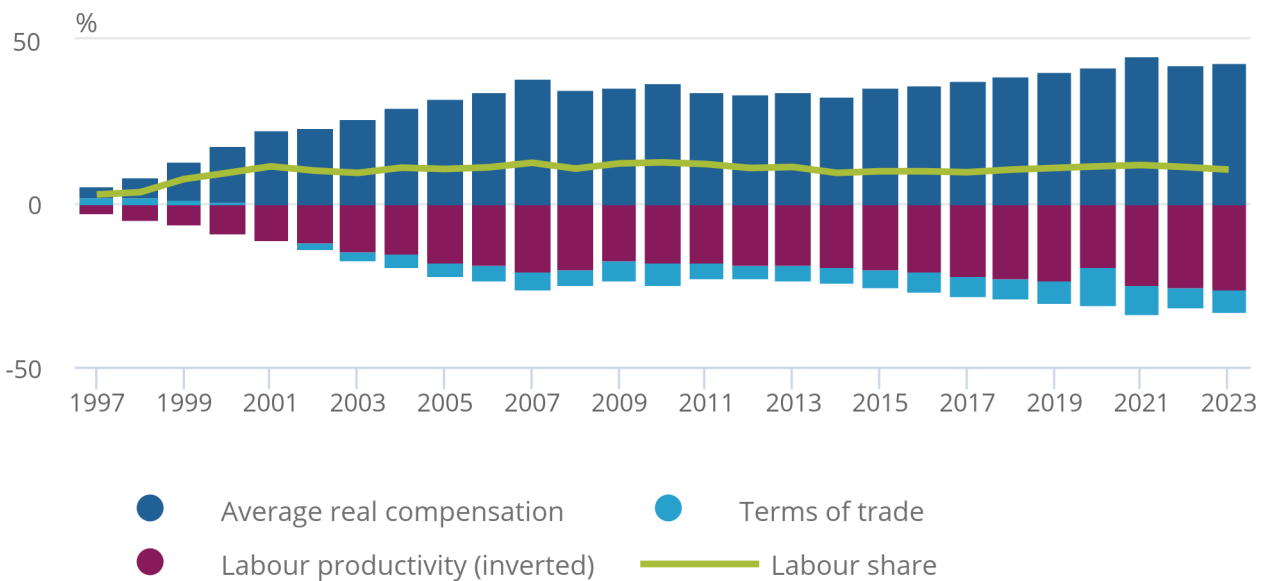
- real average labour compensation increased by a total of 43.0%
- labour productivity increased by a total of 26.1%
- the terms of trade improved by a total of 6.6%
- the labour share increased by a total of 10.2%

**Figure 7: Growth of real labour compensation has been faster than for labour productivity**

Accumulated growth in the labour share and its drivers since 1996, UK, 1997 to 2023

### Figure 7: Growth of real labour compensation has been faster than for labour productivity

Accumulated growth in the labour share and its drivers since 1996, UK, 1997 to 2023



Source: UK National Accounts, The Blue Book: 2024 from the Office for National Statistics

Between 1997 and 2023, the labour share increased by a total of 10.2% (approximately reflecting the 5.8 percentage point increase in the labour share from 53.8% in 1996 to 59.5% in 2023 shown for Method 5 Figure 1). Real average labour compensation grew by this amount in excess of the support to real wage growth from productivity growth and changes in the terms of trade.

Another way of stating this is that an improvement in the labour share has supported the growth of real average labour compensation in the UK over the last 25 years. In explaining this UK outcome, The Resolution Foundation's [Dead-end relationship: Exploring the link between productivity and workers' living standards](#) report attributes economy-wide factors including strong employment growth increasing worker power, the minimum wage and a large increase in employer pension contributions induced by auto-enrolment and the plugging of deficits in employer-sponsored pension schemes.

However, it should be noted that while the increase in labour share has supported the growth in real average labour incomes, if productivity growth had been faster, it would have been possible for real labour income to have increased by a greater amount even if the labour share had not increased, or had even fallen.

## 5 . Data on trends in the UK labour share

[UK National Accounts, The Blue Book: 2024](#)

Dataset | Released 31 October 2024

National accounts statistics including national and sector accounts, industrial analyses and environmental accounts.

[UK Economic Accounts](#)

Dataset | Released 30 September 2024

Quarterly estimates of national product, income and expenditure, sector accounts and balance of payments.

## 6 . Data sources and quality

Information about the compilation of the latest national accounts including quality and reliability issues can be found in the [Background notes](#) of the latest Blue Book.

## 7 . Related links

### [Estimating the impact of the self-employed in the labour share](#)

Article | Released 14 September 2018

Explores the labour share, considering the approaches used to adjust it for mixed income and international comparisons.

### [Employee workplace pensions in the UK: 2021 provisional and 2020 final results](#)

Bulletin | Released 20 April 2022

Membership to workplace pension arrangements for UK employees, using data from the Annual Survey of Hours and Earnings (ASHE).

### [Funded occupational pension schemes in the UK: October 2023 to March 2024](#)

Bulletin | Released 19 September 2024

Financial Survey of Pension Schemes (FSPS) results including membership, income and expenditure, transactions, assets and liabilities of pension schemes.

### [The employment-population ratio and changes in the UK labour market: 2008 to 2023](#)

Article | Released 28 March 2023

The ratio of employment to population is a useful metric for labour market analysis. This article focuses on changes in UK employment through the global financial crisis and the coronavirus (COVID-19) pandemic.

### [Productivity flash estimate and overview, UK: July to September 2024 and April to June 2024](#)

Article | Released 15 November 2024

Productivity flash estimates for Quarter 3 (July to September) 2024, based on the GDP first quarterly estimate and labour market statistics, and productivity overview for Quarter 2 (April to June) 2024.

### [Low and high pay in the UK: 2024](#)

Bulletin | Released 29 October 2024

The distribution of hourly earnings of high-paid and low-paid jobs and jobs paid below the National Minimum Wage.

### [Household income inequality, UK: financial year ending 2022](#)

Bulletin | Released 25 January 2023

Initial insight into main estimates of household incomes and inequality in the UK, with analysis of how these measures have changed over time accounting for inflation and household composition.

## 8 . Cite this article

Office for National Statistics (ONS), released 25 November 2024, ONS website, article, [Trends in the UK labour share: 1997 to 2023](#)