Office for National Statistics

Statistical bulletin

Earnings and employment from Pay As You Earn Real Time Information, UK: August 2023

Experimental monthly estimates of payrolled employees and their pay from HM Revenue and Customs' (HMRC's) Pay As You Earn (PAYE) Real Time Information (RTI) data. This is a joint release between HMRC and the Office for National Statistics (ONS).

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1 . Main points

- Early estimates for July 2023 indicate that the number of payrolled employees rose by 1.9% (578,000 employees) compared with July 2022; the number of payrolled employees rose by 4.2% (1,211,000 employees) since February 2020.

- Payrolled employment increased by 97,000 employees (0.3%) in July 2023 when compared with June 2023; this should be treated as a provisional estimate and is likely to be revised when more data are received next month.

- UK payrolled employee growth for June 2023 compared with May 2023 has been revised from a decrease of 9,000 reported in the last bulletin to an increase of 47,000; this is because of the incorporation of additional real time information (RTI) submissions into the statistics, which takes place every publication and reduces the need for imputation.

- Early estimates for July 2023 indicate that median monthly pay increased by 7.8% compared with July 2022, and increased by 22.3% compared with February 2020.

- Between July 2022 and July 2023, there was an increase of 15,000 payrolled employees aged under 25 years; during the same period, payrolled employees aged 35 to 49 years increased by 196,000.

- For Nomenclature of Territorial Units for Statistics (NUTS) 3 regions, annual growth in payrolled employees in July 2023 was the highest in Luton with a rise of 4.5%, and lowest in Camden and City of London with a fall of 0.5%.

- The increase in payrolled employees between July 2022 and July 2023 was largest in the health and social work sector with a rise of 214,000 employees, and smallest in the wholesale and retail sector with a fall of 10,000.

- This month, NUTS1 regions are further broken down by sectors in the supporting datasets for this bulletin; some sectors show similar growth rates to the region level, while others, such as accommodation and food service activities and transportation and storage, show moderate regional variation.

- Annual growth in median pay for employees in July 2023 was highest in the public administration sector with an increase of 14.0%, and lowest in the accommodation and food service activities sector with an increase of 5.6%; the growth in the public administration sector reflects the effects of the cost-of-living payment to civil servants, consisting of a one-off payment worth up to £1,500.

About the data in this release

Early estimates for July 2023 are provided to give an indication of the likely level of employees as well as median pay in the latest period. These early estimates are, on average, based on around 85% of information being available. They are of lower quality and will be subject to revision in next month's release when between 98% and 99% of data will be available. This work was introduced in April 2020 in response to the coronavirus (COVID-19) pandemic and methods will continue to be developed. A revisions triangle is available for employees and median pay at the UK level.

Statistics in this release are based on people who are employed in at least one job paid through Pay As You Earn (PAYE), and monthly estimates reflect the average of such people for each day of the calendar month. This follows the introduction of a new methodology for monthly earnings and employment estimates in December 2019, designed to better align with international guidelines for labour market statistics. This differs from the methodology used before December 2019, which produced statistics based on the total number of people paid in a particular time period.

2 . Payrolled employees

Early estimates for July 2023 indicate that there were 30.2 million payrolled employees (Figure 1), a rise of 1.9% compared with the same period of the previous year. This is a rise of 578,000 people over the 12-month period. Compared with the previous month, the number of payrolled employees increased by 0.3% in July 2023, which is equivalent to 97,000 people.

This monthly change of 97,000 should be treated as provisional, because it is based on an early estimate of July 2023 employees. More information on revisions can be found in [Section 11: Strengths and limitations](#).

When comparing the number of payrolled employees in June 2023 with the previous month, the number increased by 0.2%. This is revised upwards from the early estimate of a 0.0% increase reported in our previous [Earnings and employment from Pay As You Earn Real Time Information, UK: July 2023 bulletin](#).

Figure 1: The number of employees declined between February and November 2020, but now continues to rise in line with pre-coronavirus (COVID-19) trends

Payrolled employees, seasonally adjusted, UK, July 2014 to July 2023

Figure 1: The number of employees declined between February and November 2020, but now continues to rise in line with pre-coronavirus (COVID-19) trends

Payrolled employees, seasonally adjusted, UK, July 2014 to July 2023
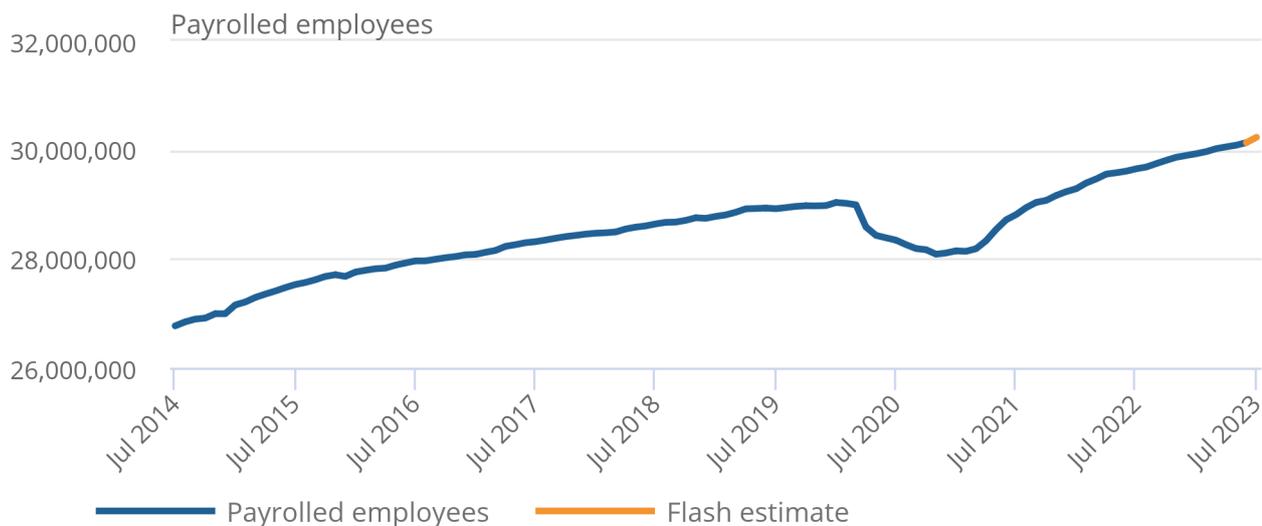
Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

The latest period, highlighted in orange, is based on early data and therefore is more likely to be subject to slightly more significant revisions.

1. The June 2023 figure is not a flash estimate of payrolled employees and is included purely for graphing purposes.

Annual growth in the number of employees remained broadly within a range of 1.0% to 1.5% from mid-2016 until 2019. Growth rates before mid-2016 were higher than 1.5% (Figure 2).

Starting around early 2019, employee growth began a slight downward trend. However, employee growth slowed more substantially past March 2020, coinciding with the coronavirus (COVID-19) pandemic, becoming negative in April 2020.

At the start of 2021, growth rates began to recover, and remained high as the labour market continued to recover from the effects of the pandemic. From April 2022, the annual growth rate has been falling. Through 2022, this fall would have been partially caused by the comparison against the increase in employee numbers from March 2021, which levelled off as we no longer compared against this higher baseline. However, growth rates continued to fall into 2023.

Figure 2: Growth in the number of payrolled employees became negative in 2020, but has since returned to positive growth

Percentage change on same month in previous year, seasonally adjusted, UK, July 2015 to July 2023

Figure 2: Growth in the number of payrolled employees became negative in 2020, but has since returned to positive growth

Percentage change on same month in previous year, seasonally adjusted, UK, July 2015 to July 2023

Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. The latest period, highlighted in orange, is based on early data and therefore is more likely to be subject to slightly more significant revisions.

2. The June 2023 figure is not a flash estimate of payrolled employees and is included purely for graphing purposes.

3 . Median monthly pay

Early estimates for July 2023 indicate that median monthly pay was £2,274, an increase of 7.8% compared with the same period of the previous year.

Figure 3: Median pay decreased sharply in April 2020, but has returned to the previous trend

Median pay per month, seasonally adjusted, UK, July 2014 to July 2023

Figure 3: Median pay decreased sharply in April 2020, but has returned to the previous trend

Median pay per month, seasonally adjusted, UK, July 2014 to July 2023
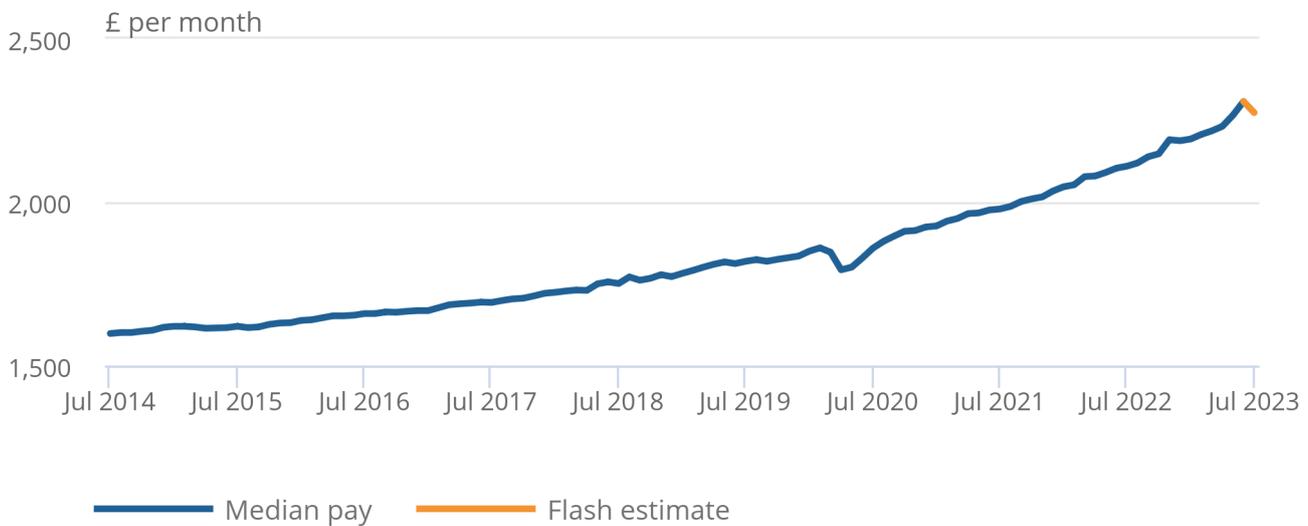
Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. The latest period, highlighted in orange, is based on early data and therefore is more likely to be subject to slightly more significant revisions.

2. The June 2023 figure is not a flash estimate of payrolled employees and is included purely for graphing purposes.

Following a general trend of increasing pay growth between mid-2015 and mid-2018, pay growth tended to fluctuate around 3.6% until 2020, when it became negative. This coincided with the coronavirus (COVID-19) pandemic and related economic and policy responses. From June 2020, median pay growth has been positive and is now above pre-pandemic (February 2020) levels. The high level of pay growth in April 2021 is attributed to the relatively high median pay in April 2021, combined with the suppressed level of median pay in April 2020 at the start of the pandemic.

Figure 4: The rate of growth in median pay fell between March and May 2020, but is now higher than the average growth before March 2020

Percentage change on same month in previous year, seasonally adjusted, UK, July 2015 to July 2023

Figure 4: The rate of growth in median pay fell between March and May 2020, but is now higher than the average growth before March 2020

Percentage change on same month in previous year, seasonally adjusted, UK, July 2015 to July 2023

Median pay growth — Flash estimate

Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. The latest period, highlighted in orange, is based on early data and therefore is more likely to be subject to slightly more significant revisions.

2. The June 2023 figure is not a flash estimate of payrolled employees and is included purely for graphing purposes.
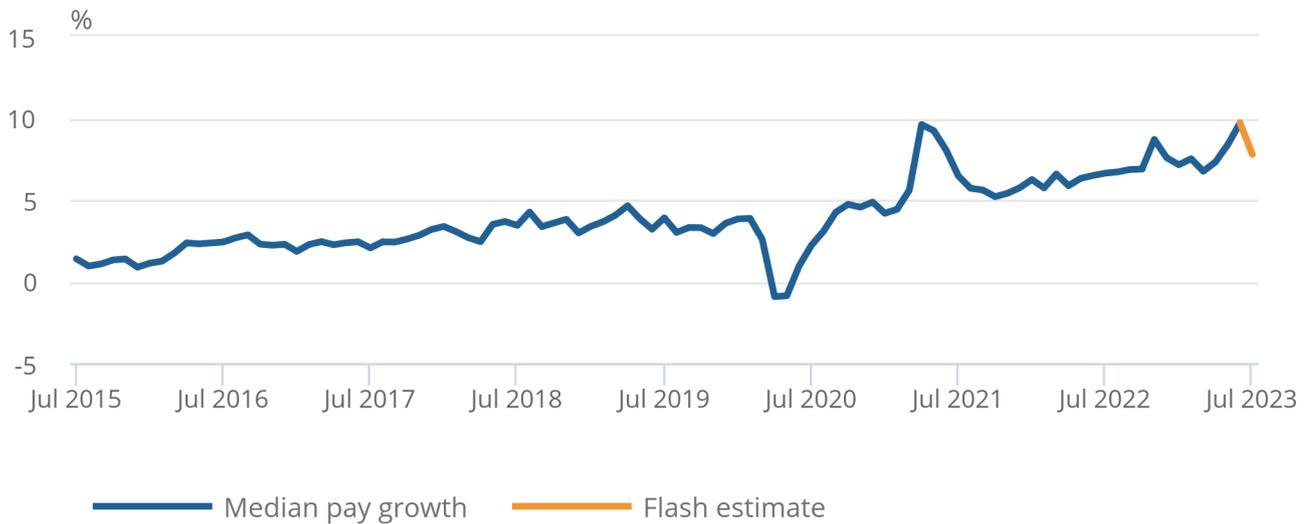
4 . Pay distribution

In the three months to June 2023, the 10th percentile of the monthly pay distribution was £748, the 90th percentile was £5,395, and the 99th percentile was £15,081 (Figure 5). This means that:

- 10% of payrolled employees earned equal to or less than £748 per month

- 90% of payrolled employees earned equal to or less than £5,395 per month

- 99% of payrolled employees earned equal to or less than £15,081 per month

Figure 5: 10% of employees earn less than £748 per month and 90% earn less than £5,395 per month

Pay per month, seasonally adjusted, UK, three months to September 2014 to three months to June 2023

Figure 5: 10% of employees earn less than £748 per month and 90% earn less than £5,395 per month

Pay per month, seasonally adjusted, UK, three months to September 2014 to three months to June 2023
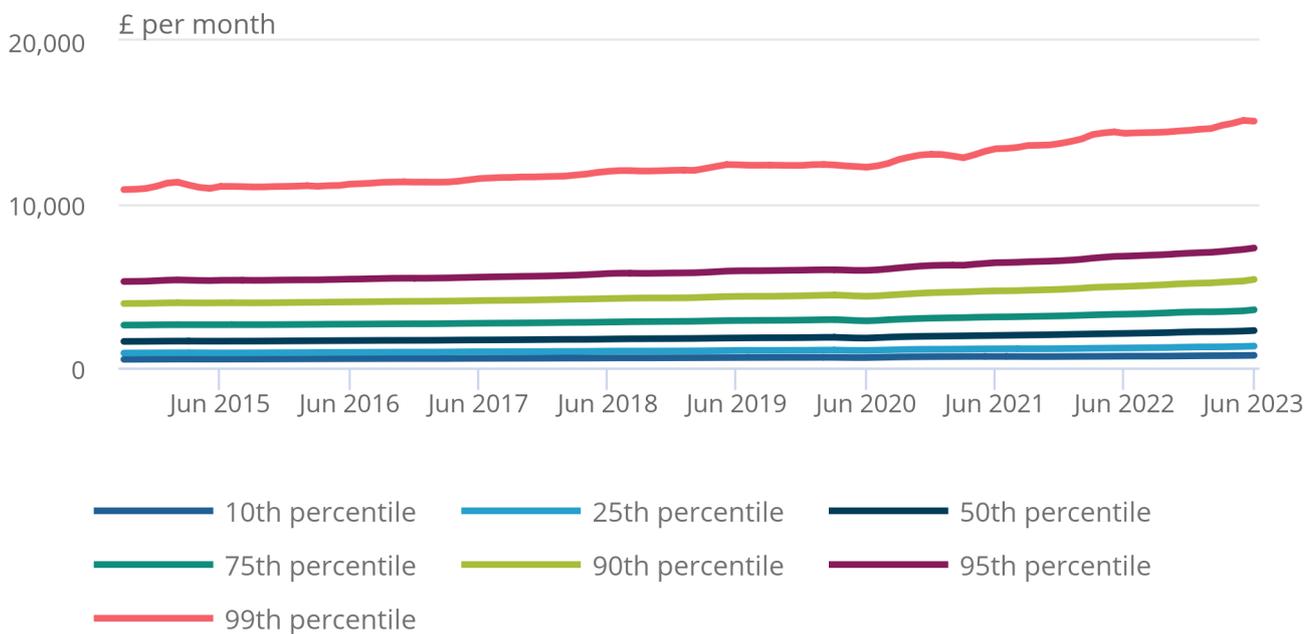
Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. Data for the 50th percentile (that is, the median) in this chart are based on three month moving averages. For this reason, they are not directly comparable with Figures 3 or 4 (which use data for a single month).

5 . Regional data

The regional figures in this bulletin are based on where employees live and not the location of their place of work. They include data for July 2023, and cover Nomenclature of Territorial Units for Statistics (NUTS): NUTS1, NUTS2 and NUTS3 regions.

Numbers of payrolled employees in the UK for the regions shown in Figure 6 ranged from 793,000 in Northern Ireland to 4,338,000 in London in July 2023.

All regions are now above pre-coronavirus (COVID-19) (February 2020) levels.

Figure 6: Regional employee growth fell across the UK over 2020 and 2021, but subsequently recovered across all regions

Percentage change on same month in previous year, seasonally adjusted, UK, January 2017 to July 2023

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

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London and Northern Ireland experienced higher growth than the UK average between January 2017 and early 2020, while the North East and Scotland experienced lower growth than the UK overall. Employee numbers within NUTS1, NUTS2, and NUTS3 regions are available in the accompanying datasets.

Over the course of the pandemic, all regions' growth rates followed a similar pattern. Growth rapidly declined and became negative in April 2020, but from the middle of 2021, it began to recover. As regions have caught up with their pre-pandemic level, these high growth rates have started to fall back to rates seen historically before the pandemic.

Comparing July 2023 with the same period of the previous year for NUTS1 regions, changes in payrolled employees ranged from a 2.4% increase in London to a 1.5% increase in Scotland.

This month, NUTS1 regions are further broken down by sectors in the supporting datasets for this bulletin. In the latest figures, some sectors show similar growth rates to the region level, while others, such as accommodation and food service activities and transportation and storage, show moderate regional variation (Figure 7).

For accommodation and food service activities, all regions saw a drop in growth around the beginning of the pandemic, with London experiencing the steepest decline. Since then, growth rates have recovered in all regions. In some areas, such as the North and Midlands, growth rates now appear to be stabilising, while growth in other areas, such as Wales, Scotland and Northern Ireland, continue to increase. Comparing July 2023 with the same period of the previous year, changes in payrolled employees for accommodation and food service activities ranged from a 2.5% decrease in the North East to a 5.2% increase in London.

For transportation and storage, employee growth has been different across regions. London, the South East, the South West, the North West and Scotland experienced negative growth after April 2020, but this largely returned to positive growth in the later half of 2021.

Figure 7: Employee growth varies by region for sectors such as accommodation and food service activities and transportation and storage

Percentage change on same month in previous year, seasonally adjusted, UK, January 2017 to July 2023

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

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Examining NUTS3 regions, Camden and City of London experienced a decrease of 0.5% in payrolled employees in comparison with July 2022, and Luton experienced an increase of 4.5% (Figure 8).

Figure 8: Growth in payrolled employees varies across the UK

Percentage change on same month in previous year, seasonally adjusted, UK, NUTS3 level, July 2023

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

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Inner London generally differs from Outer London, with median pay ranging from £2,257 in Enfield to £3,545 in Wandsworth. Median pay in July 2023 for London as a whole was £2,732. Median pay across the NUTS3 regions of the UK in July 2023 ranged from £1,927 in Leicester to £3,545 in Wandsworth (Figure 9).

Figure 9: Median pay varies across the UK

Median pay, seasonally adjusted, UK, NUTS3 level, July 2023

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

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6 . Industry data

The industrial sectors in this bulletin are based on the UK Standard Industrial Classification (SIC) codes, as defined by the Office for National Statistics (ONS). These codes have been determined from both the most recent Inter-Departmental Business Register (IDBR) and data from Companies House for each Pay As You Earn (PAYE) enterprise. The findings from the 14 largest sectors are presented. The seven smaller sectors have been removed from the bulletin for presentational purposes, but their estimates are available in the accompanying datasets.

The three largest sectors – wholesale and retail, health and social work, and education – account for around 40% of UK employees. These three sectors combined with administrative and support services; manufacturing; professional, scientific and technical; and accommodation and food service activities account for more than 70% of UK employees.

Since January 2017, employee growth has not been even across sectors (Figure 10). Sectors such as construction, transportation and storage, and information and communication experienced higher growth than the UK average between January 2017 and early 2020. Sectors such as manufacturing, and wholesale and retail experienced lower growth than the UK overall.

All sectors highlighted experienced a decrease in employee growth around April 2020, with the smallest decrease being in health and social work.

Public administration and defence, and health and social work saw early recoveries in their growth rates, as did administrative and support services, and education from early 2021 onwards.

When comparing early estimates for July 2023 with the same period of the previous year, percentage changes in payrolled employees ranged from negative 0.2% in wholesale and retail to positive 5.3% in health and social work.

Figure 10: Employee growth has been very different across sectors

Percentage change on same month in previous year, seasonally adjusted, UK, January 2017 to July 2023

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

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The increase in payrolled employees between July 2022 and July 2023 was largest in the health and social work sector (a rise of 214,000 employees) and smallest in the wholesale and retail sector (a fall of 10,000 employees).

Figure 11: The health and social work sector has seen the greatest increase in payrolled employees since July 2022

Payrolled employees, absolute change on July 2022, seasonally adjusted, UK, July 2023

Figure 11: The health and social work sector has seen the greatest increase in payrolled employees since July 2022

Payrolled employees, absolute change on July 2022, seasonally adjusted, UK, July 2023
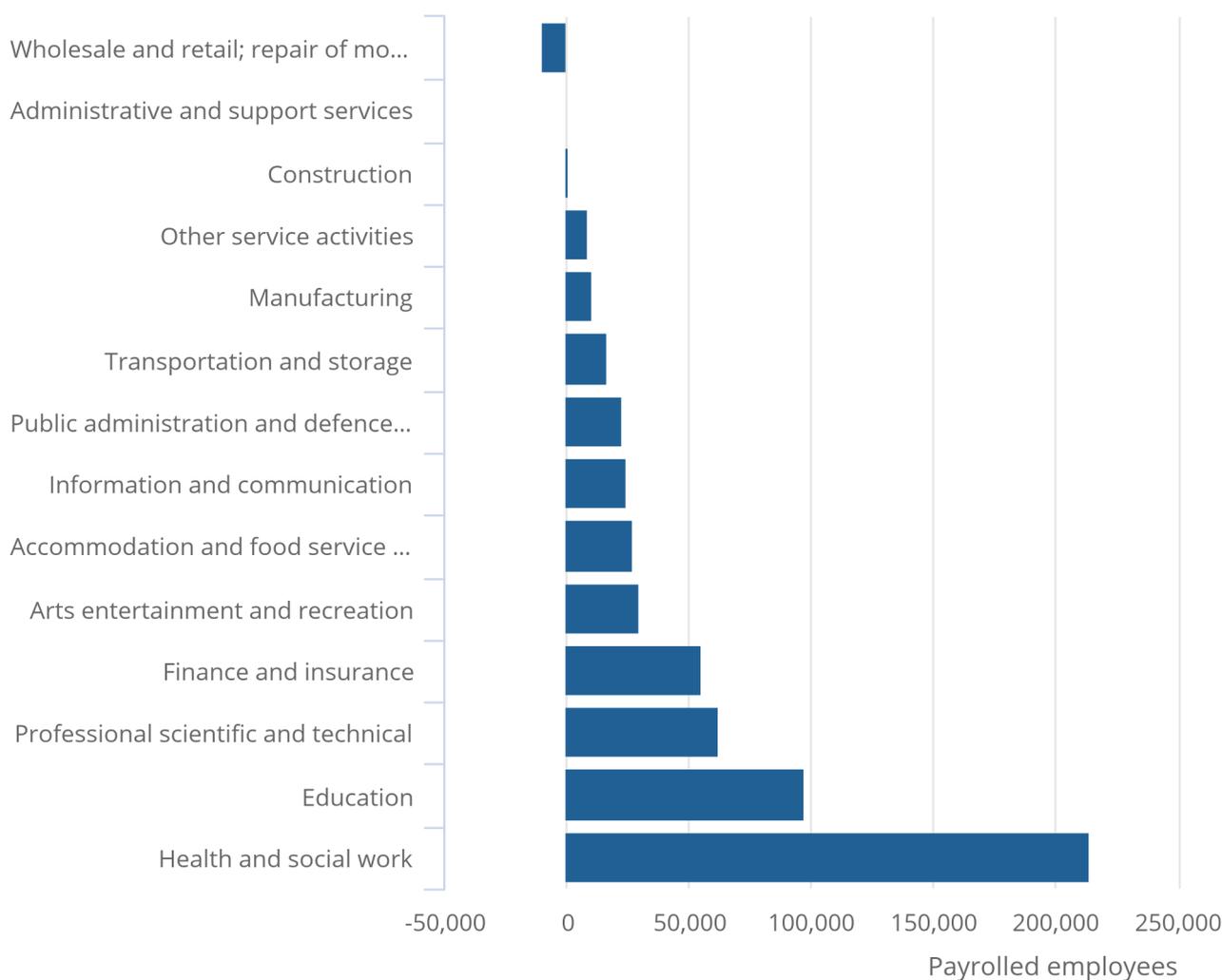
Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

Median pay in July 2023 across the highlighted sectors ranged from £1,173 in the accommodation and food service activities sector to £3,770 in finance and insurance (Figure 12).

Figure 12: Median pay varies by industry

Median pay, seasonally adjusted, UK, July 2023

Figure 12: Median pay varies by industry
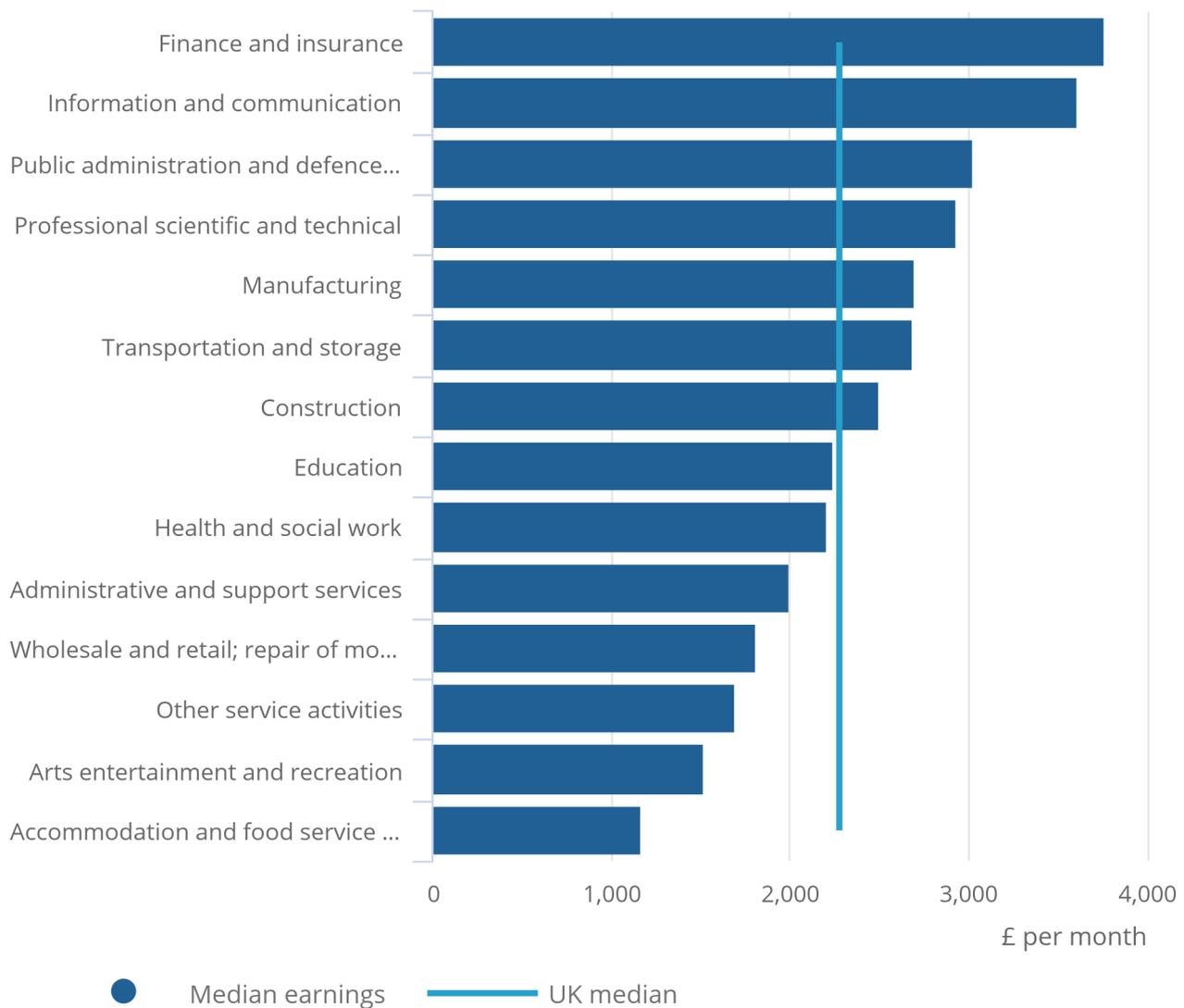
Median pay, seasonally adjusted, UK, July 2023

Median earnings •   **UK median** ——

Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

Compared with the same month in the previous year, median pay grew fastest in the public administration sector, at positive 14.0% (Figure 13), and slowest in the accommodation and food service activities sector, at positive 5.6%. The growth in the public administration sector reflects the effects of the cost-of living payment in July 2023 to civil service workers, consisting of a one-off payment worth up to £1,500.

From June 2023, NHS workers started to receive a pay rise, following an agreed pay offer from the government to eligible workers on the Agenda for Change contract. As well as a consolidated pay-rise of 5%, which was backdated to April, a one-off bonus worth at least £1,250 per person was included in this payment. The pay offer for 2022 was paid to most NHS workers in September 2022, so the current growth in the health and social work sector will include the effect of the pay offers for both 2022 and 2023.

Estimates of mean pay for each sector are available in the [accompanying datasets](#).

Figure 13: Median pay increased most in the public administration sector

Percentage change on same month in previous year, seasonally adjusted, UK, July 2023

Figure 13: Median pay increased most in the public administration sector

Percentage change on same month in previous year, seasonally adjusted, UK, July 2023
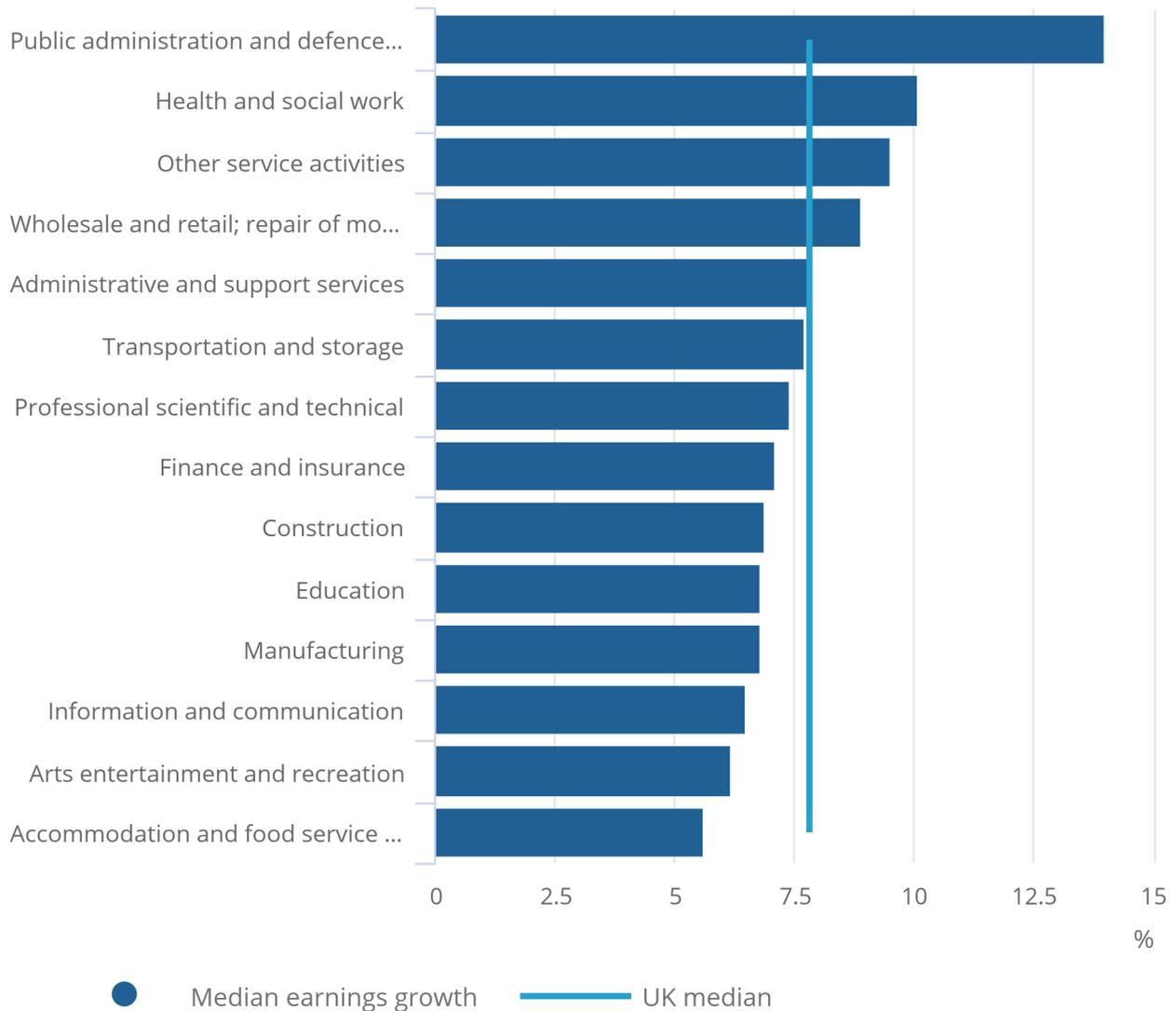
Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

2. Changes in growth rates are affected by changes in the base period (a year ago) as well as changes in the latest period.

7 . Age data

The age figures in this bulletin are calculated based on individuals' age at the time they receive a payment.

Of the 30.2 million payrolled employees in the UK in July 2023, 94.5% are aged 18 to 64 years.

Between July 2022 and July 2023, there was an increase of 15,000 payrolled employees aged under 25 years. During the same period, payrolled employees aged 35 to 49 years increased by 196,000.

Figure 14: The 35 to 49 years age group has seen the greatest increase in payrolled employees since July 2022

Payrolled employees, absolute change on July 2022, seasonally adjusted, UK, July 2023

Figure 14: The 35 to 49 years age group has seen the greatest increase in payrolled employees since July 2022

Payrolled employees, absolute change on July 2022, seasonally adjusted, UK, July 2023
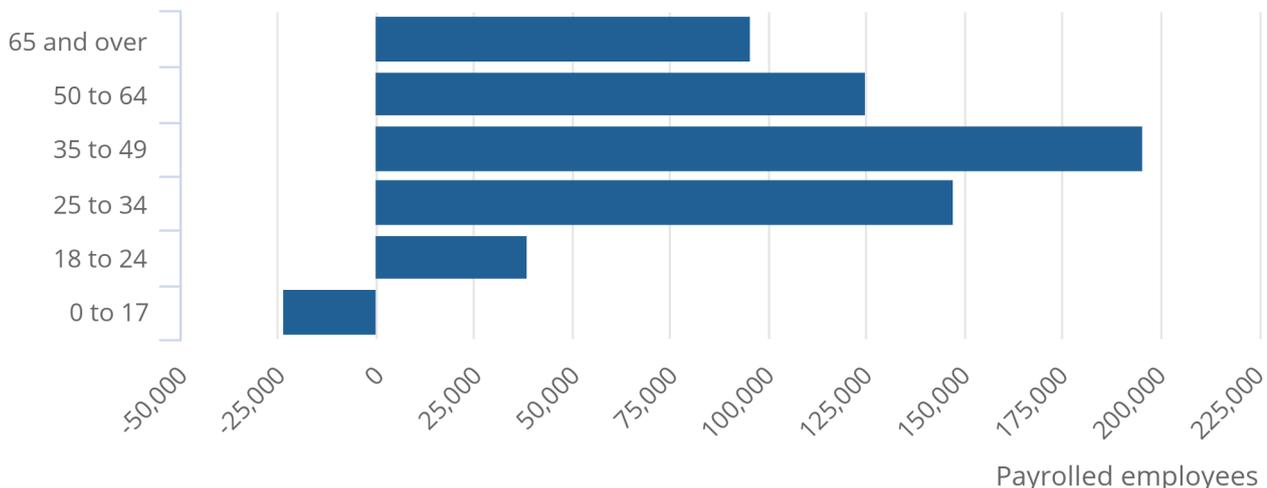
Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

Since 2019, the number of payrolled employees aged 65 years and over has increased at a faster rate than the UK as a whole, with employee growth peaking at 10.7% in January 2020 (Figure 15). This higher growth coincides with the phased increase in State Pension age between March 2019 and September 2020 for men and women aged 65 to 66 years. While growth rates fell in this age group during 2020, coinciding with the coronavirus (COVID-19) pandemic, they have now returned to above the UK average.

In contrast, growth in payrolled employees aged under 25 years has undergone a long-term decline since 2017. These age groups saw large declines in growth rates during 2020, much steeper than those seen in the UK as a whole. Both groups have since seen positive growth rates, with employee growth peaking in those aged under 18 years at 74.9% in March 2022. However, this growth has declined in recent months.

Figure 15: Employee growth fell more sharply in younger age groups, but has risen more recently

Percentage change on same month in previous year, seasonally adjusted, UK, January 2017 to July 2023

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

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Median pay in July 2023 ranged from £401 for those aged under 18 years to £2,660 for those aged 35 to 49 years (Figure 16). Overall, median pay is higher in the central age bands of those studied.

Figure 16: Median pay varies by age

Median pay, seasonally adjusted, UK, July 2023

Figure 16: Median pay varies by age
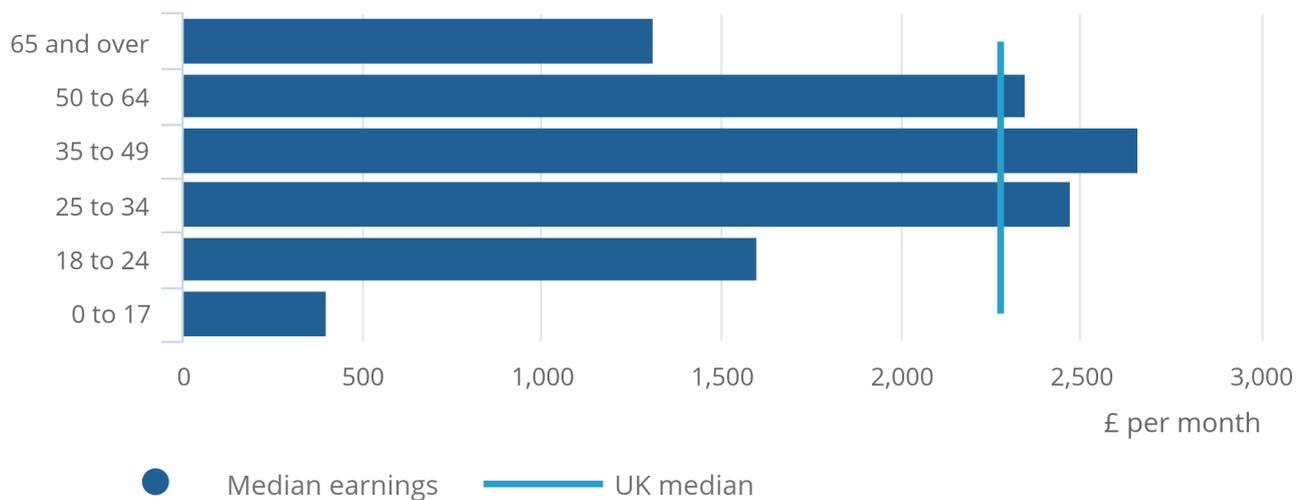
Median pay, seasonally adjusted, UK, July 2023

Source: Pay As You Earn Real Time Information from HM Revenue and Customs

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.

8 . Earnings and employment data

[Earnings and employment from Pay As You Earn Real Time Information, non-seasonally adjusted](#)
Dataset | Released 15 August 2023
Earnings and employment statistics from Pay As You Earn (PAYE) Real Time Information (RTI) (Experimental Statistics), non-seasonally adjusted.

[Earnings and employment from Pay As You Earn Real Time Information, revision triangle](#)
Dataset | Released 15 August 2023
Revisions of earnings and employment statistics from Pay As You Earn (PAYE) Real Time Information (RTI) (Experimental Statistics).

[Earnings and employment from Pay As You Earn Real Time Information, seasonally adjusted](#)
Dataset | Released 15 August 2023
Earnings and employment statistics from Pay As You Earn (PAYE) Real Time Information (RTI) (Experimental Statistics), seasonally adjusted.

9 . Glossary

Median monthly pay

Median monthly pay shows what a person in the middle of all employees would earn each month. The median pay is generally considered to be a more accurate reflection of the "average wage" because it discounts the extremes at either end of the scale.

National Minimum Wage and National Living Wage

The National Minimum Wage (NMW) is a minimum amount per hour that most workers in the UK are entitled to be payrolled. There are different rates of minimum wage depending on a worker's age and whether they are an apprentice. The NMW applies to employees aged 16 to 24 years. The government's National Living Wage (NLW) was introduced on 1 April 2016 and applies to employees aged 25 years and over. See current and previous rates for the NMW and NLW on the government website.

Pay As You Earn

Pay As You Earn (PAYE) is the system employers and pension providers use to take Income Tax and National Insurance contributions before they pay wages or pensions to employees and pensioners. It was introduced in 1944 and is now the way most employees pay Income Tax in the UK. This publication relates to employees only and not pensioners.

10 . Measuring the data

Data source and collection

The data for this release come from HM Revenue and Customs' (HMRC's) Pay As You Earn (PAYE) Real Time Information (RTI) system. They cover the whole population rather than a sample of people or companies, and they will allow for more detailed estimates of the population. The release is classed as Experimental Statistics as the methodologies used to produce the statistics are still in their development phase. As a result, the series are subject to revisions.

HM Revenue & Customs

Coverage

This publication covers employees payrolled by employers only. It does not cover self-employment income or income from other sources such as pensions, property rental and investments. Where individuals have multiple sources of income, only income from employers is included.

The figures in this release are for the period July 2014 to July 2023 and are seasonally adjusted.

Upcoming changes

We reported that in our October 2022 release, we would be making a change to update the seasonal adjustment model used in the publication and supporting datasets. In updating the model, we have found issues in some of the series that prevent the seasonal adjustment model being applied. To ensure consistency throughout the publication, we have delayed the update across all series until this issue can be resolved. We hope to implement the updated model in full in future publications.

Please contact us by email if you would like to offer feedback on how the contents can be improved in the future.

Methodology

An accompanying article contains more information on the calendarisation and imputation methodologies used in this bulletin, alongside comparisons with other earnings and employment statistics and possible quality improvements in the future.

11 . Strengths and limitations

Pre-release data

HM Revenue and Customs (HMRC) grants pre-release access to official statistics publications. As this is a joint release, and in accordance with the HMRC policy, pre-release access has been granted to a number of people to enable the preparation of statistical publications and ministerial briefing. Further details, including a list of those granted access to official statistics by HMRC, can be found on their website.

Experimental Statistics status

This is a joint experimental release between HMRC and the Office for National Statistics (ONS). The existing monthly publications produced by the ONS remain the primary National Statistics for the labour market. The intention is that these new statistics will also be updated on a monthly basis.

The release is classed as Experimental Statistics as the methodologies used to produce the statistics are still in their development phase. This does not mean that the statistics are of low quality, but it does mean that the statistics are new and still being developed. As the methodologies are refined and improved, there may be revisions to these statistics.

Rather than waiting until the development work has been completed, the statistics are being published now to involve potential users in developing the statistics. We hope that this encourages users to provide us with their thoughts and suggestions on how useful the statistics are and how we can improve them. You can send us your comments by email.

Strengths of the data

As Pay As You Earn (PAYE) Real Time Information (RTI) data cover the whole population, rather than a sample of people or companies, we are able to use these to produce estimates for geographic areas and other more detailed breakdowns of the population. The methods for producing such breakdowns are under development and we expect to include further statistics in a future release. These statistics can help inform decision-making across the country. They also have the potential to provide more timely estimates than existing measures.

These statistics also have the potential to replace some of those based on surveys, which could reduce the burden on businesses needing to fill in statistical surveys.

Industry Sector Classifications

The industrial sectors in this bulletin are based on the UK Standard Industrial Classification (SIC) codes, as defined by the Office for National Statistics (ONS). These codes have been determined from both the most recent Inter-Departmental Business Register (IDBR) and data from Companies House for each Pay As You Earn (PAYE) enterprise.

Large enterprises that cover multiple SIC codes are classified into a single SIC code based on the relative number of employees in each SIC code. Changes to the proportion of employees across SIC codes in large enterprises can result in the enterprise being reclassified to a different SIC code. To obtain the SIC code, we link to the most recent quarterly versions of the IDBR. Once a year, in the month we refresh data for the whole series, the IDBR link is refreshed using the most recent version available, and any reclassifications are then used for the entirety of the time series until the next year.

This means that sector level time series represent the current employers classified in each sector and are less likely to be distorted by employers being reclassified at the enterprise level because of small changes at the lower unit level. However, it also means that these time series may be revised between publications and, in the historical sections of the time series, employers are classified in sectors that they were not classified in at that point in time. However, this method should minimise discrepancies in the data caused by reclassifications and should more easily allow the tracking of job movements between sectors.

Imputation and revisions

RTI data used in this release are extracted in the weeks following the end of the latest reference month. For some individuals, this means payments relating to work done in recent reference months are yet to be received. Rather than wait until all payment returns have been received, we produce timelier measures by imputing the values for missing returns.

For the latest reference month, around 15% of the data are imputed. We refer to this as the "flash" or "early" estimate in the bulletin, as this figure is the most subject to revision as payment returns are received and the imputed payments replaced with actual data.

From our July 2022 publication, two changes were made to the imputation model. A seasonal factor was incorporated into the imputation model. The model was also made more responsive to recent changes to the labour market that would affect the likelihood of a payment existing. The latter change in particular should reduce the scale of revisions seen to the "flash" estimate, but cannot eliminate revisions completely.

Earlier months also contain some imputed data. Some payment frequencies mean that we have not received the relevant payment data more than a month after the reference period. Also, in some circumstances, returns might be submitted late. Therefore, earlier months are also subject to revision, but these revisions are likely to be much smaller because the level of imputation is smaller. The proportion of imputed data for a reference month two months before data extraction is around 1% to 2% of the data.

For the majority of months, post-flash revisions will occur in small amounts gradually each month as more submissions are received. However, all RTI submissions must be received before the end of the tax year. Therefore, for months close to the end of the tax year, these submissions and associated minor revisions that would have accumulated through the year instead need to be received all at once in the final submissions of the tax year. The months of January and February will be most affected by this and see sharper non-flash revisions at the end of the tax year if the imputed submissions are not received by that point. From July 2022, changes were incorporated into the imputation model to try to control for these seasonal differences, as well as other seasonal factors that might affect whether submissions are received through different points of the year.

The seasonal adjustment model will also update each month as the model is refined on the latest data available. These adjustments will appear as revisions in the seasonally adjusted data, and in the supporting seasonally adjusted revisions triangle.

Starting with the December 2020 publication, we introduced a new revisions policy. For each publication, we incorporate new input data only for the current tax year and the previous tax year. Revisions to estimates can potentially be made for up to the last two years as data can continue to be received, though updates to data outside of the most recent tax year are minimal.

Changes to the seasonally adjusted data also occur earlier than this limit, as the seasonal adjustment model is refined. The benefit of introducing this revisions policy is that we can use the processing time saved to produce and publish more detailed breakdowns. We capture any new input data referencing earlier years by incorporating data for the whole time series once a year.

Seasonal adjustment

The seasonal adjustment applied in this bulletin follows established best practice. This approach assumes that any seasonal patterns remain broadly consistent over time. If the seasonal pattern changes in strength, this will be represented as greater volatility in the seasonally adjusted figures. Both the seasonal and non-seasonally adjusted datasets are released alongside this bulletin.

Differences compared with the Labour Force Survey and Average Weekly Earnings statistics

Further information about the methodology used and comparisons with the ONS's Labour Force Survey (LFS) and Average Weekly Earnings can be found in our New methods for monthly earnings and employment estimates from Pay As You Earn Real Time Information (PAYE RTI) data: December 2019 methodology.

The strengths and weaknesses of these sources and other labour market data sources are shown in our Comparison of labour market data sources methodology, including the advantages of new administrative data sources and limitations of some of our published figures.

12 . Related links

Labour market overview: August 2023
Bulletin | Released 15 August 2023
Estimates of employment, unemployment, economic inactivity and other employment-related statistics for the UK.

Employment in the UK: August 2023
Bulletin | Released 15 August 2023
Estimates of employment, unemployment and economic inactivity for the UK.

Labour market in the regions of the UK: August 2023
Bulletin | Released 15 August 2023
Regional breakdowns of changes in UK employment, unemployment and economic inactivity.

Average weekly earnings in Great Britain: August 2023
Bulletin | Released 15 August 2023
Estimates of growth in earnings for employees before tax and other deductions from pay.

Vacancies and jobs in the UK: August 2023
Bulletin | Released 15 August 2023
Estimates of the number of vacancies and jobs for the UK.

13 . Cite this statistical bulletin

Office for National Statistics (ONS) and HM Revenue and Customs (HMRC), released 15 August 2023, ONS website, statistical bulletin, Earnings and employment from Pay As You Earn Real Time Information, UK: August 2023

PAYROLLED EMPLOYEES

1 Payrolled employee counts from PAYE RTI

	Payrolled employees
	UK, all industries, seasonally adjusted
Period	Payrolled employees
July 2014	26,768,287
July 2015	27,526,865
July 2016	27,960,737
July 2017	28,313,909
July 2018	28,640,037
July 2019	28,919,381
July 2020	28,341,800
July 2021	28,811,300
July 2022	29,652,058
August 2022	29,684,228
September 2022	29,747,408
October 2022	29,807,851
November 2022	29,863,747
December 2022	29,896,953
January 2023	29,928,899
February 2023	29,967,925
March 2023	30,022,660
April 2023	30,055,109
May 2023	30,085,698
June 2023	30,133,017
July 2023	30,230,246
Change on year	578,188
Change %	1.9

Source: PAYE RTI

1. Figures for Jul 2023 are early estimates and are more likely to be subject to more significant revisions.

2. These data are experimental statistics.

3. The number of payrolled employees here is defined as the number of people receiving paid renumeration included in PAYE RTI within the reference period,

including people who have not done work but are an employee - such as those on paid leave.

4. Values for the month are an average of employee counts in each day of the month. It is a measure of people who are payrolled employees,

as opposed to a measure of employee jobs.

5. These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.

6. PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.

7. Incomes and employments are allocated to regions and countries according to the residence of the recipient.

8. Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.

9. These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.

10. Figures have been rounded to the nearest £ or unit.

11. Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.

12. Pay figures are based on gross earnings.

MEDIAN PAY

2 Median monthly pay from PAYE RTI

Period	£ per month
	UK, all industries, seasonally adjusted
Period	Median pay
July 2014	1,598
July 2015	1,620
July 2016	1,659
July 2017	1,693
July 2018	1,751
July 2019	1,819
July 2020	1,859
July 2021	1,979
July 2022	2,110
August 2022	2,120
September 2022	2,139
October 2022	2,148
November 2022	2,191
December 2022	2,188
January 2023	2,193
February 2023	2,207
March 2023	2,218
April 2023	2,232
May 2023	2,266
June 2023	2,308
July 2023	2,274
Change on year	164
Change %	7.8

Source: PAYE RTI

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MEAN PAY

3 Mean monthly pay from PAYE RTI

	£ per month
	UK, all industries, seasonally adjusted
Period	Mean pay
June 2015	2,222
June 2016	2,268
June 2017	2,332
June 2018	2,420
June 2019	2,486
June 2020	2,488
June 2021	2,694
June 2022	2,861
July 2022	2,865
August 2022	2,878
September 2022	2,899
October 2022	2,914
November 2022	2,979
December 2022	2,960
January 2023	2,970
February 2023	3,011
March 2023	3,067
April 2023	3,018
May 2023	3,058
June 2023	3,130
Change on year	269
Change %	9.4

Source: PAYE RTI

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AGGREGATE PAY

4 Aggregate monthly pay from PAYE RTI

£ per month

UK, all industries, seasonally adjusted

Period	Aggregate pay
June 2015	61,027,083,617
June 2016	63,341,982,248
June 2017	65,974,362,523
June 2018	69,230,567,832
June 2019	71,911,384,295
June 2020	70,625,319,773
June 2021	77,362,509,635
June 2022	84,720,025,499
July 2022	84,939,221,677
August 2022	85,430,133,191
September 2022	86,229,983,994
October 2022	86,873,162,915
November 2022	88,958,928,458
December 2022	88,509,208,611
January 2023	88,896,924,955
February 2023	90,231,695,496
March 2023	92,093,908,287
April 2023	90,691,444,948
May 2023	92,012,695,474
June 2023	94,308,194,414
Change on year	9,588,168,915
Change %	11.3

Source: PAYE RTI

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PAY DISTRIBUTION

5 Monthly pay by percentile from PAYE RTI

£ per month, 3 month moving average

UK, all industries, seasonally adjusted

Period	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile	95th percentile	99th percentile
June 2015	516	896	1,614	2,622	3,963	5,340	11,087
June 2016	543	931	1,652	2,657	4,014	5,412	11,226
June 2017	563	967	1,690	2,710	4,097	5,532	11,565
June 2018	589	1,004	1,743	2,786	4,222	5,756	12,008
June 2019	612	1,050	1,810	2,879	4,354	5,921	12,410
June 2020	611	1,047	1,804	2,859	4,364	5,949	12,262
June 2021	680	1,149	1,966	3,098	4,692	6,419	13,391
June 2022	696	1,197	2,088	3,266	4,964	6,817	14,337
July 2022	697	1,204	2,101	3,282	4,988	6,840	14,363
August 2022	698	1,212	2,113	3,300	5,016	6,867	14,378
September 2022	699	1,219	2,126	3,324	5,047	6,892	14,389
October 2022	702	1,225	2,138	3,346	5,080	6,924	14,423
November 2022	709	1,241	2,162	3,380	5,120	6,967	14,479
December 2022	715	1,252	2,178	3,397	5,146	7,001	14,517
January 2023	721	1,263	2,193	3,412	5,167	7,033	14,588
February 2023	725	1,263	2,195	3,412	5,183	7,053	14,625
March 2023	727	1,269	2,203	3,425	5,226	7,106	14,821
April 2023	733	1,279	2,215	3,445	5,264	7,171	14,947
May 2023	740	1,294	2,234	3,468	5,296	7,228	15,122
June 2023	748	1,313	2,265	3,537	5,395	7,314	15,081
Change on year	52	116	177	271	431	497	744
Change %	7.5	9.7	8.5	8.3	8.7	7.3	5.2

Source: PAYE RTI

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12. Pay figures are based on gross earnings.

EMPLOYEE FLOWS

6 Inflows and outflows from PAYE RTI

| | Payrolled employees | |
| | UK, all industries, seasonally adjusted | |
Period	Inflows	Outflows
June 2017	678,001	641,466
June 2018	666,891	644,614
June 2019	662,540	653,916
June 2020	417,162	461,776
June 2021	761,496	584,385
June 2022	677,065	648,107
July 2022	679,387	635,682
August 2022	677,274	645,104
September 2022	689,274	626,094
October 2022	690,768	630,325
November 2022	688,607	632,711
December 2022	672,309	639,103
January 2023	680,333	648,387
February 2023	688,483	649,457
March 2023	693,693	638,958
April 2023	658,227	625,778
May 2023	672,055	641,466
June 2023	686,385	639,066
Change on year	9,320	-9,041
Change %	1.4	-1.4

Source: PAYE RTI

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REGIONAL PAYROLLED EMPLOYEES (NUTS1)

7 Regional payrolled employees from PAYE RTI

Period	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
July 2014	1,030,056	2,911,814	2,151,511	1,957,240	2,299,606	2,548,585	3,673,212	3,791,129	2,243,034	1,186,689	2,301,304	674,107
July 2015	1,050,006	2,988,703	2,199,580	2,014,184	2,375,162	2,625,474	3,837,417	3,893,231	2,301,364	1,209,214	2,337,190	695,340
July 2016	1,057,007	3,031,724	2,231,896	2,048,584	2,416,244	2,680,962	3,922,709	3,955,146	2,341,307	1,224,004	2,345,875	705,280
July 2017	1,062,914	3,075,269	2,257,896	2,079,377	2,445,759	2,716,599	3,985,178	4,002,660	2,370,168	1,239,654	2,358,992	719,443
July 2018	1,069,289	3,115,123	2,284,096	2,107,170	2,473,372	2,747,505	4,045,020	4,044,303	2,393,162	1,254,538	2,371,419	735,041
July 2019	1,069,996	3,144,677	2,307,033	2,123,409	2,486,935	2,778,006	4,120,365	4,083,901	2,415,372	1,260,939	2,380,959	747,789
July 2020	1,055,972	3,098,797	2,265,410	2,084,934	2,440,305	2,722,178	4,011,834	3,994,305	2,360,953	1,233,144	2,331,082	742,885
July 2021	1,078,639	3,162,846	2,312,064	2,125,283	2,483,297	2,766,852	4,031,152	4,058,479	2,411,724	1,264,388	2,355,565	761,011
July 2022	1,106,141	3,240,183	2,369,347	2,172,815	2,554,188	2,832,339	4,236,170	4,176,619	2,468,154	1,297,397	2,420,854	777,851
August 2022	1,106,529	3,243,398	2,370,794	2,174,817	2,558,620	2,837,010	4,239,930	4,183,700	2,470,249	1,296,928	2,421,258	780,993
September 2022	1,109,011	3,251,282	2,375,254	2,179,062	2,562,566	2,843,212	4,253,596	4,194,560	2,474,666	1,299,497	2,424,367	780,334
October 2022	1,110,611	3,256,607	2,378,971	2,182,022	2,567,858	2,848,039	4,271,627	4,203,408	2,478,541	1,300,934	2,427,682	781,551
November 2022	1,112,649	3,264,152	2,382,313	2,186,576	2,572,476	2,852,176	4,283,698	4,210,776	2,482,490	1,301,852	2,431,768	782,820
December 2022	1,115,929	3,266,811	2,384,545	2,188,623	2,575,464	2,854,447	4,292,893	4,212,365	2,483,109	1,302,275	2,435,996	784,495
January 2023	1,114,559	3,270,310	2,386,319	2,190,064	2,577,961	2,858,799	4,305,304	4,218,137	2,486,810	1,302,477	2,434,737	783,424
February 2023	1,115,222	3,272,689	2,386,141	2,191,960	2,579,251	2,864,288	4,315,894	4,225,951	2,489,603	1,305,002	2,436,348	785,573
March 2023	1,117,759	3,278,130	2,387,143	2,196,758	2,583,028	2,871,089	4,324,381	4,233,664	2,492,506	1,307,607	2,441,089	789,505
April 2023	1,120,019	3,284,805	2,393,031	2,199,432	2,587,533	2,876,854	4,312,731	4,236,959	2,501,234	1,312,383	2,441,325	788,803
May 2023	1,120,975	3,289,127	2,395,954	2,202,993	2,592,992	2,877,250	4,316,721	4,246,176	2,500,694	1,314,798	2,438,918	789,100
June 2023	1,123,040	3,291,427	2,399,862	2,206,614	2,597,078	2,881,914	4,323,120	4,252,194	2,505,296	1,317,126	2,445,775	789,572
July 2023	1,126,487	3,302,033	2,405,357	2,212,193	2,605,690	2,891,678	4,337,547	4,266,402	2,512,486	1,321,124	2,456,266	792,985
Change on year	20,346	61,850	36,010	39,378	51,502	59,339	101,377	89,783	44,332	23,727	35,412	15,134
Change %	1.8	1.9	1.5	1.8	2	2.1	2.4	2.1	1.8	1.8	1.5	1.9

Source: PAYE RTI

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REGIONAL MEDIAN PAY (NUTS1)

8 Regional median monthly pay from PAYE RTI

£ per month

UK, all industries, seasonally adjusted

Period	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
July 2014	1,524	1,512	1,492	1,510	1,518	1,631	1,923	1,713	1,495	1,498	1,647	1,490
July 2015	1,536	1,526	1,516	1,524	1,542	1,657	1,947	1,737	1,524	1,523	1,661	1,493
July 2016	1,568	1,565	1,546	1,563	1,575	1,697	2,006	1,781	1,555	1,551	1,692	1,520
July 2017	1,600	1,605	1,582	1,603	1,616	1,743	2,052	1,821	1,597	1,593	1,722	1,555
July 2018	1,648	1,663	1,633	1,664	1,675	1,802	2,122	1,877	1,654	1,640	1,771	1,612
July 2019	1,706	1,726	1,693	1,720	1,726	1,868	2,208	1,954	1,720	1,707	1,849	1,680
July 2020	1,751	1,773	1,739	1,772	1,768	1,921	2,226	1,993	1,759	1,751	1,895	1,742
July 2021	1,837	1,865	1,833	1,877	1,866	2,044	2,409	2,122	1,868	1,878	2,012	1,878
July 2022	1,964	1,994	1,958	2,000	2,000	2,177	2,553	2,257	2,013	1,981	2,125	1,956
August 2022	1,978	2,010	1,974	2,017	2,012	2,191	2,564	2,274	2,026	1,993	2,123	1,971
September 2022	2,004	2,032	1,999	2,032	2,024	2,208	2,590	2,292	2,033	2,011	2,142	1,964
October 2022	2,012	2,037	2,001	2,038	2,028	2,216	2,586	2,298	2,048	2,022	2,161	1,979
November 2022	2,068	2,085	2,040	2,075	2,081	2,255	2,623	2,322	2,097	2,091	2,229	2,011
December 2022	2,054	2,075	2,035	2,073	2,060	2,255	2,636	2,345	2,084	2,062	2,206	2,010
January 2023	2,045	2,076	2,036	2,072	2,068	2,257	2,643	2,337	2,084	2,050	2,224	2,036
February 2023	2,054	2,081	2,049	2,081	2,078	2,270	2,650	2,347	2,097	2,074	2,253	2,051
March 2023	2,067	2,094	2,052	2,092	2,090	2,284	2,657	2,366	2,119	2,097	2,251	2,116
April 2023	2,089	2,112	2,080	2,116	2,112	2,294	2,666	2,368	2,124	2,109	2,278	2,057
May 2023	2,122	2,151	2,111	2,145	2,140	2,337	2,706	2,415	2,166	2,137	2,283	2,083
June 2023	2,184	2,198	2,160	2,197	2,189	2,377	2,744	2,461	2,210	2,172	2,299	2,104
July 2023	2,134	2,168	2,120	2,166	2,156	2,342	2,732	2,418	2,158	2,184	2,297	2,103
Change on year	170	174	162	166	156	165	179	161	145	203	172	147
Change %	8.7	8.7	8.3	8.3	7.8	7.6	7	7.1	7.2	10.2	8.1	7.5

Source: PAYE RTI

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12. Pay figures are based on gross earnings.

9 Regional payrolled employees from PAYE RTI

| | | | Payrolled employees | |
| | | | UK, all industries, seasonally adjusted | |
Period	July 2022	July 2023	Change on year	Change %
Tees Valley and Durham	496,337	504,692	8,355	1.7
Northumberland and Tyne and Wear	609,803	621,795	11,992	2
Cumbria	220,567	224,170	3,603	1.6
Greater Manchester	1,258,703	1,285,178	26,475	2.1
Lancashire	650,495	662,029	11,534	1.8
Cheshire	442,295	450,409	8,114	1.8
Merseyside	668,122	680,246	12,124	1.8
East Yorkshire and Northern Lincolnshire	407,483	413,005	5,522	1.4
North Yorkshire	361,614	365,247	3,633	1
South Yorkshire	592,816	601,915	9,099	1.5
West Yorkshire	1,007,434	1,025,189	17,755	1.8
Derbyshire and Nottinghamshire	968,370	986,076	17,706	1.8
Leicestershire, Rutland and Northamptonshire	874,243	890,687	16,444	1.9
Lincolnshire	330,203	335,429	5,226	1.6
Herefordshire, Worcestershire and Warwickshire	624,242	635,354	11,112	1.8
Shropshire and Staffordshire	717,758	729,659	11,901	1.7
West Midlands (county)	1,212,188	1,240,676	28,488	2.4
East Anglia	1,122,719	1,144,025	21,306	1.9
Bedfordshire and Hertfordshire	884,748	905,104	20,356	2.3
Essex	824,872	842,549	17,677	2.1
Inner London - West	545,090	546,982	1,892	0.3
Inner London - East	1,203,657	1,229,931	26,274	2.2
Outer London - East and North East	877,328	902,732	25,404	2.9
Outer London - South	613,683	627,771	14,088	2.3
Outer London - West and North West	996,412	1,030,130	33,718	3.4
Berkshire, Buckinghamshire and Oxfordshire	1,195,175	1,223,987	28,812	2.4
Surrey, East and West Sussex	1,280,959	1,308,755	27,796	2.2
Hampshire and Isle of Wight	897,237	913,361	16,124	1.8
Kent	803,248	820,298	17,050	2.1
Gloucestershire, Wiltshire and Bristol/Bath area	1,176,349	1,197,804	21,455	1.8
Dorset and Somerset	567,110	576,410	9,300	1.6
Cornwall and Isles of Scilly	226,942	230,521	3,579	1.6
Devon	497,752	507,751	9,999	2
West Wales and The Valleys	789,779	803,658	13,879	1.8
East Wales	507,617	517,466	9,849	1.9
North Eastern Scotland	227,083	230,929	3,846	1.7
Highlands and Islands	205,023	207,184	2,161	1.1
Eastern Scotland	900,099	918,475	18,376	2
West Central Scotland	684,435	691,033	6,598	1
Southern Scotland	404,214	408,646	4,432	1.1
Northern Ireland	777,851	792,985	15,134	1.9

Source: PAYE RTI

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REGIONAL MEDIAN PAY (NUTS2)

10 Regional median monthly pay from PAYE RTI

£ per month

UK, all industries, seasonally adjusted

Period	July 2022	July 2023	Change on year	Change %
Tees Valley and Durham	1,959	2,130	171	8.7
Northumberland and Tyne and Wear	1,971	2,140	169	8.6
Cumbria	1,975	2,139	164	8.3
Greater Manchester	2,004	2,171	167	8.3
Lancashire	1,914	2,086	172	9
Cheshire	2,111	2,277	166	7.9
Merseyside	1,995	2,187	192	9.6
East Yorkshire and Northern Lincolnshire	1,929	2,079	150	7.8
North Yorkshire	1,992	2,140	148	7.4
South Yorkshire	1,940	2,111	171	8.8
West Yorkshire	1,981	2,144	163	8.2
Derbyshire and Nottinghamshire	1,995	2,166	171	8.6
Leicestershire, Rutland and Northamptonshire	2,035	2,192	157	7.7
Lincolnshire	1,927	2,097	170	8.8
Herefordshire, Worcestershire and Warwickshire	2,100	2,253	153	7.3
Shropshire and Staffordshire	1,991	2,151	160	8
West Midlands (county)	1,949	2,112	163	8.4
East Anglia	2,065	2,219	154	7.5
Bedfordshire and Hertfordshire	2,326	2,498	172	7.4
Essex	2,209	2,386	177	8
Inner London - West	3,166	3,404	238	7.5
Inner London - East	2,614	2,815	201	7.7
Outer London - East and North East	2,332	2,508	176	7.5
Outer London - South	2,591	2,790	199	7.7
Outer London - West and North West	2,392	2,553	161	6.7
Berkshire, Buckinghamshire and Oxfordshire	2,419	2,565	146	6
Surrey, East and West Sussex	2,259	2,418	159	7
Hampshire and Isle of Wight	2,153	2,310	157	7.3
Kent	2,156	2,324	168	7.8
Gloucestershire, Wiltshire and Bristol/Bath area	2,133	2,282	149	7
Dorset and Somerset	1,962	2,118	156	8
Cornwall and Isles of Scilly	1,819	1,963	144	7.9
Devon	1,895	2,054	159	8.4
West Wales and The Valleys	1,942	2,149	207	10.7
East Wales	2,041	2,239	198	9.7
North Eastern Scotland	2,244	2,418	174	7.8
Highlands and Islands	2,037	2,195	158	7.8
Eastern Scotland	2,146	2,311	165	7.7
West Central Scotland	2,132	2,314	182	8.5
Southern Scotland	2,071	2,245	174	8.4
Northern Ireland	1,956	2,103	147	7.5

Source: PAYE RTI

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INDUSTRY PAYROLLED EMPLOYEES

11 Industry payrolled employees from PAYE RTI

| | | | Payrolled employees | |
| | | | UK, all industries, seasonally adjusted | |
Period	July 2022	July 2023	Change on year	Change %
Agriculture, forestry and fishing	192,050	191,366	-684	-0.4
Mining and quarrying	51,283	52,183	900	1.8
Manufacturing	2,349,006	2,359,562	10,556	0.4
Energy production and supply	103,461	111,950	8,489	8.2
Water supply, sewerage and waste	184,324	189,334	5,010	2.7
Construction	1,306,872	1,307,873	1,001	0.1
Wholesale and retail; repair of motor vehicles	4,386,731	4,376,933	-9,798	-0.2
Transportation and storage	1,362,648	1,379,266	16,618	1.2
Accommodation and food service activities	2,151,544	2,178,764	27,220	1.3
Information and communication	1,307,852	1,332,155	24,303	1.9
Finance and insurance	1,056,239	1,111,867	55,628	5.3
Real estate	441,207	447,827	6,620	1.5
Professional, scientific and technical	2,348,477	2,410,624	62,147	2.6
Administrative and support services	2,506,857	2,506,667	-190	0
Public administration and defence; social security	1,437,724	1,460,217	22,493	1.6
Education	3,163,741	3,261,522	97,781	3.1
Health and social work	4,061,934	4,276,023	214,089	5.3
Arts, entertainment and recreation	594,971	624,427	29,456	5
Other service activities	532,009	541,119	9,110	1.7
Households and Extraterritorial	113,125	110,569	-2,556	-2.3

Source: PAYE RTI

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INDUSTRY MEDIAN PAY

12 Industry median monthly pay from PAYE RTI

£ per month

UK, all industries, seasonally adjusted

Period	July 2022	July 2023	Change on year	Change %
Agriculture, forestry and fishing	1,903	1,996	93	4.9
Mining and quarrying	4,228	4,446	218	5.2
Manufacturing	2,529	2,700	171	6.8
Energy production and supply	3,766	4,102	336	8.9
Water supply, sewerage and waste	2,720	2,924	204	7.5
Construction	2,346	2,507	161	6.9
Wholesale and retail; repair of motor vehicles	1,665	1,814	149	8.9
Transportation and storage	2,494	2,687	193	7.7
Accommodation and food service activities	1,111	1,173	62	5.6
Information and communication	3,397	3,618	221	6.5
Finance and insurance	3,521	3,770	249	7.1
Real estate	2,172	2,322	150	6.9
Professional, scientific and technical	2,733	2,934	201	7.4
Administrative and support services	1,856	2,000	144	7.8
Public administration and defence; social security	2,655	3,028	373	14
Education	2,103	2,246	143	6.8
Health and social work	2,011	2,215	204	10.1
Arts, entertainment and recreation	1,428	1,516	88	6.2
Other service activities	1,551	1,698	147	9.5
Households and Extraterritorial	1,050	1,098	48	4.6

Source: PAYE RTI

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PAYROLLED EMPLOYEES BY AGE

13 Payrolled employees by age from PAYE RTI

| | | | | | Payrolled employees | |
| | | | | | UK, all industries, seasonally adjusted | |
Period	0 to 17	18 to 24	25 to 34	35 to 49	50 to 64	65 and over
July 2014	408,261	3,478,449	6,352,921	9,154,153	6,562,854	811,649
July 2015	431,565	3,599,683	6,553,856	9,285,615	6,825,306	830,840
July 2016	439,413	3,614,211	6,680,957	9,336,343	7,034,871	854,942
July 2017	439,845	3,591,838	6,765,365	9,379,250	7,268,339	869,273
July 2018	440,763	3,584,054	6,819,920	9,420,039	7,487,401	887,860
July 2019	439,023	3,522,071	6,867,027	9,447,822	7,679,386	964,051
July 2020	322,003	3,219,911	6,725,204	9,361,552	7,733,362	979,768
July 2021	432,712	3,358,795	6,735,653	9,417,931	7,859,807	1,006,402
July 2022	526,693	3,488,910	6,925,576	9,622,005	8,029,781	1,059,093
August 2022	528,393	3,475,838	6,936,563	9,637,069	8,040,779	1,065,585
September 2022	532,200	3,476,566	6,950,790	9,656,916	8,058,235	1,072,701
October 2022	526,876	3,482,189	6,966,585	9,678,936	8,070,902	1,082,364
November 2022	525,184	3,483,165	6,977,854	9,696,238	8,085,621	1,095,685
December 2022	523,474	3,479,673	6,985,779	9,711,077	8,096,588	1,100,362
January 2023	520,022	3,478,055	6,996,492	9,727,513	8,100,872	1,105,945
February 2023	525,280	3,483,707	7,002,884	9,738,696	8,104,419	1,112,938
March 2023	529,624	3,489,990	7,015,523	9,755,820	8,111,830	1,119,872
April 2023	524,982	3,501,022	7,017,023	9,762,720	8,120,584	1,128,779
May 2023	518,513	3,497,555	7,027,779	9,776,073	8,129,980	1,135,799
June 2023	512,432	3,496,664	7,038,881	9,797,674	8,143,215	1,144,151
July 2023	503,331	3,527,760	7,072,769	9,817,539	8,154,422	1,154,426
Change on year	-23,362	38,850	147,193	195,534	124,641	95,333
Change %	-4.4	1.1	2.1	2	1.6	9

Source: PAYE RTI

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MEDIAN PAY BY AGE

14 Median monthly pay by age from PAYE RTI

Period	0 to 17	18 to 24	25 to 34	35 to 49	50 to 64	65 and over
July 2014	272	1,073	1,728	1,903	1,718	718
July 2015	288	1,119	1,756	1,925	1,736	751
July 2016	290	1,167	1,798	1,962	1,764	771
July 2017	299	1,206	1,849	2,001	1,786	808
July 2018	313	1,254	1,909	2,056	1,832	861
July 2019	323	1,308	1,998	2,124	1,886	939
July 2020	340	1,306	2,015	2,159	1,911	1,017
July 2021	405	1,386	2,144	2,322	2,038	1,116
July 2022	406	1,502	2,307	2,480	2,155	1,199
August 2022	407	1,511	2,320	2,489	2,169	1,202
September 2022	410	1,515	2,338	2,524	2,194	1,219
October 2022	412	1,526	2,349	2,525	2,197	1,215
November 2022	414	1,546	2,381	2,582	2,275	1,252
December 2022	415	1,553	2,382	2,563	2,244	1,252
January 2023	411	1,561	2,386	2,561	2,238	1,253
February 2023	411	1,576	2,400	2,573	2,251	1,263
March 2023	408	1,587	2,418	2,594	2,272	1,264
April 2023	411	1,595	2,424	2,610	2,290	1,277
May 2023	415	1,624	2,455	2,635	2,315	1,304
June 2023	411	1,624	2,518	2,711	2,378	1,334
July 2023	401	1,600	2,472	2,660	2,347	1,309
Change on year	-5	98	165	180	192	110
Change %	-1.2	6.5	7.2	7.3	8.9	9.2

Source: PAYE RTI

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