

Statistical bulletin

Earnings and employment from Pay As You Earn Real Time Information, UK: November 2022

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).

Contact:
Debra Leaker, C. Robinson
labour.market@ons.gov.uk;
rtistatistics.enquiries@hmrc.gov.
uk
+44 1633 455400

Release date:
15 November 2022

Next release:
13 December 2022

Table of contents

1. [Main points](#)
2. [Payrolled employees](#)
3. [Median monthly pay](#)
4. [Pay distribution](#)
5. [Regional data](#)
6. [Industry data](#)
7. [Age data](#)
8. [Earnings and employment data](#)
9. [Glossary](#)
10. [Measuring the data](#)
11. [Strengths and limitations](#)
12. [Related links](#)
13. [Cite this statistical bulletin](#)

1 . Main points

- Early estimates for October 2022 indicate that the number of payrolled employees rose by 2.7% compared with October 2021, a rise of 772,000 employees; the number of payrolled employees was up by 2.9% since February 2020, a rise of 834,000.
- Payrolled employment increased by 74,000 employees (0.2%) in October 2022 when compared with September 2022, though 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 September 2022 compared with August 2022 has been revised from an increase of 69,000 reported in the last bulletin to an increase of 94,000, 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 October 2022 indicate that median monthly pay increased by 6.0% compared with October 2021, and increased by 14.6% when compared with February 2020.
- All age groups saw an increase in payrolled employees between October 2021 and October 2022; there was an increase of 153,000 payrolled employees aged under 25 years.
- For Nomenclature of Territorial Units for Statistics (NUTS) 3 regions, annual growth in payrolled employees in October 2022 was the highest in Tower Hamlets, with a rise of 7.5%, and was lowest in East Dunbartonshire, West Dunbartonshire and Helensburgh and Lomond, with a rise of 0.7%.
- The increase in payrolled employees between October 2021 and October 2022 was largest in the professional, scientific and technical sector (a rise of 117,000 employees) and smallest in the wholesale and retail sector (a rise of 0).
- 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 October 2022 was highest in the finance and insurance sector (an increase of 10.0%), and lowest in the accommodation and food service activities sector (an increase of 0.6%).

About the data in this release

Early estimates for October 2022 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% to 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 October 2022 indicate that there were 29.8 million payrolled employees (Figure 1), a rise of 2.7% compared with the same period of the previous year. This means a rise of 772,000 people over the 12-month period. Compared with the previous month, the number of payrolled employees increased by 0.2% in October 2022, which is equivalent to 74,000 people. The early estimate for October 2022 shows that after a period of falling there has been little change in the last month, with a slight increase to maintain a high growth rate relative to historical rates.

Note, this monthly growth of 74,000 should be treated as provisional, because it is based on an early estimate of October 2022 employees. More information on revisions can be found in Section 11: Strengths and limitations.

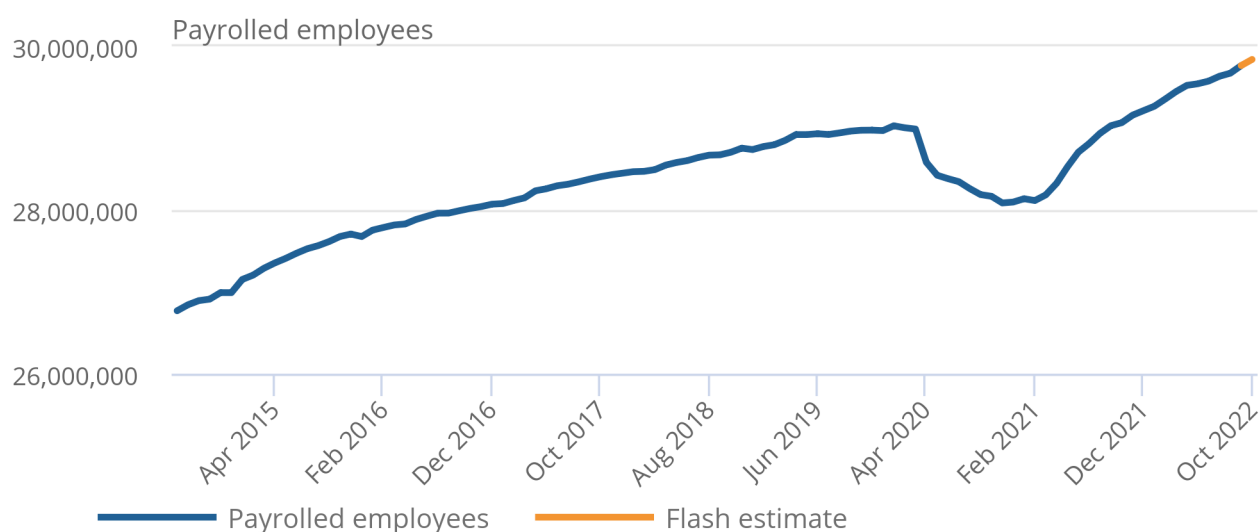
When comparing the number of payrolled employees in September 2022 with the previous month, the number increased by 0.3%. This is revised upwards from the early estimate of a 0.2% increase reported in our previous bulletin, [Earnings and employment from Pay As You Earn Real Time Information, UK: October 2022](#).

Figure 1: The number of employees declined between February and November 2020, but now continues to rise above the pre-coronavirus (COVID-19) level

Payrolled employees, seasonally adjusted, UK, July 2014 to October 2022

Figure 1: The number of employees declined between February and November 2020, but now continues to rise above the pre-coronavirus (COVID-19) level

Payrolled employees, seasonally adjusted, UK, July 2014 to October 2022



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

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 September 2022 figure is not a flash estimate of payrolled employees, this 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.

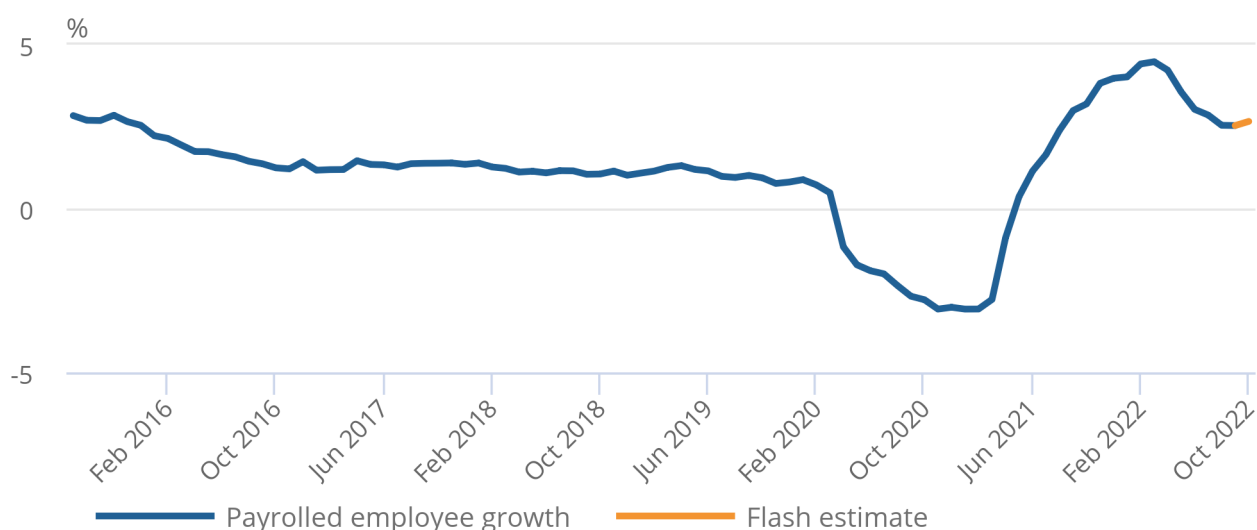
At the start of 2021, growth rates began to recover, and remained high as the labour market continued to recover from the effects of the coronavirus pandemic. Since April 2022, the annual growth rate was falling, but this fall in the growth rate will be partially caused by the comparison against the increase in employee numbers from March 2021, the first substantial increase since January 2020. In recent months, this fall has levelled off with a slight increase in the latest month.

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 October 2022

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 October 2022



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

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 September 2022 figure is not a flash estimate of payrolled employees, this is included purely for graphing purposes.

3 . Median monthly pay

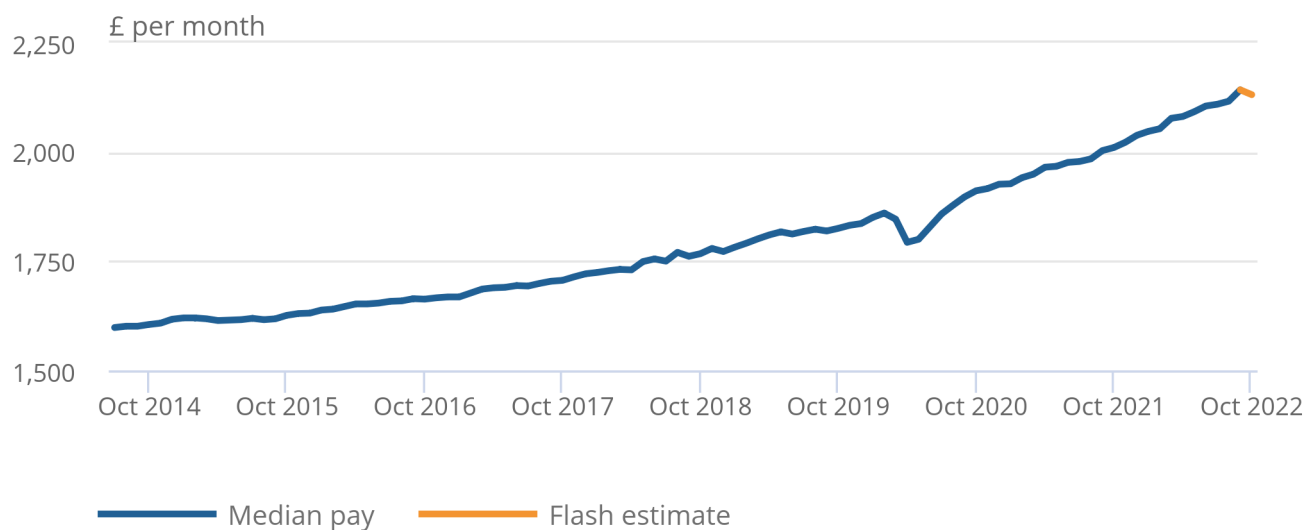
Early estimates for October 2022 indicate that median monthly pay was £2,131, an increase of 6.0% compared with the same period of the previous year.

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 October 2022

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 October 2022



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

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 September 2022 figure is not a flash estimate of median pay, this is included purely for graphing purposes.

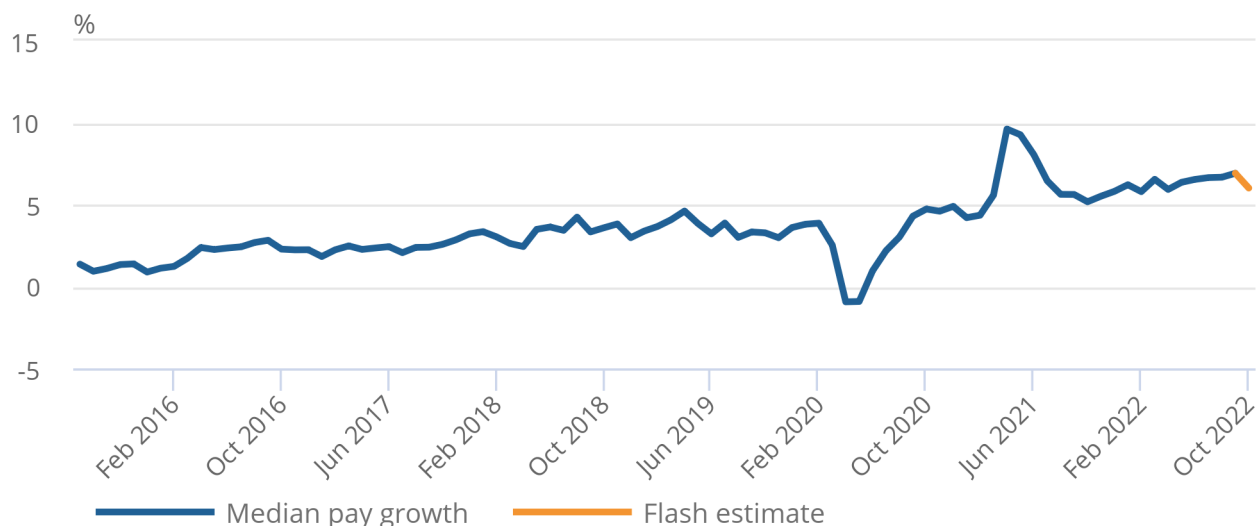
Following a general trend of increasing pay growth between mid-2015 and mid-2018, pay growth tended to fluctuate around 3.6%, until 2020 when it became negative. This coincided with the coronavirus (COVID-19) pandemic and related economic and policy responses. From June 2020 median pay growth has been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

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 October 2022

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 October 2022



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

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 September 2022 figure is not a flash estimate of median pay growth, this is included purely for graphing purposes.

The relatively high level of pay growth between June and December 2020 is partially explained by lower levels of people entering the labour market than usual during that period. This is explored in our [August 2020 earnings and employment bulletin](#) and [September 2020 earnings and employment bulletin](#).

While the general trend of pay growth is dominated by those continually employed, the mean pay of people entering the labour market (referred to as inflows) tends to be around 40% lower than mean pay for those continually employed. This means that inflows into payrolled employment tend to bring down average pay and average pay growth. As inflows were relatively low between June and December 2020, this reduced the downward pressure on pay growth, which in turn increased median pay growth.

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 coronavirus pandemic.

4 . Pay distribution

In the three months to September 2022, the 10th percentile of the monthly pay distribution was £697, the 90th percentile was £5,063 and the 99th percentile was £14,384 (Figure 5). This means that:

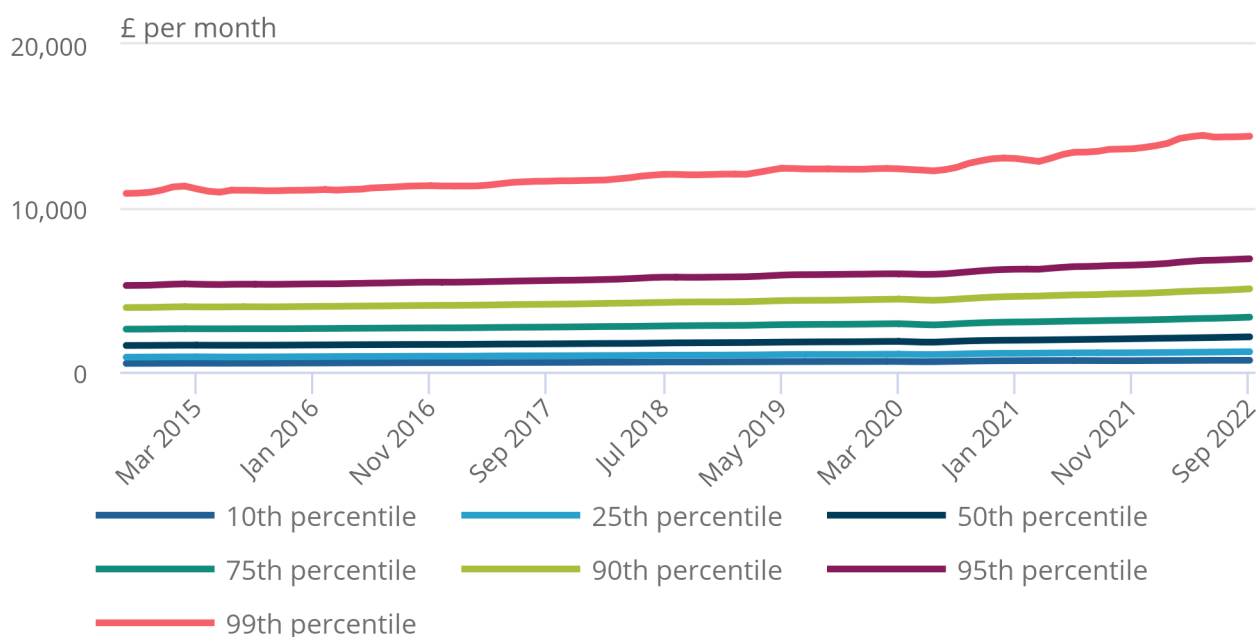
- 10% of payrolled employees earned equal to or less than £697 per month
- 90% of payrolled employees earned equal to or less than £5,063 per month
- 99% of payrolled employees earned equal to or less than £14,384 per month

Figure 5: 10% of employees earn less than £697 per month and 90% earn less than £5,063 per month

Pay per month, seasonally adjusted, UK, three months to September 2014 to three months to September 2022

Figure 5: 10% of employees earn less than £697 per month and 90% earn less than £5,063 per month

Pay per month, seasonally adjusted, UK, three months to September 2014 to three months to September 2022



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

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 October 2022, and cover [Nomenclature of Territorial Units for Statistics \(NUTS\): NUTS1, NUTS2 and NUTS3 regions](#).

While the UK as a whole has experienced moderate, if declining, payrolled employee growth since January 2017, growth within regions has not been even (Figure 6).

Numbers of payrolled employees in the UK for the regions shown in Figure 6 range from 781,000 in Northern Ireland to 4,266,000 in London in October 2022.

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 has risen more recently

Percentage change on same month in previous year, seasonally adjusted, UK, January 2017 to October 2022

Notes:

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

Download the data

[.xlsx](#)

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

Comparing October 2022 with the same period of the previous year for NUTS1 regions, changes in payrolled employees ranged from a 4.3% increase in London to a 2.0% increase in the North West.

This month, NUTS1 regions are further broken down by sectors in the supporting datasets for this bulletin. Please note, in the May publication there was an error in the revision of the historical time series that resulted in data within the NUTS1 by Sector breakdowns failing to be updated. While revisions in the historical data are generally small, this resulted in a discontinuity for some employers whose Standard Industrial Classification (SIC) code had changed. This meant that their sector was identified based on their previous SIC code until April 2021 and on their new SIC code after this point. This created sudden shifts in the time series for these breakdowns. As we only refresh the full historical time series once a year, this error was then carried forward in the August publication as well. This error was isolated to the NUTS1 by Sector breakdown and did not affect the Sector breakdown.

This month's publication corrects this error and identifies the sector of each employer based solely on their most recent SIC code. As a result, there are revisions to the NUTS1 by Sector breakdowns for months up to April 2021. The largest differences are in the Public Administration sector in the North East and the Mining and Quarrying sector in the North West and Northern Ireland, which all saw some percentage differences of over 20% from the corrected values. Of area-sector combinations, 95% have a percentage difference of less than 3%.

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 coronavirus 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 October 2022 with the same period of the previous year, changes in payrolled employees for accommodation and food service activities ranged from a 1.0% increase in the North East to a 12.8% 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 October 2022

Notes:

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

Download the data

[.xlsx](#)

Examining NUTS3 regions, East Dunbartonshire, West Dunbartonshire and Helensburgh and Lomond experienced an increase of 0.7% in payrolled employees in comparison with October 2021, and Tower Hamlets experienced an increase of 7.5% (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, October 2022

Notes:

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

Download the data

[.xlsx](#)

Median pay across the NUTS3 regions of the UK in October 2022 ranged from £1,789 in Leicester to £3,356 in Wandsworth (Figure 9).

Inner London generally differs from Outer London, with median pay ranging from £2,109 in Enfield to £3,356 in Wandsworth. Median pay in October 2022 for London as a whole was £2,564.

Figure 9: Median pay varies across the UK

Median pay, seasonally adjusted, UK, NUTS3 level, October 2022

Notes:

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

Download the data

[.xlsx](#)

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 October 2022 with the same period of the previous year, percentage changes in payrolled employees range from 0.0% in wholesale and retail to positive 8.8% in arts, entertainment and recreation.

Figure 10: Employee growth has been very different across sectors

Percentage change on same month in previous year, seasonally adjusted, UK, January 2017 to October 2022

Notes:

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

Download the data

[.xlsx](#)

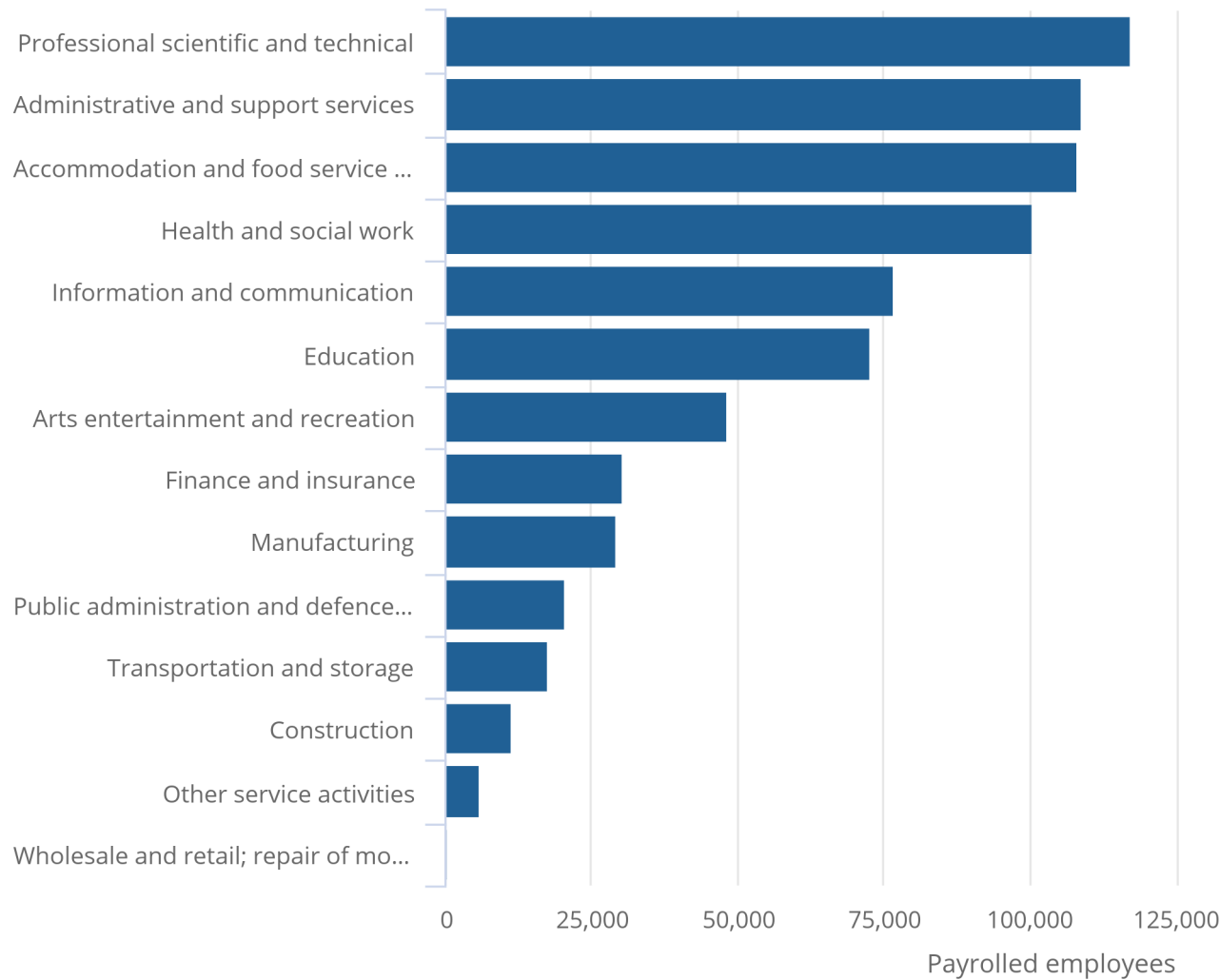
The increase in payrolled employees between October 2021 and October 2022 was largest in the professional, scientific and technical sector (a rise of 117,000 employees) and smallest in the wholesale and retail sector (a rise of 0 employees).

Figure 11: The professional, scientific and technical sector has seen the greatest increase in payrolled employees since October 2021

Payrolled employees, absolute change on October 2021, seasonally adjusted, UK, October 2022

Figure 11: The professional, scientific and technical sector has seen the greatest increase in payrolled employees since October 2021

Payrolled employees, absolute change on October 2021, seasonally adjusted, UK, October 2022



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

Notes:

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

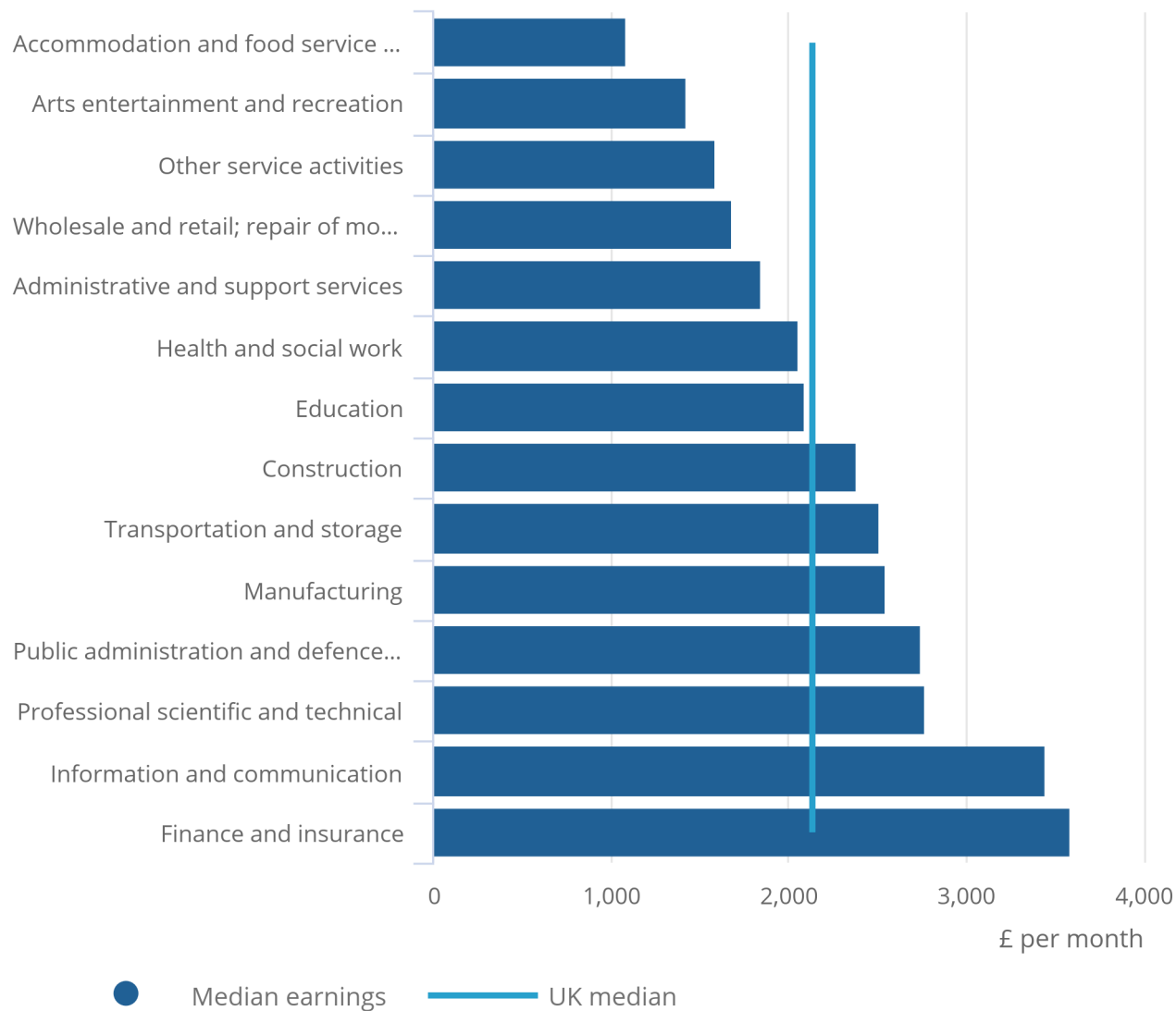
Median pay in October 2022 across the highlighted sectors ranged from £1,092 in the accommodation and food service activities sector to £3,589 in finance and insurance (Figure 12).

Figure 12: Median pay varies by industry

Median pay, seasonally adjusted, UK, October 2022

Figure 12: Median pay varies by industry

Median pay, seasonally adjusted, UK, October 2022



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

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 finance and insurance sector (positive 10.0%, Figure 13) and slowest in the accommodation and food service activities sector (positive 0.6%).

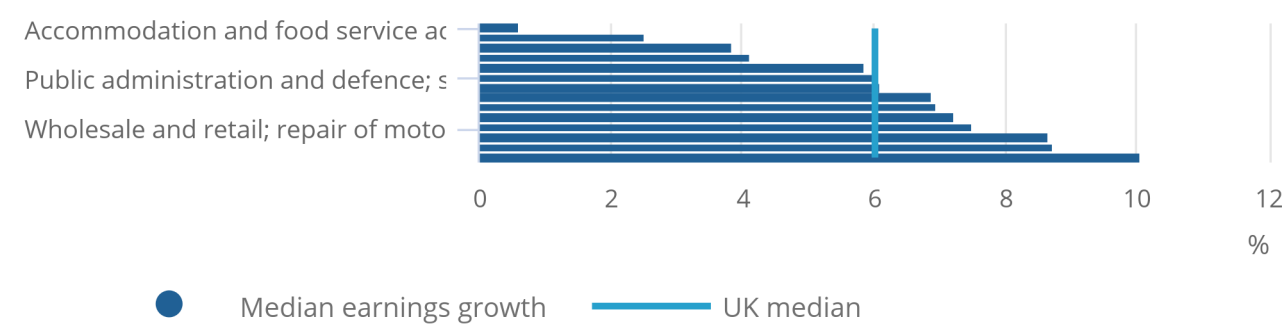
Estimates of mean pay for each sector are available in the [accompanying datasets](#).

Figure 13: Median pay increased most in the finance and insurance sector

Percentage change on same month in previous year, seasonally adjusted, UK, October 2022

Figure 13: Median pay increased most in the finance and insurance sector

Percentage change on same month in previous year, seasonally adjusted, UK, October 2022



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

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.
2. The UK median is shown here for comparative purposes, but it does not represent an average of median pay growth across the regions. It is statistically possible, for example, for median pay growth for the UK as a whole to be higher or lower than pay growth in all constituent parts of the UK.
3. 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 29.8 million payrolled employees in the UK in October 2022, 94.6% are aged 18 to 64 years.

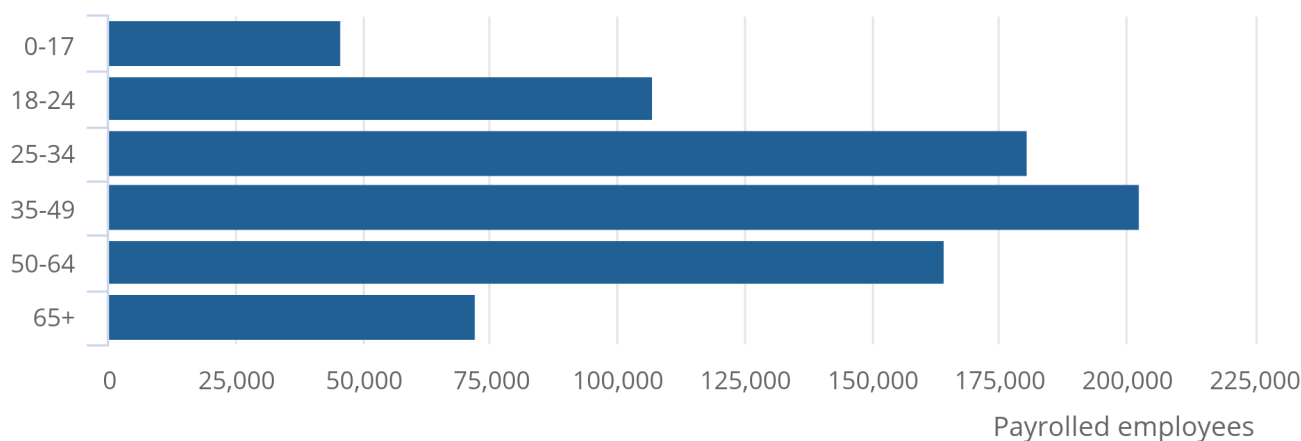
Between October 2021 and October 2022, there was an increase of 153,000 payrolled employees aged under 25 years. During the same period, payrolled employees aged 35 to 49 years increased by 203,000.

Figure 14: The 35 to 49 years age group has seen the greatest increase in payrolled employees since October 2021

Payrolled employees, absolute change on October 2021, seasonally adjusted, UK, October 2022

Figure 14: The 35 to 49 years age group has seen the greatest increase in payrolled employees since October 2021

Payrolled employees, absolute change on October 2021, seasonally adjusted, UK, October 2022



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

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.

Conversely, growth in payrolled employees aged under 25 years has undergone 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 76.3% 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 October 2022

Notes:

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

Download the data

[.xlsx](#)

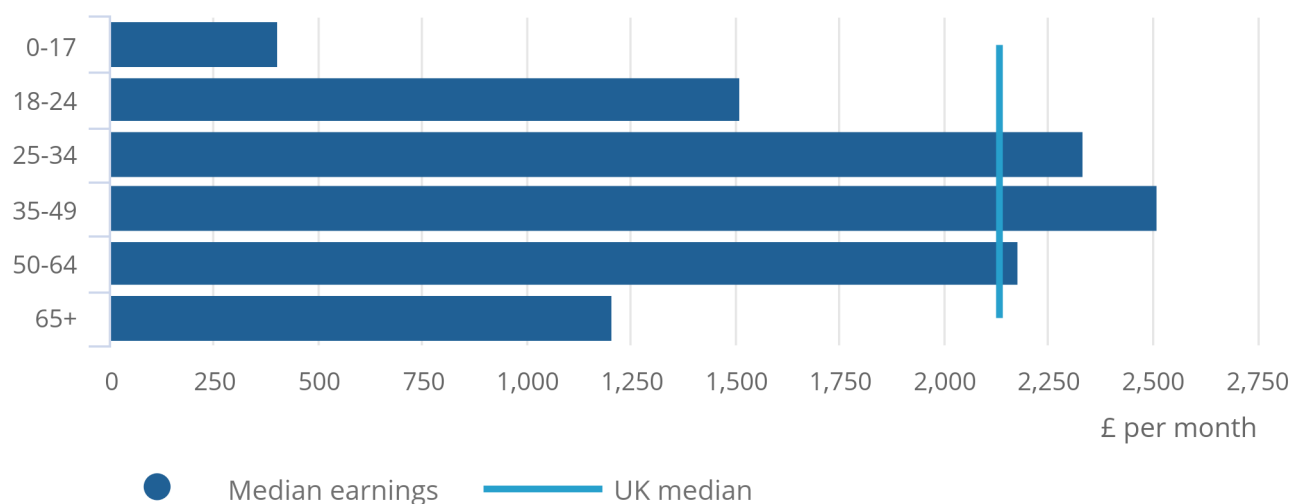
Median pay in October 2022 ranged from £405 for those aged under 18 years to £2,514 for those aged 35 to 49 years (Figure 16). Overall, median pay is higher in the central age bands, of those studied.

Figure 16: Median pay varies by age

Median pay, seasonally adjusted, UK, October 2022

Figure 16: Median pay varies by age

Median pay, seasonally adjusted, UK, October 2022



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

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 November 2022

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 November 2022

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 November 2022

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.



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 October 2022 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 within some of the series preventing 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 signify 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.

More information about [Experimental Statistics](#), including when they should be used and the differences between them and [National Statistics](#), is available.

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.

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. In May of each year, new input data will be incorporated for the whole data time series. The benefit of introducing this revisions policy is that we can use the processing time saved to produce and publish more detailed breakdowns.

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 [Monthly earnings and employment estimates from Pay As You Earn Real Time Information \(PAYE RTI\) data 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: November 2022](#)

Bulletin | Released 15 November 2022

Estimates of employment, unemployment, economic inactivity and other employment-related statistics for the UK.

[Employment in the UK: November 2022](#)

Bulletin | Released 15 November 2022

Estimates of employment, unemployment and economic inactivity for the UK.

[Labour market in the regions of the UK: November 2022](#)

Bulletin | Released 15 November 2022

Regional breakdowns of changes in UK employment, unemployment and economic inactivity.

[Average weekly earnings in Great Britain: November 2022](#)

Bulletin | Released 15 November 2022

Estimates of growth in earnings for employees before tax and other deductions from pay.

[Vacancies and jobs in the UK: November 2022](#)

Bulletin | Released 15 November 2022

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 November 2022, ONS website, statistical bulletin, [Earnings and employment from Pay As You Earn Real Time Information, UK: November 2022](#)

PAYROLLED EMPLOYEES

1 Payrolled employee counts from PAYE RTI

Period	Payrolled employees
	UK, all industries, seasonally adjusted
Period	Payrolled employees
October 2014	26,910,619
October 2015	27,676,176
October 2016	28,019,470
October 2017	28,406,867
October 2018	28,705,777
October 2019	28,974,486
October 2020	28,167,814
October 2021	29,067,068
November 2021	29,159,114
December 2021	29,213,888
January 2022	29,267,664
February 2022	29,355,530
March 2022	29,447,079
April 2022	29,522,952
May 2022	29,542,449
June 2022	29,575,179
July 2022	29,634,632
August 2022	29,671,681
September 2022	29,765,285
October 2022	29,839,507
Change on year	772,438
Change %	2.7

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- 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
October 2014	1,605
October 2015	1,626
October 2016	1,663
October 2017	1,706
October 2018	1,767
October 2019	1,825
October 2020	1,911
October 2021	2,010
November 2021	2,022
December 2021	2,038
January 2022	2,047
February 2022	2,053
March 2022	2,077
April 2022	2,081
May 2022	2,092
June 2022	2,105
July 2022	2,109
August 2022	2,116
September 2022	2,142
October 2022	2,131
Change on year	121
Change %	6

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

MEAN PAY

3 Mean monthly pay from PAYE RTI

Period	£ per month
	UK, all industries, seasonally adjusted
Period	Mean pay
September 2014	2,197
September 2015	2,224
September 2016	2,286
September 2017	2,345
September 2018	2,422
September 2019	2,489
September 2020	2,594
September 2021	2,731
October 2021	2,741
November 2021	2,765
December 2021	2,797
January 2022	2,833
February 2022	2,851
March 2022	2,876
April 2022	2,813
May 2022	2,839
June 2022	2,861
July 2022	2,864
August 2022	2,875
September 2022	2,899
Change on year	168
Change %	6.2

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

AGGREGATE PAY

4 Aggregate monthly pay from PAYE RTI

Period	£ per month
	UK, all industries, seasonally adjusted
Period	Aggregate pay
September 2014	59,089,501,741
September 2015	61,418,869,240
September 2016	63,998,450,964
September 2017	66,551,864,955
September 2018	69,452,943,300
September 2019	72,095,179,166
September 2020	73,111,911,623
September 2021	79,287,503,980
October 2021	79,663,459,900
November 2021	80,634,750,273
December 2021	81,716,852,983
January 2022	82,907,760,812
February 2022	83,705,336,060
March 2022	84,682,958,027
April 2022	83,050,286,540
May 2022	83,872,145,730
June 2022	84,607,667,068
July 2022	84,874,604,947
August 2022	85,299,927,607
September 2022	86,300,514,636
Change on year	7,013,010,657
Change %	8.8

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

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
September 2014	505	887	1,600	2,599	3,919	5,267	10,892
September 2015	521	903	1,619	2,625	3,960	5,337	11,052
September 2016	549	940	1,662	2,671	4,035	5,451	11,334
September 2017	568	972	1,700	2,724	4,117	5,569	11,636
September 2018	593	1,009	1,763	2,809	4,256	5,766	12,029
September 2019	619	1,052	1,824	2,891	4,364	5,937	12,389
September 2020	647	1,094	1,882	2,960	4,478	6,100	12,731
September 2021	674	1,152	1,994	3,130	4,742	6,480	13,583
October 2021	673	1,153	2,003	3,141	4,756	6,496	13,601
November 2021	673	1,156	2,014	3,152	4,774	6,512	13,621
December 2021	677	1,161	2,025	3,163	4,789	6,539	13,703
January 2022	681	1,166	2,037	3,181	4,819	6,573	13,807
February 2022	684	1,173	2,045	3,196	4,851	6,617	13,952
March 2022	685	1,179	2,056	3,219	4,892	6,693	14,246
April 2022	689	1,187	2,065	3,234	4,918	6,747	14,362
May 2022	692	1,192	2,077	3,253	4,944	6,798	14,437
June 2022	696	1,199	2,088	3,263	4,959	6,814	14,332
July 2022	696	1,206	2,102	3,282	4,988	6,840	14,345
August 2022	696	1,214	2,114	3,302	5,021	6,872	14,351
September 2022	697	1,220	2,128	3,331	5,063	6,897	14,384
Change on year	23	68	135	201	321	417	801
Change %	3.4	5.9	6.8	6.4	6.8	6.4	5.9

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- 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
September 2017	683,381	650,098
September 2018	683,673	679,746
September 2019	653,915	632,226
September 2020	546,763	620,326
September 2021	689,247	595,803
October 2021	691,855	655,145
November 2021	670,233	578,187
December 2021	673,245	618,471
January 2022	698,702	644,926
February 2022	709,538	621,672
March 2022	749,511	657,963
April 2022	700,089	624,216
May 2022	672,020	652,523
June 2022	691,459	658,729
July 2022	692,004	632,551
August 2022	719,605	682,555
September 2022	745,921	652,317
Change on year	56,674	56,514
Change %	8.2	9.5

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

REGIONAL PAYROLLED EMPLOYEES (NUTS1)

7 Regional payrolled employees from PAYE RTI

	Payrolled employees											
	UK, all industries, seasonally adjusted											
			Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
Period	North East	North West										
October 2014	1,033,782	2,924,576	2,161,887	1,966,018	2,308,204	2,563,623	3,709,686	3,809,611	2,254,547	1,189,651	2,311,467	677,567
October 2015	1,052,468	3,002,873	2,209,420	2,022,926	2,385,883	2,643,288	3,871,177	3,915,799	2,313,262	1,212,955	2,347,432	698,692
October 2016	1,056,278	3,034,924	2,235,481	2,053,784	2,420,502	2,687,582	3,933,659	3,965,035	2,346,637	1,225,265	2,351,888	708,435
October 2017	1,065,300	3,085,369	2,264,883	2,086,730	2,453,698	2,725,055	4,000,352	4,012,306	2,376,916	1,242,696	2,370,282	723,279
October 2018	1,068,450	3,122,477	2,288,574	2,110,183	2,476,728	2,752,179	4,059,767	4,054,770	2,397,177	1,256,645	2,380,121	738,706
October 2019	1,071,997	3,147,784	2,312,016	2,123,241	2,491,606	2,783,823	4,136,233	4,089,911	2,420,433	1,260,197	2,389,096	748,149
October 2020	1,051,005	3,082,655	2,260,079	2,078,094	2,421,824	2,713,626	3,943,660	3,978,669	2,356,525	1,232,642	2,311,469	737,566
October 2021	1,088,004	3,191,153	2,331,204	2,136,079	2,504,417	2,785,117	4,091,275	4,093,649	2,427,253	1,271,463	2,384,916	762,541
November 2021	1,092,046	3,200,423	2,337,580	2,143,053	2,512,616	2,793,243	4,111,387	4,104,969	2,432,810	1,273,688	2,392,287	765,012
December 2021	1,095,395	3,206,374	2,342,135	2,146,645	2,515,559	2,796,202	4,127,721	4,110,322	2,433,755	1,274,240	2,398,309	767,232
January 2022	1,095,328	3,210,326	2,348,372	2,149,148	2,520,854	2,801,034	4,145,831	4,118,429	2,436,489	1,276,663	2,396,154	769,036
February 2022	1,098,542	3,214,428	2,352,759	2,157,380	2,527,296	2,811,101	4,162,380	4,131,676	2,445,792	1,281,426	2,403,266	769,485
March 2022	1,101,495	3,220,829	2,358,531	2,164,345	2,532,661	2,820,032	4,187,007	4,148,516	2,450,343	1,285,102	2,406,855	771,364
April 2022	1,103,336	3,228,723	2,363,685	2,169,891	2,539,296	2,826,057	4,196,203	4,149,164	2,470,530	1,290,352	2,412,368	773,346
May 2022	1,103,451	3,228,316	2,363,379	2,170,653	2,541,303	2,826,766	4,202,974	4,156,718	2,465,217	1,293,550	2,416,090	774,032
June 2022	1,105,079	3,231,453	2,364,090	2,171,783	2,543,461	2,829,494	4,210,838	4,162,887	2,467,865	1,294,703	2,418,894	774,632
July 2022	1,106,822	3,236,487	2,366,903	2,172,726	2,550,465	2,834,768	4,223,655	4,176,484	2,470,497	1,295,904	2,422,832	777,088
August 2022	1,107,222	3,239,287	2,368,850	2,174,208	2,554,567	2,840,329	4,227,795	4,184,904	2,473,793	1,295,883	2,424,079	780,764
September 2022	1,110,703	3,250,121	2,376,594	2,180,693	2,560,191	2,850,087	4,243,921	4,201,615	2,481,113	1,299,739	2,430,541	779,967
October 2022	1,112,336	3,254,847	2,383,589	2,183,175	2,565,898	2,855,592	4,266,060	4,211,204	2,488,865	1,301,990	2,434,689	781,262
Change on year	24,332	63,694	52,386	47,096	61,482	70,475	174,785	117,555	61,612	30,527	49,774	18,721
Change %	2.2	2	2.2	2.2	2.5	2.5	4.3	2.9	2.5	2.4	2.1	2.5

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

REGIONAL MEDIAN PAY (NUTS1)

8 Regional median monthly pay from PAYE RTI

Period	£ per month											
	UK, all industries, seasonally adjusted											
	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
October 2014	1,533	1,518	1,501	1,516	1,521	1,643	1,933	1,722	1,506	1,501	1,649	1,494
October 2015	1,538	1,533	1,520	1,530	1,542	1,667	1,961	1,746	1,524	1,523	1,667	1,496
October 2016	1,570	1,570	1,550	1,567	1,583	1,702	2,013	1,784	1,561	1,557	1,695	1,523
October 2017	1,606	1,616	1,592	1,615	1,627	1,759	2,074	1,836	1,611	1,598	1,734	1,564
October 2018	1,662	1,675	1,643	1,675	1,680	1,818	2,140	1,894	1,668	1,662	1,781	1,629
October 2019	1,715	1,731	1,697	1,726	1,731	1,880	2,204	1,959	1,724	1,709	1,856	1,689
October 2020	1,790	1,815	1,781	1,809	1,810	1,970	2,311	2,042	1,811	1,812	1,939	1,773
October 2021	1,862	1,893	1,862	1,908	1,897	2,078	2,434	2,152	1,902	1,874	2,031	1,850
November 2021	1,872	1,902	1,874	1,921	1,904	2,091	2,444	2,163	1,912	1,885	2,041	1,863
December 2021	1,898	1,913	1,888	1,933	1,920	2,104	2,464	2,178	1,930	1,909	2,071	1,898
January 2022	1,896	1,926	1,896	1,939	1,925	2,118	2,479	2,186	1,942	1,922	2,092	1,935
February 2022	1,911	1,939	1,908	1,946	1,932	2,124	2,484	2,189	1,946	1,927	2,072	1,915
March 2022	1,946	1,957	1,925	1,964	1,958	2,134	2,521	2,209	1,984	1,956	2,055	1,935
April 2022	1,937	1,962	1,929	1,966	1,955	2,143	2,534	2,216	1,979	1,939	2,093	1,937
May 2022	1,944	1,970	1,936	1,977	1,966	2,153	2,542	2,230	1,985	1,968	2,100	1,942
June 2022	1,948	1,981	1,949	1,992	1,985	2,170	2,553	2,245	1,997	2,017	2,124	1,959
July 2022	1,963	1,993	1,958	2,000	2,000	2,176	2,551	2,259	2,012	1,979	2,124	1,952
August 2022	1,974	2,006	1,972	2,014	2,011	2,187	2,562	2,269	2,021	1,991	2,119	1,975
September 2022	2,008	2,038	2,003	2,036	2,025	2,210	2,585	2,300	2,036	2,010	2,135	1,957
October 2022	1,996	2,024	1,984	2,023	2,023	2,200	2,564	2,285	2,031	1,999	2,143	1,967
Change on year	134	131	122	115	126	122	130	133	130	125	111	117
Change %	7.2	6.9	6.5	6	6.6	5.9	5.3	6.2	6.8	6.6	5.5	6.3

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

REGIONAL PAYROLLED EMPLOYEES (NUTS2)
9 Regional payrolled employees from PAYE RTI

Period	Payrolled employees			
	UK, all industries, seasonally adjusted			
	October 2021	October 2022	Change on year	Change %
Tees Valley and Durham	488,131	498,718	10,587	2.2
Northumberland and Tyne and Wear	599,873	613,618	13,745	2.3
Cumbria	218,135	221,816	3,681	1.7
Greater Manchester	1,238,068	1,265,008	26,940	2.2
Lancashire	640,478	654,097	13,619	2.1
Cheshire	435,955	444,390	8,435	1.9
Merseyside	658,516	669,535	11,019	1.7
East Yorkshire and Northern Lincolnshire	402,110	410,766	8,656	2.2
North Yorkshire	356,843	363,884	7,041	2
South Yorkshire	583,517	596,091	12,574	2.2
West Yorkshire	988,734	1,012,848	24,114	2.4
Derbyshire and Nottinghamshire	952,051	973,258	21,207	2.2
Leicestershire, Rutland and Northamptonshire	859,836	878,316	18,480	2.1
Lincolnshire	324,193	331,602	7,409	2.3
Herefordshire, Worcestershire and Warwickshire	614,293	627,872	13,579	2.2
Shropshire and Staffordshire	707,187	722,035	14,848	2.1
West Midlands (county)	1,182,936	1,215,991	33,055	2.8
East Anglia	1,104,559	1,132,862	28,303	2.6
Bedfordshire and Hertfordshire	868,041	890,469	22,428	2.6
Essex	812,517	832,260	19,743	2.4
Inner London - West	523,008	547,273	24,265	4.6
Inner London - East	1,156,643	1,216,350	59,707	5.2
Outer London - East and North East	853,900	883,094	29,194	3.4
Outer London - South	598,556	615,679	17,123	2.9
Outer London - West and North West	959,168	1,003,663	44,495	4.6
Berkshire, Buckinghamshire and Oxfordshire	1,168,776	1,206,670	37,894	3.2
Surrey, East and West Sussex	1,255,242	1,293,099	37,857	3
Hampshire and Isle of Wight	882,978	902,971	19,993	2.3
Kent	786,653	808,465	21,812	2.8
Gloucestershire, Wiltshire and Bristol/Bath area	1,156,699	1,186,479	29,780	2.6
Dorset and Somerset	558,819	571,909	13,090	2.3
Cornwall and Isles of Scilly	222,942	228,287	5,345	2.4
Devon	488,793	502,190	13,397	2.7
West Wales and The Valleys	774,135	791,535	17,400	2.2
East Wales	497,328	510,455	13,127	2.6
North Eastern Scotland	223,386	228,839	5,453	2.4
Highlands and Islands	201,917	205,382	3,465	1.7
Eastern Scotland	883,806	906,833	23,027	2.6
West Central Scotland	675,395	686,874	11,479	1.7
Southern Scotland	400,412	406,762	6,350	1.6
Northern Ireland	762,541	781,262	18,721	2.5

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

REGIONAL MEDIAN PAY (NUTS2)

10 Regional median monthly pay from PAYE RTI

Period	£ per month			
	UK, all industries, seasonally adjusted			
	October 2021	October 2022	Change on year	Change %
Tees Valley and Durham	1,857	1,992	135	7.3
Northumberland and Tyne and Wear	1,871	2,005	134	7.2
Cumbria	1,870	1,994	124	6.6
Greater Manchester	1,891	2,026	135	7.1
Lancashire	1,823	1,940	117	6.4
Cheshire	2,019	2,128	109	5.4
Merseyside	1,899	2,029	130	6.8
East Yorkshire and Northern Lincolnshire	1,837	1,946	109	5.9
North Yorkshire	1,870	2,006	136	7.3
South Yorkshire	1,851	1,969	118	6.4
West Yorkshire	1,882	2,005	123	6.5
Derbyshire and Nottinghamshire	1,900	2,022	122	6.4
Leicestershire, Rutland and Northamptonshire	1,940	2,058	118	6.1
Lincolnshire	1,851	1,938	87	4.7
Herefordshire, Worcestershire and Warwickshire	1,994	2,115	121	6.1
Shropshire and Staffordshire	1,894	2,016	122	6.4
West Midlands (county)	1,851	1,975	124	6.7
East Anglia	1,960	2,091	131	6.7
Bedfordshire and Hertfordshire	2,229	2,364	135	6.1
Essex	2,107	2,239	132	6.3
Inner London - West	3,002	3,197	195	6.5
Inner London - East	2,499	2,630	131	5.2
Outer London - East and North East	2,230	2,360	130	5.8
Outer London - South	2,490	2,617	127	5.1
Outer London - West and North West	2,270	2,407	137	6
Berkshire, Buckinghamshire and Oxfordshire	2,307	2,443	136	5.9
Surrey, East and West Sussex	2,150	2,288	138	6.4
Hampshire and Isle of Wight	2,050	2,185	135	6.6
Kent	2,065	2,196	131	6.3
Gloucestershire, Wiltshire and Bristol/Bath area	2,022	2,163	141	7
Dorset and Somerset	1,862	1,988	126	6.8
Cornwall and Isles of Scilly	1,729	1,837	108	6.2
Devon	1,792	1,922	130	7.3
West Wales and The Valleys	1,842	1,961	119	6.5
East Wales	1,936	2,061	125	6.5
North Eastern Scotland	2,158	2,251	93	4.3
Highlands and Islands	1,950	2,036	86	4.4
Eastern Scotland	2,040	2,162	122	6
West Central Scotland	2,043	2,146	103	5
Southern Scotland	1,978	2,089	111	5.6
Northern Ireland	1,850	1,967	117	6.3

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipient's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

INDUSTRY PAYROLLED EMPLOYEES

11 Industry payrolled employees from PAYE RTI

Period	Payrolled employees			
	UK, all industries, seasonally adjusted			
	October 2021	October 2022	Change on year	Change %
Agriculture, forestry and fishing	189,584	193,111	3,527	1.9
Mining and quarrying	51,588	52,447	859	1.7
Manufacturing	2,358,317	2,387,499	29,182	1.2
Energy production and supply	123,560	124,692	1,132	0.9
Water supply, sewerage and waste	179,281	185,432	6,151	3.4
Construction	1,295,166	1,306,366	11,200	0.9
Wholesale and retail; repair of motor vehicles	4,379,517	4,379,742	225	0
Transportation and storage	1,344,220	1,361,632	17,412	1.3
Accommodation and food service activities	2,030,004	2,138,248	108,244	5.3
Information and communication	1,244,003	1,320,842	76,839	6.2
Finance and insurance	1,032,959	1,063,290	30,331	2.9
Real estate	430,951	445,724	14,773	3.4
Professional, scientific and technical	2,242,771	2,360,153	117,382	5.2
Administrative and support services	2,443,757	2,552,733	108,976	4.5
Public administration and defence; social security	1,376,259	1,396,890	20,631	1.5
Education	3,142,712	3,215,322	72,610	2.3
Health and social work	4,020,358	4,120,771	100,413	2.5
Arts, entertainment and recreation	550,330	598,735	48,405	8.8
Other service activities	519,858	525,727	5,869	1.1
Households and Extraterritorial	111,878	110,150	-1,728	-1.5

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

INDUSTRY MEDIAN PAY

12 Industry median monthly pay from PAYE RTI

Period	£ per month			
	UK, all industries, seasonally adjusted			
	October 2021	October 2022	Change on year	Change %
Agriculture, forestry and fishing	1,807	1,903	96	5.3
Mining and quarrying	3,967	4,238	271	6.8
Manufacturing	2,408	2,549	141	5.9
Energy production and supply	3,357	3,697	340	10.1
Water supply, sewerage and waste	2,591	2,722	131	5.1
Construction	2,235	2,390	155	6.9
Wholesale and retail; repair of motor vehicles	1,570	1,688	118	7.5
Transportation and storage	2,412	2,511	99	4.1
Accommodation and food service activities	1,085	1,092	7	0.6
Information and communication	3,169	3,445	276	8.7
Finance and insurance	3,262	3,589	327	10
Real estate	2,114	2,228	114	5.4
Professional, scientific and technical	2,555	2,776	221	8.6
Administrative and support services	1,746	1,852	106	6.1
Public administration and defence; social security	2,586	2,744	158	6.1
Education	2,019	2,096	77	3.8
Health and social work	1,924	2,056	132	6.9
Arts, entertainment and recreation	1,389	1,425	36	2.6
Other service activities	1,481	1,588	107	7.2
Households and Extraterritorial	1,004	1,034	30	3

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

PAYROLLED EMPLOYEES BY AGE

13 Payrolled employees by age from PAYE RTI

Period	Payrolled employees UK, all industries, seasonally adjusted					
	0-17	18-24	25-34	35-49	50-64	65+
October 2014	406,120	3,512,189	6,387,796	9,166,289	6,616,771	821,453
October 2015	436,692	3,620,155	6,594,308	9,306,737	6,881,425	836,858
October 2016	440,546	3,604,737	6,700,680	9,340,988	7,083,365	849,155
October 2017	441,534	3,592,125	6,785,878	9,390,646	7,323,353	873,330
October 2018	438,789	3,566,362	6,834,889	9,427,578	7,537,793	900,367
October 2019	431,885	3,515,934	6,871,174	9,456,496	7,717,062	981,935
October 2020	294,164	3,191,801	6,661,293	9,320,220	7,718,174	982,163
October 2021	474,785	3,427,446	6,787,657	9,453,359	7,903,674	1,020,147
November 2021	490,644	3,429,986	6,804,379	9,478,221	7,927,825	1,028,058
December 2021	496,603	3,431,097	6,818,595	9,488,414	7,945,132	1,034,046
January 2022	493,523	3,441,904	6,827,297	9,508,259	7,957,172	1,039,508
February 2022	504,575	3,465,538	6,849,156	9,519,611	7,970,049	1,046,600
March 2022	521,989	3,490,210	6,866,168	9,532,827	7,980,975	1,054,910
April 2022	527,860	3,497,499	6,888,995	9,564,540	7,990,452	1,053,606
May 2022	528,050	3,492,518	6,894,513	9,577,687	7,996,282	1,053,399
June 2022	522,327	3,484,040	6,908,044	9,595,027	8,007,891	1,057,850
July 2022	524,608	3,486,566	6,923,287	9,612,081	8,024,230	1,063,859
August 2022	526,523	3,478,618	6,932,390	9,624,060	8,037,311	1,072,779
September 2022	532,676	3,499,807	6,947,471	9,641,562	8,061,876	1,081,894
October 2022	520,474	3,534,418	6,968,011	9,656,073	8,068,101	1,092,430
Change on year	45,689	106,972	180,354	202,714	164,427	72,282
Change %	9.6	3.1	2.7	2.1	2.1	7.1

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.

MEDIAN PAY BY AGE

14 Median monthly pay by age from PAYE RTI

Period	£ per month					
	UK, all industries, seasonally adjusted					
	0-17	18-24	25-34	35-49	50-64	65+
October 2014	273	1,089	1,735	1,910	1,726	734
October 2015	289	1,134	1,763	1,931	1,739	756
October 2016	295	1,174	1,807	1,966	1,764	786
October 2017	303	1,217	1,861	2,015	1,795	819
October 2018	316	1,268	1,929	2,075	1,841	867
October 2019	324	1,319	2,002	2,133	1,889	958
October 2020	363	1,357	2,065	2,219	1,960	1,057
October 2021	403	1,420	2,182	2,360	2,065	1,128
November 2021	402	1,426	2,194	2,369	2,076	1,138
December 2021	403	1,438	2,212	2,391	2,089	1,153
January 2022	394	1,438	2,223	2,403	2,105	1,158
February 2022	405	1,440	2,227	2,408	2,114	1,165
March 2022	407	1,452	2,251	2,434	2,134	1,170
April 2022	416	1,469	2,261	2,443	2,127	1,171
May 2022	408	1,472	2,279	2,456	2,139	1,179
June 2022	408	1,490	2,293	2,473	2,153	1,191
July 2022	403	1,505	2,305	2,481	2,154	1,193
August 2022	404	1,513	2,320	2,492	2,167	1,198
September 2022	408	1,513	2,335	2,523	2,204	1,211
October 2022	405	1,510	2,335	2,514	2,181	1,206
Change on year	2	90	152	154	116	78
Change %	0.6	6.3	7	6.5	5.6	6.9

Source: PAYE RTI

- Figures for October 2022 are early estimates and are more likely to be subject to more significant revisions.
- These data are experimental statistics.
- The number of payrolled employees here is defined as the number of people receiving paid remuneration 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.
- 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.
- These statistics include only individuals paid through PAYE and do not cover other sources of income such as from pensions, self-employment or investments.
- PAYE covers occupational pension income as well as employment. In these tables pension income is excluded.
- Incomes and employments are allocated to regions and countries according to the residence of the recipient.
- Incomes and employments are allocated to industries according to the sector that an recipients's PAYE scheme is in.
- These data include imputation for payments not yet received by HMRC which would relate to the respective work periods.
- Figures have been rounded to the nearest £ or unit.
- Those employees placed on furlough through the Coronavirus Job Retention Scheme and still in PAYE are included in these statistics.
- Pay figures are based on gross earnings.