

Statistical bulletin

Earnings and employment from Pay As You Earn Real Time Information, UK: November 2020

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

- The number of payrolled employees in the UK in September 2020 fell by 2.5%, compared with the same period of the previous year.
- Early estimates for October 2020 indicate that the number of payrolled employees fell by 2.6% compared with October 2019, which is a fall of 763,000 employees.
- In October 2020, 33,000 fewer people were in payrolled employment when compared with September 2020 and 782,000 fewer people were in payrolled employment when compared with March 2020.
- Median monthly pay increased by 4.6% in September 2020, compared with the same period of the previous year.
- Early estimates for October 2020 indicate that median monthly pay increased by 4.6%, compared with the same period of the previous year.
- Annual growth in payrolled employees in October 2020 was the highest in Northern Ireland (a fall of 0.9%) and lowest in London (a fall of 4.6%).
- Annual growth in median pay for employees in October 2020 was highest in Wales (an increase of 6.1%) and lowest in the South East (an increase of 3.8%).
- Annual pay growth in the UK for employees was highest at the 25th percentile (positive 4.3%) and lowest at the 75th percentile (positive 2.5%) in the three months to September 2020, for the percentiles we have analysed.

About the data in this release

Early estimates for October 2020 are provided to give an indication of the likely level of employees as well as median pay in the latest period. The figures for October 2020 are based on around 85% of information being available and are considered of lower quality and may be subject to revision in next month's release when between 98% to 99% of data will be available. This work has been brought forward in response to the coronavirus (COVID-19) and methods will continue to be developed. [A revision triangle](#) is available for employees and median pay at the UK level.

This release covers people paid through the Pay As You Earn (PAYE) system where their pay is reported through the Real Time Information (RTI) system. As employees who are furloughed as part of the Coronavirus Job Retention Scheme (CJRS) programme should still have their payments reported through this system, they should feature in these data and contribute toward the employment and pay statistics for the relevant periods.

Statistics in this release are based on people who are employed in at least one job paid through 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](#) in December 2019, designed to better align with international guidelines for labour market statistics. This differs from the methodology used prior to December 2019, which produced statistics based on the total number of people paid in a particular time period.

2 . Individuals receiving pay

In September 2020, 28.2 million people were payrolled employees (Figure 1). This represents a 2.5% fall in payrolled employees when compared with the same period of the previous year. When comparing the number of payrolled employees in September 2020 with the previous month, the number fell by 0.1%. This is a small revision from the early estimate of a 0.1% increase, reported in the previous bulletin.

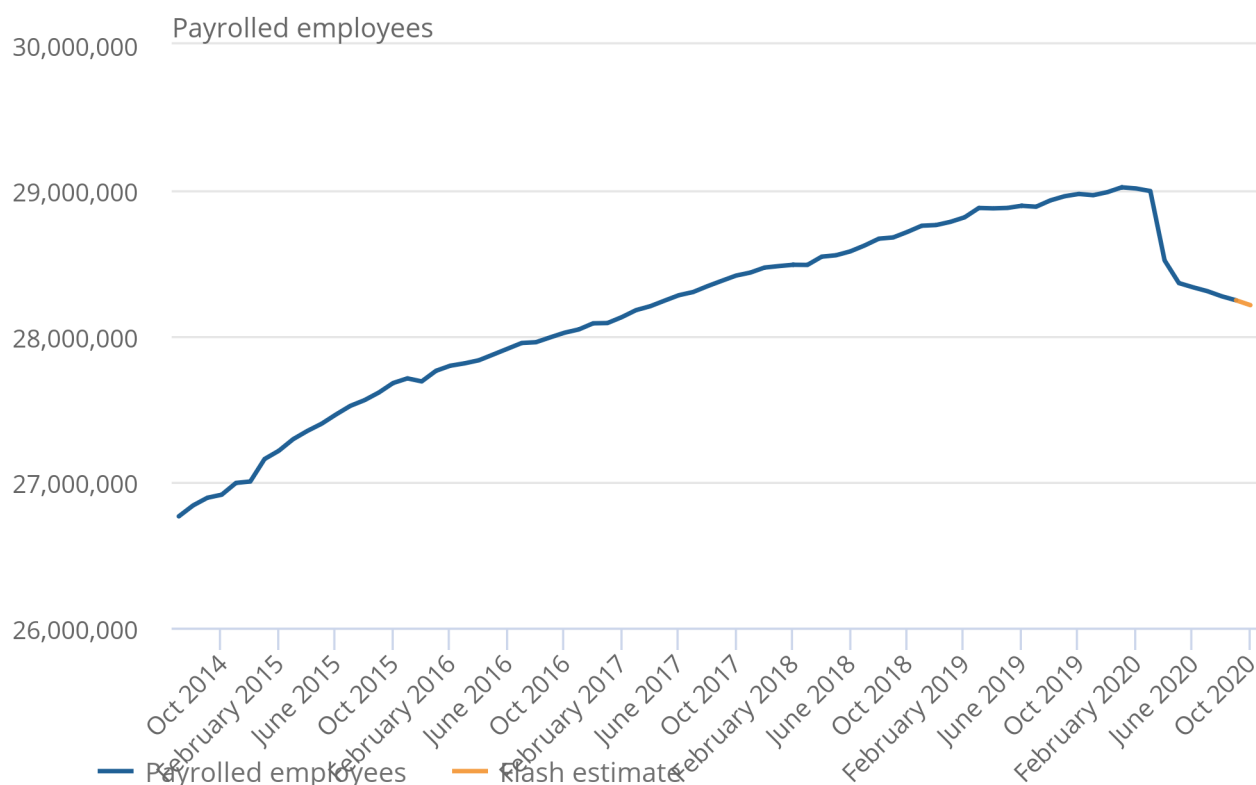
Early estimates for October 2020 indicate that there were 28.2 million payrolled employees, a fall of 2.6% compared with the same period of the previous year and a decline of 763,000 people over the twelve month period. Compared with the previous month, the number of payrolled employees decreased by 0.1% in October 2020 – equivalent to 33,000 people.

Figure 1: After rising for several years, the number of employees has fallen in recent months

Payrolled employees, seasonally adjusted, UK, July 2014 to October 2020

Figure 1: After rising for several years, the number of employees has fallen in recent months

Payrolled employees, seasonally adjusted, UK, July 2014 to October 2020



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 2020 figure is not a flash estimate of payrolled employees, this is included purely for graphing purposes.

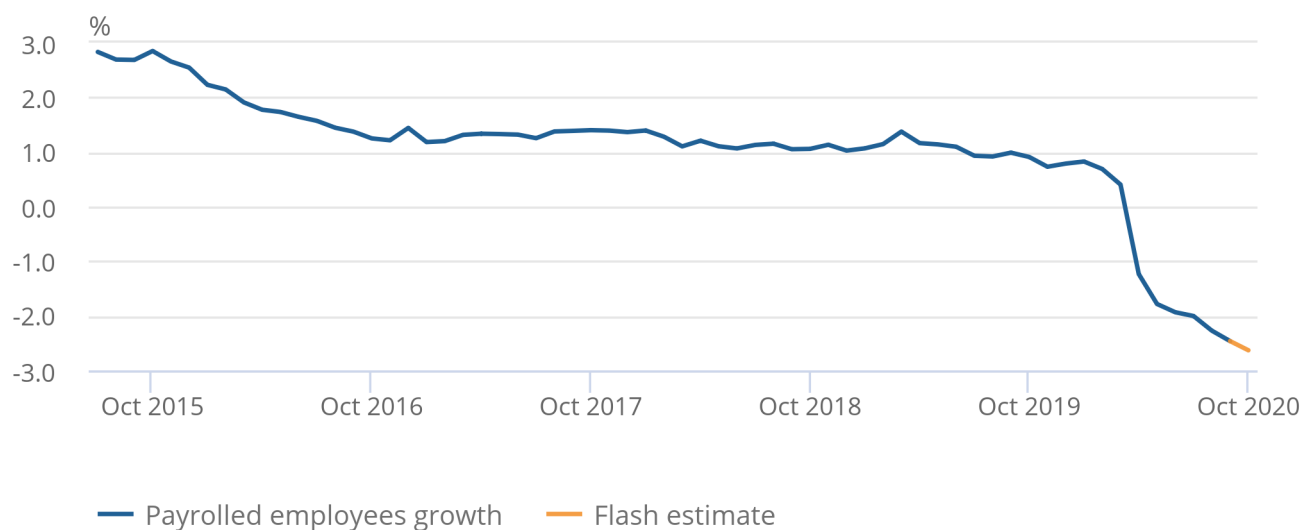
Annual growth in the number of employees remained broadly within a range of 1.0% to 1.5% until 2019, following higher rates of growth prior to mid-2016 (Figure 2). Starting around early 2019, employee growth began a slight downward trend. However, employee growth slowed more substantially recently (becoming negative in April 2020) coinciding with the coronavirus (COVID-19) pandemic.

Figure 2: Growth in the number of payrolled employees fell recently, becoming negative in April 2020

Percentage change on same month in previous year, seasonally adjusted, UK, July 2015 to October 2020

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Percentage change on same month in previous year, seasonally adjusted, UK, July 2015 to October 2020



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

Notes:

1. Percentage change has been calculated using unrounded figures.
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3. The September 2020 figure is not a flash estimate of payrolled employees, this is included purely for graphing purposes.

3 . Median monthly pay

Median monthly pay for payrolled employees in September 2020 was £1,911 (Figure 3). This represents a 4.6% increase compared with the same period of the previous year. This is a small revision to the early estimate of a 4.3% increase reported in the [previous bulletin](#).

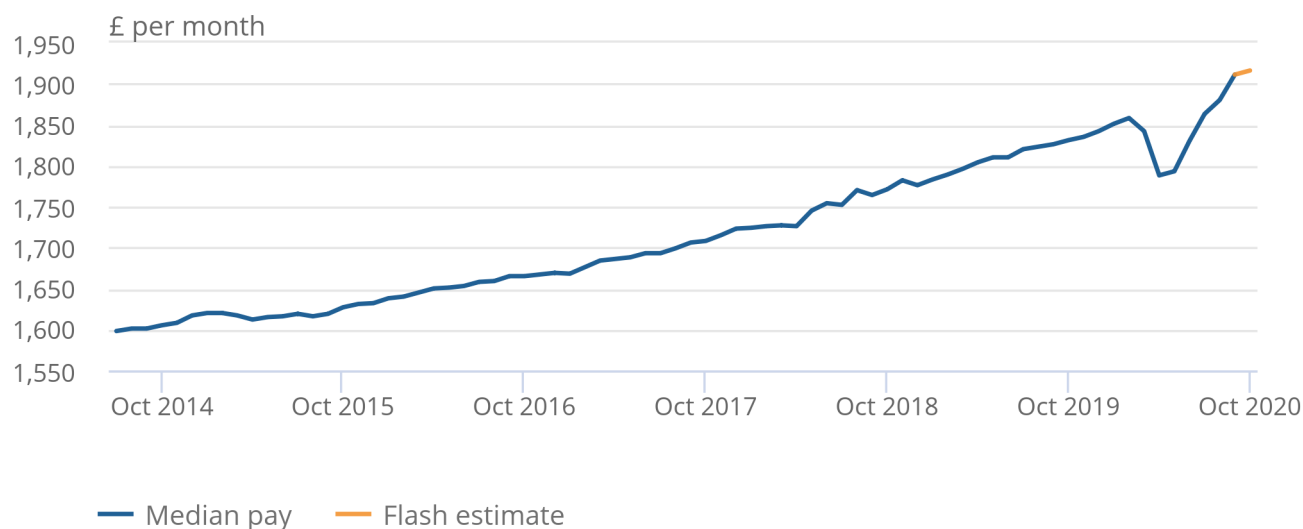
Early estimates for October 2020 indicate that median monthly pay increased to £1,916, an increase of 4.6% compared with the same period of the previous year.

Figure 3: Median pay decreased sharply in April, but has recovered since June

Median pay per month, seasonally adjusted, UK, July 2014 to October 2020

Figure 3: Median pay decreased sharply in April, but has recovered since June

Median pay per month, seasonally adjusted, UK, July 2014 to October 2020



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 2020 figure is not a flash estimate of median pay, this is included purely for graphing purposes.

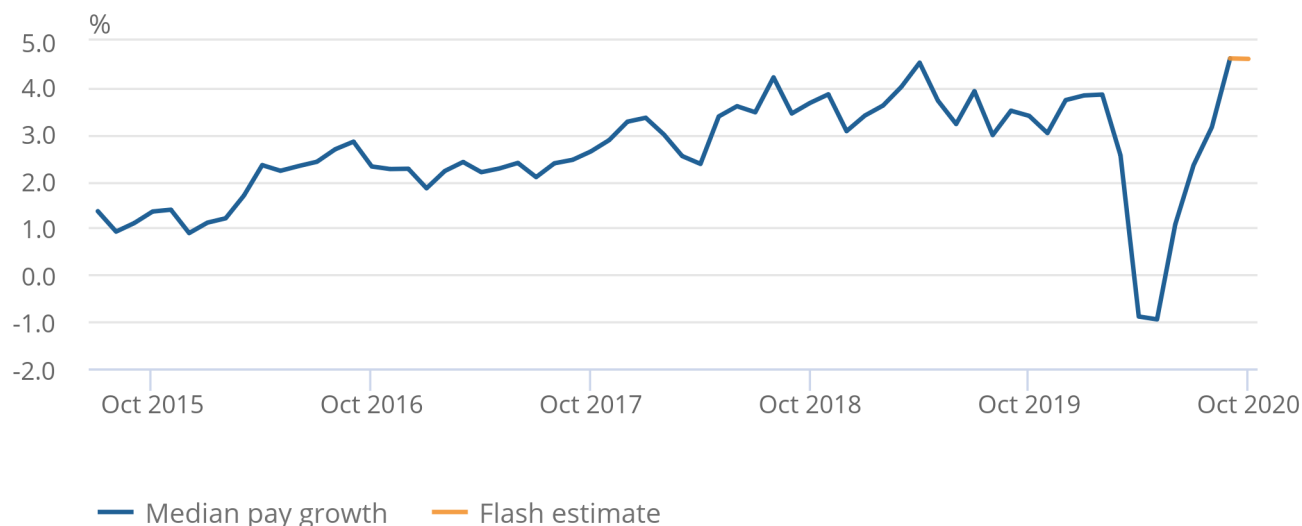
Following a general trend of increasing pay growth between mid-2015 and mid-2018, annual pay growth tended to fluctuate around 3.6% (Figure 4). Pay growth for April and May 2020 became negative, coinciding with the coronavirus (COVID-19) pandemic as well as related economic and policy responses. More recently, median pay growth has increased, and is now above pre-coronavirus 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 2020

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 2020



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

Notes:

1. Percentage change has been calculated using unrounded figures.
2. The latest period, highlighted in orange, is based on early data and therefore is more likely to be subject to slightly more significant revisions.
3. The September 2020 figure is not a flash estimate of median pay growth, this is included purely for graphing purposes.

The level of pay growth since June 2020 is partially explained by the decrease in inflows to payrolled employment over recent months, explored in the August and [September](#) bulletins. Whilst the general trend of pay growth is dominated by those continually employed, the mean pay of inflows tends to be around 40% lower than mean pay for those continually employed – meaning inflows into payrolled employment tend to bring down average pay and average pay growth. As inflows have fallen in recent months, this downward pressure on pay growth is reduced, and recorded pay growth is higher as a result.

Average pay growth is explored in more detail in [Section 6: Average pay growth: alternative metrics](#).

4 . Pay distribution

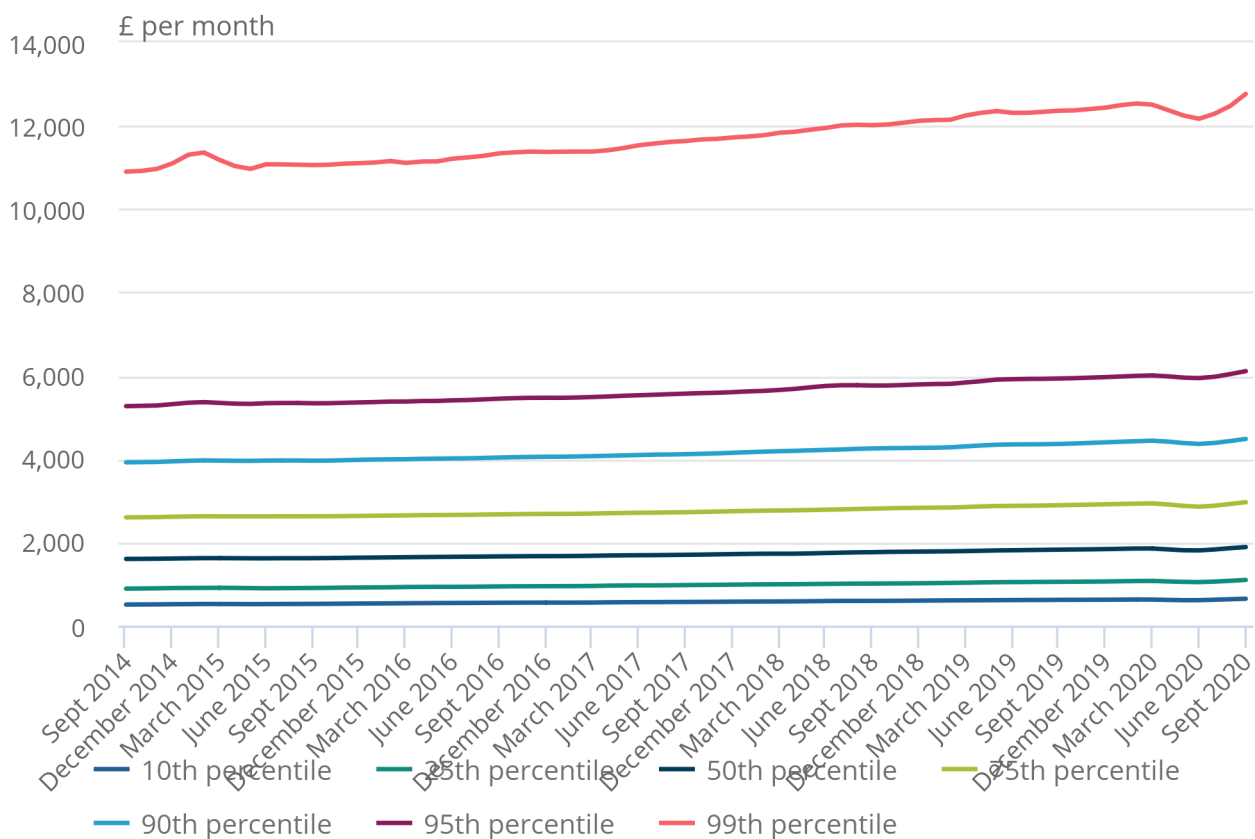
In the three months to September 2020, the 10th percentile of the monthly pay distribution was £644, the 90th percentile was £4,481 and the 99th percentile was £12,763 (Figure 5). This means that 10% of payrolled employees earned equal to or less than £644 per month, 90% earned equal to or less than £4,481, and 99% earned equal to or less than £12,763.

Figure 5: 10% of employees earn less than £644 per month and 90% earn less than £4,481 per month

Pay per month, seasonally adjusted, UK, three months to September 2014 to three months to September 2020

Figure 5: 10% of employees earn less than £644 per month and 90% earn less than £4,481 per month

Pay per month, seasonally adjusted, UK, three months to September 2014 to three months to September 2020



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).

Compared with the same time a year ago, of the percentiles we have analysed, pay growth was highest at the 25th percentile (positive 4.3%) and lowest at the 75th percentile (2.5%).

When interpreting changes in the distribution over time, it can be useful to compare the level of percentiles relative to the median (that is, the amount of earnings in the middle of the distribution so that half of employees earn more and half earn less).

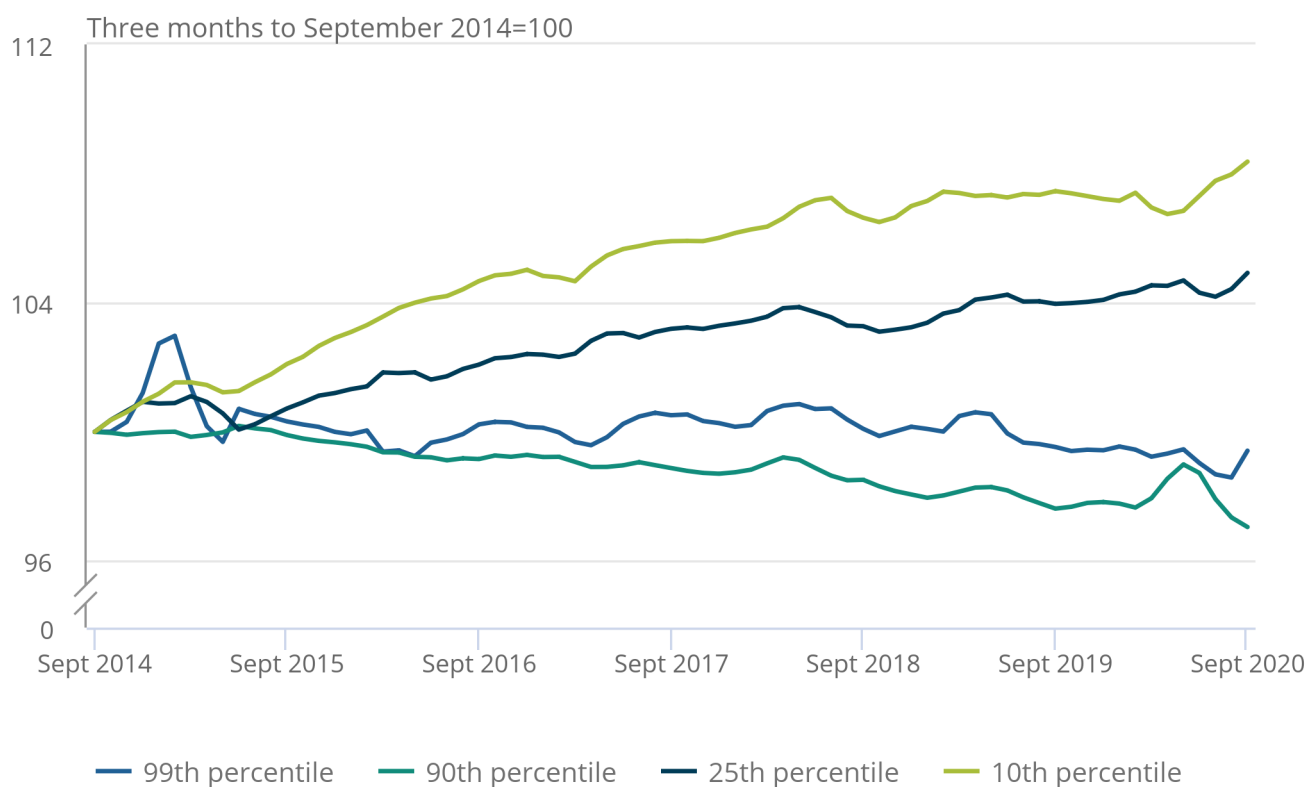
Figure 6 divides each percentile by the median and then indexes these to 100 at the start of the series to better focus on their movements over time. Growth in these series reflects a percentile growing faster than median pay, while a fall in these series reflects a percentile growing slower than median pay.

Figure 6: Since 2014, employees' pay has generally grown fastest toward the low end of the pay distribution

Ratio of selected percentiles relative to the median, rolling three-month average, seasonally adjusted, UK, three months to September 2014 to three months to September 2020

Figure 6: Since 2014, employees' pay has generally grown fastest toward the low end of the pay distribution

Ratio of selected percentiles relative to the median, rolling three-month average, seasonally adjusted, UK, three months to September 2014 to three months to September 2020



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

The 10th and 25th percentiles of employees' pay have generally grown faster than median pay over the past five years, coinciding with the introduction of, and increases to, the [National Living Wage \(NLW\)](#). However, since mid-2018, the 10th percentile and the median have grown at broadly the same pace, so their ratio has remained broadly constant. In line with the rest of this bulletin, Figure 6 includes only employees' pay and not other income such as from self-employment.

The ratio of the 90th percentile to the median has generally fallen, reflecting pay towards this high end of the distribution growing slightly slower than median pay. When focusing even further towards the high end of the distribution, pay at the 99th percentile has grown at a broadly similar pace to median pay.

Recent periods have shown more volatility, around the time of the coronavirus (COVID-19) pandemic. While pay growth (relative to median pay) around April 2020 was lower at the 10th percentile and higher at the 90th percentile, these movements are less prevalent more recently – or may have partially reversed.

5 . Regional data

Early estimates are now available for the regional information. 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 2020.

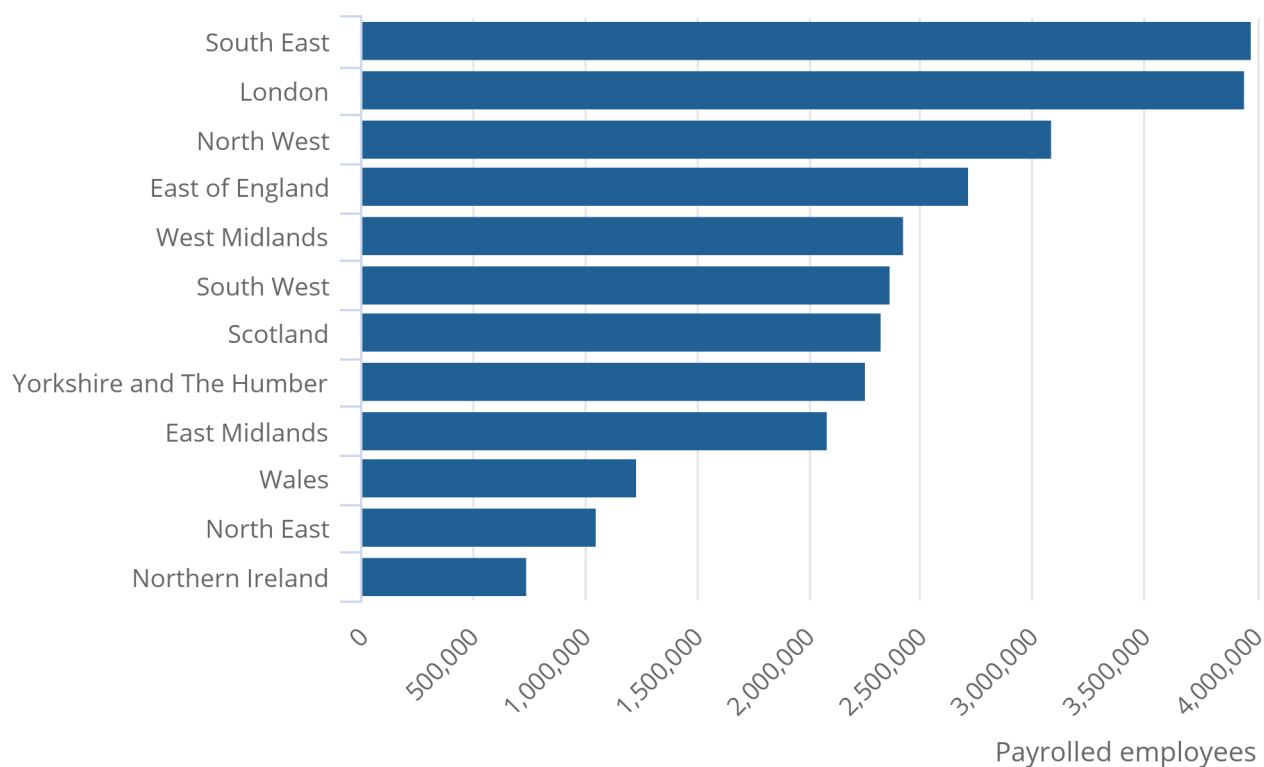
Numbers of payrolled employees in the UK range from 742,000 in Northern Ireland to 3,984,000 in the South East in October 2020 (Figure 7).

Figure 7: Numbers of payrolled employees vary across the UK

Payrolled employees, seasonally adjusted, UK, October 2020

Figure 7: Numbers of payrolled employees vary across the UK

Payrolled employees, seasonally adjusted, UK, October 2020



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.

While the UK as a whole has experienced moderate, if declining, payrolled employee growth since January 2017, growth within regions has not been uniform (Figure 8).

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.

In the past six months, all regions' growth rates followed a similar pattern: rapidly declining and becoming negative in April, and continuing a slower downward trend since. However, the magnitude of changes varies. When compared with the same period of the previous year, decreases in payrolled employees ranged from 0.9% in Northern Ireland to 4.6% in London.

Of the 782,000 decrease in payrolled employees since March 2020, 192,000 can be attributed to employees living in London, 106,000 in the South East, while only 12,000 can be attributed to employees living in Northern Ireland and 23,000 to the North East.

Figure 8: Regional employee growth has fallen across the UK in recent months

Percentage change on same month in previous year, seasonally adjusted, January 2017 to October 2020

Notes:

1. The latest period is based on early data and therefore is more likely to be subject to slightly more significant revisions.
2. Percentage change has been calculated using unrounded figures

[Data download](#)

Median pay across the regions and nations of the UK in October 2020 ranged from £1,769 in Northern Ireland to £2,318 in London (Figure 9).

Figure 9: Median pay varies across the UK

Median pay, seasonally adjusted, UK, October 2020

Figure 9: Median pay varies across the UK

Median pay, seasonally adjusted, UK, October 2020



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.

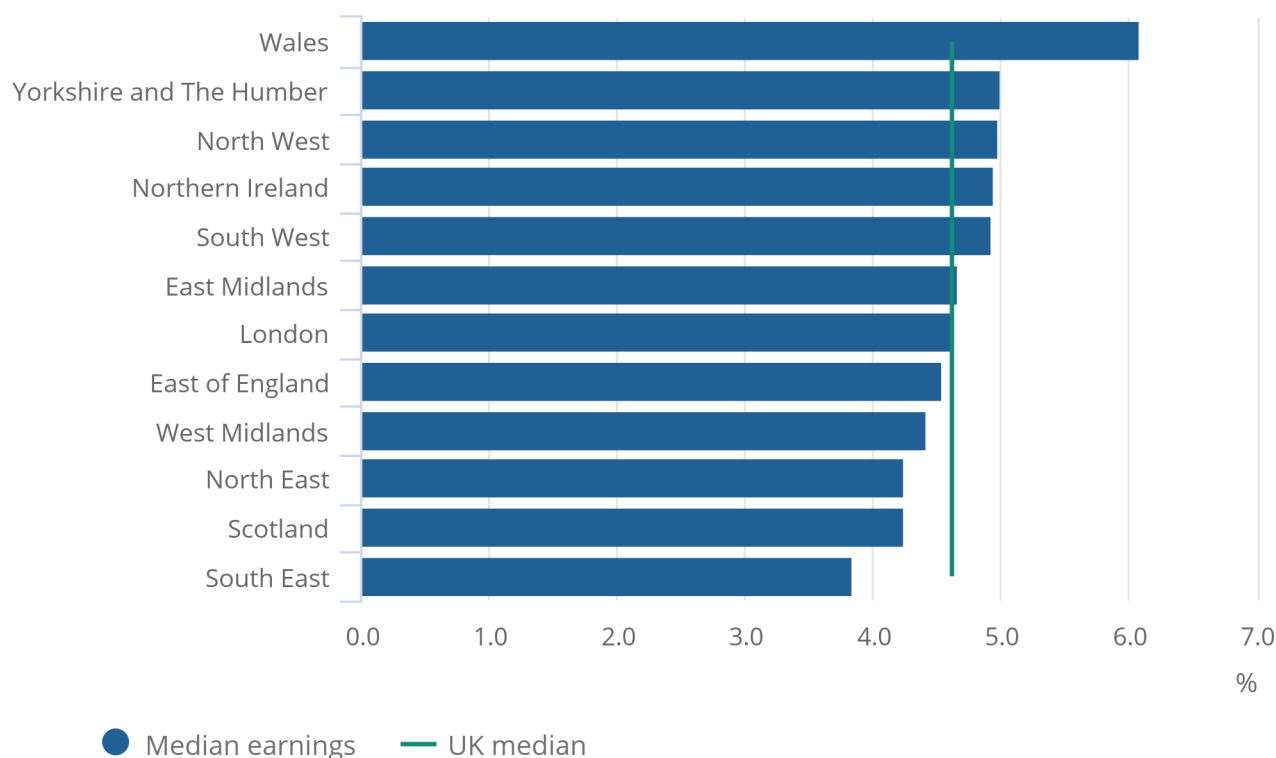
Compared with the same time last year, pay grew fastest in Wales (positive 6.1%) and slowest in the South East (positive 3.8%) (Figure 10). Over the longer-term, on average over the past five years, pay growth was highest in Wales (at an annualised rate of positive 3.6%) and slowest in Scotland (positive 3.0%). Estimates of mean pay for the regions is available in the tables published alongside this bulletin.

Figure 10: Median pay increased most in Wales and least in the South East

Percentage change on same month last year, seasonally adjusted, UK, October 2020

Figure 10: Median pay increased most in Wales and least in the South East

Percentage change on same month last year, seasonally adjusted, UK, October 2020



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. Percentage change has been calculated using unrounded figures.
3. 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 consistent parts of the UK.
4. Changes in growth rates are affected by changes in the base period (a year ago) as well as changes in the latest period.

6 . Average pay growth: alternative metrics

Up to now, this publication has used the median as the primary metric for average pay. Growth in median pay is the growth rate for the median earner, which takes the pay of the median (or middle) earner for two periods and calculates the growth between these, with this publication focusing to date on annual pay growth.

However, when the labour market is not stable and there are large changes in inflows or outflows, care needs to be taken when interpreting median pay growth. Alternative metrics of average pay growth may be required at these times.

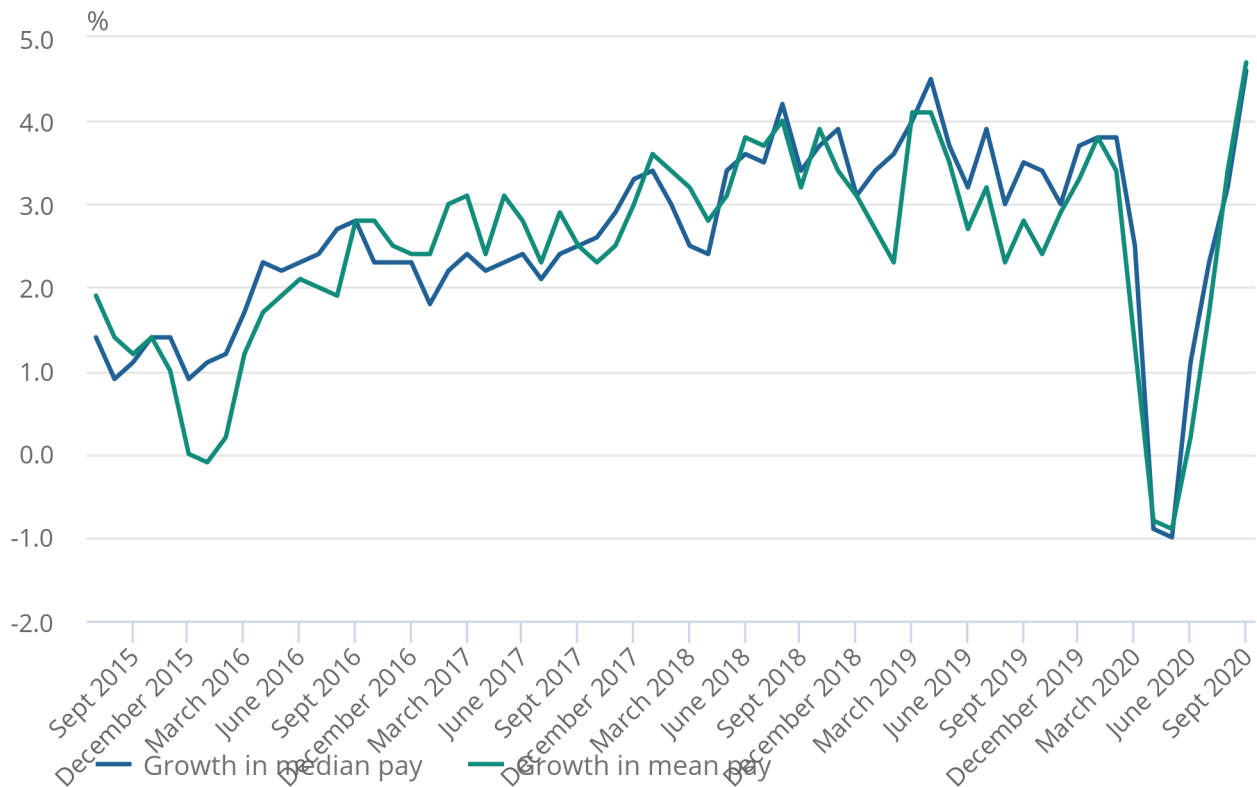
One alternative metric would be to consider mean pay rather than median pay. Figure 11 shows mean pay growth as well as median pay growth which have been similar in recent months. Mean pay growth is more volatile than median pay growth.

Figure 11: Median and mean pay growth rates have been similar for the past five years

Percentage change on same month last year, seasonally adjusted, UK, July 2015 to September 2020

Figure 11: Median and mean pay growth rates have been similar for the past five years

Percentage change on same month last year, seasonally adjusted, UK, July 2015 to September 2020



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

Notes:

1. Percentage change has been calculated using unrounded figures.

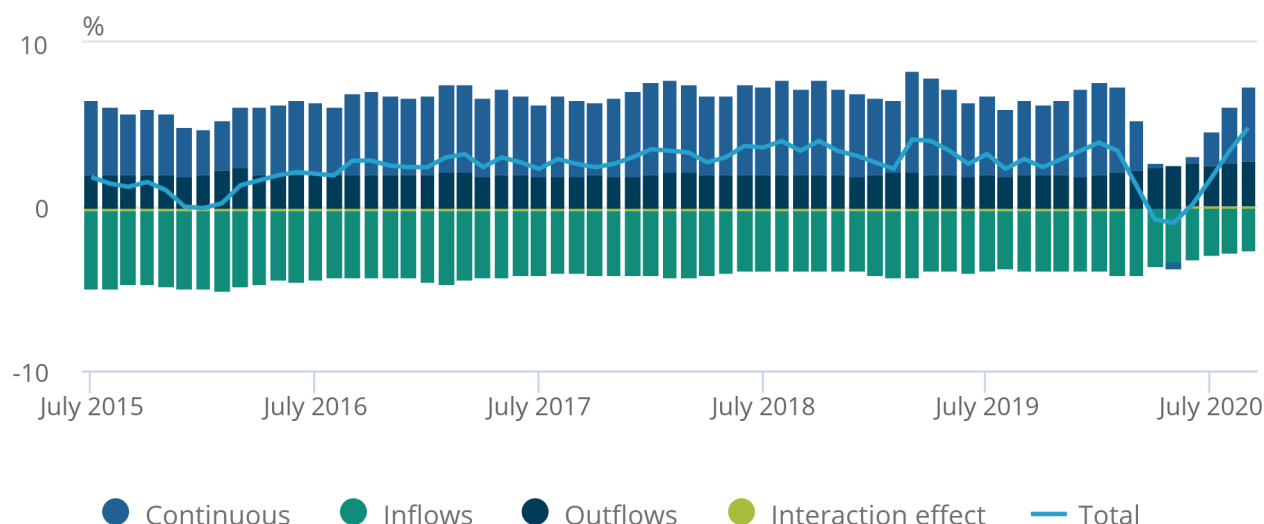
It is possible to decompose mean pay growth into components relating to inflows, outflows and those in continuous employment. Figure 12 shows that inflows have a negative effect on pay growth because new employees are on average lower paid than other employees. Similarly, employees leaving the labour market are also on average lower paid than other employees, which means that they have a positive effect on pay growth. The negative effect of inflows has historically been greater than the positive effect of outflows. So the effect of inflows and outflows is normally to lower mean pay growth, while those in continuous employment have higher mean pay growth. Recently inflows have been very weak which has the effect of increasing mean pay growth.

Figure 12: Fewer inflows than usual in recent months have had a positive impact on pay growth

Percentage change on same month last year, not seasonally adjusted, UK, July 2015 to September 2020

Figure 12: Fewer inflows than usual in recent months have had a positive impact on pay growth

Percentage change on same month last year, not seasonally adjusted, UK, July 2015 to September 2020



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

Notes:

1. Percentage change has been calculated using unrounded figures.

An alternative measure, median of pay growth, calculates each employee's pay growth for a certain period, and then takes the median of these growth rates. It is a measure of average pay growth, as opposed to growth in average pay. It is the measure used in the [Annual Survey of Hours and Earnings](#). It only measures those in continuous employment, as an employee cannot have a pay growth rate between two periods if they were not in employment for one of them. It is therefore not directly influenced by inflows and outflows.

The median of pay growth fell during April and May 2020 (Figure 13), but has only increased to around two-thirds of its average level for 2019, in contrast to the growth in median pay, which is now higher than its 2019 average.

Figure 13: The median of pay growth is lower than its average since 2015

Percentage change on same month last year, UK, July 2015 to October 2020

Figure 13: The median of pay growth is lower than its average since 2015

Percentage change on same month last year, UK, July 2015 to October 2020



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. Percentage change has been calculated using unrounded figures.
3. The median of pay growth data in this graph have not been seasonally adjusted. The growth in median pay data have been seasonally adjusted.

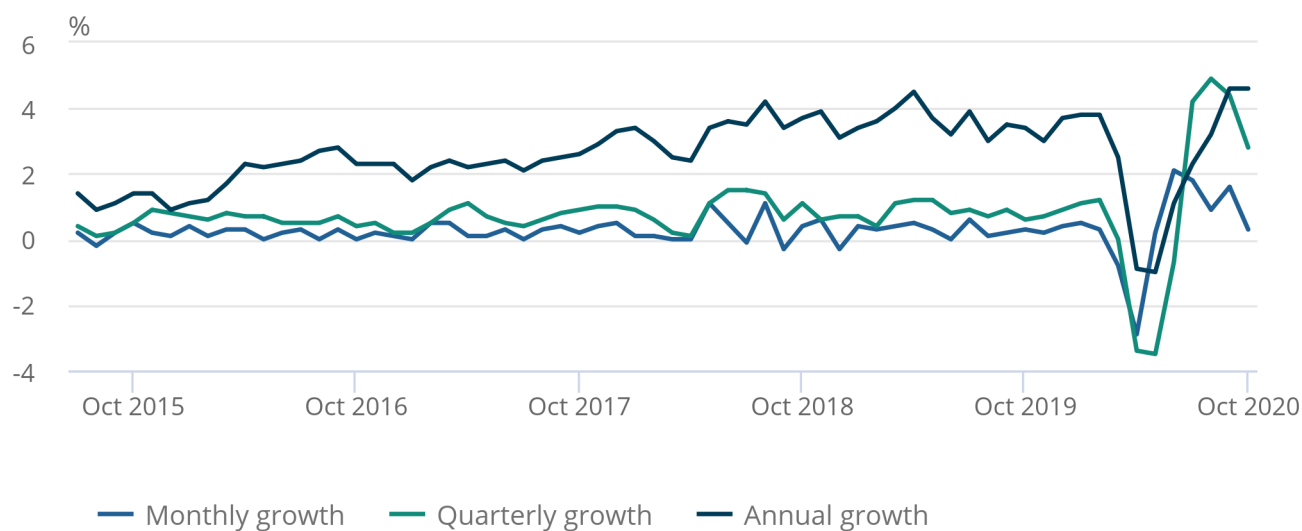
Another approach that could be taken is to consider the growth in median pay over a shorter period of time. The advantage of considering pay growth over a 12 month period is that the monthly variations are less volatile compared with the annual level. However, it is also less responsive to short term shocks. For example, the larger than average outflow in April 2020 and the lower than average inflow will continue to have an effect on median pay growth until April 2021. Therefore, where there are shocks to the labour market, it may be useful to also consider median pay growth over shorter time periods. Figure 14 illustrates the relative paths of monthly, quarterly and annual pay growth. (The monthly and quarterly pay series have not been annualised).

Figure 14: Monthly and quarterly growth rates in median pay

Percentage change on selected periods, seasonally adjusted, UK, July 2015 to October 2020

Figure 14: Monthly and quarterly growth rates in median pay

Percentage change on selected periods, seasonally adjusted, UK, July 2015 to October 2020



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

Notes:

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2. Percentage change has been calculated using unrounded figures.

7 . Earnings and employment data

[Earnings and employment from Pay As You Earn Real Time Information, seasonally adjusted](#)

Dataset | Released 10 November 2020

Employee counts and earnings data, including geographic and distributional breakdowns, from Pay As You Earn (PAYE) Real Time Information (RTI), seasonally adjusted.

[Earnings and employment from Pay As You Earn Real Time Information, non-seasonally adjusted](#)

Dataset | Released 10 November 2020

Employee counts and earnings data, including geographic and distributional breakdowns, from PAYE RTI, non-seasonally adjusted.

[Earnings and employment from Pay As You Earn Real Time Information, revision triangle](#)

Dataset | Released 10 November 2020

Revisions of earnings and employment statistics from Pay As You Earn (PAYE) Real Time Information (RTI) (Experimental Statistics).

8 . 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 paid. 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 between 16 and 24 years. The government’s National Living Wage (NLW) was introduced on 1 April 2016 and applies to employees aged 25 years and over.

On the Annual Survey of Hours and Earnings (ASHE) reference date in April 2020, the NMW and NLW rates were:

- £8.72 for employees aged 25 years and over
- £8.20 for employees aged 21 to 24 years
- £6.45 for employees aged 18 to 20 years
- £4.55 for employees aged 16 to 17 years
- £4.15 for apprentices aged 16 to 18 years and those aged 19 years or over who are in the first year of their apprenticeship

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. This publication relates to employees only and not pensioners. It was introduced in 1944 and is now the way most employees pay Income Tax in the UK.

9 . 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 2020 and are seasonally adjusted.

Upcoming changes

A revisions policy will be introduced by early 2021. This will reduce levels of revisions to the back series on a monthly basis. The policy will take the ONS's existing [labour market statistics revision policies](#) into account.

Future bulletins are planned to include additional statistics, such as more detailed geographic breakdowns, industry and demographic breakdowns. The focus and timing of these will be informed by user feedback. Please email rtistatistics.enquiries@hmrc.gov.uk 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.

10 . 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](#), can be found on [HMRC's 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 what can be done to improve them. Comments can be sent by email to rtistatistics.enquiries@hmrc.gov.uk.

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 will be able to use these to produce estimates for geographic areas and other more detailed breakdowns of the population. At the moment, 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

A limitation of the calendarisation used is that the figures for pay and numbers of employees in month t depend on payments made in month $t + 1$. This means only around 80% of the data used in the calculation on month t statistics are available at the end of each month.

Rather than wait until all those remaining payment returns have been received, we have decided to produce a timelier measure of numbers of employees and median pay by imputing the values for missing returns. The data on which the statistics are based were extracted at the beginning of October 2020, which means around 1% to 2% of the data for September 2020 are imputed, while around 15% of the data for the "flash" October 2020 data are imputed. As a result, the figures in future releases will be updated as new payment returns are received, and the imputation payments can be replaced with actual data.

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 an [accompanying article](#).

11 . Related links

[Labour market overview: November 2020](#)

Bulletin | Released 10 November 2020

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

[Employment in the UK: November 2020](#)

Bulletin | Released 10 November 2020

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

[Labour market in the regions of the UK: November 2020](#)

Bulletin | Released 10 November 2020

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

[Average weekly earnings in Great Britain: November 2020](#)

Bulletin | Released 10 November 2020

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

PAYROLLED EMPLOYEES

1 Payrolled employee counts from PAYE RTI

UK, all industries, seasonally adjusted	
Period	Payrolled employees
September 2014	26,890,583
September 2015	27,612,360
September 2016	27,990,814
September 2017	28,378,412
September 2018	28,676,060
September 2019	28,958,708
October 2019	28,974,509
November 2019	28,965,784
December 2019	28,986,915
January 2020	29,019,884
February 2020	29,011,973
March 2020	28,994,244
April 2020	28,518,412
May 2020	28,363,023
June 2020	28,333,830
July 2020	28,307,361
August 2020	28,272,384
September 2020	28,244,996
Change on year	-713,712
Change %	-2.5
Flash estimate for October 2020	28,211,839

Source: PAYE RTI

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MEDIAN PAY

2 Median monthly pay from PAYE RTI

Period	£ per month
	UK, all industries, seasonally adjusted
Period	Median pay
September 2014	1,601
September 2015	1,619
September 2016	1,665
September 2017	1,706
September 2018	1,764
September 2019	1,826
October 2019	1,831
November 2019	1,835
December 2019	1,842
January 2020	1,851
February 2020	1,858
March 2020	1,842
April 2020	1,788
May 2020	1,793
June 2020	1,830
July 2020	1,863
August 2020	1,880
September 2020	1,911
Change on year	84
Change %	4.6
Flash estimate for October 2020	1,916

Source: PAYE RTI

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MEAN PAY

3 Mean monthly pay from PAYE RTI

Period	£ per month
	UK, all industries, seasonally adjusted
	Mean pay
September 2014	2,198
September 2015	2,224
September 2016	2,286
September 2017	2,343
September 2018	2,419
September 2019	2,486
October 2019	2,494
November 2019	2,503
December 2019	2,516
January 2020	2,533
February 2020	2,524
March 2020	2,521
April 2020	2,461
May 2020	2,466
June 2020	2,490
July 2020	2,534
August 2020	2,568
September 2020	2,603
Change on year	117
Change %	4.7

Source: PAYE RTI

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AGGREGATE PAY

4 Aggregate monthly pay from PAYE RTI

UK, all industries, seasonally adjusted		£
Period	Aggregate pay	
September 2014	59,099,093,554	
September 2015	61,418,874,811	
September 2016	63,984,654,618	
September 2017	66,502,197,264	
September 2018	69,386,519,624	
September 2019	72,017,373,863	
October 2019	72,232,257,095	
November 2019	72,490,107,537	
December 2019	72,933,026,201	
January 2020	73,510,698,885	
February 2020	73,216,525,048	
March 2020	73,104,564,858	
April 2020	70,193,833,357	
May 2020	69,936,790,982	
June 2020	70,565,740,733	
July 2020	71,736,145,772	
August 2020	72,615,762,106	
September 2020	73,542,530,128	
Change on year	1,525,156,265	
Change %	2.1	

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								
Three months to:	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile	95th Percentile	99th Percentile	
September 2014	505	887	1,600	2,598	3,919	5,268	10,898	
September 2015	521	903	1,618	2,624	3,959	5,337	11,056	
September 2016	548	940	1,661	2,670	4,034	5,447	11,338	
September 2017	567	972	1,699	2,722	4,115	5,568	11,633	
September 2018	593	1,008	1,762	2,807	4,252	5,763	12,014	
September 2019	618	1,050	1,823	2,889	4,360	5,932	12,361	
October 2019	619	1,053	1,827	2,896	4,371	5,940	12,369	
November 2019	620	1,056	1,831	2,904	4,386	5,952	12,402	
December 2019	621	1,059	1,836	2,912	4,400	5,965	12,436	
January 2020	623	1,065	1,843	2,920	4,414	5,980	12,496	
February 2020	627	1,070	1,850	2,928	4,426	5,996	12,534	
March 2020	624	1,072	1,850	2,933	4,439	6,004	12,506	
April 2020	616	1,060	1,829	2,907	4,416	5,984	12,376	
May 2020	609	1,049	1,808	2,874	4,383	5,952	12,246	
June 2020	610	1,043	1,804	2,854	4,361	5,941	12,166	
July 2020	621	1,056	1,828	2,878	4,385	5,973	12,290	
August 2020	633	1,075	1,858	2,919	4,430	6,037	12,474	
September 2020	644	1,096	1,885	2,962	4,481	6,108	12,763	
Change on year	26	45	61	73	121	176	402	
Change %	4.3	4.3	3.4	2.5	2.8	3	3.3	

Source: PAYE RTI

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EMPLOYEE FLOWS

6 Inflows and outflows from PAYE RTI

Period	Payrolled employees UK, all industries, seasonally adjusted	
	Inflows	Outflows
September 2017	679,185	642,471
September 2018	675,095	666,608
September 2019	661,068	632,407
October 2019	658,848	643,046
November 2019	647,028	655,754
December 2019	675,511	654,379
January 2020	691,346	658,378
February 2020	677,696	685,607
March 2020	667,251	684,979
April 2020	433,529	909,361
May 2020	431,728	587,117
June 2020	426,004	455,196
July 2020	440,968	467,437
August 2020	535,669	570,646
September 2020	553,100	580,487
Change on year	-107,968	-51,920
Change %	-16.3	-8.2
Flash estimate for October 2020	635,375	668,533

Source: PAYE RTI

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6. These are experimental Statistics

REGIONAL PAYROLLED EMPLOYEES

7 Regional payrolled employees from PAYE RTI

Area name	Oct-20	Change on year	Payrolled employees UK, all industries, seasonally adjusted	
			Change %	
North East	1,051,577	-19,915	-1.9	
North West	3,083,236	-64,956	-2.1	
Yorkshire and the Humber	2,260,166	-48,794	-2.1	
East Midlands	2,080,308	-44,109	-2.1	
West Midlands	2,427,902	-60,640	-2.4	
East of England	2,716,433	-65,321	-2.3	
London	3,946,265	-189,709	-4.6	
South East	3,984,315	-106,242	-2.6	
South West	2,362,953	-57,241	-2.4	
Wales	1,234,919	-25,486	-2	
Scotland	2,322,024	-73,777	-3.1	
Northern Ireland	741,739	-6,480	-0.9	

Source: PAYE RTI

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REGIONAL MEDIAN PAY

8 Regional median pay from PAYE RTI

Area name	Oct-20	Change on year	£ per month	
			UK, all industries, seasonally adjusted	Change %
North East	1,794	73		4.3
North West	1,820	86		5
Yorkshire and the Humber	1,787	85		5
East Midlands	1,809	81		4.7
West Midlands	1,804	76		4.4
East of England	1,971	86		4.5
London	2,318	103		4.6
South East	2,039	75		3.8
South West	1,815	85		4.9
Wales	1,816	104		6.1
Scotland	1,935	79		4.2
Northern Ireland	1,769	83		5

Source: PAYE RTI

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REGIONAL MEAN PAY

9 Regional mean monthly pay from PAYE RTI

Area name	September 2020	Change on year	£ per month	
			UK, all industries, seasonally adjusted	Change %
North East	2,188	79		3.8
North West	2,293	111		5.1
Yorkshire and the Humber	2,202	99		4.7
East Midlands	2,264	95		4.4
West Midlands	2,253	97		4.5
East of England	2,696	116		4.5
London	3,677	197		5.7
South East	2,946	127		4.5
South West	2,302	116		5.3
Wales	2,180	115		5.6
Scotland	2,416	86		3.7
Northern Ireland	2,121	103		5.1

Source: PAYE RTI

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REGIONAL AGGREGATE PAY

10 Regional aggregate pay from PAYE RTI

			£
			UK, all industries, seasonally adjusted
Area name	September 2020	Change on year	Change %
North East	2,305,842,527	46,669,010	2.1
North West	7,081,254,096	216,213,545	3.1
Yorkshire and the Humber	4,979,491,259	124,663,659	2.6
East Midlands	4,710,068,745	103,030,974	2.2
West Midlands	5,478,059,419	114,336,532	2.1
East of England	7,324,202,783	150,376,986	2.1
London	14,593,980,649	211,708,353	1.5
South East	11,744,877,902	217,035,643	1.9
South West	5,435,761,226	145,412,680	2.7
Wales	2,693,486,914	89,801,453	3.4
Scotland	5,620,243,804	38,901,017	0.7
Northern Ireland	1,575,260,806	67,006,413	4.4

Source: PAYE RTI

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