

Statistical bulletin

# **Employee earnings in the UK: 2019**

Measures of employee earnings, using data from the Annual Survey for Hours and Earnings (ASHE).



Release date: 29 October 2019

Next release: To be announced

# Correction

## 12 November 2019 13:01

A correction has been made to the subtitle in Figure 4 which plots distribution of growth in real hourly earnings, whereas the original text referred to growth in nominal hourly earnings.

You can see the original content in the superseded version.

We apologise for any inconvenience.

# **Table of contents**

- 1. Other pages in this release
- 2. Main points
- 3. Employee earnings and hours worked
- 4. Earnings growth for individuals
- 5. Detailed analysis of earnings and hours worked
- 6. Employee earnings data
- 7. Glossary
- 8. Measuring the data
- 9. Strengths and limitations
- 10. Related links

# 1. Other pages in this release

Commentary on topics covered in the Annual Survey of Hours and Earnings (ASHE) is split between three separate bulletins in 2019. Other commentary from the latest ASHE data can be found on the following pages:

- Low and high pay in the UK: 2019
- Gender pay gap in the UK: 2019

# 2. Main points

- Median weekly earnings for full-time employees reached £585 in April 2019, an increase of 2.9% since April 2018.
- In real terms (after adjusting for inflation), median full-time employee earnings increased by 0.9% in the year to April 2019.
- Median weekly earnings in real terms are still 2.9% lower (£18 lower) than the peak in 2008 of £603 in 2019 prices.
- Between April 2018 and April 2019, 35.7% of full-time employees experienced a real-term pay decrease or pay freeze, a reduction from 43.3% in 2018.
- Since 1997, the biggest increase in median nominal weekly earnings for full-time employees was for those working in Scotland (91.4%) and the smallest was for those in Wales (78.0%).
- Weekly earnings for women peak in the age group 40 to 49 years in 2019 for the first time.

The Annual Survey for Hours and Earnings (ASHE) is based on a 1% sample of employee jobs, drawn from HM Revenue and Customs Pay As You Earn (PAYE) records. Throughout this bulletin, the terms jobs and employees are used interchangeably

# 3. Employee earnings and hours worked

Figure 1: Median weekly earnings for full-time employees increased by 2.9% in 2019 but in real terms are lower than a decade ago

Real and nominal median gross weekly earnings for full-time and part-time employees, UK, 1997 to 2019

Figure 1: Median weekly earnings for full-time employees increased by 2.9% in 2019 but in real terms are lower than a decade ago

Real and nominal median gross weekly earnings for full-time and part-time employees, UK, 1997 to 2019



Source: Office for National Statistics – Annual Survey of Hours and Earnings (ASHE)

#### Notes:

1. Footnotes applicable to this chart are 1, 2, 3, 4 and 5 in Section 8: Measuring the data.

The gender pay gap has been declining only slowly in recent years. Among full-time employees it now stands at 8.9%, little changed from 2018 when it was 8.6% (not a statistically significant increase). The figure for 2019 represents a decline of 3.3 percentage points from a decade ago – 12.2% in 2009 – but only 0.6 percentage points since 2012. Among all employees the gap fell from 17.8% in 2018 to 17.3% in 2019.

Median weekly earnings for part-time jobs increased at a greater rate. In 2019, earnings increased by 5.2% in nominal terms, which translates to a 3.1% increase in real terms. The median weekly earnings for part-time employee jobs of £197 is 6.5% higher than in 2008 in real terms.

The greater rate of increase for part-time jobs has been notable since 2014, despite the median number of hours per week worked in both full-time and part-time jobs being stable. Part-time jobs tend to have lower pay per hour than full-time jobs, and are therefore more affected by increases in the National Living Wage and National Minimum Wage (which have been higher than the rate of inflation in recent years).

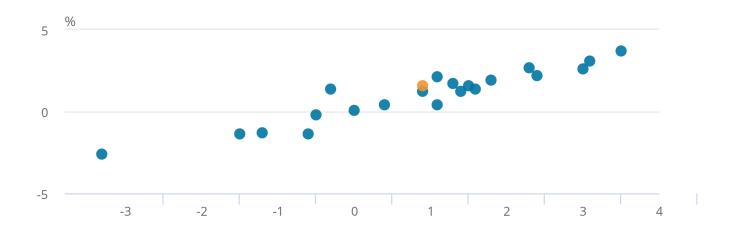
Caution should be taken when comparing across time series as ASHE was the subject of a discontinuity in 2011, when new occupation codes were introduced. An <u>article published in 2017</u> looks at the change on wage estimates. Similar discontinuities are present in 2004 and 2006.

Figure 2: Growth in hourly pay for full-time employees is generally in line with growth in weekly pay

Real gross weekly earnings growth against real gross hourly earnings growth for full-time employees, UK, 1998 to 2019

# Figure 2: Growth in hourly pay for full-time employees is generally in line with growth in weekly pay

Real gross weekly earnings growth against real gross hourly earnings growth for full-time employees, UK, 1998 to 2019



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

#### Notes:

1. Footnotes applicable to this chart are 1, 2, 3, 4 and 5 in Section 8: Measuring the data

Figure 2 shows the relationship between growth in weekly earnings and hourly earnings, in real terms (adjusted for inflation) for full-time employees.

Since 2011, the median growths in weekly earnings for full-time employee jobs have generally been in line with the growths in hourly earnings. This reflects that the number of hours worked per week for full-time employees has stayed at approximately 39.1 hours.

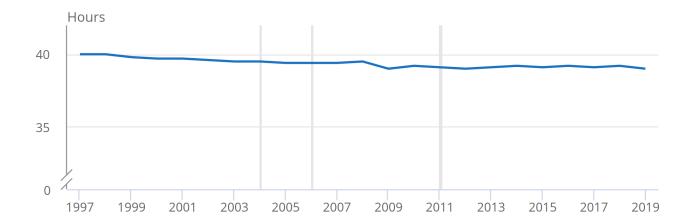
The year 2009 marked a change, where hours dropped from approximately 39.5 hours per week in 2008, and weekly earnings fell but hourly earnings grew. This suggests that in 2009, on average, employees experienced an increase in hourly pay compared with 2008 but were working fewer hours. Since 1997, pay in real terms has decreased in five years, all of which occurred after 2009.

Figure 3: Figure 3: Mean total paid hours worked per week for full-time employees

**April 1997 to April 2019** 

Figure 3: Figure 3: Mean total paid hours worked per week for full-time employees

April 1997 to April 2019



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

### Notes:

1. Footnotes applicable to this chart are 1, 2, 3, 5, 6 and 7 in Section 8: Measuring the data

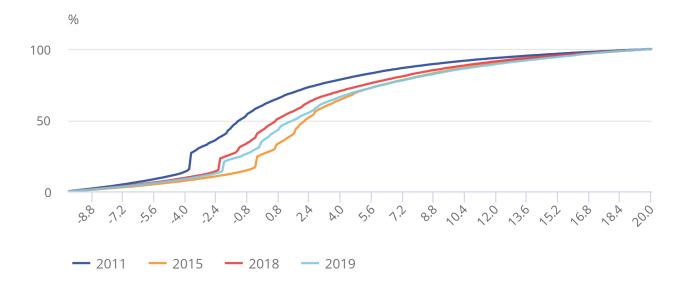
# 4. Earnings growth for individuals

Figure 4: 36% of full-time employees experienced a real-term pay decrease or pay freeze in 2019

Cumulative distribution of growth in real hourly earnings, UK, 2011, 2015, 2018 and 2019

# Figure 4: 36% of full-time employees experienced a real-term pay decrease or pay freeze in 2019

Cumulative distribution of growth in real hourly earnings, UK, 2011, 2015, 2018 and 2019



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

### Notes:

1. Footnotes applicable to this chart are 1, 2, 3, 4, 8, 9 and 10 in Section 8: Measuring the data

Figure 4 shows the distributions of growth in individuals' hourly earnings compared with a year earlier, adjusted for inflation, as a cumulative percentage frequency chart for years 2011, 2015, 2018 and 2019. The shift to the right from 2018 to 2019 highlights higher real growth in earnings across the distribution for 2019.

The proportion of employees experiencing a pay freeze or a decrease in earnings (in real terms) in 2019 (35.7%) is lower than in 2018 (43.3%) and in 2011 (relative to 2010) when it was 60.5%.

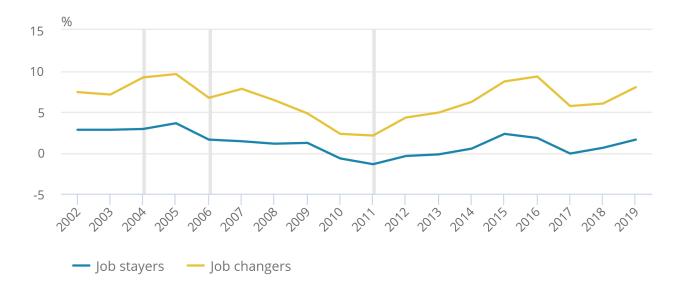
However, this is not a consistent trend, demonstrated by the proportion in 2019 being higher than the proportion receiving a pay freeze or a decrease in earnings from 2014 to 2015, when it was 26.3%. This low proportion can be partly attributed to a low rate of inflation in April 2015, when the Consumer Prices Index including owner occupiers' housing costs (CPIH) grew by 0.3% from the previous year.

Figure 5: The pay-rise premium for employees who changed jobs was high in 2019

Annual percentage change in median full-time real gross hourly earnings for job stayers and job changers, UK, April 2002 to 2019

# Figure 5: The pay-rise premium for employees who changed jobs was high in 2019

Annual percentage change in median full-time real gross hourly earnings for job stayers and job changers, UK, April 2002 to 2019



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

### Notes:

1. Footnotes applicable to this chart are 1, 2, 3, 4, 5 and 8 in Section 8: Measuring the data

Figure 5 shows the longer-term trend in individuals' earnings, split by whether the employee changed jobs or stayed in the same job in the previous year. Pay growth of those who changed jobs help us understand the labour market, for example the extent to which employees are aware of the labour market conditions, and whether there is upward pressure on wages.

In 2019, the difference in growth in earnings for full-time employees who changed jobs since April 2018 (8.0%) compared with those who stayed in the same job (1.6%) was high, suggesting stronger upward pressure on wages compared with other years.

The details in Figure 5 are an update of those in the Office for National Statistics' (ONS) bulletin, <u>Analysis of job changers and stayers</u>, which, provides further analysis of job changers and stayers from 2000 to 2018.

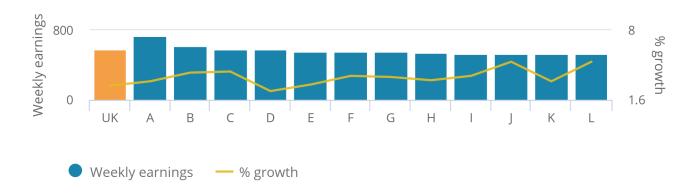
# 5. Detailed analysis of earnings and hours worked

Figure 6: Weekly earnings in London are £152 higher than the UK average

Median full-time gross weekly earnings and percentage change from previous year, by workplace regions and countries, UK, April 2019

Figure 6: Weekly earnings in London are £152 higher than the UK average

Median full-time gross weekly earnings and percentage change from previous year, by workplace regions and countries, UK, April 2019



Source: Office for National Statistics – Annual Survey of Hours and Earnings (ASHE)

#### Notes:

- 1. Footnotes applicable to this chart are 1, 2 and 3 in Section 8: Measuring the data
- A London
- B South East
- C East
- D Scotland
- E West Midlands
- F South West
- G North West
- H Yorkshire and the Humber
- I East Midlands
- J Wales
- K Northern Ireland
- L North East

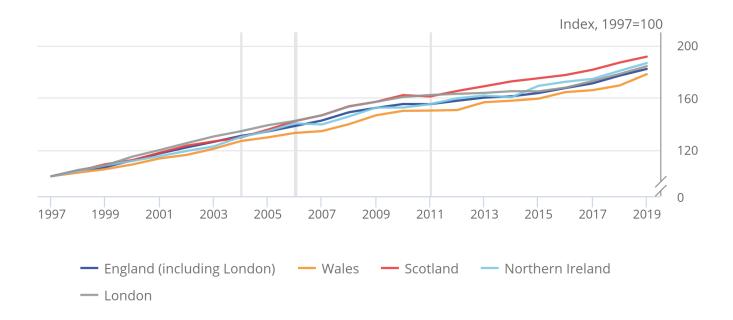
In April 2019, London topped the regional list for median earnings for full-time employees by place of work, at £736 per week. The median here is £123 more per week more than the next highest, the South East (£613), and £152 more than the median for the whole of the UK (£585). The high pay in London reflects a high proportion of its labour force being employed in high-paying industries and occupations, and will also be impacted by allowances for some employees working in the capital.

Figure 7: Since 2011, the rate of growth in weekly pay for full-time workers in London has been relatively low

Index of median gross weekly earnings for full-time employees by place of work, UK, April 1997 to 2019 (1997=100)

# Figure 7: Since 2011, the rate of growth in weekly pay for fulltime workers in London has been relatively low

Index of median gross weekly earnings for full-time employees by place of work, UK, April 1997 to 2019 (1997=100)



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

#### Notes:

1. Footnotes applicable to this chart are 1, 2, 3, 4 and 5 in Section 8: Measuring the data

Among the countries of the UK, long-term pay growth has been highest in Scotland and lowest in Wales. Median pay for full-time workers in 2019 was 91.4% higher in Scotland than in 1997, whereas in Wales it was 78.0% higher.

However, since 2011, the rate of growth in each of Scotland, England, Wales and Northern Ireland has been quite similar, whereas growth in London has been lower. The impact of higher National Minimum wage rates is likely to have boosted pay in countries like Wales and Northern Ireland that have lower than average wages.

The interactive chart in Figure 8 allows you to view the median pay levels in all local authorities.

Find what the median gross weekly pay is in your area by searching for or selecting an area from the drop-down list in the interactive chart.

# Figure 8: Median gross weekly earnings for full-time employees for all local authorities by place of work

Great Britain, April 2019

### Notes:

1. Footnotes applicable to this chart are 1, 2 and 3 in Section 8: Measuring these data.

### Download the data

In April 2019, the City of London had the highest gross weekly earnings for full-time employees (£1,052) and Newark and Sherwood had the lowest (£431). The map in Figure 8 shows general consistency in pay levels within regions, but with some notable exceptions, for example, Copeland, which had high median pay despite being in a region with low pay, and Enfield, which had the opposite profile.

Figure 9: Over the past five years weekly earnings have grown most in the lowest-paid sectors

Growth in real gross weekly earnings by occupation for 2019 from 2018 and 2014, UK

Figure 9: Over the past five years weekly earnings have grown most in the lowest-paid sectors

Growth in real gross weekly earnings by occupation for 2019 from 2018 and 2014, UK



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

## Notes:

1. Footnotes applicable to this chart are 1, 2, 3, 4 and 11 in Section 8: Measuring the data

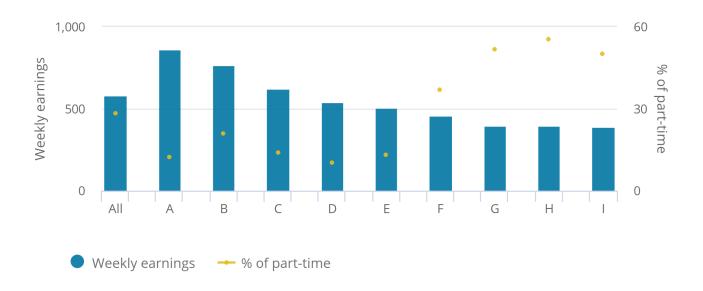
Occupations with typically lower pay have experienced higher real growth in earnings. Real earnings for associate professional and technical occupations have contracted since both 2018 and 2014. Each of the 5 occupation types within this group, including health and social care associate professionals and protective service occupations (such as police, fire and prison service officers), all saw median pay grow by lower than average in 2019.

Figure 10: Full-time employees earn less in jobs that have a higher proportion of part-time employees

Median full-time gross weekly earnings and proportion of part-time employees by occupation group, UK, April 2019

# Figure 10: Full-time employees earn less in jobs that have a higher proportion of part-time employees

Median full-time gross weekly earnings and proportion of part-time employees by occupation group, UK, April 2019



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

#### Notes:

- 1. Footnotes applicable to this chart are 1, 2, 3 and 11 in Section 8: Measuring the data
- A Managers, directors and senior officials
- B Professional occupations
- C Associate professional and technical occupations
- D Skilled trades occupations
- E Process, plant and machine operatives
- F- Administrative and secretarial occupations
- G Elementary occupations
- H Sales and customer service occupations
- I Caring, leisure and other service occupations

In April 2019, the occupation group with the highest median weekly earnings for full-time employees was managers, directors and senior officials, at £862. This was £278 higher than the UK as a whole. Caring, leisure and other service occupations was the lowest-paid group, at £392 per week.

Figure 10 shows the weekly earnings of full-time employees by occupation compared with the proportion of employee jobs that are part-time. Jobs with higher proportions of part-time employees have lower earnings on average, and this is an important consideration for understanding the gender pay gap given that women are much more likely than men to work part-time.

In the three lowest-paying occupation groups – elementary occupations, sales and customer service and caring, leisure and other services, over half of jobs are part-time. This compares with only 10.3% in the skilled trades occupation group.

The highest-earning occupation was chief executives and senior officials (£97,708 median full-time annual gross pay).

The interactive chart in Figure 11 allows you to compare earnings across occupations, in terms of annual pay.

See what the median annual earnings are for your occupation by searching for or selecting your occupation from the drop-down list in the interactive tool.

## Figure 11: Annual full-time gross pay by occupation

UK, April 2019

## Notes:

1. Footnotes applicable to this chart are 1, 2, 3 and 11 in Section 8: Measuring these data.

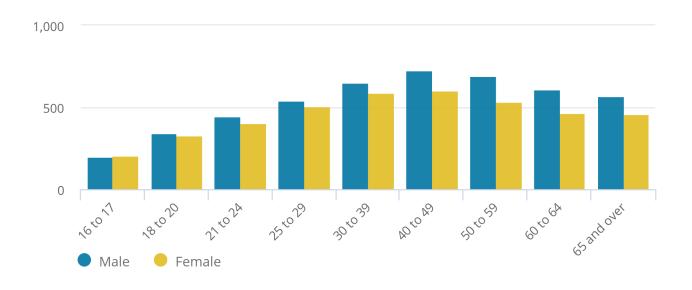
Download the data

Figure 12: Weekly earnings for women peak in age-group 40 to 49 years for the first time

Median full-time gross weekly earnings by sex and age group, UK, April 2019

# Figure 12: Weekly earnings for women peak in age-group 40 to 49 years for the first time

Median full-time gross weekly earnings by sex and age group, UK, April 2019



Source: Office for National Statistics – Annual Survey of Hours and Earnings (ASHE)

## Notes:

1. Footnotes applicable to this chart are 1, 3 and 12 in Section 8: Measuring the data

Full-time gross weekly earnings peaked at ages 40 to 49 years for both men (£728) and women (£601) in April 2019. This is the first time in the series that earnings for full-time women have not peaked at ages 30 to 39 years. As a comparison, five years ago in 2014, earnings for full-time women were £537 and £507 per week for age groups 30 to 39 years and 40 to 49 years, respectively.

Similarly, the 40 to 49 years age group is the age group where the gender pay gap (which is based on hourly earnings) is falling most quickly. This is explored further in the <u>Gender pay gap bulletin</u>.

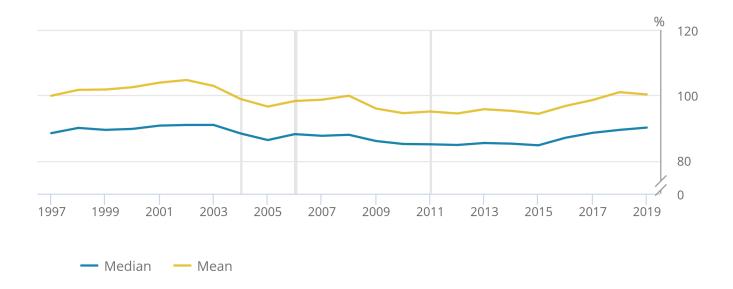
The subsequent decrease in median earnings for both sexes in the older age groups for full-time employees is not explained by a decrease in hours worked; total paid hours for full-time employees in the older age groups are in line with those for younger workers.

Figure 13: Mean private sector and public sector earnings are almost equal in 2019

Gross weekly private sector earnings as a proportion of public sector earnings for full-time employees for the mean and median, UK, April 1997 to 2019

# Figure 13: Mean private sector and public sector earnings are almost equal in 2019

Gross weekly private sector earnings as a proportion of public sector earnings for full-time employees for the mean and median, UK, April 1997 to 2019



Source: Office for National Statistics - Annual Survey of Hours and Earnings (ASHE)

### Notes:

1. Footnotes applicable to this chart are 1, 2, 3 and 5 in Section 8: Measuring the data

Private sector median earnings for full-time employees were approximately 85% of median public sector earnings between 2010 and 2015 but have now risen to over 90% (£570 compared with £632, respectively).

Mean earnings in the private sector were slightly higher than in the public sector in 2019. The difference between the mean and median comparisons reflects different pay distributions, with more very high earners working in the private sector.

Estimates of the increase in public sector pay were inflated in April 2019 by the pattern of payments to some NHS staff during 2018. This saw 2018 pay rises delayed, meaning that a comparison with April 2018 is boosted by an effective double pay rise.

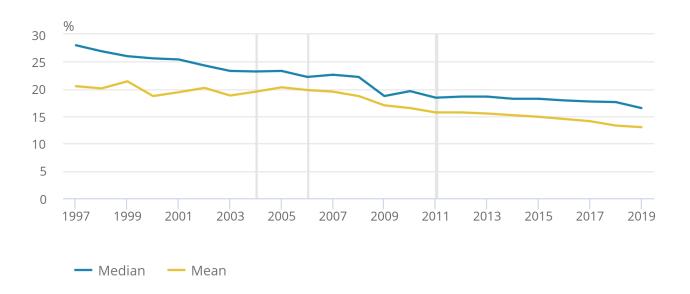
The factors affecting the differences in earnings of the public and private sectors are discussed in more detail in the article, <u>Public and private sector earnings in the UK: 2017</u>, and can be explored using a selection of regression models that include different measures of remuneration, in <u>Public versus private sector earnings in the UK: 2011 to 2017</u>.

Figure 14: Proportion of employee jobs that work overtime has continued to decrease

Proportion of employees who work overtime by working pattern, UK, 1997 to 2019

# Figure 14: Proportion of employee jobs that work overtime has continued to decrease

Proportion of employees who work overtime by working pattern, UK, 1997 to 2019



Source: Office for National Statistics – Annual Survey of Hours and Earnings (ASHE)

#### Notes:

1. Footnotes applicable to this chart are 1, 2, 3 and 5 in Section 8: Measuring the data

Whereas the average number of total hours worked per week for full-time employees has been fairly stable since 2011 (and fell by only 2.3% in the 14 years prior to that), paid overtime hours worked have decreased more markedly. Mean paid overtime hours have fallen from 2.2 hours per week in 1997 to 0.9 hours in 2019.

Similarly, the proportion of employees who work overtime has also fallen (Figure 14), from 28.0% in 1997 to 16.5% in 2019 for full-time employees.

The reduction in employees working overtime has occurred in most industries and occupations. It has also been affected by a decline in the number of employee jobs in the manufacturing industry, in which overtime working is more common than average.

In 2019, the industry in which paid overtime is worked by the highest proportion of employees was the transport and storage industry (37.8%), while for occupation it was process, plant and machine operatives (42.7%).

The industry with the lowest proportion of employees who worked paid overtime was education (6.4%) and among occupations it was lowest for managers, directors and senior officials (7.6%).

# 6. Employee earnings data

A detailed set of data tabulations containing employee earnings estimates from the Annual Survey of Hours and Earnings (ASHE) broken down by aspects such as age, region, occupation and industry are available.

Annual Survey of Hours and Earnings: 2019 provisional and 2018 revised results

Dataset | Released 29 October 2019

The tables show employee earnings estimates as outlined in the ASHE guide to tables.

# 7. Glossary

## **Full-time and part-time**

Full-time is defined as employees working more than 30 paid hours per week (or 25 or more for the teaching professions). Part-time is defined as employees working less than or equal to 30 paid hours per week (or less than 25 hours for the teaching professions).

## Median

A measure of the average. The median is calculated by identifying the exact middle point in a set of observations. When the observations are ranked from lowest to highest, the median is the value in the exact middle of the observed values. It is the Office for National Statistics' (ONS) preferred measure of average earnings as it is less affected by a relatively small number of very high earners than the mean.

## **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 ASHE reference date in April 2019, the NMW and NLW rates were:

- £8.21 for employees aged 25 years and over
- £7.70 for employees aged 21 to 24 years
- £6.15 for employees aged 18 to 20 years
- £4.35 for employees aged 16 to 17 years
- £3.90 for apprentices aged 16 to 18 years and those aged 19 years or over who are in the first year of their apprenticeship.

## Real earnings

Real earnings (earnings adjusted for inflation) are calculated by adjusting nominal (unadjusted) earnings using the CPIH (Consumer Prices Index including owner occupiers' housing costs). The CPIH is the most comprehensive measure of inflation. It extends the Consumer Prices Index (CPI) to include a measure of the costs associated with owning, maintaining and living in one's own home, known as owner occupiers' housing costs (OOH), along with Council Tax.

## **Standard Occupational Classification (SOC)**

The <u>Standard Occupational Classification (SOC)</u> is a common classification of occupational information for the UK.

# 8. Measuring the data

All estimates for 2018 are provisional and relate to the reference date 10 April 2019. Data from the 2018 survey have been subject to small revisions since the provisional estimates were published on 25 October 2018. For the charts in this bulletin, the following notes apply:

- 1. Estimates for 2019 data are provisional
- 2. Employees are on adult rates, pay is unaffected by absence.
- 3. Full-time is defined as employees working more than 30 paid hours per week (or 25 or more for the teaching professions).
- 4. The data have been adjusted for inflation using the Consumer Prices Index including owner occupiers' housing costs (CPIH). The CPIH figures are based on the All Items Consumer Prices Index (including owner occupiers' housing costs) of inflation for April.
- 5. Dashed lines represent discontinuities in 2004, 2006 and 2011 ASHE estimates.
- 6. Note that the chart y-axis does not start at zero.
- 7. Estimates of the mean include zero responses, whereas estimates of the median exclude zero responses.
- 8. Growth in individuals' earnings (the median wage growth rate) are estimated by calculating the growth rates for individuals' earnings then taking the median of these growth rates. Note that the median wage growth rate is different from the growth rate for the median earner, which represents the middle employee's (ordered by earnings) earnings growth. The difference between these values is partially because of sample differences and the distribution of growth rates not following the distribution of earnings.
- 9. For each growth rate on the horizontal axis, the curve indicates the cumulative proportion of employees who experienced real earnings growth at that rate. For example, in 2019, approximately 40% of employees experienced real hourly earnings growth of 0.4% or less.
- 10. This figure only looks at employees whose pay growth between 2018 and 2019 fell between negative 10% and positive 20%. As such, the proportion of employees on the y-axis should not be interpreted as the entire population of employees.
- 11. Occupations as defined by the Standard Occupational Classification 2010.
- 12. Includes all employees aged 16 to 17 years and employees aged 18 years and over on adult rates, pay unaffected by absence.

<u>A guide to interpreting ASHE estimates</u> is available and addresses common questions about the data. Further information about ASHE can be found in quality and methodology on our Guidance and methodology page and in the <u>Quality and Methodology Information (QMI) report</u>.

# 9. Strengths and limitations

The strengths and limitations of the Annual Survey of Hours and Earnings (ASHE) can be found in the <u>Quality</u> and <u>Methodology Information (QMI) report</u> and the <u>Guide to sources of data of earnings and income</u>.

## 10. Related links

### Earnings and working hours

Office for National Statistics (ONS) employee earnings and hours worked home page.

An overview of and comparison between Annual Survey of Hours and Earnings (ASHE) and Average Weekly Earnings (AWE): 2017

Article | Release 14 September 2017

An overview of the Annual Survey of Hours and Earnings and Average Weekly Earnings, comparing the differences between the two headline outputs.

### **UK labour market**

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

#### Public and private sector earnings in the UK: 2017

Article | Released 2 November 2018

The results of statistical models that explore the relationship between mean hourly earnings and a range of independent variables, based on Annual Survey of Hours and Earnings (ASHE) 2017 provisional results data.

## Index of labour costs per hour, UK

Changes in the cost of employing labour, analysed by sector and industry.