

Statistical bulletin

Measures of employee earnings based on SOC 2020, UK: 2021

Comparison of measures of employee earnings using data from the Annual Survey of Hours and Earnings based on Standard Occupation Classification 2020.



Contact:
Nicola White
earnings@ons.gov.uk
+44 1633 456120

Release date:
27 June 2022

Next release:
To be announced

Table of contents

1. [Main points](#)
2. [Employee earnings based on Standard Occupational Classification 2020](#)
3. [Measures of employee earnings based on SOC 2020 data](#)
4. [Glossary](#)
5. [Measuring the data](#)
6. [Strengths and limitations](#)
7. [Related links](#)

1 . Main points

- This bulletin provides April 2021 Annual Survey for Hours and Earnings (ASHE) results on a Standard Occupational Classification (SOC) 2020 basis; estimates published in our [Employee earnings in the UK: 2021](#) on a SOC 2010 basis remain the headline April 2021 estimates.
- Most top-level earnings estimates produced on a SOC 2020 basis are generally slightly higher than they were on a SOC 2010 basis; earnings for female employees have been affected more than males because of the composition of this group.
- Median gross weekly earnings have increased from £611 to £613 among full-time employees, a 0.3% increase.
- Median gross annual earnings have increased from £31,285 to £31,349 among full-time employees, a 0.2% increase.
- Median hourly earnings excluding overtime among full-time employees have increased from £15.59 per hour to £15.64 per hour, a 0.3% increase.
- Changes to the proportion of jobs defined as low or high paid are minimal.
- The gender pay gap among full-time employees of all age groups changed from 7.9% to 7.8%, because of the greater shift in wages for female employees caused by SOC 2020 reweighting.

Statistics in this bulletin relate to the pay period that includes 21 April 2021, at which time approximately 3.7 million employees were on furlough under the Coronavirus Job Retention Scheme (CJRS). The estimates in this bulletin include furloughed employees and are based on actual payments made to the employee from company payrolls and the hours on which this pay was calculated, which in the case of furloughed employees are their usual hours.

2 . Employee earnings based on Standard Occupational Classification 2020

The Standard Occupational Classification (SOC) 2010 has been revised to produce SOC 2020. The [2021 Annual Survey for Hours and Earnings \(ASHE\) results](#) were first published on a SOC 2010 basis on the 26 October 2021 and these remain our headline April 2021 estimates. Estimates for ASHE earnings in 2022 and onward will be on a SOC 2020 basis.

The move to SOC 2020 has an impact across all breakdowns, including those that do not include occupation, because of occupation forming part of the methodology by which ASHE data are weighted to produce estimates for the UK.

Estimates for earnings in April 2021 on a SOC 2020 basis represent a break in the ASHE time series. Estimates will not be directly comparable with estimates for earnings on a SOC 2010 basis and, as such, should not be used in direct comparison with each other. The [Standard Occupational Classification \(SOC\)](#) is a common classification of occupational information for the UK. It aims to divide jobs into meaningful categories by skill level and job content in order to provide analysis for users. More recent versions of SOC will provide better divisions of occupation according to the changing role of staff within the labour market as a whole.

The main areas of change in SOC 2020 are:

- a review of the classification of roles as professional or associate professional
- the reclassification of occupations associated with information technologies
- disaggregation into less heterogeneous unit groups

More information can be found on the SOC 2020 reclassification in our [SOC 2020 Volume 1: structure and descriptions of unit groups](#).

Table 1: Comparison of SOC 2010 and SOC 2020 gross median, weekly, annual and hourly earnings for full-time employees by sex, April 2021

Breakdown	SOC 2010 (£)	SOC 2020 (£)	Change (%)
Full-time median gross weekly earnings	611	613	0.3%
Men	652	652	0.1%
Women	558	560	0.4%
Full-time median gross annual earnings	31,285	31,349	0.2%
Men	33,414	33,472	0.2%
Women	28,305	28,381	0.3%
Full-time median hourly earnings excluding overtime	15.6	15.6	0.3%
Men	16.1	16.2	0.3%
Women	14.9	14.9	0.5%

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

Notes

1. Estimates for 2021 data are provisional.
2. Full-time is defined as employees working more than 30 paid hours a week (or 25 or more for the teaching professions).

Overall, most top-level earnings estimates produced on a SOC 2020 basis are higher than they were on a SOC 2010 basis. This is primarily because of employees with high wages in groups with low weightings moving to groups with higher average weightings and higher average wages. For example, a substantial number of employees reclassified from the lower paid and lower weighted "caring, leisure and other service occupations" to the higher paid and higher weighted "associate professional and technical occupations". These movements are also consistent with the published [Labour Force Survey \(LFS\) results](#) on SOC 2020. However, note that the differences are small in magnitude and similar across breakdowns by different metrics.

Table 2: Changes to median gross weekly earnings for all employees by major occupational group

Major Occupational Group	SOC 2010 Total (£)	SOC 2020 Total (£)	Change (%)
All	504	507	0.5%
Managers, directors and senior officials	778	784	0.7%
Professional occupations	746	742	-0.4%
Associate professional occupations	585	563	-3.9%
Administrative and secretarial occupations	401	403	0.5%
Skilled trades occupations	520	520	-0.1%
Caring, leisure and other service occupations	325	325	0.0%
Sales and customer service occupations	282	276	-2.1%
Process, plant and machine operatives	489	487	-0.3%
Elementary occupations	298	295	-1.3%
Full-time	611	613	0.3%
Managers, directors and senior officials	853	857	0.4%
Professional occupations	798	797	-0.1%
Associate professional occupations	625	608	-2.8%
Administrative and secretarial occupations	479	479	0.0%
Skilled trades occupations	551	551	-0.1%
Caring, leisure and other service occupations	413	416	0.7%
Sales and customer service occupations	421	416	-1.0%
Process, plant and machine operatives	521	519	-0.3%
Elementary occupations	428	428	-0.1%
Part-time	215	216	0.3%
Managers, directors and senior officials	241	241	0.0%
Professional occupations	412	407	-1.4%
Associate professional occupations	259	250	-3.2%
Administrative and secretarial occupations	222	223	0.5%
Skilled trades occupations	210	210	-0.1%
Caring, leisure and other service occupations	218	217	-0.6%
Sales and customer service occupations	185	184	-0.4%
Process, plant and machine operatives	210	209	-0.1%
Elementary occupations	139	139	-0.3%

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

Notes

1. Estimates for 2021 data are provisional.
2. Employees are on adult rates, pay is unaffected by absence unless furloughed.
3. Full-time is defined as employees working more than 30 paid hours a week (or 25 or more for the teaching professions).

Changes to earnings by occupation, unlike other breakdowns, are mostly negative. This is linked to the disaggregation of occupations into less heterogeneous groups. As a result, a number of jobs which were highly paid for their SOC 2010 group moved into major occupational groups in SOC 2020 with a higher average pay, decreasing the pay of their previous group.

Estimates are weighted by both age group and major occupational group, so the changes to occupation when going from SOC 2010 to SOC 2020 have an effect on earnings and estimates for the number of jobs.

The impact of the SOC changes among the major occupation groups are mixed. Among all employees, pay for associate professional occupations has decreased by 3.9%. This change is caused, in part, by the group of approximately 405,000 above-average earners being reclassified from associate professional occupations to professional occupations. Also, approximately 131,000 employees being reclassified from "caring, leisure and other service occupations" to "associate professional and technical occupations" has contributed to this change. The movers are primarily composed of veterinary nurses and higher-level teaching assistants.

Among all employees, pay for sales and customer service occupations has decreased by 2.1%. This decrease is mainly because of approximately 34,000 employees being reclassified from "sales and customer service occupations" to "administrative and secretarial occupations". The movers are primarily composed of customer service managers, a group which comes from the disaggregation of customer service managers and supervisors.

Among all employees, pay for elementary occupations has decreased by 1.3%. This is primarily because of the movement of employees which earned above-average wages for the group being reclassified into a sub-major group called "community and civil enforcement occupations", which is new in the SOC 2020 classification.

Among all employees, pay for "managers, directors and senior officials" increased by 0.7%. This change primarily comes from jobs with below-average earnings moving to "professional occupations" and "sales and customer service occupations", with a number of high earning jobs also being reclassified from "professional occupations" into "managers, directors and senior officials".

Among all employees, pay for "professional occupations" decreased by 0.4%. This is less than expected given approximately 405,000 employees have been reclassified from "associate professional and technical occupations" to "professional occupations". This minimal change is because of movers being primarily composed of graphic designers, finance and investment analysts and advisers, taxation experts and sales accounts and business development managers. These occupations have average wages similar to that of professional occupations.

The magnitude of changes to earnings in breakdowns which do not include occupation are generally smaller, since estimates in these groups are only affected by the reweighting and the groups are not redefined under SOC 2020.

Table 3: Changes to gross weekly earnings in other breakdowns

	SOC 2010 Total (£)	SOC 2020 Total (£)	Difference (%)
18-21 years	234	234	0.1%
22-29 years	473	475	0.4%
30-39 years	565	567	0.5%
40-49 years	584	587	0.5%
50-59 years	528	531	0.5%
60+ years	402	404	0.3%
Public Sector	562	567	0.8%
Private Sector	486	488	0.4%
Not for Profit	479	481	0.3%
United Kingdom	504	507	0.5%
North East	458	460	0.4%
North West	479	480	0.1%
Yorkshire and The Humber	466	467	0.2%
East Midlands	470	472	0.4%
West Midlands	491	493	0.4%
East	491	492	0.3%
London	668	671	0.5%
South East	524	527	0.6%
South West	464	467	0.5%
Wales	462	464	0.3%
Scotland	504	505	0.3%
Northern Ireland	469	471	0.5%

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

Notes

1. Estimates for 2021 data are provisional.
2. Employees are on adult rates, pay is unaffected by absence unless furloughed.

Low Pay

Table 4: Proportion of earners by earnings category

		Earnings Category	SOC 2010	SOC 2020	Difference
Hourly Earnings (Including Overtime)	Low Earners		14.2%	14.6%	0.4%
	Middle Earners		61.3%	61.0%	-0.3%
	High Earners		24.5%	24.5%	0.0%
Gross Weekly Earnings	Low Earners		25.5%	25.5%	-0.1%
	Middle Earners		49.5%	49.7%	0.1%
	High Earners		25.0%	24.9%	-0.1%

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

Notes

1. Estimates for 2021 data are provisional.
2. Employees are on adult rates, pay is unaffected by absence unless furloughed.
3. Low pay is defined as the value that is two-thirds of median hourly earnings. High pay is defined as the value that is 1.5 times median hourly earnings.

In April 2021, the proportion of jobs within each group, weighted by the SOC 2020 has changed by less than half a percent from SOC 2010. The number of jobs defined as low earners by hourly earnings excluding overtime has increased. This is primarily because of jobs previously classified as middle earners, moving into the low earners group because of the increase in median earnings, caused by reclassification of the survey weights.

Under SOC 2020, in April 2021, there were approximately 1,074,000 employee jobs with employees aged 16 years and over who were paid below the [National Minimum Wage \(NMW\) or National Living Wage \(NLW\)](#) (3.8% of employee jobs); under SOC 2010, this was 1,084,000 (3.8%). For context, this compares with 2,085,000 (7.4%) in 2020 and 409,000 (1.4% of employee jobs) in 2019.

Gender Pay Gap

Table 5: Gender pay gap (GPG) by age group and employment type

Age group Employment Type SOC 2010 GPG SOC 2020 GPG Difference

All	Full-Time	7.9%	7.8%	-0.1%
18-21	Full-Time	1.0%	1.3%	0.3%
22-29	Full-Time	0.9%	1.0%	0.0%
30-39	Full-Time	3.0%	2.7%	-0.3%
40-49	Full-Time	12.3%	12.1%	-0.2%
50-59	Full-Time	12.3%	12.3%	0.0%
60+	Full-Time	11.9%	11.8%	-0.1%
All	Part-Time	-2.7%	-2.9%	-0.2%
18-21	Part-Time	1.1%	1.1%	0.0%
22-29	Part-Time	0.0%	0.0%	0.0%
30-39	Part-Time	-4.9%	-4.7%	0.2%
40-49	Part-Time	0.9%	0.2%	-0.7%
50-59	Part-Time	5.1%	5.8%	0.7%
60+	Part-Time	9.5%	9.7%	0.2%

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

Notes

1. The gender pay gap is a measure of inequality between the median hourly earnings excluding overtime of full-time and part-time employees.
2. Estimates for 2021 data are provisional.
3. Full-time is defined as employees working more than 30 paid hours a week (or 25 or more for the teaching professions).
4. The age group aged 16 to 17 years has been excluded from this table because of sample size volatility.

The April 2021 gender pay gap change after reweighting for both full-time and part-time employees was minimal, decreasing by 0.1% and increasing by 0.2%, respectively.

The gender pay gap has been most affected for part-time employees aged 40 to 49 years and those aged 50 to 59 years. The gender pay gap decreased by 0.7% for those aged 40 to 49 years and increased by 0.7% for those aged 50 to 59 years.

3 . Measures of employee earnings based on SOC 2020 data

A detailed set of data tabulations containing employee earnings estimates from the Annual Survey of Hours and Earnings (ASHE) based on Standard Occupation Classification 2020 broken down by aspects such as age, region, occupation and industry are available.

[Annual Survey of Hours and Earnings: 2021 provisional based on SOC 2020](#)

Dataset | Released 27 June 2022

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

4 . 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' preferred measure of average earnings as it is less affected by a relatively small number of very high earners than the mean is.

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 workers' age and whether they are apprentices. The NMW applies to employees aged 16 to 22 years. The government's National Living Wage (NLW) was introduced on 1 April 2016 and applies to employees aged 23 years and over.

On the Annual Survey for Hours and Earnings (ASHE) reference date in April 2021, the NMW and NLW rates were:

- £8.91 for employees aged 23 years and over
- £8.36 for employees aged 21 to 22 years
- £6.56 for employees aged 18 to 20 years
- £4.62 for employees aged 16 to 17 years
- £4.30 for apprentices aged 16 to 18 years and those aged 19 years and over who are in the first year of their apprenticeship

Standard Occupational Classification (SOC)

The [Standard Occupational Classification \(SOC\)](#) is a common classification of occupational information for the UK.

5 . Measuring the data

The estimates in this bulletin are based on information gathered from a sample of 1% of employees in the UK. Prior to the coronavirus (COVID-19) pandemic, the achieved sample size on Annual Survey for Hours and Earnings (ASHE) was approximately 180,000 each year. However, given the challenges to data collection during the coronavirus pandemic and response rates not recovering, the final achieved sample size was 144,000 for 2020 and 140,000 for 2021. As such, ASHE estimates for 2020 and 2021 are subject to more uncertainty than usual.

All estimates for 2021 are provisional and relate to the pay period that includes 21 April 2021, at which time [3.7 million employees were furloughed](#) under the Coronavirus Job Retention Scheme (CJRS). Furloughed employee jobs received 80% of normal pay from the scheme, to a maximum £2,500 a month. Employers were able to top up employees' pay, but they were not required to. The Office for National Statistics (ONS) has estimated that approximately half of employees had their pay topped up for both years.

The ASHE collected actual payments made to the employee and the hours on which this pay were calculated, which in the case of furloughed employees would be their usual hours.

As with 2020, we have revised the exclusion criteria for the 2020 and 2021 data tables to be "those employees who were not furloughed but whose pay was affected by absence". This results in the ASHE data tables excluding 4.4% of employee jobs in 2021 and 6.0% in 2020 (compared with approximately 5% in previous years).

The 2021 ASHE estimates have been weighted using the reweighted Labour Force Survey (LFS) weights from July 2021 and do not use the most recent weights. You can find out more about the impact the most recent weights have had in our [Impact of reweighting on Labour Force Survey key indicators: 2022 article](#).

The 2021 ASHE estimates in this article have been weighted using the new Standard Occupational Classification (SOC) 2020 definitions of occupation. More information on the weighting process and further information about ASHE can be found in our [Quality and Methodology Information \(QMI\) report](#).

Our [Guide to interpreting ASHE estimates](#) addresses common questions about the data.

6 . Strengths and limitations

The strengths and limitations of the Annual Survey of Hours and Earnings (ASHE) can be found in our [Quality and Methodology Information \(QMI\) report](#) and our [Guide to sources of data of earnings and income](#).

7 . Related links

[Earnings and working hours](#)

Webpage | Updated regularly

Average weekly earnings of people in the UK and information on the gender pay gap and low pay. Data from Average Weekly Earnings (AWE) and the Annual Survey of Hours and Earnings (ASHE).

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

Article | Released 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.