

October 2019

Northern Ireland Annual Survey of Hours and Earnings

Geographical Area: Northern Ireland
Theme: Labour Market
Frequency: Annual

Key points

- Median gross weekly earnings for full-time employees (“weekly earnings”) in April 2019 were £535, an increase of 3.3% from £518 in 2018. This is the fifth consecutive annual increase in weekly earnings.
- Real weekly earnings increased by 1.2%. This is the fourth increase in real earnings in the last five years and brings real earnings close to 2009 levels.
- In the UK, weekly earnings were £585, an increase of 2.9% from 2018 (£568). Real UK weekly earnings increased by 0.9% over the year.
- NI now has the second lowest weekly earnings of the 12 UK regions, with London (£737) the highest and the North East (£533) the lowest. NI experienced the joint third smallest increase (3.3%) in weekly earnings.
- Approximately a fifth of all jobs in NI were ‘low-paid’. This is the lowest proportion in NI in 20 years but is the highest proportion of the 12 UK regions.
- Private sector weekly earnings increased by 3.4% over the year, while public sector weekly earnings increased by 0.7%. Public sector weekly earnings (£625) were 31% higher than private sector earnings (£479).
- This is the tenth year that the gender pay gap in NI has been zero or in favour of full-time females. Median hourly earnings (excluding overtime) for full-time females (£13.13) was 2.9% greater than those for full-time males (£12.76).
- NI remains the only region in the UK where full-time females earn more per hour on average than full-time males. In the UK as a whole, full-time females earned 8.9% less per hour than full-time males.
- Median annual earnings increased by 1.2% for all full-time employees in NI over the year to £27,434, but remained lower than the UK median of £30,353. The highest 10% of earners earned approximately £50,000 and above.
- The total weekly hours worked by full-time employees in NI remained unchanged over the year at 38.2 hours, and are now 0.7 hours higher than the UK average.

Commentary

The Annual Survey of Hours and Earnings (ASHE) results for 2019 show increases in earnings for full-time employees across a range of measures including median weekly, hourly and annual earnings. *The headline measure of earnings from ASHE is median gross weekly earnings for full-time employees and is referred to as 'weekly earnings' for ease of reporting.*

Weekly earnings increased over the year to April 2019 in nominal (3.3%) and real terms (1.2%) to £535. The increase was larger than the UK average (2.9%) but one of the smallest increases in the UK and has resulted in NI earnings dropping from the fourth lowest to the second lowest of the UK regions. Although the proportion of low-paid jobs in NI is at its lowest in 20 years, at approximately a fifth of all jobs, it is the highest of the UK regions (based on OECD measure of low pay).

The increase in weekly earnings over the year was driven by increases in the private sector (3.4%). Increases in pay were experienced across the spectrum for private sector workers, with those at the lowest 10% of the earnings distribution experiencing an increase of 4.8% and those at the top 10% experiencing a 4.4% increase. The increase in hourly rates of pay at the 10th percentile of the private sector pay distribution is in line with the increase in the National Living Wage from £7.83 in 2018 to £8.21 in 2019. This is a clear indication of its impact on low pay.

Earnings in the public sector increased at a much lower rate (0.7%), however public sector earnings remain above earnings in the private sector (31% higher). Whilst public sector earnings in NI were similar to those in the UK, earnings in the private sector in NI remained below those in the UK and are now equivalent to 84% of the UK private sector median.

This is the tenth year where full-time working females have earned at least as much as full-time males and NI remains the only region in the UK with a gender pay gap in favour of women. Females earned 2.9% more per hour than males in 2019, in contrast to the UK where females earned 8.9% less than males. The gender pay gap in NI is driven by a larger proportion of full-time females working in higher paid occupations than males, and a larger proportion of full-time females than males working in the public sector. When all employees (regardless of working pattern) are considered, the gender pay gap is reversed, and males earn more on average than females. This is because a greater proportion of females than males are in part-time work, where average pay is lower.

Context

The headline measure of earnings from the Annual Survey of Hours and Earnings (ASHE) is median gross weekly earnings for full-time employees. This measure is the main focus of this release, but data are also included for hourly and annual earnings of full-time employees. Figures for full-time and part-time employees combined (as well as part-time employees alone) are included in the downloadable spreadsheets on the [NISRA website](#).

ASHE is a UK wide survey that provides a wide range of information on hourly, weekly and annual earnings by age, gender, work pattern, industry and occupation including public and private sector pay comparisons. The sample used comprises approximately 1% of all employees in NI who were covered by Pay As You Earn (PAYE) schemes.

This report presents revised 2018 and provisional results from the NI element of the 2019 ASHE, which surveyed employee earnings for the pay-week (or other pay-period if the employee was paid less frequently) which included 10th April 2019, the reference date for the latest survey. A total of 7,095 returns were received by NISRA (91% of those employees sampled).

ASHE replaced the New Earnings Survey (NES) from 2004. Data are therefore only available on a consistent basis from that year onwards. The introduction of methodological changes in 2006 and 2011 resulted in additional discontinuities in the ASHE time series therefore care should be taken when making comparisons with earlier years. Users should note that, although two data points are available for 2004 and 2006, only those calculated using the most recent methodology are presented in this report.

A [Summary of usage of the Northern Ireland Annual Survey of Hours and Earnings](#) is available on the NISRA website. Users of NI ASHE statistics include the Department for the Economy (DfE) economists who analyse and create briefing on current labour market trends for policy purposes, the Low Pay Commission who recommend rates for the National Living Wage, and Trade Unions who use the data to monitor pay levels and the differences between NI and UK earnings.

Further information on ASHE can be found on the Office for National Statistics (ONS) website:

[Annual Survey of Hours and Earnings methodology and guidance](#)

[Quality and Methodology Information for the Annual Survey of Hours and Earnings](#)

This Annual Survey of Hours and Earnings Bulletin contains the following chapters:

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NATIONAL STATISTICS STATUS

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

These statistics were designated as National Statistics in September 2011 following a full [assessment](#) against the [Code of Practice](#).

Since the assessment by the UK Statistics Authority, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- Redesigned the ASHE Bulletin, improving the commentary, analysis and presentation, and providing more context.
- Removed pre-release access to enhance trustworthiness.
- Updated the ASHE web page to make it more accessible for users.
- Reduced respondent burden by providing the option to respond electronically to the survey.

1 Overview of earnings

1.1 Median weekly earnings

The headline measure of earnings from the Annual Survey of Hours and Earnings (ASHE) is median gross weekly earnings for full-time employees. This is referred to throughout this section as “weekly earnings”. The mean is not used to summarise earnings as it is susceptible to small numbers of very high earners.

Gross weekly pay includes basic pay, overtime pay, commissions, shift premium pay, bonus or incentive pay and allowances, and is before deductions for PAYE, National Insurance, pension schemes, student loan repayments and voluntary deductions.

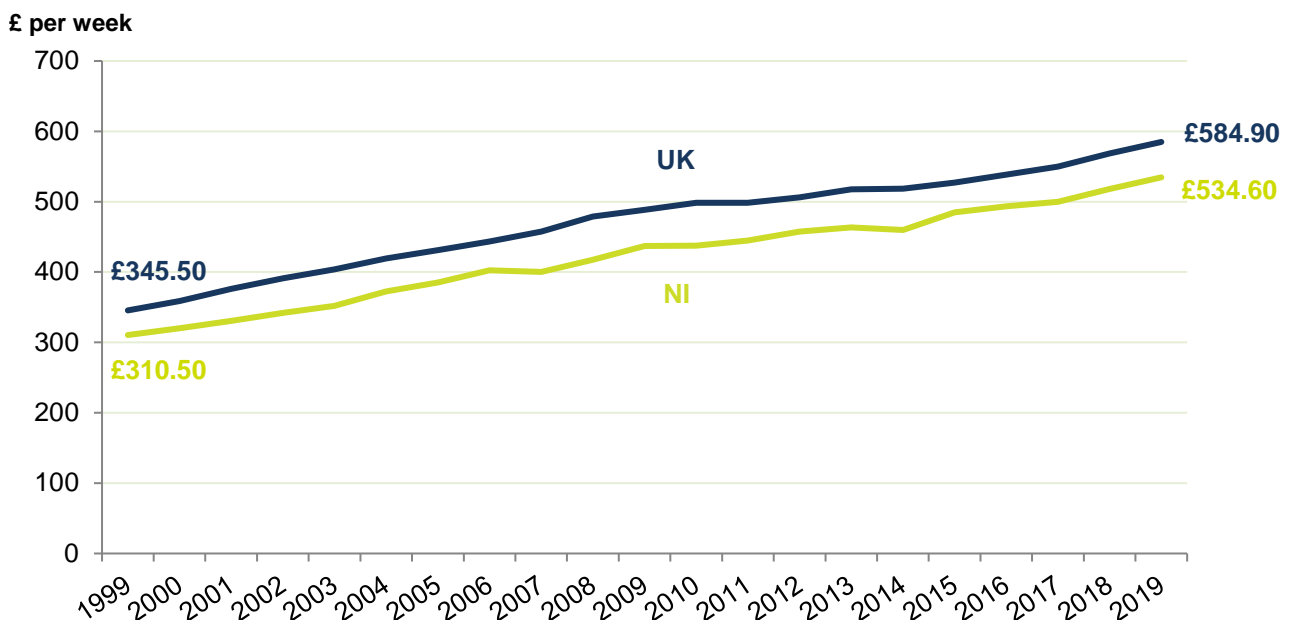
Median measures the amount earned by the average individual, i.e. the level of earnings at which half the population are above and half the population are below.

Full-time employee is defined as anyone aged 16 years or over that is directly paid from a business’s payroll for carrying out more than 30 paid hours per week (or 25 or more for the teaching professions).

Key findings

- Weekly earnings in NI increased by £16.80 (3.3%) over the year and by £16.60 (2.9%) in the UK

Figure 1: Median gross weekly earnings for full-time employees in NI and the UK, April 1999 to April 2019



Note: there were a number of methodological changes during the series in 2004, 2006 and 2011. See Section 4 Further information for full details.

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Over the last 20 years, the median gross weekly earnings for full-time employees has increased by an average of £11 each year in NI. At April 2019, weekly earnings were £535. This was the second lowest of the 12 UK regions and £50 (8.6%) lower than the UK median (£585). Although NI weekly earnings increased by more (3.3%) than the equivalent UK median (2.9%), it had the joint third smallest increase of the UK regions over the year.

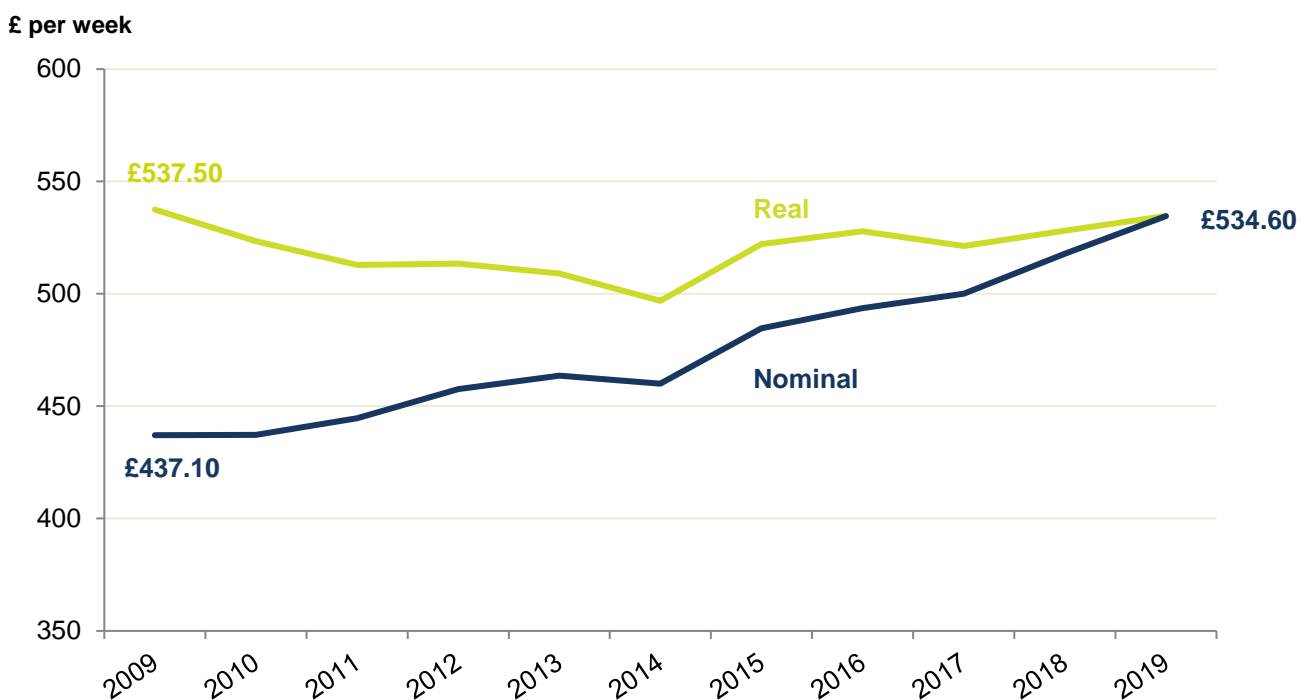
1.2 Real earnings

Real earnings are earnings with the effects of inflation removed. This provides a comparison of the amount of goods and services that can be bought over time (also known as purchasing power). An increase in real earnings means that earnings growth is above the rate of inflation. Real earnings are calculated by adjusting historic earnings data using the Consumer Price Index including owner occupiers' housing costs (CPIH).

Key findings

- Real earnings increased over the year (1.2%)
- Real earnings have almost returned to 2009 levels

Figure 2: Median gross weekly earnings for full-time employees in nominal and real (2019) terms, April 2009 to April 2019



Note: there was a methodological change during the series in 2011.
See Section 4 Further information for full details.
Non-zero axis

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Figure 2 shows that, while nominal weekly earnings have increased each year since 2009 (with the exception of 2014), real earnings have not. Nominal weekly earnings in 2019 are approximately £100 more than in 2009, while real earnings differ by £3.

Over the year, real weekly earnings increased by 1.2%, similar to the increase of 1.3% recorded the previous year. This compares with an annual increase of 0.9% in the UK, following an increase of 1.1% over the year to 2018.

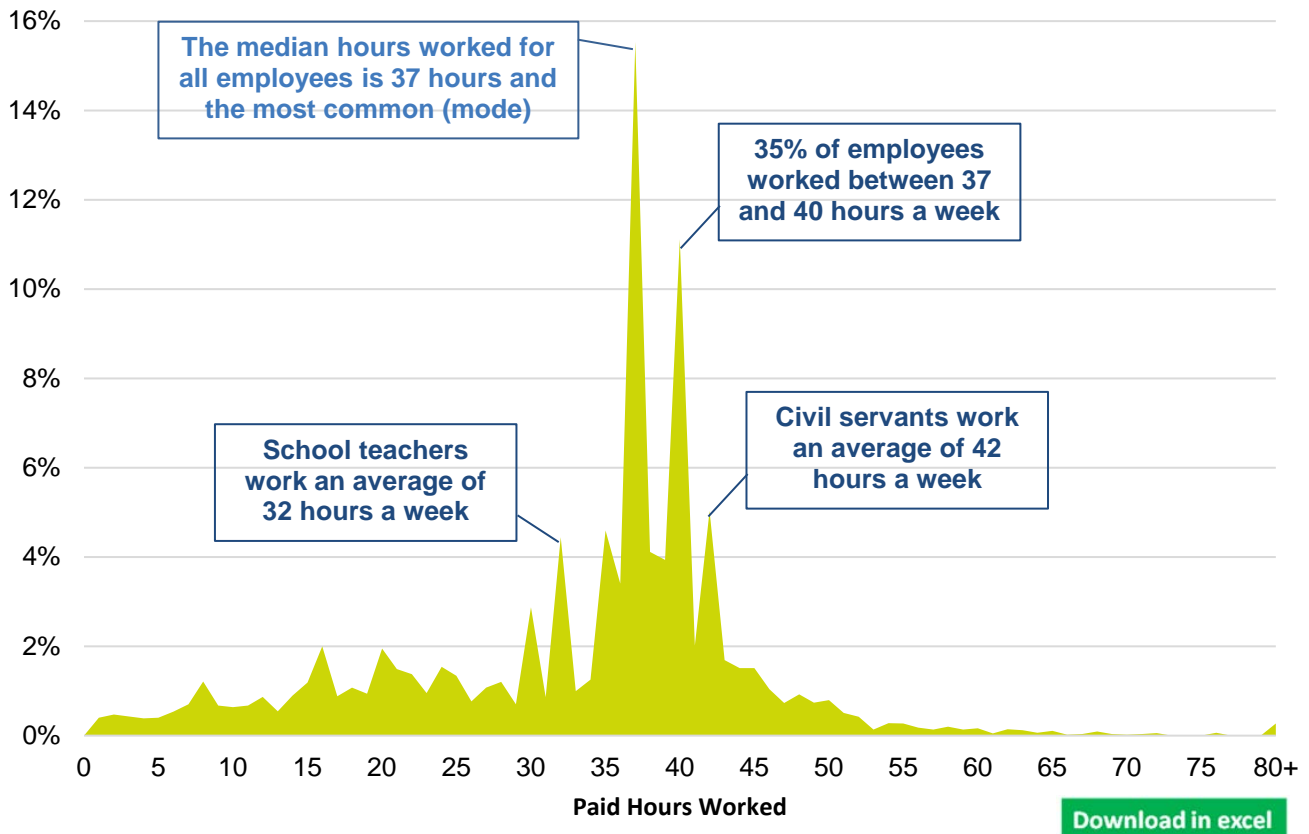
1.3 Paid hours

Total weekly paid hours worked is made up of paid basic hours and paid overtime hours. It is calculated using employees on adult rates whose pay was unaffected by absence.

Key findings

- Median weekly paid hours for all employees in NI and UK remained at 37 hours
- Full-time weekly paid hours was 0.7 hours greater in NI than the UK

Figure 3: Distribution of total weekly paid hours for all employees in NI, April 2019



In 2019, full-time employees in NI worked an average of 38.2 hours per week, compared to 37.5 hours in the UK. The median weekly paid hours worked has remained constant in the UK for full-time employees since 2004 (37.5 hours). It has been more varied for full-time employees in NI, ranging from a low of 37.5 hours in 2003 to a high of 38.9 hours in 2008.

When compared to the UK, the median paid hours was 0.7 hours higher for full-time employees in NI (38.2 hours compared with 37.5 hours), 0.8 hours higher for part-time employees (19.6 hours compared with 18.8 hours) and was the same for all employees in 2019 (37.0 hours).

Nearly 35% of employees worked between 37 and 40 hours per week, equivalent in hours to the standard '9 to 5'. Two clear peaks are evident at 37 hours and 40 hours for full-time employees while the working patterns of part time employees is more varied. The noticeable peak at 32 hours includes school teachers and at 42 hours includes NI civil servants.

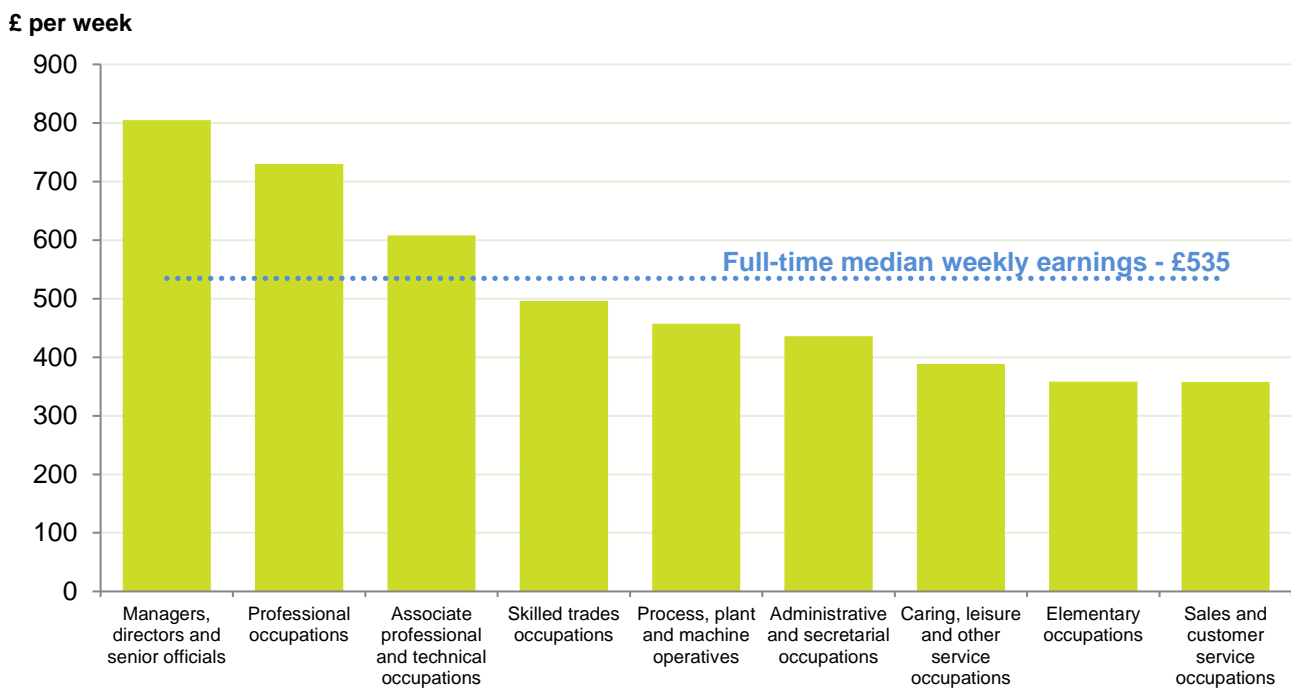
1.4 Earnings by occupation

Occupation: Results are collated using the 2010 Standard Occupation Classification (SOC10).

Key findings

- ‘Managers, directors and senior officials’ had the highest full-time weekly earnings
- ‘Sales and customer service occupations’ had the lowest full-time weekly earnings
- ‘Caring, leisure and other service occupations’ showed the largest increase in weekly earnings over the year

Figure 4: Median gross weekly earnings for full-time employees in NI by occupation, April 2019



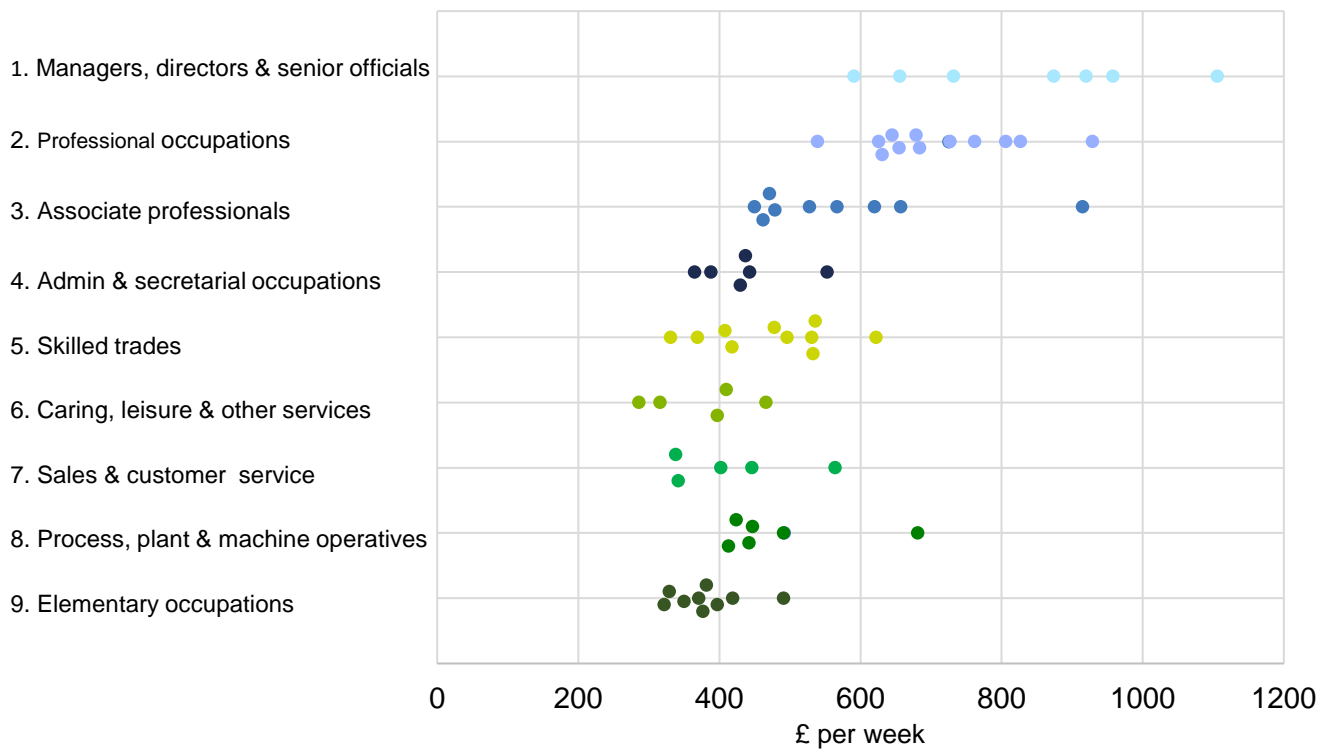
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Analysis of full-time weekly earnings by occupation group shows that ‘Sales and customer service occupations’ (£358) remained the lowest paid occupational group, earning on average approximately £180 a week below the median for all full-time employees. ‘Managers, directors and senior officials’ (£805) remained the highest at £270 a week above the median for all full-time employees and more than double that of ‘Sales and customer service occupations’.

Weekly earnings increased in eight of the nine occupational groups over the year, the only decrease occurring in ‘Managers, directors and senior officials’ (£805), which decreased by £6 (0.8%). ‘Caring, leisure and other service occupations’ (£388) experienced the largest increase (£28 or 7.9%) in earnings between April 2018 and April 2019, followed by ‘Skilled trades occupations’ (5.5% to £496).

More detailed analysis on the earnings of 71 occupational groups (3-digit SOC10 codes) is presented in Figure 5. Please note, 19 occupation groups have been excluded from the chart due to small numbers.

Figure 5: Median gross weekly earnings for full-time employees in NI by occupation, April 2019



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‘Managers, directors and senior officials’ had the widest range of earnings across the occupational groups. Weekly earnings ranged from £591 for ‘Managers and directors in retail and wholesale’, to £1,106 for ‘Senior officers in protective services’.

[An interactive version of this chart is available here.](#)

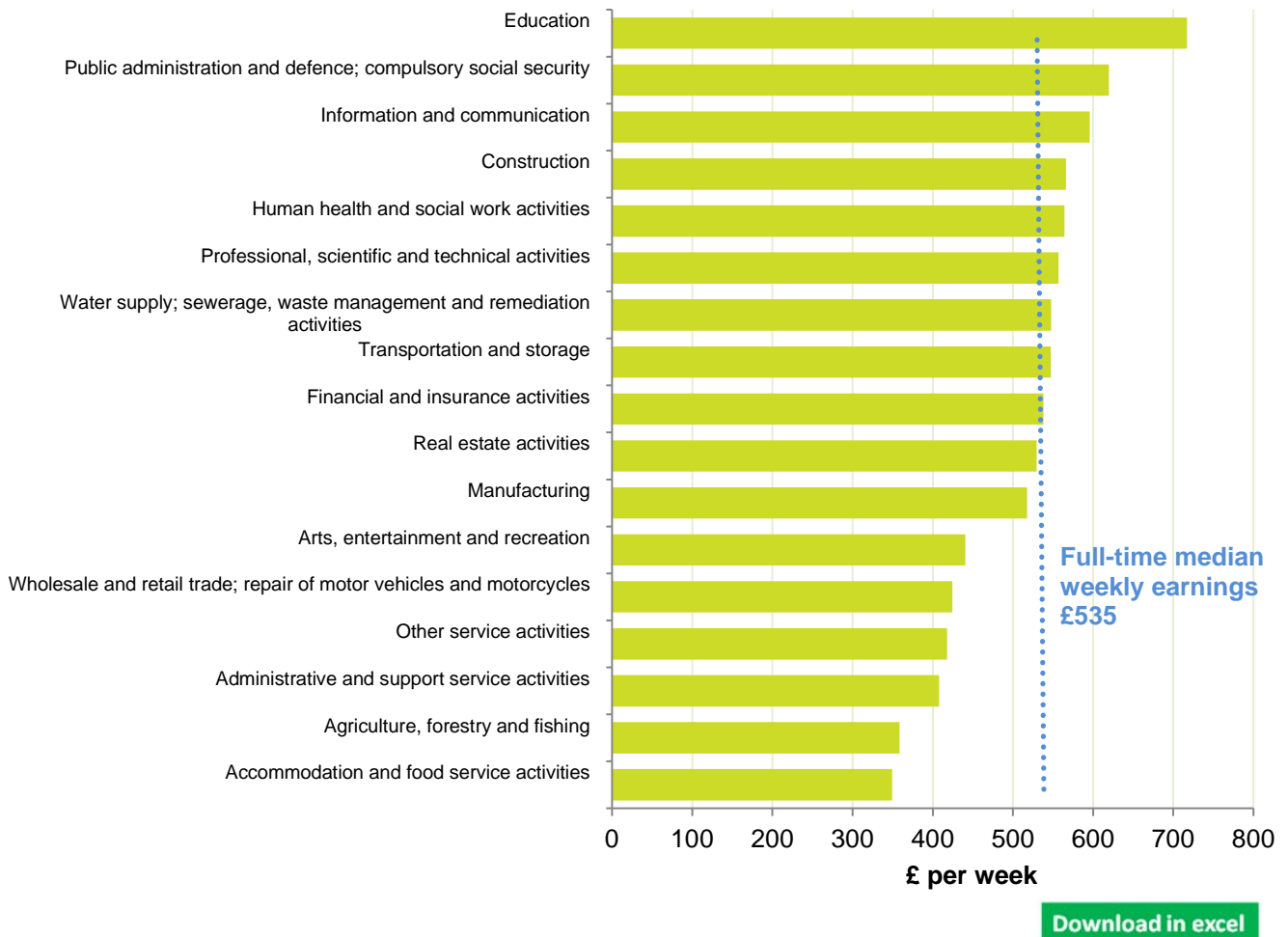
1.5 Earnings by industry

Industry: Results are collated using the 2007 Standard Industrial Classification (SIC07).

Key findings

- ‘Education’ had the highest full-time weekly earnings
- ‘Accommodation and food services activities’ had the lowest full-time weekly earnings
- Increases in full-time earnings were reported in the majority of industry sectors over the year (14 out of the 17 reported in the survey in both years¹)

Figure 6: Median gross weekly earnings for full-time employees in NI by industry, April 2019



In NI, weekly earnings for full-time employees at April 2019 were highest in ‘Education’ (£717) and lowest in ‘Accommodation and food service activities’ (£349). Increases were recorded in 14 of the 17 sectors that were reported for full-time employees¹. The largest increase (13.7%) was seen in ‘Real estate activities’ (£529), followed by ‘Construction’ (11.0% to £566), while the largest decrease (7.4%) was in ‘Water supply; sewerage, waste management and remediation activities’ (£548), followed by ‘Financial and insurance activities’ (7.3% to £538).

For information on the output of different NI industries, users may be interested in referring to results from the [Index of Production](#) and the [Index of Services](#) on the NISRA website.

¹ Full-time estimates were not published for 4 of the 21 industry sectors due to small sample sizes in those sectors.

1.6 Public/private sector comparison

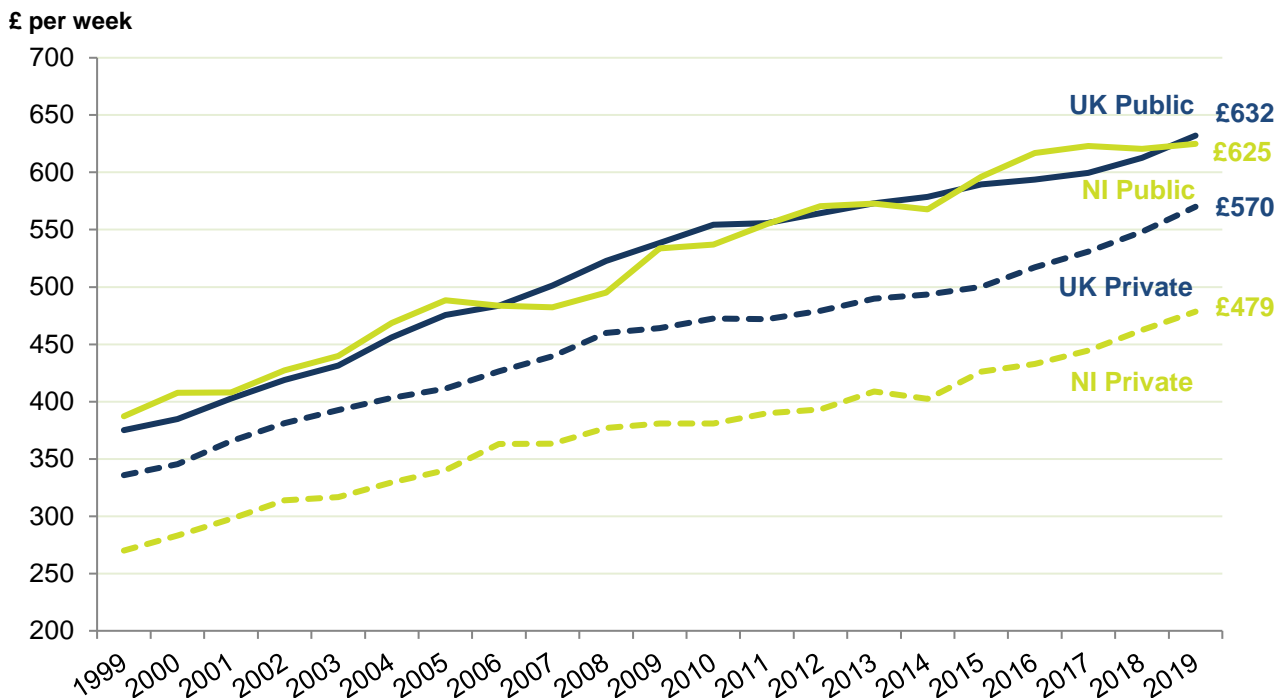
Public sector: The NI public sector can be broken down into five areas: NI central government; Bodies under aegis of NI central government; UK central government employees based in Northern Ireland; Local government; Public corporations.

Private sector: The private sector encompasses all for-profit businesses (that are not owned or operated by the government). This does not include any non-profit body or mutual association.

Key findings

- Median public sector earnings were almost a third higher than private sector earnings
- Larger increase in private sector full-time weekly earnings over the year than in the public sector

Figure 7: Median gross weekly earnings for full-time employees in NI and the UK in the public and private sectors, April 1999 to April 2019



Note: there were a number of methodological changes during the series in 2004, 2006 and 2011. See Section 4 Further information for full details.
Non-zero axis

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Typically NI and UK median public sector earnings are within £20 of each other while private sector earnings differ to a greater extent. In 2019 NI public sector earnings were £7 lower than in the UK while earnings of private sector employees in NI were £92 lower than in the UK.

In April 2019 weekly earnings of public sector employees (£625) in NI were 30.6% higher than those for private sector employees (£479). In comparison, weekly earnings in the UK were 10.9% higher in the public sector (£632) than in the private sector (£570).

When public and private sector pay in NI and UK are considered, earnings for NI public sector employees had the lowest growth over the year. NI public sector pay increased by 0.7%, while in the

private sector, earnings increased more markedly at 3.4%. The UK increases were larger than those in NI, with increases of 3.2% in public sector and 4.0% in private sector earnings.

Increases were experienced right across the distribution of NI private sector employees. Those in the lowest 10% experienced an increase of 4.8%, a similar rate to those in the highest 10% (4.4%). Those in the lowest 10% of the public sector full-time weekly earnings distribution increased by 5.1%, but those in the highest 10% increased by much less at 0.6%.

When considering the hourly earnings of all employees (full-time and part-time combined), the lowest earning 10% of workers in the private sector (those at the 10th percentile) earned the same as the current National Living Wage (£8.21). In contrast, those at the 10th percentile of the public sector (£9.74) earned more per hour than those at the 40th percentile of the private sector (£9.44).

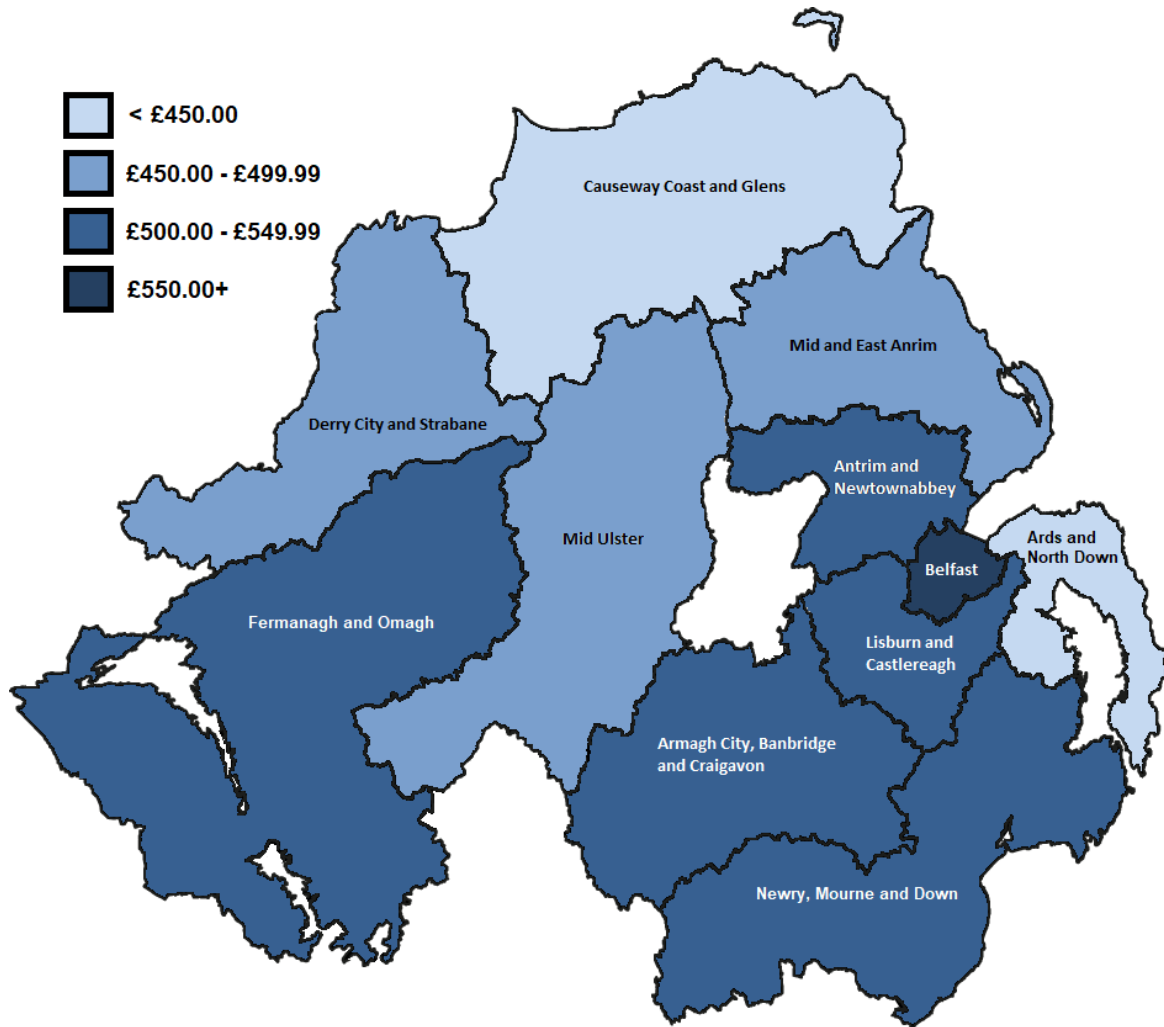
Please note, some of the difference between earnings in the public and private sectors may be due to differences in the composition of the respective workforces. For example, many of the lowest paid occupations exist primarily in the private sector, while there is a larger proportion of graduate-level and professional occupations in the public sector. Further detail on differences in the composition of the respective workforces is available at: [NI ASHE public and private sector analysis \(2013\)](#) and [Who works in the public sector?](#)

1.7 Earnings by Local Government District

Key findings

- Weekly earnings by place of work were highest in Belfast and lowest in Ards and North Down
- Ards and North Down was the only area where earnings decreased over the year

Figure 8: Median gross weekly earnings for full-time employees in NI by place of work, April 2019



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In April 2019, full-time employees working in Belfast earned £575 on average per week. This is almost £130 more than the median weekly earnings for those in Ards and North Down (£447).

Ards and North Down had the lowest earnings of the local government districts and was the only district where earnings decreased over the year. The largest increase in earnings was in Fermanagh and Omagh, with an increase of £44 over the year (9.0%) to £532.

When earnings by place of residence are considered the ranking of LGDs changes, reflecting commuting patterns. Median weekly pay for full-time employees was highest for residents in Lisburn and Castlereagh (£591) and lowest for Causeway Coast and Glens (£483) residents.

2 Gender pay gap

Key findings

- 2019 was the tenth year where full-time females in NI earned at least as much as full-time males on average
- Full-time females earned 37p more per hour than full-time males (£13.13 compared to £12.76)
- NI is the only region in the UK where full-time females earned more than full-time males
- Considering all employees, regardless of working pattern, female hourly pay is below male pay on average due to the higher proportion of female part-time employees

Various methods can be used to measure the earnings of females relative to males. The majority of this section is based on full-time median hourly earnings excluding overtime; including overtime can distort the picture as males work relatively more overtime than females, and using hourly earnings better accounts for the fact that males work, on average, more hours per week than females (see Figure 16).

Although median hourly pay excluding overtime provides useful comparisons of males and females earnings, it does not reveal differences in rates of pay for comparable jobs. This is because such measures do not allow for the different employment characteristics of males and females, such as the proportion in different occupations and their length of time in jobs. For example, a higher proportion of females work in professional occupations, which tend to offer higher salaries.

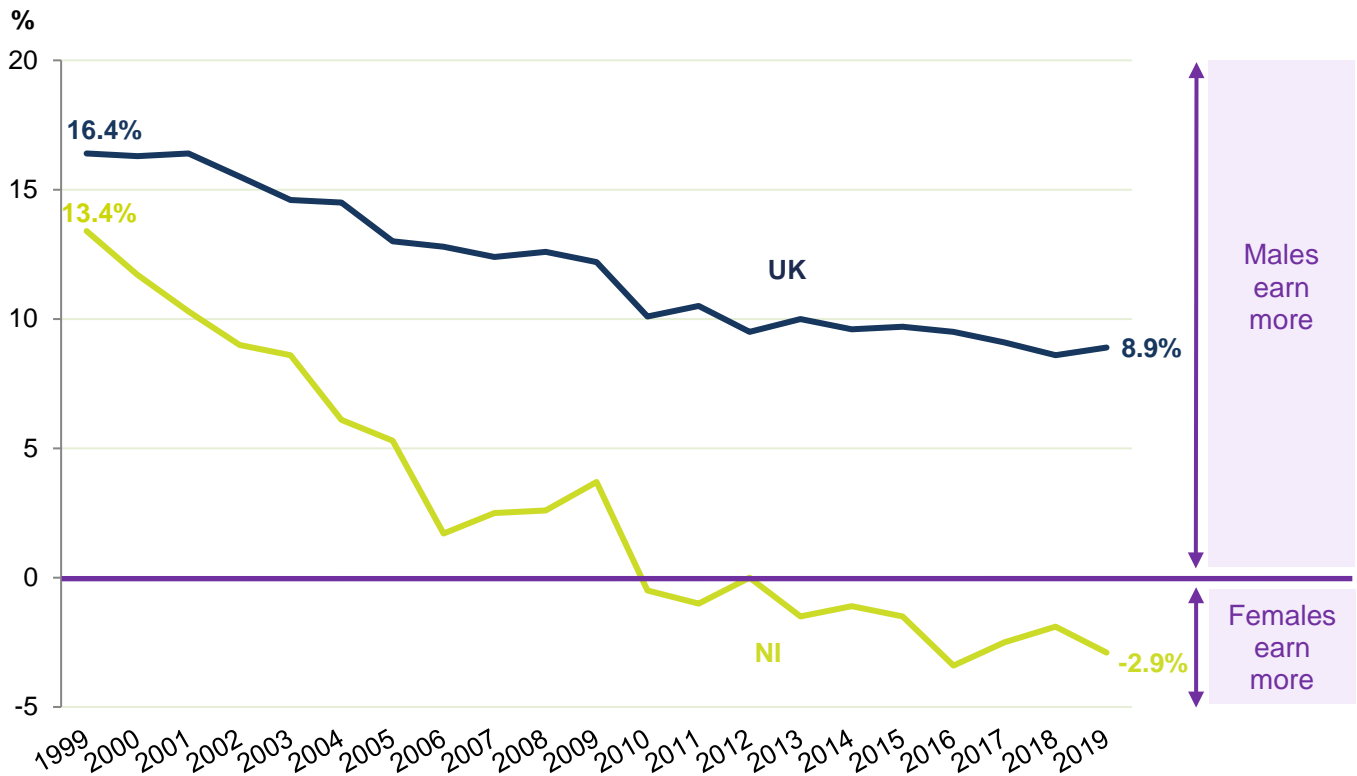
Gross hourly earnings (excluding overtime) includes basic pay, commissions, shift premium pay, bonus or incentive pay and allowances, and is before deductions for PAYE, National Insurance, pension schemes, student loan repayments and voluntary deductions

Gender pay gap: The headline measure is calculated as the difference between the median full-time hourly earnings (excluding overtime) of males and females, as a proportion of median full-time hourly earnings (excluding overtime) of males earnings.

$$\frac{\text{male earnings} - \text{female earnings}}{\text{male earnings}}$$

Tenth year where full-time females earned at least as much as full-time males

Figure 9: Gender Pay Gap for full-time employees in NI and the UK, April 1999 to April 2019



Note: there were a number of methodological changes during the series in 2004, 2006 and 2011. See Section 4 Further information for full details

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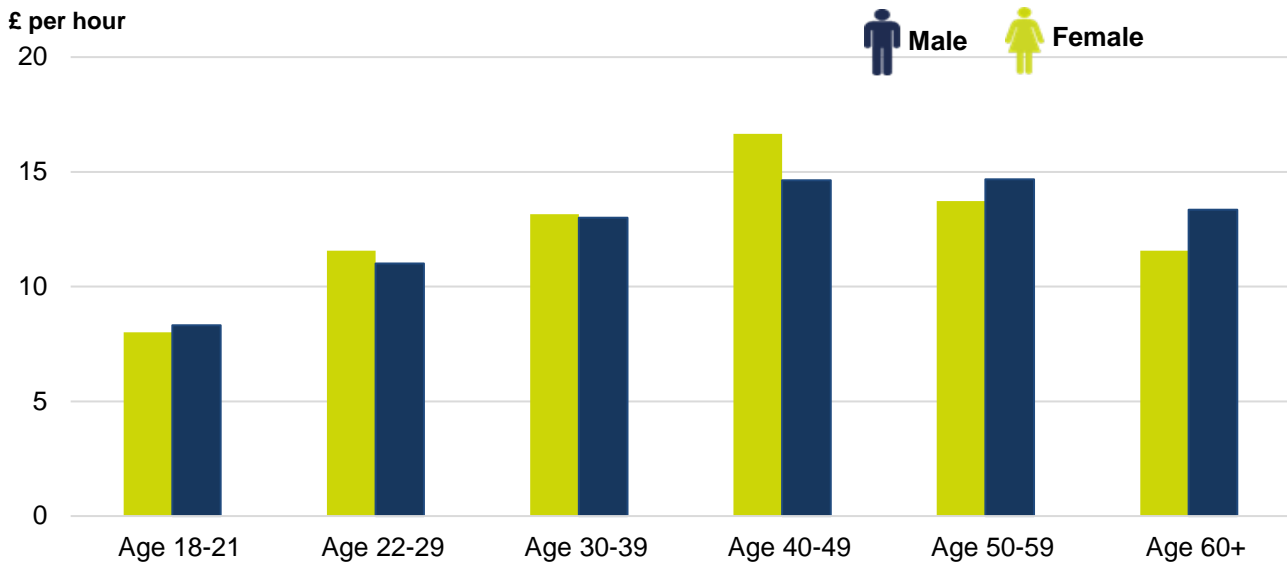
The results from the 2019 ASHE show that the gender pay gap for full-time employees in NI is negative, with females who work full-time earning 37p per hour more on average than males (£13.13 per hour compared to £12.76 per hour for males). This is equivalent to a 2.9% gender pay gap in favour of females; larger than the 1.9% gender pay gap in favour of females (equivalent to 24p per hour) recorded in 2018.

This is the tenth year where the gender pay gap has been zero or has been in favour of females and NI continues to be the only region in the UK where this is the case. Currently in the UK full-time females (£13.97) earned less than full-time males (£15.34) on average; a gender pay gap of 8.9% in favour of males.

The following section explores beyond the headline gender pay gap measure (full-time hourly earnings excluding overtime) and considers the experience across different age groups, occupations and sectors.

Largest gender pay gap among 40-49 year olds

Figure 10: Median gross hourly earnings excluding overtime for full-time employees in NI by age and gender, April 2019

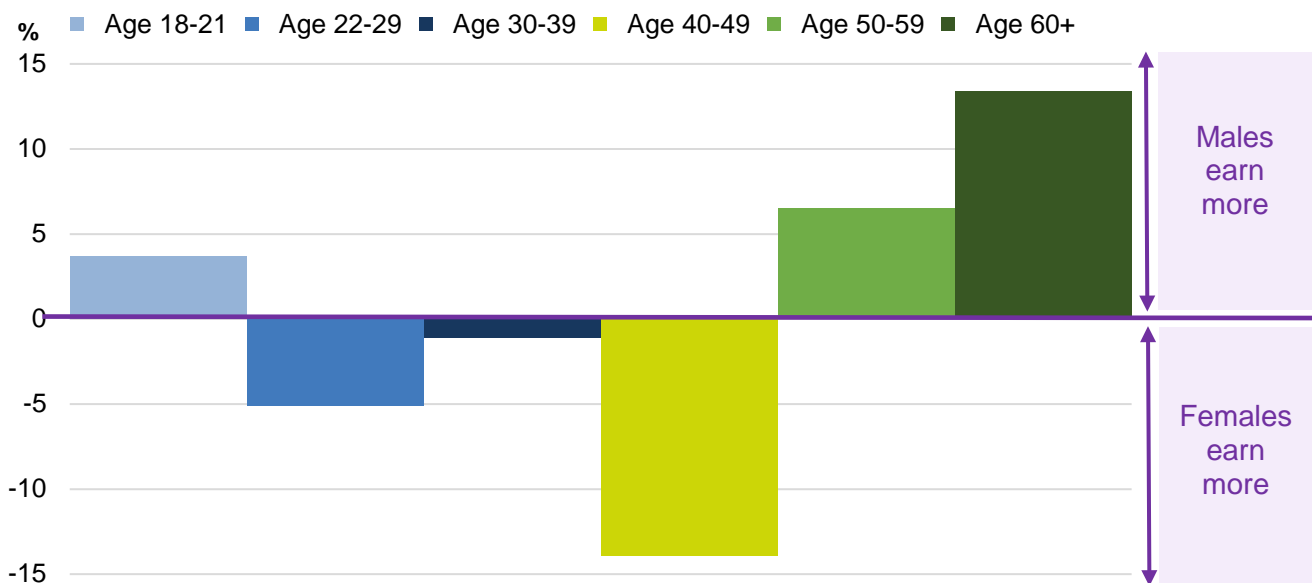


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The ASHE 2019 data shows that female earnings increase with age up to the 40-49 age group and decrease thereafter. Earnings for males increase with age until the 50-59 age group and decline at age 60+. Whilst the median full-time hourly pay for males reaches a high of £14.68, full-time female hourly earnings peak at £16.66, almost £2.00 higher.

Full-time male employees aged 18 to 21 and 50 and over earned more than full-time females in 2019, while full-time females aged 22 to 49 earned more than males on average. The largest difference in full-time male and female earnings was recorded in the 40-49 age group where females earned 13.9% or £2.03 per hour more than males. This age group accounted for approximately a quarter of all full-time female employees and full-time male employees.

Figure 11: Gender pay gap for full-time employees in NI by age bands, April 2019



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Females earned less than males in eight of the nine occupation groups

Occupation: Results are collated using the 2010 Standard Occupation Classification (SOC10).

Figure 12: Median gross hourly earnings excluding overtime for full-time employees in NI by occupation and gender, April 2019



Note: Non-zero axis

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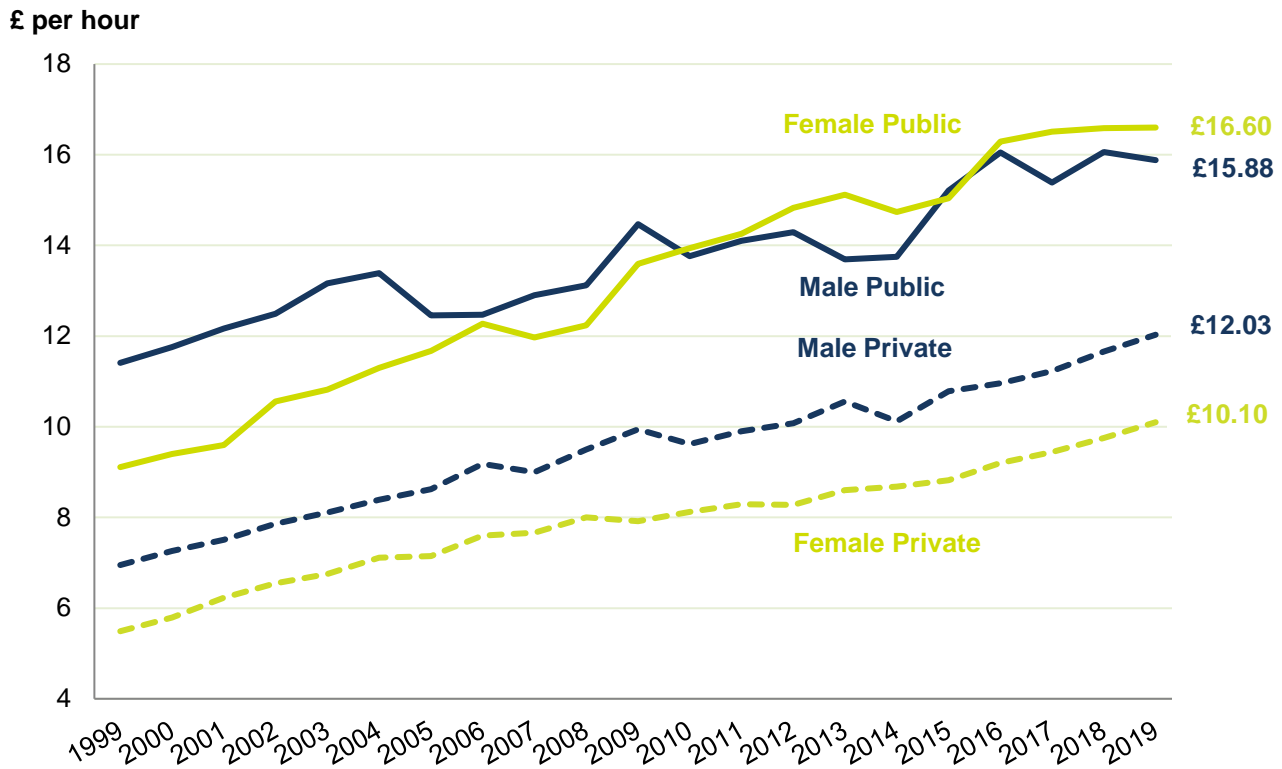
Although the gender pay gap is in favour of females when looking at all full-time employees, overall this is not the case within occupations. Disaggregating the data into occupation groups shows that on average, females earned less than males in eight of the nine occupation groups. The occupation group in which females earned more on average was the highest paying group; 'Managers, directors and senior officials'. However, females made up less than a third (31%) of employees within this occupational group, less than the proportion of all full-time employees who are female (40%).

The largest difference between male and female average pay was in the 'Skilled trades occupations' where on average for every pound earned by males, females earned 83p (£11.79 compared to £9.73 per hour). In 'Skilled trades occupations', 94% of employees were male.

There was a larger proportion of full-time females (40%) than full-time males (30%) employed in the top two earning occupation groups ('Managers, directors and senior officials' and 'Professional occupations'), both paying around £20 per hour on average. This greater proportion of females working in higher paying occupations has led to a higher average pay for females than males despite the differences in average pay within occupations.

Females in the public sector have highest average earnings

Figure 13: Median gross hourly earnings excluding overtime for full-time employees in NI by sector and gender, April 1999 to April 2019



Note: there were a number of methodological changes during the series in 2004, 2006 and 2011. See Section 4 Further information for full details
Non-zero axis

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Overall, public sector employees earned more on average than private sector employees. Within this, females earned more in the public sector on average than males, whilst they earned less in the private sector on average than males. This has been the broad trend since 2010.

The increase in female earnings in the public sector, compared to both males in the public sector and males and females in the private sector over the past 20 years, stands out. Whilst male and female private sector earnings have increased at similar rates since 1999, the increase in public sector earnings for females has surpassed the increase for males in the public sector (increase of £7.49 per hour compared to an increase of £4.47 per hour).

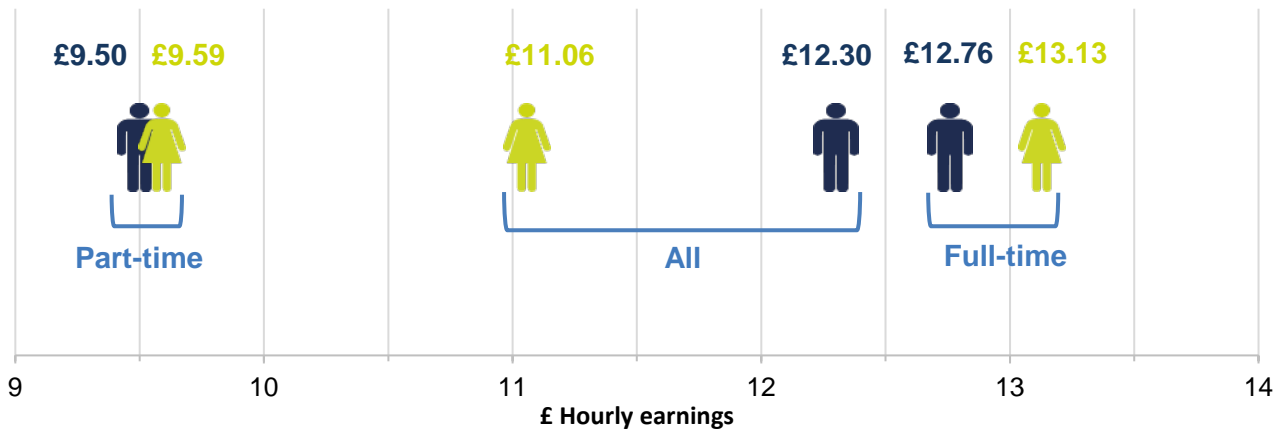
Close to half of full-time females worked in the public sector compared to approximately a quarter of full-time males. Therefore, due to the composition effect of a higher relative proportion of females than males (48% compared with 24% respectively) working in the public sector, where earnings were higher on average, median earnings for full-time females were higher than males.

Full-time and part-time females earn more than males, but overall males earn more

Full-time employee is defined as anyone aged 16 years or over that is directly paid from a business's payroll for carrying out more than 30 paid hours per week (or 25 or more for the teaching professions).

Part-time employee is defined as anyone aged 16 years or over working 30 or less paid hours a week (or less than 25 for the teaching professions).

Figure 14: Median gross hourly earnings excluding overtime by gender in NI, April 2019



Note: Non-zero axis

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Figure 14 and [Gender Pay Gap slideshow](#) present hourly earnings for males and females disaggregated by working pattern and show that part-time earnings for females (£9.59) were greater than part-time earnings for males (£9.50) and full-time earnings for females (£13.13) were greater than full-time earnings for males (£12.76). However, hourly earnings for males (£12.30), regardless of working pattern, were £1.24 higher than for females (£11.06).

The higher earnings for 'all' males regardless of working pattern is primarily due to a higher proportion of males (85% compared with 56% of females) in full-time work, which has higher hourly rates of pay on average than part-time employment and fewer low paid jobs. Figure 15 highlights the greater proportion of low paid part-time (37.5%) employee jobs, compared with full-time (14.1%). (See section 3 for more information on low paid employee jobs).

Figure 15: Proportion of low and high paid employee jobs by working pattern in NI, 2019



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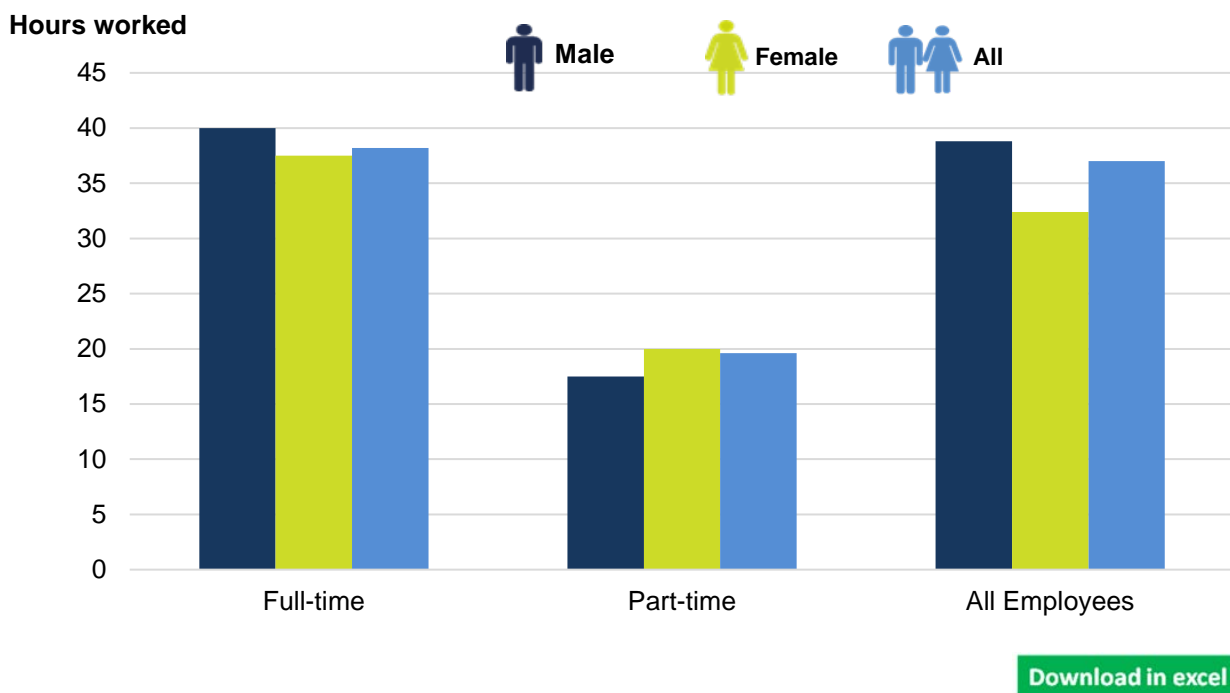
Annual pay higher for males due to longer working hours and higher bonuses

Total paid hours worked is made up of paid basic hours and paid overtime hours. It is calculated using employees on adult rates whose pay was unaffected by absence.

Median gross annual earnings for full-time employees in NI in 2019 was £27,434; £25,606 for females and £28,843 for males. This was a decrease of 0.1% for females over the year, and a 2.9% increase for males.

The gender pay gap for full-time employees is in favour of males when calculated on annual earnings. The difference between the annual and hourly earnings pay gap measure can be attributed to males working more hours on average and receiving higher bonuses than females.

Figure 16: Median weekly paid hours worked by working pattern and gender, NI, April 2019



In April 2019 males in full-time employment worked 2.5 more paid hours per week than females (40 hours compared with 37.5 hours). For those in part-time employment, females worked 2.5 more paid hours per week (20 hours) than males (17.5 hours).

Overall, males (38.8 hours) worked 6.4 hours more than females (32.4 hours), highlighting that a greater proportion of males (85%) work full-time compared with females (56%).

3 Low and high pay analysis

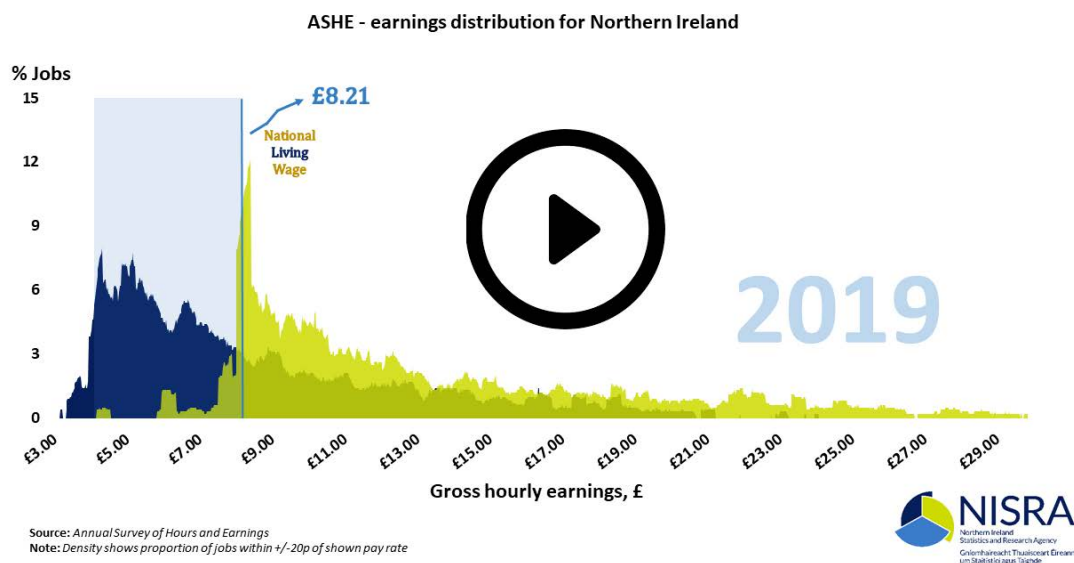
Key findings

- Median hourly pay in NI is lowest of all regions
- The percentage of low-paid and high-paid jobs in NI at their lowest in 20 years
- NI has the highest percentage of low-paid jobs of all the UK regions
- NI has the joint second lowest percentage of high-paid jobs in the UK
- Increase in earnings at bottom 10th percentile in line with NLW increases since 2016

The **National Living Wage (NLW)** was introduced by the Government on 1 April 2016 for all working people aged 25 and over, and is currently set at £8.21 per hour.

The **National Minimum Wage (NMW)** applies for those under the age of 25. It was introduced in 1 April 1999 and ranges between £3.90 and £7.70 per hour. Further details and a full breakdown on rates can be found in section 4.

Figure 17: Gross hourly earnings distribution for all employees NI, April 2002 to April 2019



Note: Jobs shows proportion of jobs within +/-20p of shown pay rate

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Impact of National Living Wage on earnings

Figure 17 shows the changing distribution of earnings from 2002 to 2019. The shape of the chart is typical of a skewed earnings distribution with more jobs at lower earnings and tailing off towards higher earnings.

The peak of the chart, which shows the wage rate with the largest proportion of jobs can be seen moving to the right each year in line with increases in the National Minimum/Living Wage.

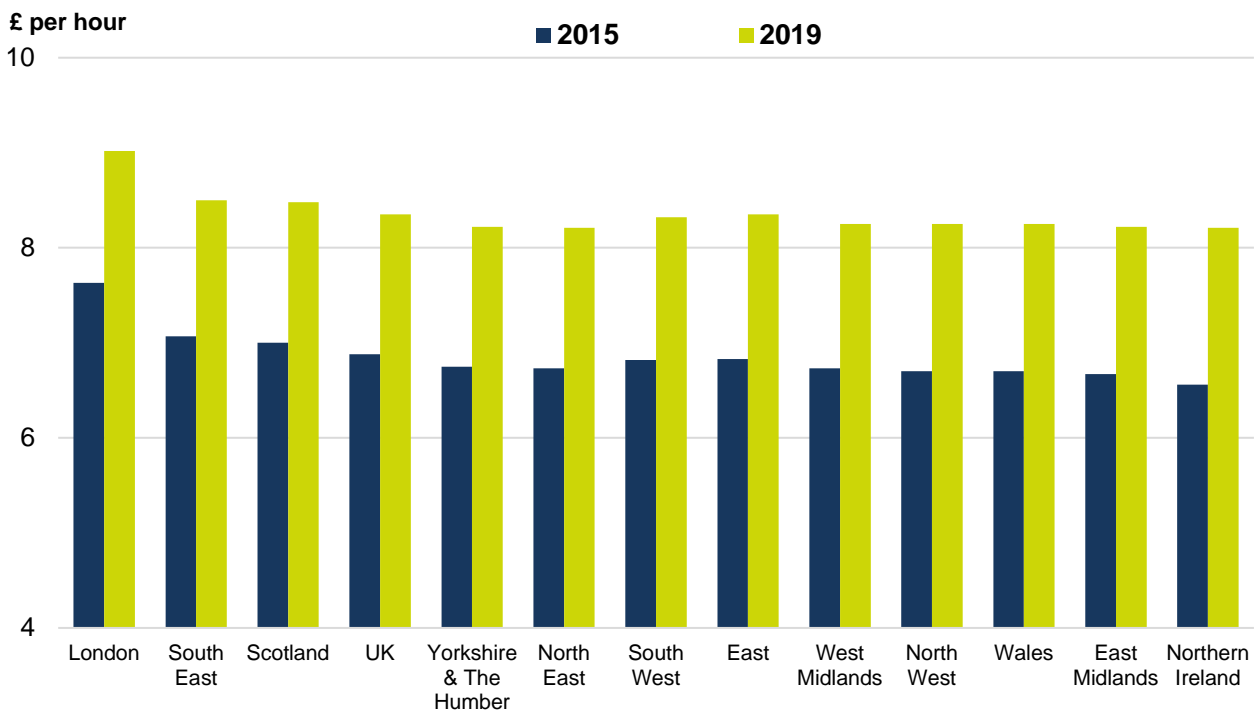
The shape of the distribution has also changed over time. The peak has become more pronounced as earnings are compressed around the National Minimum/Living Wage. In 2002 8.0% of jobs were within 20p of the minimum wage and in 2019 12.1% were within 20p of the National Living Wage.

The largest change in the distribution occurs at 2016 when the National Living Wage was introduced resulting in a 70 pence increase in the minimum wage for those aged 25+ (from a National Minimum Wage of £6.50 in April 2015 to National Living Wage of £7.20 in April 2016). The proportion of jobs within 20p of the minimum wage increased from 12.0% in 2015 to 13.4% in 2016.

The graph also shows jobs below the minimum wage. This cannot be used as a measure of non-compliance with the minimum wage legislation as it is not always possible to determine from the survey data whether an individual is eligible for the minimum wage. For example, if employees receive free accommodation, employers are entitled to offset hourly rates.

The proportion of jobs paid below the National Living Wage in 2019 was 1.1%.

Figure 18: Gross hourly earnings at the 10th percentile for all employees by Government region, April 2015 and April 2019



[Download in excel](#)

Note: Non-zero axis.

Up to 2016, earnings at the 10th percentile were above the National Minimum Wage. Since the introduction of the National Living Wage in 2016, the 10th percentile of earnings in NI has been at the National Living Wage value.

Between 2015 and 2019, earnings at the 10th percentile in NI increased by £1.65 (25.2%), the largest increase of all the regions. The increases in the National Living Wage have directly impacted a larger proportion of employee jobs in NI than in the other UK regions.

Although NI had the lowest earnings at the 10th percentile in 2015 and remains joint lowest in 2019, the difference between NI's lowest earners and the rest of the UK's lowest has narrowed. In 2015 there were no regions within 5p of NI's lowest earners compared to 6 regions in 2019.

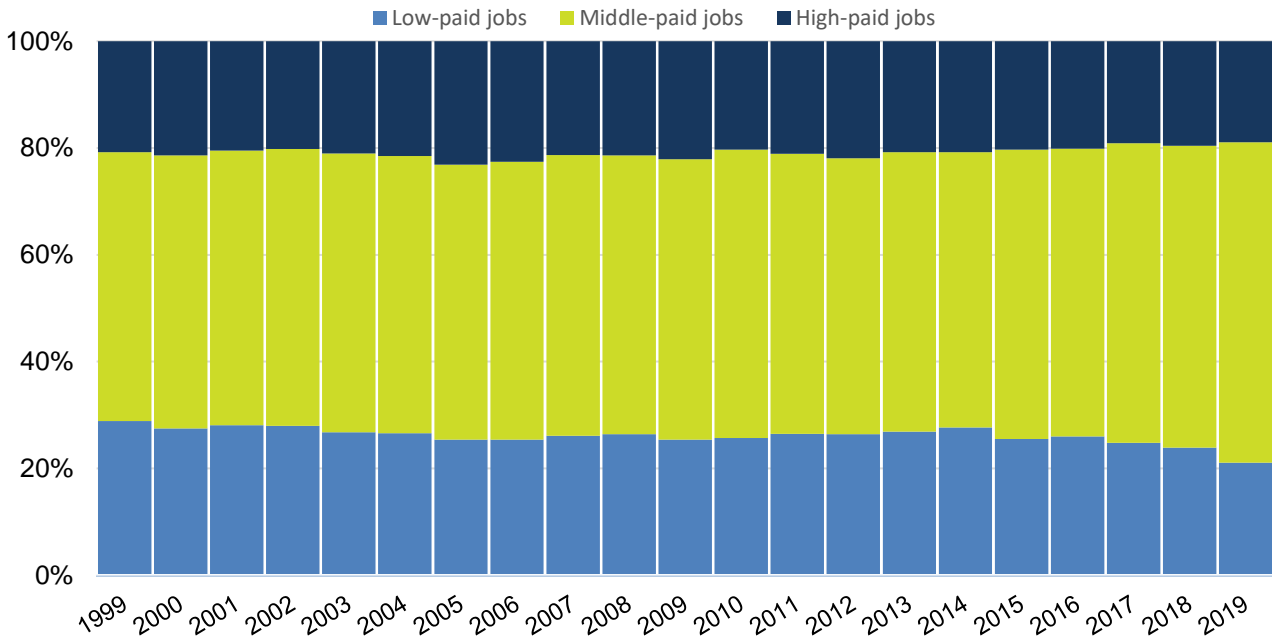
NI has most low-paid jobs in UK

The following [Organisation for Economic Co-operation and Development \(OECD\)](#) definitions of low pay and high pay are used.

Low pay is defined as the value that is two-thirds of the UK median hourly earnings (eg £13.27 x 2/3 = £8.85 in 2019)

High pay is defined as the value that is 1.5 times the UK median hourly earnings (eg £13.27 x 1.5 = £19.91 in 2019).

Figure 19: Proportion of low-paid and high-paid employee jobs in NI, April 1999 to April 2019



Note: there were a number of methodological changes during the series in 2004, 2006 and 2011. See Section 4 Further information for full details.

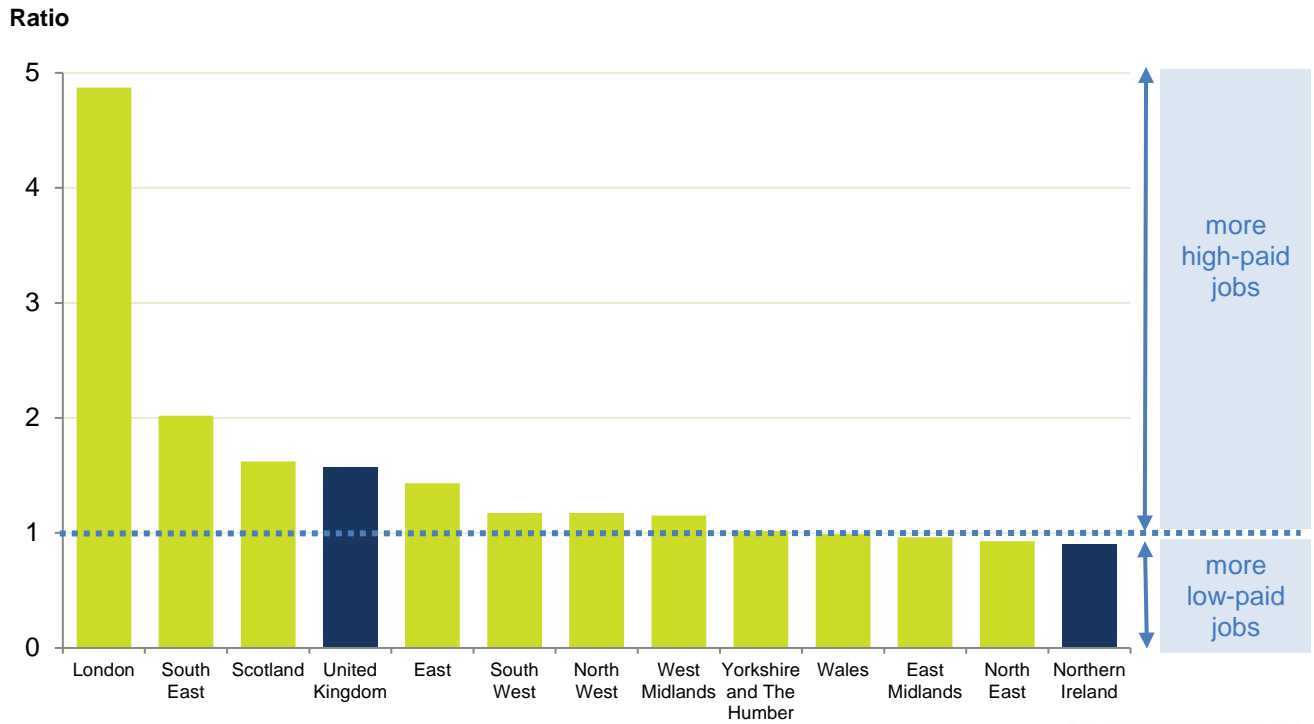
Hourly earnings for all employees is used to calculate high and low pay in line with ONS methodology.

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Figure 19 shows that, over the last 20 years the proportion of low-paid jobs has decreased from 28.9% in 2009 to its lowest proportion of 21.1% in 2019. Since the introduction of the National Living Wage in 2016, the proportion of low-paid jobs has decreased by 5.1pps.

The proportion of high paid jobs is at its lowest in the 20 year period at 18.9%, compared to 23.1% in 2005. As the proportions of both low-paid and high-paid jobs have decreased, the proportion of middle-paid jobs has increased to 60% in 2019.

Figure 20: Ratio of high-paid to low-paid employee jobs, by Government region, April 2019



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Hourly earnings for all employees is used to calculate high and low pay in line with ONS methodology.

Although the proportion of low-paid jobs has decreased, NI has the highest proportion of low-paid jobs of all the UK regions.

Analysis of ratios of high-paid to low-paid employee jobs in the different regions of the UK (Figure 20) shows that NI had the lowest ratio, indicating that low-paid jobs exceeded high-paid jobs to the greatest extent in the UK. London had the highest ratio, with almost 5 times as many high-paid than low-paid jobs, followed by South East and Scotland, all of which were above the UK average. There were only 3 regions other than NI where the number of low-paid jobs exceeded the number of high-paid jobs.

4 Further information

Methodology

The Annual Survey of Hours and Earnings (ASHE) is a UK wide survey that provides a wide range of information on earnings and hours worked. The Office for National Statistics (ONS) carries out ASHE in Great Britain and it is carried out by the Northern Ireland Statistics and Research Agency (NISRA) in NI.

The survey information related to the pay-week (or other pay period if the employee was paid less frequently) which included 10th April 2019, the reference date for the latest survey. The results are therefore not necessarily representative of pay over a longer period. They do not take account of subsequent changes in rates of pay which have become effective since April or changes which have been introduced with retrospective effect since the survey returns were completed.

Coverage and sampling

As in previous years, the sample used for the survey included approximately 1% of all employees in NI who were covered by PAYE schemes and therefore is subject to an associated level of sampling error. Someone who is in more than one PAYE scheme may appear more than once. Information on earnings and hours is obtained in confidence from employers under the authority of The Statistics of Trade and Employment (Northern Ireland) Order 1988. Information collected is treated as strictly confidential and is used only for statistical purposes. The resulting analyses do not show information about identifiable people or private businesses.

The ASHE estimates are based on a sample and are therefore subject to an associated level of variability. The coefficient of variation (CV) indicates the quality of an estimate. The CV is the ratio of the standard error of an estimate to the estimate, expressed as a percentage. The smaller the CV, the higher the quality of the estimate. The CVs are published alongside the estimates, and CVs for the key ASHE estimates are shown in Table 3 below.

Table 1: Coefficient of variation (%) for key NI ASHE estimates, 2019

		Full-time	Part-time
Median gross weekly earnings	Males	2.0	6.8
	Females	2.6	2.9
	All	1.5	2.4
Median gross hourly earnings (excluding overtime)	Males	1.5	2.7
	Females	2.9	1.0
	All	1.3	1.0

Weighting

ASHE responses are weighted to the number of jobs measured by the Labour Force Survey (LFS), and this weighting is carried out by ONS. The weighting factors include age, sex, occupation and workplace, and take account of differing response rates.

Revisions

In line with normal practice, this release contains revised estimates from the 2018 survey results published on 25th October 2018. These results take account of some corrections to the original 2018 data that were identified during the validation of the results for 2019, as well as late returns.

Methodology Changes 2004 to date

The ASHE bulletin presents the most recent data in the context of a 20 year time trend. As such it is worth noting a number of methodological changes that have taken place since the survey was introduced, in particular in 2004, 2007 and 2012. For 2004 and 2006 two sets of results are available based on the existing and updated methodologies at the time. Users should note that data used in the report relate to the updated methodology and superseded data has not been included in the time series charts.

The impact of the changes increases as the size of the group being considered decreases. For example, conclusions can be drawn when considering broad time trends over the 20 year period, but caution should be taken when comparing across occupations and industries.

Table 2: Methodology changes to the ASHE Survey

Year	Change	Impact
2004	ASHE replaced the New Earnings Survey	Coverage improved
2007	Sample design improvements	Results between 2004-2007 not directly comparable
2009	Change in industry classification from SIC 2003 to SIC 2007	Industries not directly comparable More info on impact here
2012	Change in occupation coding from SOC2000 to SOC 2010	Occupations are used to weight ASHE results. Estimates before 2011 not directly comparable with later estimates. More info on impact here (from page 62)
2013	Change in sample frame from PAYE to RTI PAYE	Small impact on coverage

Mean, Median and Percentiles

The mean and the median measure different things and either can be appropriate depending on what the user is trying to measure. The mean measures the average amount earned by individuals, but in a skewed distribution such as earnings this measure is susceptible to small numbers of very high earners. The median measures the amount earned by the average individual, i.e. the level of earnings at which half the population are above and half the population are below. Please note that changes in median values for sub-sectors of the population are not necessarily additive at the population level.

A percentile is a statistical measure which shows the value below which a given percentage of observations fall, i.e. the 10th percentile is the value below which the lowest earning 10% of employees fall, and the 50th percentile (median) is the value below which 50% of employees fall.

National Living Wage (NLW) and National Minimum Wage (NMW)

The NLW rate that applied in April 2019 was £8.21 per hour for employees aged 25 and over. The NMW rates that applied in April 2019 were: £7.70 per hour for employees aged 21 to 24, £6.15 for employees aged 18 to 20, £4.35 for employees aged under 18, and £3.90 for apprentices aged 19 and older and in the first year of their apprenticeship and those aged under 19. The following table provides a breakdown of NLWs and NMWs since April 2008.

Table 3: National Living Wage, 2016 to 2019 and National Minimum Wage, 2010 to 2019

Year	25+	21 to 24	18 to 20	Under 18	Apprentice
2019	£8.21	£7.70	£6.15	£4.35	£3.90
2018	£7.83	£7.38	£5.90	£4.20	£3.70
2017	£7.50	£7.05	£5.60	£4.05	£3.50
2016 (Oct 16 to Mar 17)	£7.20	£6.95	£5.55	£4.00	£3.40
2016 (Apr 16 to Sep 17)*	£7.20	£6.70	£5.30	£3.87	£3.30
		21+	18 to 20	Under 18	Apprentice
2015		£6.70	£5.30	£3.87	£3.30
2014		£6.50	£5.13	£3.79	£2.73
2013		£6.31	£5.03	£3.72	£2.68
2012		£6.19	£4.98	£3.68	£2.65
2011		£6.08	£4.98	£3.68	£2.60
2010		£5.93	£4.92	£3.64	£2.50
		22+	18 to 21	Under 18	
2009		£5.80	£4.83	£3.57	
2008		£5.73	£4.77	£3.53	

*Introduction of National Living Wage for 25 and over

More information on the [National Minimum Wage and National Living Wage rates](#) can be found on the Gov.uk website.

Simpson's Paradox

A trend that appears in groups of data but not when the groups are combined is referred to as Simpson's Paradox. In particular this phenomenon is apparent when NI earnings data is split by gender and other characteristics. For example, gender and working pattern, and gender and occupation. The following [slideshow](#) explains the occurrence within the earnings data and an ONS blog describes it [here](#).

Further information

If you require further information about the figures contained in this publication or the accompanying tables, please use the contact details below:

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Website: [Annual Survey of Hours and Earnings](#)

5 Index of tables

Reporting Periods:

2019 (provisional)
2018 (revised)

Data available:

[Weekly pay – Gross \(£\)](#)
[Weekly pay – Excluding overtime \(£\)](#)
[Weekly pay – Basic including other \(£\)](#)
[Weekly pay – Overtime \(£\)](#)
[Hourly pay – Gross \(£\)](#)
[Hourly pay – Excluding overtime \(£\)](#)
[Annual pay – Gross \(£\)](#)
[Annual pay – Incentive \(£\)](#)
[Hours worked – Total](#)
[Hours worked – Basic](#)
[Hours worked – Overtime](#)

Breakdowns provided:

[Headline Statistics](#)
[Headline Coefficients of Variation](#)
[Industry](#)
[Occupation](#)
[SOC 4-digit](#)
[Age](#)
[Public/Private Sector](#)
[Local Government District](#)
[Parliamentary Constituency](#)
[Skill level](#)

These data, along with Headline Statistics for the years 1997 to 2017 can be found on the [Annual Survey of Hours and Earnings](#) section on the NISRA website.