

Real wages up 62% on average over the past 25 years. Read more...

Coverage: **UK**

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Geographical Area: **Region**

Theme: **Labour Market**

Animated video podcast

A podcast explaining this story using audio commentary and graphical animations is available on the [ONS YouTube channel](#).

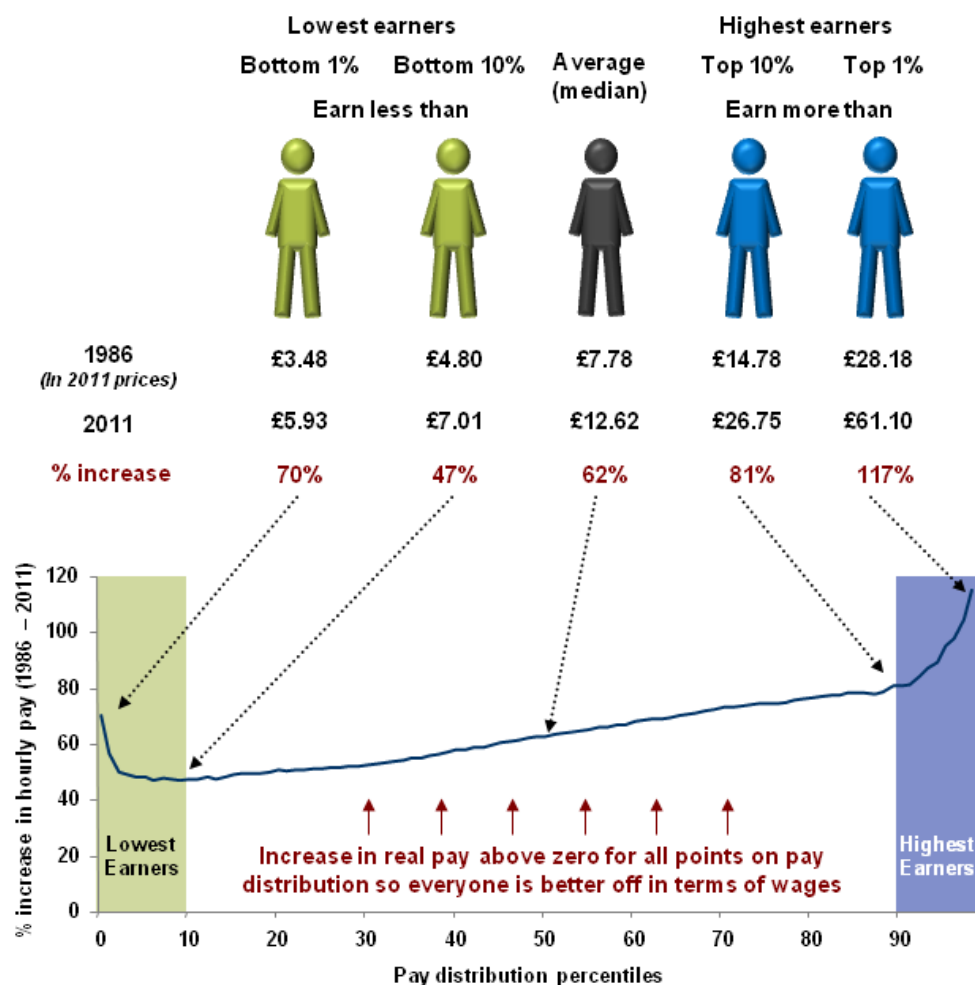
The key points are:

- the average full-time employee earned 62% more than in 1986 after taking into account price rises using the Consumer Prices Index,
- pay of the highest paid employees more than doubled in real terms since 1986,
- the lowest paid full-time employees had a higher than average real wage increase at 70%,
- since the economic downturn in 2008 wages have not kept up with price rises,
- wage inequality (ratio of highest to lowest earners) increased between 1986 and 1998 but fell after the introduction of the National Minimum Wage,
- London has the largest wage inequality across the regions,
- aircraft pilots and flight engineers were the highest paid occupations while waiters/waitresses and bar staff earned the least.

Real wages up 62% on average over the past 25 years

In April 2011 the average full-time employee in the UK earned around £12.62 per hour excluding overtime, an increase of 226 per cent since 1986 when the average wage was £3.87 per hour. Prices have risen over the same period, and £1 in 1986 was worth around £2.01 in 2011 using the Consumer Prices Index. Adjusting for these price increases to give an estimate of real earnings growth, full-time employees were on average 62% better off in 2011 than in 1986.

Real earnings growth, 1986-2011 (in 2011 prices), hourly earnings excluding overtime, percentiles, UK



Source: Office for National Statistics

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Looking at those employees who are the highest earners through to those who earn the least, every full-time employee is better off, however real earnings growth varies across the pay distribution. Ordering employees in terms of their hourly pay and splitting them up into 100 equal sized groups, the real earnings of the top one per cent more than doubled, increasing by around 117% between 1986 and 2011. In 1986 the top 1% earned at least £28.18 per hour (in 2011 prices) while in 2011 this stood at £61.10 per hour.

Moving along the pay distribution, from the highest towards the lowest earners, real wage growth over the period is generally lower, showing that those who earned the most also had the largest real wage increases. The exception was for the lowest earners in the economy, or the bottom 2%, where real earnings growth started to increase again, with the main factor being the introduction of the National Minimum Wage (NMW) in 1999. The bottom 1% of earners had real wage growth of around 70% over the period. In 1986 their full-time wage was at or below £3.48 (in 2011 prices)

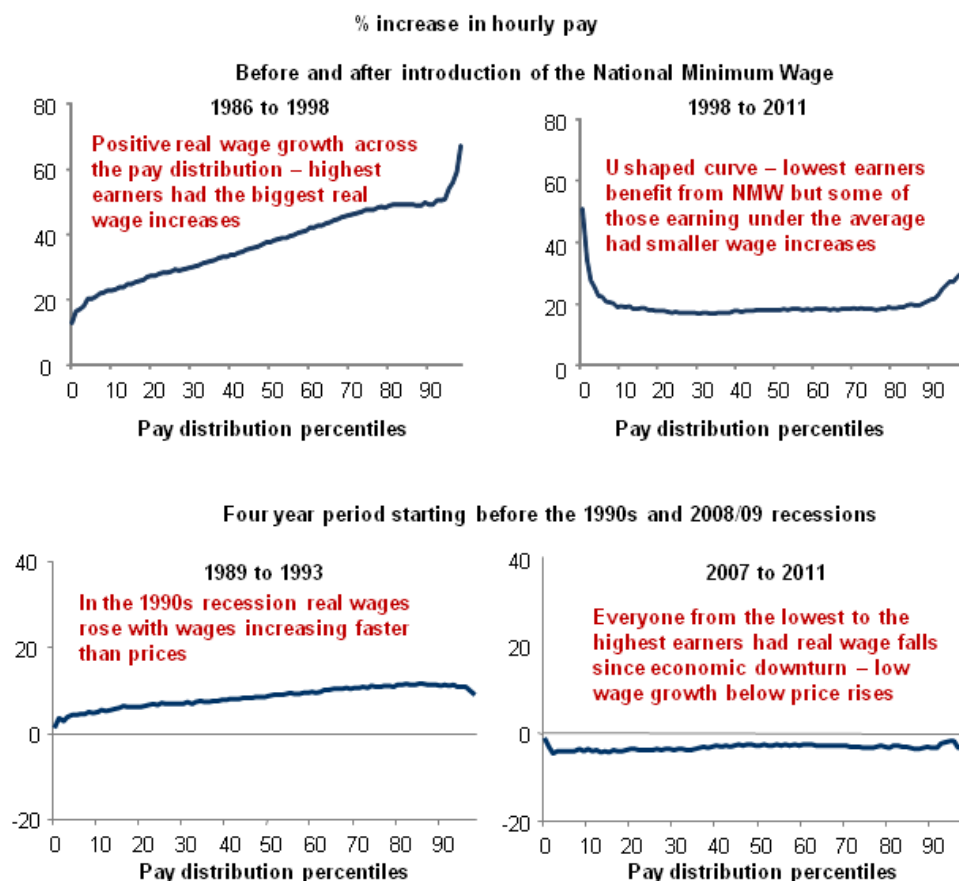
and in 2011 it stood at £5.93 per hour – the level of the NMW in April 2011 for those aged 22 and over. Some people earn less than the NMW wage rate as there is a lower NMW rate for those aged 16 to 21. Some individuals are also exempt from the NMW, such as apprentices or those receiving accommodation as part of their remuneration.

In 1986, comparing the 99th percentile (the highest earners) with the 1st percentile (the lowest earners), the top earners in the UK were paid around 8.1 times more than the bottom earners. With real wages increasing more for the highest earners this gap increased to 10.3 times more, although this was slightly lower than the peak for the period considered here in 1998 where it stood at 12.0 times more.

The lowest earners had a 51% real pay rise since 1998

Looking at the period 1986 to 1998, before the introduction of the NMW, there were real wage increases across the pay distribution. However, the top 1% had a real wage rise of 63 per cent over the period whereas the bottom 1% had a 15 per cent real wage increase, meaning that wage inequality widened between the top and bottom earners. Since the introduction of the NMW the lowest earners have fared much better in terms of real earnings growth, with the bottom 1% having a real wage rise of 51 % between 1998 and 2011. However, not everyone has seen as fast a real wage rise over the period with those earning under the average wage but not among the very lowest earners having smaller real wage increases. The top 1% of earners had a real wage rise of 30% over the same period.

Real earnings growth (per cent), 1986-1998, 1998-2011, and 2007-2011, hourly earnings excluding overtime, by percentile, UK



Source: Office for National Statistics

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A different pattern can also be seen through the recession of the 1990s and the recent recession in 2008/09. Following the 2008/09 recession all points across the pay distribution have seen real wage cuts. This is due to modest wage growth over a period in which there have been pay freezes, sometimes pay cuts and relatively low pay settlements in relation to price increases over the same period. In the 1990s recession there were real wage increases across the whole pay distribution. These two different patterns may help to explain why employment has not fallen as much in the recent downturn as that in the 1990s: a real wage fall reduces the real wage bill for businesses which may reduce the need to lay off staff.

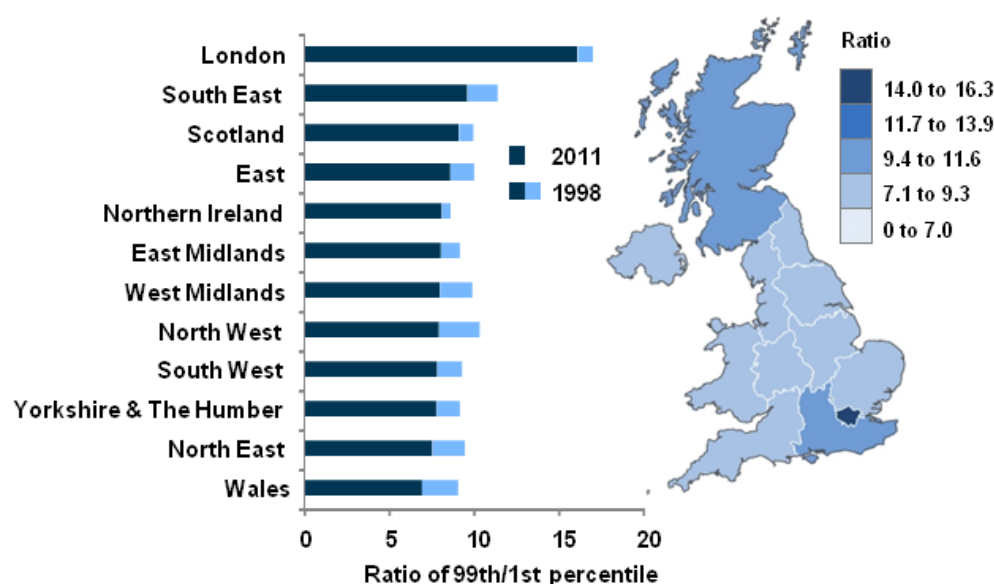
Wage inequality highest in London

Looking at the different regions of the UK, and comparing the 99th percentile with the 1st percentile in each region, the largest ratio in 2011 was in London where the highest earners had wages 16.2 times higher than the lowest earners. London is the region with some of the highest paid jobs within the UK, in particular in the finance sector. The smallest ratio was in Wales, where the highest

earners had wages 7 times higher than the smallest. Note that each region is made up of a different variety of jobs in terms of industries and skills. This affects the wages within an area and the ratio of the highest to lowest earners.

The fall in the gap between the top and bottom earners for the UK is also seen across the regions of England and the countries of the UK. Between 1998 and 2011, the largest fall in the gap between the top and bottom earners occurred in the North West, where the gap between the top and bottom earners fell from 10.4 in 1998 to 8.0 in 2011. The smallest fall was seen in Northern Ireland, from 8.6 in 1998 to 8.2 in 2011, although it is worth noting that Northern Ireland already had a smaller gap between the top and bottom earners relative to the rest of the UK.

Hourly earnings (excluding overtime), ratio between the 99th and 1st percentiles by region, April 2011 and April 1998, UK



Source: Office for National Statistics

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Also the top 10 per cent of earners in the UK earned at least £26.75 per hour excluding overtime in 2011. Of these 36 per cent worked in London showing that over one in three of the highest paid jobs are in the capital.

Aircraft pilots and flight engineers earn most while waiters/waitresses and bar staff earn least

Wages vary greatly depending on the types of occupation being carried out and in April 2011 aircraft pilots and flight engineers had the highest average hourly earnings excluding overtime at £44.49 per hour. These occupations were followed in ranking by chief executives and senior officials (£39.24) and advertising and public relations directors (£33.43). Note these are average (median) hourly wages and there may be some occupations where individuals are paid considerably more, for

example, sportspeople and entertainers. Also, some people in these types of occupations may be classed as self-employed and therefore would not be covered by ASHE.

The lowest paid occupations in the UK economy in 2011 were waiters/waitresses and bar staff where the average gross hourly pay was £6.25 excluding overtime. The third lowest paid occupation was kitchen and catering assistants (£6.30).

The average pay for these occupations reflects the skills needed to carry out the jobs and also the available labour to carry out these roles. Working behind a bar requires less skill than being an aircraft pilot and so there will be many more people competing for bar work which acts as a downward pressure on wages. Also, the highest and lowest paid occupations in the economy vary in terms of their age demographic. Those occupations that pay the most are usually occupied by older people as it takes a number of years to develop the skills to become a senior official or chief executive whereas those occupations that pay the least have a higher concentration of younger people working in them.

Bottom 5 occupations by median hourly pay, excluding overtime, SOC2010

	£/hour
Waiters, waitresses	6.25
Bar staff	6.25
Kitchen and catering assistants	6.30
Vehicle valeters and cleaners	6.39
Launderers, dry cleaners and pressers	6.45

Table source: Office for National Statistics

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Top 5 occupations by median hourly pay, excluding overtime, SOC2010

	£/hour
Aircraft pilots and flight engineers	44.49
Chief executives and senior officials	39.24
Advertising and public relations directors	33.43
Marketing and sales directors	32.08
Information technology and telecommunications directors	31.14

Table source: Office for National Statistics

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The data in this article is available in a [supporting spreadsheet \(83 Kb Excel sheet\)](#).

Background notes

1. ASHE does not cover the self-employed nor does it cover employees not paid during the reference period, which always includes a date in April each year. Earnings estimates relate to full-time employees on adult rates whose earnings for the survey pay period were not affected by absence.
2. 1986 to 2003 uses the New Earnings Survey (NES), unweighted from 1986 to 1997 and weighted from 1997 to 2003. From 2004 onwards it uses the Annual Survey of Hours and Earnings (ASHE) which replaced NES.
3. The ASHE and NES are based on a sample of employee jobs taken from HM Revenue & Customs (HMRC) Pay As You Earn (PAYE) records. Information on earnings and hours is obtained from employers and treated confidentially.
4. Gross hourly earnings excluding overtime are used throughout this article.
5. The Consumer Prices Index of inflation is used to calculate real earnings using the annual growth rate between April in each year.
6. Official estimates of the number of employees earnings below the National Minimum Wage are produced from ASHE but have a slightly differently weighting method so may give rise to slightly different results than used in this report.
7. Standard Occupation Classification (SOC 2010) is used when reporting occupations.
8. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk

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