Graduate Labour Market Statistics 2017

24 April 2018


In 2017, graduates and postgraduates had higher employment rates than non-graduates.

Long term trends illustrate that employment rates fell across all groups as the recession hit in 2008, although for graduates and non-graduates these have since recovered to around pre-recession levels. The employment rate for working age postgraduates in 2017, however, was still 1.3 percentage points below 2007 levels (89.1%).

High Skilled Employment Rates (2017)

Although graduates and postgraduates had similar overall employment rates in 2017 (around 87.5% and 87.7%, respectively), postgraduates had much greater high-skilled employment rates, with 77.8% of all working age postgraduates in high-skilled employment compared to 65.5% of all working age graduates.

A greater percentage of non-graduates were working in medium or low skilled employment than graduates or postgraduates across the working age population.


In 2017 the average, working age graduate earned £10,000 more than the average non-graduate, while on average postgraduates earned £6,000 more than graduates.

The nominal earnings data does not account for inflation, however, it illustrates that long term trends show that salary growth has remained subdued since 2010. This demonstrates how salaries across the economy faltered during this period, with higher education not necessarily protecting graduates from low salary growth.
About this release

This official statistical release summarises the annual employment and earning outcomes data for English domiciled graduates, postgraduates and non-graduates in 2017 using data from the Labour Force Survey (LFS). The publication focuses on two population bases: those aged 16-64 years old and 21-30 years old. In addition to the median outcomes data this publication also looks at how the employment and earnings outcomes of graduates varies by their specific characteristics – including for the first time the outcomes of graduates by government office region. The breakdowns included are: age group, gender, ethnicity, disability status, degree class, subject group, occupation, sector of employment and region. Further data on these breakdowns can be found in the accompanying data tables.

As the results presented in the publication are based on survey data, they represent estimates. Therefore, any findings relating to differences or changes should be interpreted with caution as they may not necessarily be statistically significant. Further information on the methodology used and validity of the estimates can be found in the methodology note and supporting data. These have been published alongside the code and syntax used to generate all statistics within the GLMS on the gov.uk website.

GLMS only provides simple outcome measures based on survey data and does not control for the differences in characteristics between graduates, postgraduates and non-graduates. This means that the outcomes reported may not be wholly attributable to the fact that an individual holds a particular qualification, but instead could reflect other factors, such as their wider skills, experience, or natural ability.
In this publication
The following figures and tables are included in this publication:

Figure 1: Employment, Unemployment and Inactivity rates of the working age population
Figure 2: Employment, Unemployment and Inactivity rates of the young population
Figure 3: High-skilled employment rates of the working age and young population
Figure 4: Median salaries of the working age and young population
Table 1: Headline Statistics and year-on-year changes
Figure 5: Time Series Data – Annual employment rates
Figure 6: Time Series Data - Annual High-skilled employment rates
Figure 7: Time Series Data – Annual unemployment rates
Figure 8: Time Series Data – Annual Median Salaries
Figure 9: Regional median salaries of the working age and young graduate population

Underlying data - Graduate labour market statistics: 2017: supporting data
Microsoft Excel format (GLMS_2017_Supporting_Data.xlsx)
Microsoft Excel format (GLMS_2017_Supporting_Data.ods)

When reviewing the tables, please note that:
Labour Force Survey (LFS) datasets are routinely reweighted in line with population estimates. In May 2017 a new weighting variable was introduced, PWT17, to LFS datasets from July - September 2012 onwards.
The 2017 reweighting project completed by the Office for National Statistics resulted in revisions back to 2012 due to incorporating the latest published mid-2015 population estimates (and updates to MYE’s for 2012-14) and 2014 based sub-national population projections.
The accompanying quality and methodology information document, provides information on the data sources, their coverage and quality and explains the methodology used in producing the data.
https://www.gov.uk/government/collections/graduate-labour-market-quarterly-statistics

Feedback
We are changing how our releases look and welcome feedback on any aspect of this document at he.statistics@education.gov.uk.
1. **Introduction**

Graduate Labour Market Statistics (GLMS) covers labour market conditions for English domiciled graduates and postgraduates, and compares these to English domiciled non-graduates. GLMS was first published by the Department for Business, Innovation and Skills (BIS) in December 2014, using data from the Labour Force Survey (LFS). Responsibility for English Higher Education policy, and hence this publication, transferred to the Department for Education (DfE) in summer 2016.

In this publication, graduates refer to people whose highest qualification is an undergraduate degree at Bachelor’s level; postgraduates are those holding a higher degree (such as a Master’s or PhD) as their highest qualification; and non-graduates are those whose highest qualification is below undergraduate level (i.e. National Qualification Framework Level 5 or below). Employment and earnings outcomes are provided for the working age (16-64 year olds) and the young (21-30 year olds) population groups. This publication also provides time series data covering the past decade to help understand trends for the headline statistics.

As the results presented in the publication are based on survey data, they represent estimates. Therefore, any findings should be interpreted with caution as they may not necessarily be statistically significant. Further information on the methodology used and validity of the estimates can be found in the methodology note and supporting data. These have been published alongside the code and syntax used to generate all statistics within the GLMS on the gov.uk website.

This edition of the GLMS summarises the annual employment and earning outcomes data for graduates, postgraduates and non-graduates in 2017. The publication focuses on two population bases: those aged 16-64 years old and 21-30 years old. In addition to the median outcomes data this publication also provides employment and earnings outcomes of graduates by their specific characteristics – including for the first time the outcomes of graduates by government office region. The breakdowns included are: age group, gender, ethnicity, disability status, degree class, subject group, occupation, sector of employment and region.

GLMS only provides simple outcome measures based on survey data and does not control for the differences in characteristics between graduates, postgraduates and non-graduates. This means that the outcomes reported may not be wholly attributable to the fact that an individual holds a particular qualification, but instead could reflect other factors, such as their wider skills, experience, or natural ability.

Labour Force Survey (LFS) datasets are routinely reweighted in line with population estimates. In May 2017 a new weighting variable was introduced, PWT17, to LFS datasets from July - September 2012 onwards. Thus, results for the years mid-2012 to 2017 within this release have been calculated using the latest 2017 LFS weights. The results for the years prior to this have been calculated using the 2014 LFS weights. The effect of reweighting the 2017 results is typically negligible (less than 0.1 percentage points difference).

Links to all previous GLMS publications, supporting data and methodology notes can be found on the gov.uk website at the following link:

https://www.gov.uk/government/collections/graduate-labour-market-quarterly-statistics

---

1 “English domiciled” means that their permanent home is in England.

2 More information on the Labour Force Survey, including its user guide, can be found on the Office for National Statistics (ONS) website:
https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/labourforcesurvey

3 For a more detailed explanation of the qualifications included in each definition, please see the Methodology Note published on the gov.uk website.
2. Headline Outcomes

This section provides the following headline statistics for 2017: employment rates, unemployment rates, inactivity rates, high-skilled employment rates and median salaries for graduates, postgraduates and non-graduates in both the working age population (16-64 year olds) and the young population (21-30 year olds).

Employment rates, high-skilled employment rates and inactivity rates use the total population (e.g. all graduates aged 16-64) as their base for calculating percentages. The total population includes those who are employed, unemployed and the economically inactive. This differs from the unemployment rate that uses only the economically active (employed or unemployed) as the base to calculate percentages, so it excludes the economically inactive. The economically inactive are defined as individuals that were not employed and either did not seek work over the reference period or were seeking work over the reference period, but unavailable to start work. This is consistent with the definition set out by the Office for National Statistics. Further detail on the methodology used in this publication can be found in the supporting methodology note.

Employment outcomes

Figures 1 and 2 below compare the percentage of working age and young graduates, postgraduates and non-graduates, respectively, who were defined as employed, unemployed and inactive in the calendar year 2017.

**Figure 1: Employment, Unemployment and Inactivity rates of the working age population**
Coverage: English domiciled 16-64 years old population; Jan-Dec 2017

<table>
<thead>
<tr>
<th>Graduates</th>
<th>Postgraduates</th>
<th>Non-Graduates</th>
</tr>
</thead>
</table>
| **Employment Rates:**
| Working Age Population (16-64 year olds) |
| 87.5% | 87.7% | 71.1% |
| **Unemployment Rates:**
| Working Age Population (16-64 year olds) |
| 2.8% | 2.4% | 5.3% |
| **Inactivity Rates:**
| Working Age Population (16-64 year olds) |
| 10.0% | 10.1% | 24.9% |

Source: Department for Education analysis of the Labour Force Survey
As Figures 1 and 2 above show, graduates and postgraduates had higher employment rates than non-graduates. Graduates and postgraduates also had lower unemployment\(^4\) rates and lower inactivity rates than non-graduates\(^5\). The unemployment rate for working age non-graduates was 5.3%; almost double that of graduates at 2.8%. Postgraduates enjoyed slightly better outcomes than graduates, although within the working age population they had an inactivity rate of 10.1%, marginally higher than the 10.0% for graduates.

Employment rates were similar between the working age population and the young population; however the young population has higher unemployment rates and lower inactivity rates than the working age population across all qualification categories.

**High-skilled employment rates**

Figure 3 breaks down the employment rates shown in Figures 1 and 2 by the percentage of those in high-skilled employment\(^6\) or medium/low skilled employment\(^7\).

\(^4\) Unemployment is defined under the International Labour Organization (ILO) measure, which assesses the number of jobless people who want to work, are available to work and are actively seeking work.

\(^5\) The employment rate and inactivity rate are based on the total specified population. This includes economically inactive individuals, including students who are not in employment. As individuals studying for undergraduate degrees are less likely to be in employment and more likely to be classified as inactive, this will have some influence on the headline results for the young non-graduate population as this will include a higher proportion of individuals studying than the general population.

\(^6\) High-skilled jobs are defined as Standard Occupation Classification (SOC) codes 1-3. SOC 1-3 include: managers, directors and senior officials; professional occupations and associate professional and technical occupations.

\(^7\) Medium or low skilled jobs are defined in this publication as Standard Occupation Classification (SOC) codes 4-9. SOC 4-9 include: administrative and secretarial occupations; skilled trades’ occupations; caring, leisure and other service occupations; sales and customer service occupations; process, plant and machine operatives and elementary occupations.
Figure 3: High-skilled employment rates of the working age and young population
Coverage: English domiciled population; Jan-Dec 2017

Figure 3 shows that although graduates and postgraduates had similar overall employment rates in 2017 (around 87.5% and 87.7%, respectively), postgraduates had much greater high-skilled employment rates, with 77.8% of all working age postgraduates in high-skilled employment compared to 65.5% of all working age graduates. The young population had lower high-skilled employment rates than the overall working age population across all qualification categories, suggesting it might take time for young people to become established in the labour market or to reach the higher levels in organisations that are captured by the high-skilled employment rate measure.

A greater percentage of non-graduates were working in medium or low skilled employment than graduates or postgraduates within both the working age and young populations.

Median Salaries

Figure 4: Median salaries of the working age and young population
Coverage: English domiciled population; Jan-Dec 2017

8 The high-skilled employment rate and the medium/low skilled employment rate may not add up to the employment rate exactly due to rounding.
9 Median salaries are given in nominal terms, so do not account for inflation. They are only given for those in full-time work, so exclude part-time workers. In addition, they are rounded to the nearest £500, in line with statistics from the Destinations of Leavers from Higher Education surveys.
10 Median salaries are rounded to the nearest £500.
Figure 4 shows that in 2017 the average, working age graduate earned £10,000 more than the average non-graduate, while on average postgraduates earned £6,000 more than graduates. These gaps were narrower for the young population, with graduates earning £5,000 more than non-graduates, and postgraduates earning £3,500 more than graduates, on average.

3. Year-on-Year Changes

Table 1 shows how the headline statistics changed between 2016 and 2017.

Table 1: Headline Statistics and year-on-year changes
Coverage: English domiciled population; 2016 and 2017

<table>
<thead>
<tr>
<th>Working Age Population (16-64)</th>
<th>Employment Rate</th>
<th>Y/Y</th>
<th>High Skilled Employment Rate</th>
<th>Y/Y</th>
<th>Unemployment Rate</th>
<th>Y/Y</th>
<th>Median Salary</th>
<th>Y/Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>87.5%</td>
<td>+ 0.2 pts</td>
<td>65.5%</td>
<td>No change</td>
<td>2.8%</td>
<td>- 0.1 pts</td>
<td>£33,000</td>
<td>+ £1000</td>
</tr>
<tr>
<td>Postgraduates</td>
<td>87.7%</td>
<td>- 0.3 pts</td>
<td>77.8%</td>
<td>- 0.6 pts</td>
<td>2.4%</td>
<td>+ 0.3 pts</td>
<td>£39,000</td>
<td>+ £1000</td>
</tr>
<tr>
<td>Non-graduates (L5-)</td>
<td>71.1%</td>
<td>+ 0.8 pts</td>
<td>22.2%</td>
<td>+ 0.2 pts</td>
<td>5.3%</td>
<td>- 0.6 pts</td>
<td>£23,000</td>
<td>+ £500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Young Population (21-30)</th>
<th>Employment Rate</th>
<th>Y/Y</th>
<th>High Skilled Employment Rate</th>
<th>Y/Y</th>
<th>Unemployment Rate</th>
<th>Y/Y</th>
<th>Median Salary</th>
<th>Y/Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>88.7%</td>
<td>+ 1.7 pts</td>
<td>57.8%</td>
<td>+ 1.9 pts</td>
<td>4.1%</td>
<td>- 0.6 pts</td>
<td>£25,000</td>
<td>No change</td>
</tr>
<tr>
<td>Postgraduates</td>
<td>88.3%</td>
<td>- 2.2 pts</td>
<td>73.9%</td>
<td>- 1.4 pts</td>
<td>4.5%</td>
<td>+1.5 pts</td>
<td>£28,500</td>
<td>- £500</td>
</tr>
<tr>
<td>Non-graduates (L5-)</td>
<td>74.6%</td>
<td>+ 1.3 pts</td>
<td>17.8%</td>
<td>+ 1.2 pts</td>
<td>6.7%</td>
<td>- 1.0 pts</td>
<td>£20,000</td>
<td>+ £1000</td>
</tr>
</tbody>
</table>

Source: Department for Education analysis of the Labour Force Survey

Employment rates have increased for both graduates and non-graduates in 2017. Young graduates and non-graduates have seen the largest increases with employment rates increasing by 1.7 and 1.3 percentage points, respectively. This corresponded with young graduates and non-graduates seeing a similar improvement in their unemployment rates with falls of 0.6 and 1.0 percentage points, respectively. Working age and young postgraduates saw a reduction in employment rates of 0.3 and 2.2 percentage points, respectively.

Young graduates and non-graduates have seen the largest increases in the proportions working in high-skilled jobs increasing by 1.9 and 1.2 percentage points. The only two groups to have seen a reduction in the proportion of high-skilled employment are working age and young postgraduates who have seen a fall of 0.6 and 1.4 percentage points, respectively.

Regardless of the magnitude of growth within high-skilled employment, however, all groups within the working age population saw their median salaries increase by between £500 and £1,000 between 2016 and 2017. The only group to see a reduction in their median salaries was young postgraduates who experienced a dip of approximately £500 to £28,500 in 2017.

The year-on-year change rate within this table may not total the difference between annual data reported within this document exactly due to rounding of the latter to 1 decimal place.

This section focuses on how employment rates, high-skilled employment rates, unemployment rates and nominal median salaries have changed over the last decade. The graphs below include data for years 2007, 2010, 2013 and 2017 as reference point to help demonstrate the trends over the decade analysed; however the full time series data (2006-2017) can be found in the supporting data published on the gov.uk website alongside this publication.

**Time Series: Employment Rates**

**Figure 5: Time Series Data – Annual employment rates**

<table>
<thead>
<tr>
<th>Year</th>
<th>Graduates</th>
<th>Postgraduates</th>
<th>Non-Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>89.1%</td>
<td>87.3%</td>
<td>86.7%</td>
</tr>
<tr>
<td>2007</td>
<td>87.3%</td>
<td>84.9%</td>
<td>86.0%</td>
</tr>
<tr>
<td>2008</td>
<td>69.5%</td>
<td>66.8%</td>
<td>71.1%</td>
</tr>
<tr>
<td>2009</td>
<td>67.5%</td>
<td>66.5%</td>
<td>71.1%</td>
</tr>
<tr>
<td>2010</td>
<td>86.7%</td>
<td>85.6%</td>
<td>87.7%</td>
</tr>
<tr>
<td>2011</td>
<td>86.7%</td>
<td>85.6%</td>
<td>87.7%</td>
</tr>
<tr>
<td>2012</td>
<td>85.6%</td>
<td>85.6%</td>
<td>87.7%</td>
</tr>
<tr>
<td>2013</td>
<td>85.6%</td>
<td>85.6%</td>
<td>87.7%</td>
</tr>
<tr>
<td>2014</td>
<td>85.6%</td>
<td>85.6%</td>
<td>87.7%</td>
</tr>
<tr>
<td>2015</td>
<td>85.6%</td>
<td>85.6%</td>
<td>87.7%</td>
</tr>
<tr>
<td>2016</td>
<td>85.6%</td>
<td>85.6%</td>
<td>87.7%</td>
</tr>
<tr>
<td>2017</td>
<td>88.3%</td>
<td>88.7%</td>
<td>88.7%</td>
</tr>
</tbody>
</table>

Source: Department for Education analysis of the Labour Force Survey

Employment rates fell across all groups as the recession hit in 2008, although for graduates and non-graduates these have since recovered to around pre-recession levels in 2007. The employment rate for young postgraduates has also recovered to pre-recession levels albeit the employment rate in 2017 (88.3%) is lower than in 2016 (90.6%). The employment rate for working age postgraduates in 2017, however, was still 1.3 percentage points below 2007 levels.12

**Time Series: High-skilled Employment Rates**

**Figure 6: Time Series Data - Annual High-skilled employment rates**

Source: Department for Education analysis of the Labour Force Survey

12 The percentage point change within this chart may not total the difference reported within the text exactly due to rounding.
13 The shaded vertical lines in the two graphs in this figure represent the structural break in the data as the SOC codes were revised by the ONS.
High-skilled employment rates were lower in 2017 than they were in 2007 before the recession hit, although there was a small structural break in the definition between 2010 and 2011 (as the Office for National Statistics revised the Standard occupation classification codes) which means this is difficult to quantify and comparisons should be treated within some degree of caution\textsuperscript{14}.

**Time Series: Unemployment Rates**

Figure 7: Time Series Data – Annual unemployment rates

Coverage: English domiciled population; 2006-2017

Unemployment rates follow a similar trend to employment rates, increasing as the recession hit in 2008 and then gradually decreasing over the following years. In 2017, unemployment rates have recovered to reach pre-recession levels for all groups except young postgraduates\textsuperscript{15}.

Graduates and postgraduates were more protected from unemployment during the recession than non-graduates. For example, from 2007 to 2013 young non-graduates saw their unemployment rate rise by 5.0 percentage points to 12.8\% compared to a rise of 2.4 percentage points to 6.5\% for young graduates.

\textsuperscript{14} More detail on this issue can be found on the ONS website: https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationssoc/soc2010

\textsuperscript{15} Complete time series data (2006-2017) can be found in the supporting data published on the gov.uk website alongside this publication.
Salaries remained relatively flat between 2010-2017. This demonstrates how salaries across the economy faltered during this period, with higher education not necessarily protecting graduates and postgraduates from slow salary growth during these years.

Nominal salaries for all groups in the working age population increased between 2016-2017. Postgraduates in the young population experienced a £500 fall in salaries, whereas young non-graduate salaries increased by £1,000.

4. Graduate Breakdowns

In addition to the median outcomes data this publication also looks at how the employment and earnings outcomes of graduates varies by their specific characteristics – including for the first time the outcomes of graduates by government office region.

The graphs below show median salary data for graduates across the nine government office regions within England; however the full suite of employment outcomes can be found in the supporting data published on the gov.uk website alongside this publication.

Characteristic breakdowns which are included in the data tables are: age group, gender, ethnicity, disability status, degree class, subject group, occupation, sector of employment and region.

---

16 Median salaries are given in nominal terms, so do not account for inflation
17 Median salaries are rounded to the nearest £500
Graduate Breakdown by Region: Median Salaries

Figure 9: Median salaries of the working age and young population\(^{18}\)

Coverage: English domiciled population; 2017

In 2017 median salaries for working aged graduates across the nine government office regions within England ranged from £28,500 within Yorkshire and The Humber to £38,500 within London. Young graduates residing in London also reported a higher median salary (£29,500) than other regions; with East Midlands, North East and West Midlands reporting the lowest average salaries (£22,000).

It is important to note that this data does not take into account the differences in living costs between regions.

5. Accompanying tables

The following tables are available in Excel format on the department’s statistics website https://www.gov.uk/government/collections/graduate-labour-market-quarterly-statistics:

National & Regional tables
1 Graduate labour market statistics: 2017: supporting data

6. Further information is available

Within the supporting data we have provided a more detailed focus on the employment and earnings outcomes of graduates by their specific characteristics\(^{19}\). The breakdowns included in this dataset include:

- Age group
- Gender

---

18 Median salaries are rounded to the nearest £500.
19 Please note that all postgraduates and some graduate groups are out of scope for this part of the publication due to smaller sample sizes not making robust analysis possible. In addition, non-graduates are out of scope for this part of the publication given the focus of the GLMS on those who have gained higher education qualifications.
These have been provided for the working age (16-64 years old) and young (21-30 years old) graduate populations.

7. Official Statistics

These are Official Statistics and have been produced in line with the Code of Practice for Official Statistics. This can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as Official Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

The Department has a set of statistical policies in line with the Code of Practice for Official Statistics.

8. Technical information

A quality and methodology information document accompanies this publication. This provides further information on the data sources, their coverage and quality and explains the methodology used in producing the data, including how it is validated and processed.


9. Get in touch

Media enquiries
Press Office News Desk, Department for Education, Sanctuary Buildings, Great Smith Street, London SW1P 3BT.
Tel: 020 7783 8300

Other enquiries/feedback
Natasha Barras, Higher Education Analysis
Address: Department for Education, 2 St. Paul’s Place, Sheffield, S1 2FJ.
Email: he.statistics@education.gov.uk