Office for National Statistics

Article

Graduates in the UK labour market: 2017

There were 14 million graduates in the UK in July to September 2017, following a steady increase over the past decade. This overview looks at employment, skill level of jobs, industry, pay, unemployment and comparison of male and female graduates.

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1 . Main points

- In July to September 2017, there were 14 million graduates in the UK.

- There has been a steady increase in the number of graduates in the UK over the past decade.

- In July to September 2017, graduates were more likely to be employed than non-graduates.

- Non-graduates aged 21 to 30 have consistently higher unemployment rates than all other groups; non-graduates aged 21 to 30 have much higher inactivity rates than recent graduates.

- 40% of graduates worked in the public administration, education and health industries. Graduates were more likely to work in high-skilled posts than non-graduates.

- Annual earnings for graduates are higher than for non-graduates and reach a peak at a later age.

- In July to September 2017, those graduates that had an undergraduate degree in medicine or engineering were the most likely to be employed and had the highest average gross annual pay.

- Male graduates were more likely to have a high- or upper-middle-skill job than female graduates.

2 . Things you need to know about this release

Definition of a graduate

For the purposes of this report we use the word "graduates" to refer to those people who have left education with qualifications above A level standard. This includes those with higher education and those with degrees. To see a detailed list of all qualifications included in this definition, please refer to the user guidance section.

Definition of the population used in this report

The population we have used in this report is all adults living in the UK who were not enrolled on any educational course on the survey date. The age range we have focused on is women and men aged between 21 and 64. The lower age limit of 21 is used as most people will not have been able to complete a graduate level qualification before this age. However, please note also that educational systems are different across the countries of the UK. Upper age limits were used because we wished to focus on people active in the labour market. These particular ages were chosen to maintain consistency throughout the report as some sections consider time periods before changes to State Pension ages.

3 . Steady increase in the number of graduates in the UK over the past decade

In July to September 2017, there were 34 million people aged between 21 and 64 in the UK who were not enrolled on any educational course (Figure 1). Breaking these people down by the highest qualification they held:

- 14 million, or 42% were graduates

- 7 million, or 21% had qualifications equivalent to an A level

- 7 million, or 20% had qualifications equivalent to an A* to C grade GCSE

- 3 million, or 9% had "other" qualifications not categorised in the UK

- 3 million, or 8% had no qualifications

Figure 1: People in the UK[1] not enrolled on any educational course by the level of their highest qualification[2]

July to September 2017

Figure 1: People in the UK^1^ not enrolled on any educational course by the level of their highest qualification^2^

July to September 2017

34 million were not in education

Source: Labour Force Survey

Notes:

1. People in the UK refers to men and women aged over 20 but below 65.

2. To see a list of all qualifications included in each category please see the user guidance to the report.

3. A graduate is defined as a person who is aged over 20, not enrolled on any educational course and who has a level of higher education above A level standard.

The percentage of the population classed as graduates has been rising steadily from 24% in 2002, to 42% in July to September 2017 (Figure 2). This reflects changes to education since the 1970s, which have led to it becoming more common for people to undertake higher education and less common for people to have no qualifications.

Figure 2: The percentage of graduates[1] in the population[2]

July to September 2002 to July to September 2017, UK

Figure 2: The percentage of graduates^1^ in the population^2^

July to September 2002 to July to September 2017, UK

Source: Labour Force Survey

Notes:

1. A graduate is defined as a person who is aged over 20, not enrolled on any educational course and who has a level of higher education above A level standard. Graduates are aged between 21 and 64.

2. The population used in this report is all adults living in the UK who were not enrolled on any educational course on the survey date. The age range focuses on people aged between 21 and 64.

3. These percentages are calculated from seasonally adjusted constrained figures.
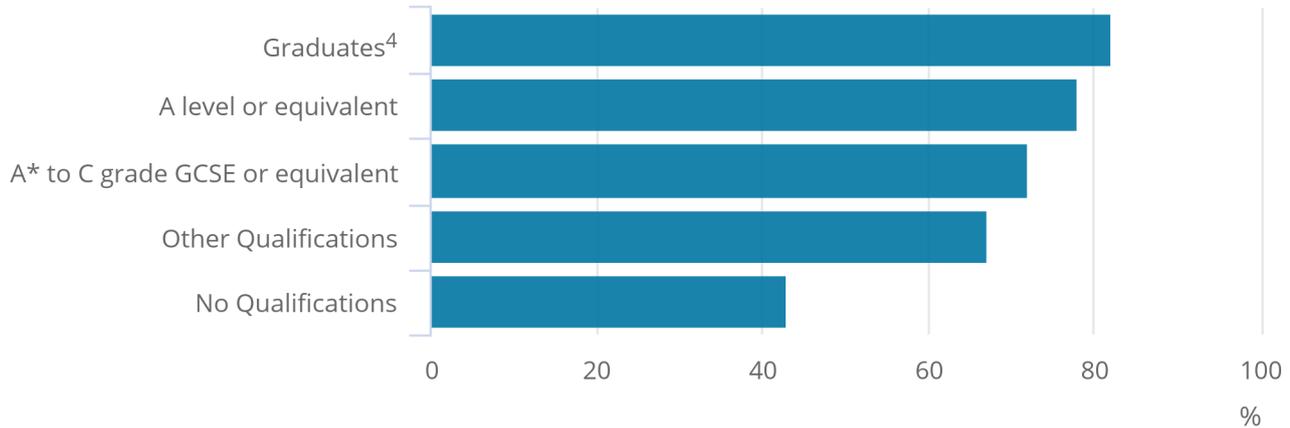
In July to September 2017, graduates were more likely to be employed than those who left education with qualifications of a lower level (Figure 3).

Figure 3a: Employment[1], by the highest level of qualification[2] held

July to September 2017, UK[3]

Figure 3a: Employment^1^, by the highest level of qualification^2^ held

July to September 2017, UK^3^

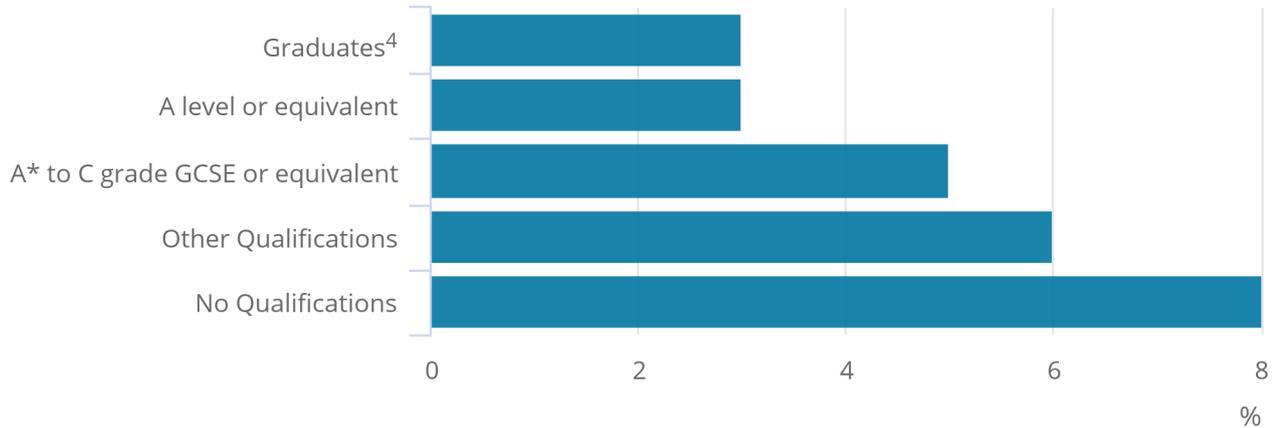**Source: Labour Force Survey**

Notes:

1. The employment rate is the percentage of people in the population who are employed.

2. To see a list of all qualifications included in each category please see the user guidance to the report.

3. Refers to to all adults living in the UK who were not enrolled on any educational course on the survey date. The age range focuses on people aged between 21 and 64.

4. A graduate is defined as a person who is aged over 20, not enrolled on any educational course, who has a level of higher education above A level standard. Graduates are aged between 21 and 64.

Figure 3b: Unemployment[1] by the highest level of qualification[2] held

July to September 2017, UK[3]

Figure 3b: Unemployment^1^ by the highest level of qualification^2^ held

July to September 2017, UK^3^

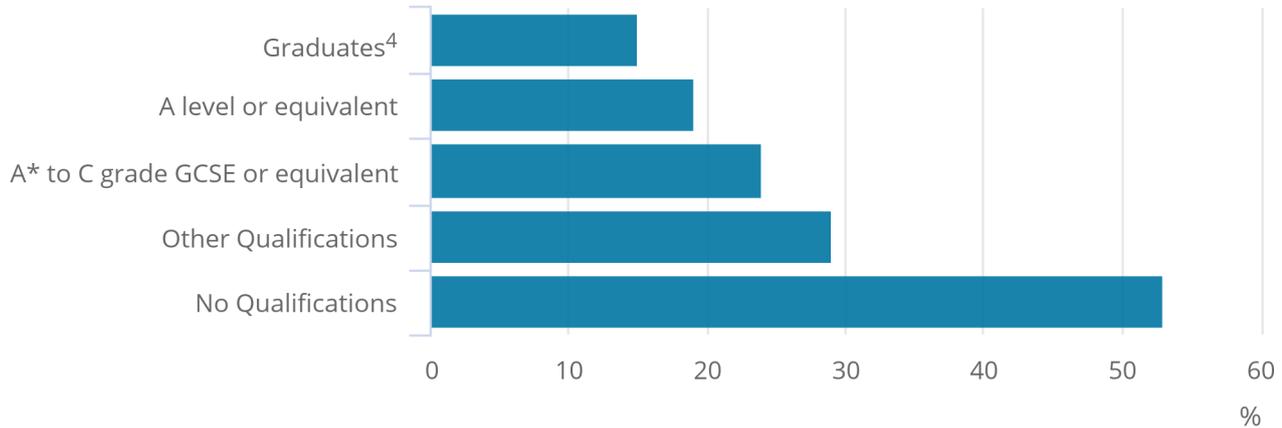**Source: Labour Force Survey**

Notes:

1. The unemployment rate is the number of unemployed people in the relevant population group divided by the economically active population for the same population group.

2. To see a list of all qualifications included in each category please see the user guidance to the report.

3. Refers to to all adults living in the UK who were not enrolled on any educational course on the survey date. The age range focuses on people aged between 21 and 64.

4. A graduate is defined as a person who is aged over 20, not enrolled on any educational course, who has a level of higher education above A level standard. Graduates are aged between 21 and 64.

Figure 3c: Inactivity[1] rates by the highest level of qualification[2] held

July to September 2017, UK[3]

Figure 3c: Inactivity^1^ rates by the highest level of qualification^2^ held

July to September 2017, UK^3^

Source: Labour Force Survey

Notes:

1. The inactivity rate is the percentage of people in the population who are out of the labour force.

2. To see a list of all qualifications included in each category please see the user guidance to the report.

3. Refers to to all adults living in the UK who were not enrolled on any educational course on the survey date. The age range focuses on people aged between 21 and 64.

4. A graduate is defined as a person who is aged over 20, not enrolled on any educational course, who has a level of higher education above A level standard. Graduates are aged between 21 and 64.

In July to September 2017, the graduate employment rate stood at 82%, which was higher than the employment rate for those educated to A level standard (78%), A* to C grade GCSE standard (72%) and the rates for those with other qualifications (67%) or no qualifications (43%).

Graduates and those educated to A level standard had unemployment rates of 3%, which was lower than the unemployment rate for those educated to A* to C grade GCSE standard (5%) and the rates for those with other qualifications (6%) or no qualifications (8%).

The inactivity rate for graduates (the percentage who were out of the labour force, that is, not employed or unemployed) stood at 15%. This was lower than the percentage for those educated to A level standard (19%), A* to C grade GCSE standard (24%) and the percentages for those with other qualifications or no qualifications (29% and 53% respectively).

Overall these figures show that in July to September 2017, graduates were more likely to be employed, less likely to be searching for work and much less likely to be out of the labour force than people who left education with lower qualifications or no qualifications.

4 . Different types of graduates and non-graduates

In this section we split graduates into two groups, graduates who left full-time education more than five years before the survey date and "recent graduates", that is, those graduates who left full-time education within five years of the survey date.

Please note that this definition of recent graduates excludes those who recently studied for their higher education on a part-time basis. These are excluded because we wish to focus on young graduates who have little or no labour market experience. In July to September 2017, the recent graduate group had an average age of 25.
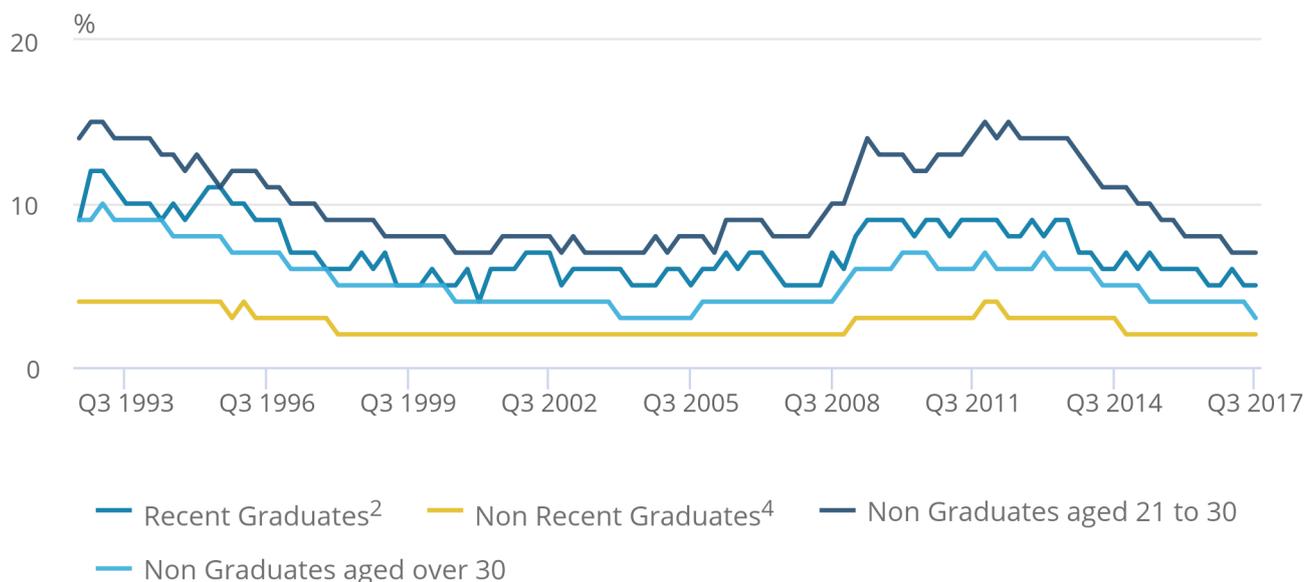
We split non-graduates into those aged between 21 and 30 and those aged over 30. This was done to create non- graduate groups comparable with the graduate groups in terms of average ages.

Figure 4: Unemployment rates[1] for recent graduates[2,3], non-recent graduates[4], non-graduates aged 21 to 30 and non-graduates aged over 30

July to September 1992 to July to September 2017, UK

Figure 4: Unemployment rates^1^ for recent graduates^2,3^, non-recent graduates^4^, non-graduates aged 21 to 30 and non-graduates aged over 30

July to September 1992 to July to September 2017, UK

Source: Labour Force Survey

Notes:

1. The unemployment rate is calculated as the percentage of the labour force within each group that is unemployed. The labour force is the total number either employed or unemployed.

2. A recent graduate is a graduate who left full time education within five years of the survey date.

3. A graduate is defined as a person who is aged over 20, not enrolled on any educational course who has a level of higher education above A level standard. Graduates are aged between 21 and 64.

4. Non-recent graduates are graduates who left full-time education more than five years from the survey date.

Unemployment rates are related to age. Recent graduates and non-graduates aged 21 to 30 have both had consistently higher unemployment rates than older graduates and older non-graduates (Figure 4). This could be explained by the fact that young people will have been looking for work for a relatively short period of time, may probably lack labour market experience and are less likely to have a clearly-defined career path.

When focusing on recent graduates and non-graduates aged 21 to 30, the recent graduate group had consistently lower unemployment rates. This indicates that going on to higher education can help a young person find a job.

Since the 2008 to 2009 economic downturn, unemployment rates have risen for all groups but the sharpest rise was experienced by non-graduates aged 21 to 30. However, from 2013, unemployment rates for all groups have been falling to levels similar to those before the economic downturn.

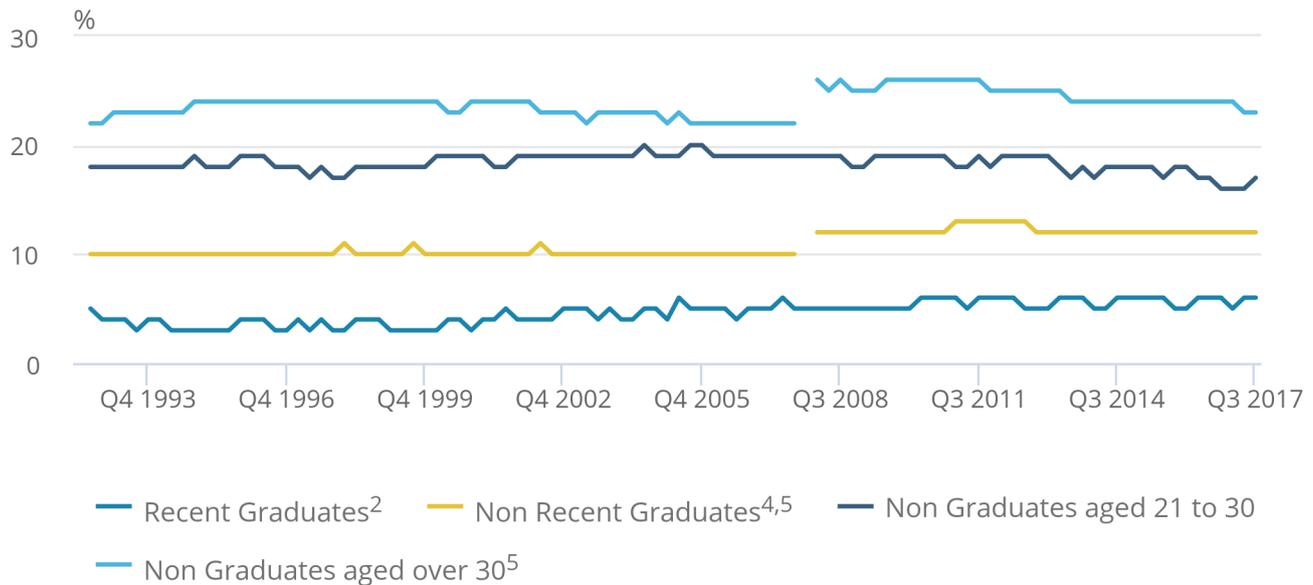## Non-graduates aged 21 to 30 had much higher inactivity rates than recent graduates

Recent graduates have consistently lower inactivity rates than all other groups (Figure 5), which may be related to their low average age. However, in July to September 2017, non-graduates aged 21 to 30 had an average age of 28 and recent graduates had an average age of 25. Despite this, 31% of non-graduates aged 21 to 30 had dependent children compared with only 9% of recent graduates. This means a non-graduate aged 21 to 30 was more likely to stay out of the labour force to look after the family or home. This may explain why non-graduates aged 21 to 30 have consistently higher inactivity rates than recent graduates.

Figure 5: Inactivity rates[1] for recent graduates[2,3], non recent graduates[4], non graduates aged 21 to 30 and non graduates aged over 30

July to September 1992 to July to September 2017, UK

Figure 5: Inactivity rates^1^ for recent graduates^2,3^, non recent graduates^4^, non graduates aged 21 to 30 and non graduates aged over 30

July to September 1992 to July to September 2017, UK

Legend:
- Recent Graduates[2]
- Non Recent Graduates[4,5]
- Non Graduates aged 21 to 30
- Non Graduates aged over 30[5]

Source: Labour Force Survey

Notes:

1. The inactivity rate refers to the percentage of people within each group who are out of the labour force. The labour force is the total number either employed or unemployed.

2. A recent graduate is a graduate who left full time education within five years of the survey date.

3. A graduate is defined as a person who is aged over 20, not enrolled on any educational course and who has a level of higher education above A level standard. Graduates are aged between 21 and 64.

4. Non recent graduates are graduates who left full time education more than five years from the survey date.

5. Between 1992 and 2007 this series covers men aged 16 to 64 and women aged 16 to 59. From 2008 onwards the series covers men and women aged 16 to 64.

5 . Graduates and non-graduates in work

Over 40% of graduates worked in the public administration, education and health industry compared with 21% of non-graduates

In July to September 2017, of all employed graduates in the UK 40% were working in the public administration, education and health industries. In contrast only 21% of employed non-graduates were working in this industries (Figure 6).
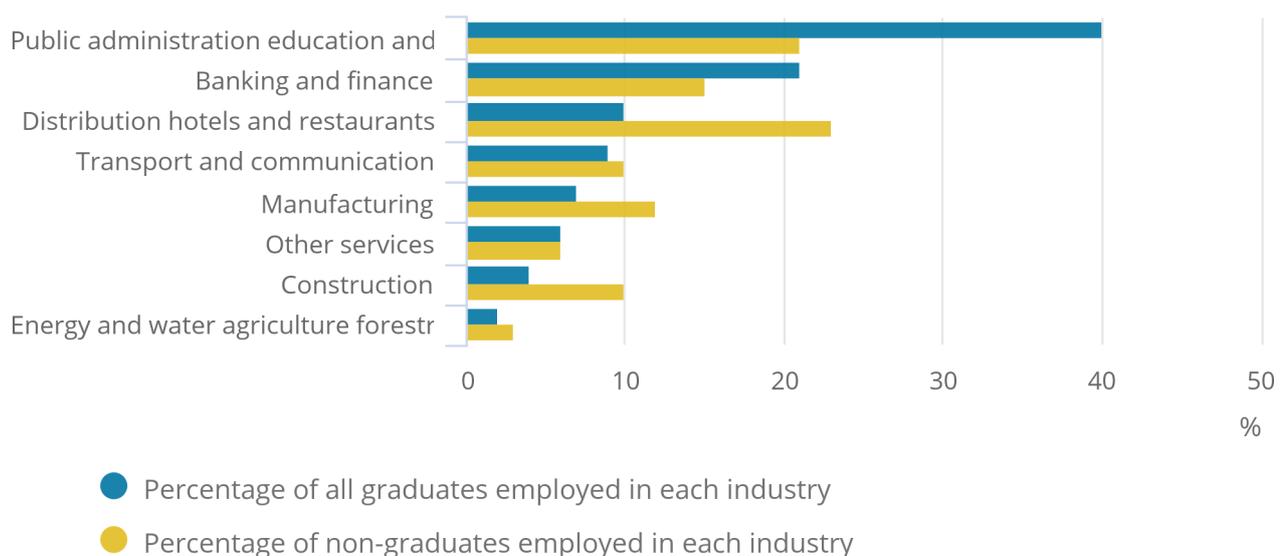
The public administration, education and health industry is a common industry for graduates from various educational backgrounds, which may be due to the wide range of jobs available in this area. It was a particularly common industry for those graduates with degrees in medicine or dentistry, education and subjects related to medicine.

Figure 6: Percentage of graduates[1] and non-graduates employed in each industry group[2]

July to September 2017, UK

Figure 6: Percentage of graduates^1^ and non-graduates employed in each industry group^2^

July to September 2017, UK

Source: Labour Force Survey

Notes:

1. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

2. Industry group is based on the SIC2007 major groups. The industry group is not available for some workers, these workers have been excluded from the total.
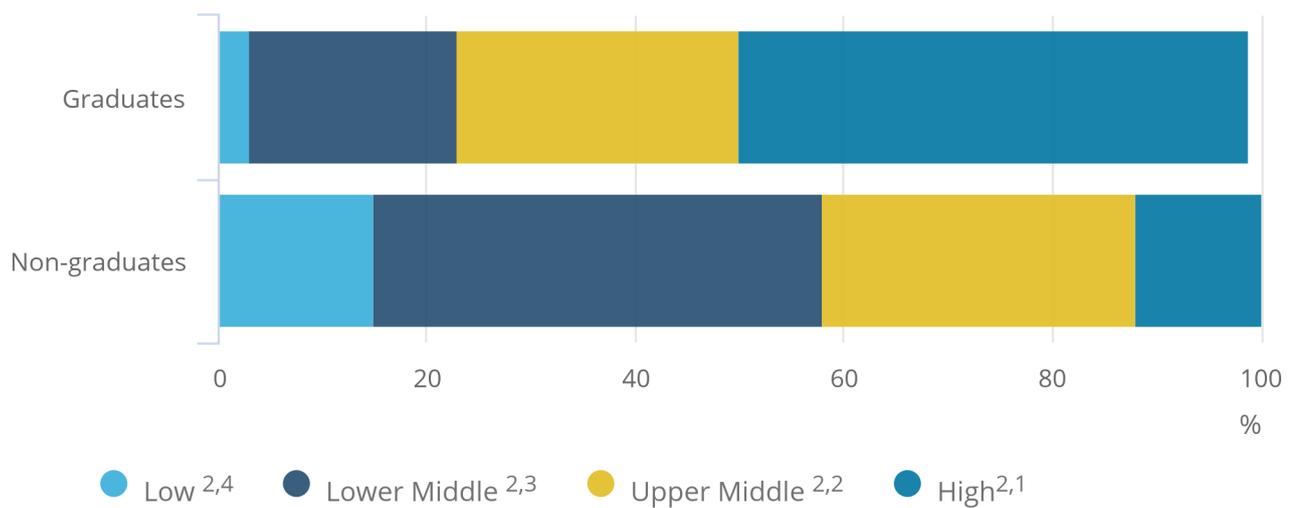
Turning to the banking and finance industry, 21% of employed graduates were working in this area compared with 15% of employed non-graduates. However, when considering the distribution, hotels and restaurants industry the percentage of employed graduates working in this area was below the percentage of employed non-graduates, 10% and 23% respectively.

Figure 7: Percentage of graduates[1] and non graduates working in each skill level group[2]

July to September 2017, UK

Figure 7: Percentage of graduates^1^ and non graduates working in each skill level group^2^

July to September 2017, UK

Low [2,4]   Lower Middle [2,3]   Upper Middle [2,2]   High[2,1]

Source: Labour Force Survey

Notes:

1. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

2. The skill level groups are created by grouping jobs together based on their occupation according to the Standard Occupation Classification (SOC) 2010 lower level groups. The occupation group is not available for some workers, these have been excluded from the total.

   Occupations were grouped by the skill level required according to the following guidelines:

   2,1. High – This skill level is normally acquired through a degree or an equivalent period of work experience. Occupations at this level are generally termed 'professional' or managerial positions, and are found in corporate enterprises or governments. Examples include senior government officials, financial managers, scientists, engineers, medical doctors, teachers and accountants.

   2,2. Upper-middle – This skill level equates to competence acquired through post-compulsory education but not to degree level. Occupations found at this level include a variety of technical and trades occupations, and proprietors of small business. For the latter, significant work experience may be typical. Examples of occupations at this level include catering managers, building inspectors, nurses, police officers (sergeant and below), electricians and plumbers.

   2,3. Lower-middle – This skill level covers occupations that require the same competence acquired through compulsory education, but involve a longer period of work related training and experience. Examples of occupations at this level include machine operation, driving, caring occupations, retailing, and clerical and secretarial occupations.

   2,4. Low – This skill level equates to the competence acquired through compulsory education. Job-related competence involves knowledge of relevant health and safety regulations and may be acquired through a short period of training. Examples of occupations at this level include postal workers, hotel porters, cleaners and catering assistants.

Overall the percentage of graduates in high-skill jobs was higher than non-graduates, but the percentage of each group in upper-middle skill jobs was fairly similar (Figure 7).

Nearly half of employed recent graduates were working in a non-graduate role

Professors Peter Elias and Kate Purcell at the University of Warwick have defined a non-graduate job as one in which the associated tasks do not normally require knowledge and skills developed through higher education to enable them to perform these tasks in a competent manner[1]. Examples of non-graduate jobs include receptionists, sales assistants, many types of factory work, care workers and home carers.

Using this definition of a non-graduate job and focusing on recent graduates who were employed, the percentage of them who were working in one of these roles has risen from 41% in July to September 2002 to 49% in July to September 2017 (Figure 8). The series shows an overall upward trend, in particular since the 2008 to 2009 economic downturn, however, the series has levelled out slightly since 2014. This may reflect lower demand for graduate skills as well as an increased supply of graduates.

Figure 8: Percentage of recent graduates[1,2] and non-recent graduates[3] working in non-graduate roles[4]

July to September 2001 to July to September 2017, UK

Figure 8: Percentage of recent graduates^1,2^ and non-recent graduates^3^ working in non-graduate roles^4^

July to September 2001 to July to September 2017, UK

Source: Labour Force Survey

Notes:

1. A recent graduate is a graduate who left full time education within five years of the survey date.

2. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

3. Non recent graduates are graduates who left full time education more than five years from the survey date.

4. Researchers at the University of Warwick and the University of the West of England have defined a non-graduate role as one which does not require a higher educational background. Please see the user guidance to the report for more details.

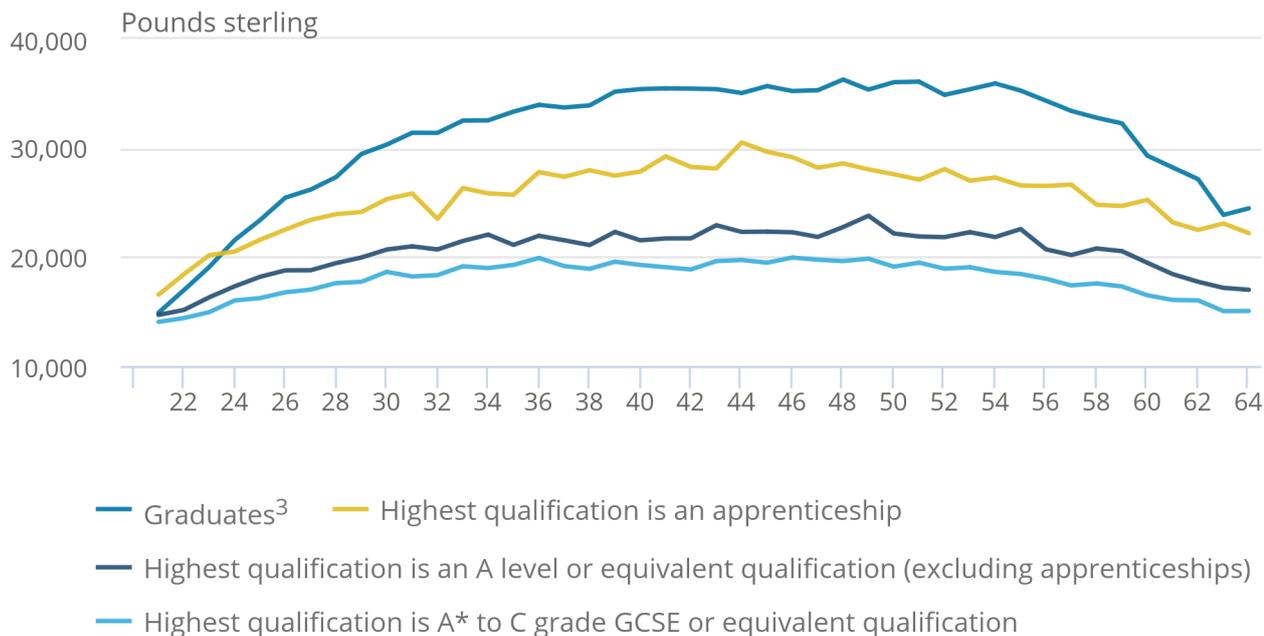# 6 . Graduate and non-graduate earnings

Pay progression by highest qualification

Figure 9: Average annual gross wage [1,2] by age and highest qualification

July to September 2017, UK

Figure 9: Average annual gross wage ^1,2^ by age and highest qualification

July to September 2017, UK

Source: Labour Force Survey Datasets

Notes:

1. Medians are adjusted using Average Weekly Earnings such that they are in terms of 2016 salaries.

2. The average annual gross wages do not include the wages of those who are self employed.

3. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

To see full lists of all qualifications included in these defintions please see user guidance in the report.

Annual earnings for graduates reach a higher peak at a later age than the annual earnings for non-graduates

On average, graduates aged 21 earned a lower gross annual wage than 21 year olds who left education with an apprenticeship. In fact graduates aged 21 actually earned a similar gross annual wage to 21 year olds who left education with an A* to C grade GCSE. This could be explained by the fact that many graduates aged 21 will have either just entered the labour market and therefore may be working in a lower-skilled role while looking for a post in their desired industry.

Those with apprenticeships earned less than graduates at all ages over 24 but earned more on average than those educated to A level or A* to C grade GCSE standard. The annual pay for those with an apprenticeship decreased at an earlier age (45), this is possibly because the work done by these people was more physically strenuous so they may have worked fewer hours or taken on easier work that was less well paid as they got older.

The annual income for graduates increased at a fast pace as they became older and more experienced in the workplace, before levelling out around the age of 39 at an average of £35,000. In contrast, gross annual earnings for those educated to an A* to C grade GCSE standard increased at a more moderate pace and levelled out at around the age of 30 at an average of £19,000. The gross annual wage for those educated to A level standard increased until the age of 34 when it levelled out at around £22,000.

The decline in annual gross wages that occurred as people got older happened at a slightly faster pace for graduates than for those with qualifications of a lower standard. This may be because graduates earned more over their working life so they were more likely to take early retirement or work fewer hours as they got older.

7 . Graduates with undergraduate degrees

For the purposes of this report we have used the word "graduates" to refer to those people who have left education with qualifications above A level standard. In this section we will focus on those graduates with an undergraduate degree.

In July to September 2017, of graduates that had left full-time education 45% had an undergraduate degree. This may not have been their highest qualification as some may have gone onto study for a higher degree such as a master's degree or a PhD. The graduates who did not have undergraduate degrees had other types of higher education such as an NVQ level 5, foundation degree or a nursing qualification.
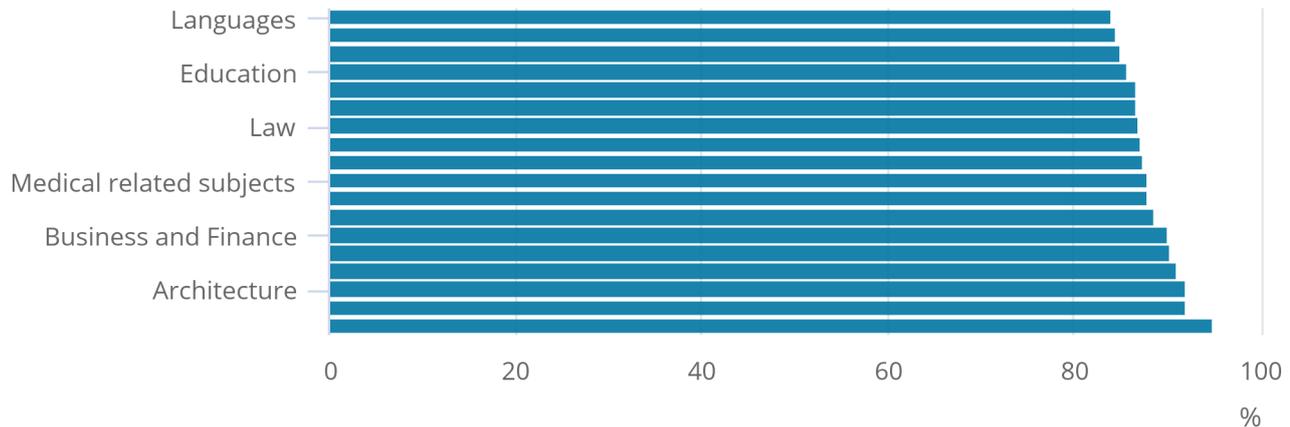
In July to September 2017, those graduates that had an undergraduate degree in medicine and engineering were the most likely to be employed (Figure 10) and had the highest gross annual pay (Figure 11).

Figure 10: Employment rates[1] for graduates[2] with undergraduate degree[3] by the subject of their degree[4]

July to September 2017, UK

Figure 10: Employment rates^1^ for graduates^2^ with undergraduate degree^3^ by the subject of their degree^4^

July to September 2017, UK

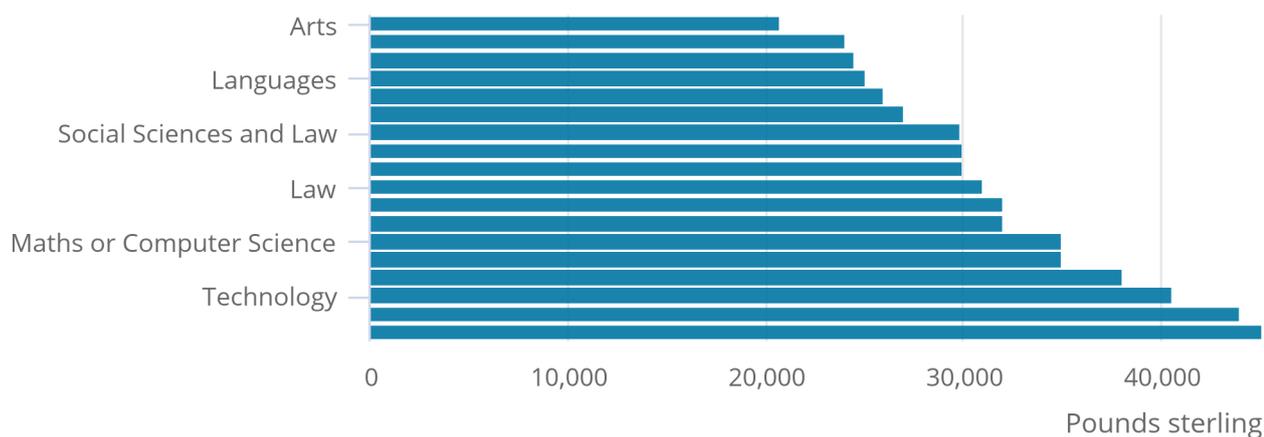**Source: Labour Force Survey**

Notes:

1. The employment rate is the number of employed graduates as a percentage of all graduates

2. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

3. Not all graduates have an undergraduate degree. To see the list of qualifications that people have to have in order to be classified as a graduate please see the user guidance to the report

4. The subject of degree is taken from the main subject studied at degree level if the degree was in more than one subject area.

5. In the LFS user guide, this subject area may be referred to as 'Librarianship and Information Studies' in the case of a degree in more than one subject area or 'Mass Communication and Documentation' in the case of a degree in a single subject.

Figure 11: Average[1] gross annual pay for graduates[2] with undergraduate degrees[3] by the subject of their degree[4]

July to September 2017, UK

Figure 11: Average^1^ gross annual pay for graduates^2^ with undergraduate degrees^3^ by the subject of their degree^4^

July to September 2017, UK

Source: Labour Force Survey

Notes:

1. The average used is the median.

2. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

3. Not all graduates have an undergraduate degree. To see the list of qualifications classified as graduate qualifications please see the user guidance to the report.

4. The subject of degree is taken from the main subject studied at degree level if the degree was in more than one subject area.

5. In the LFS userguide, this subject area may be referred to as 'Librarianship and Information Studies' in the case of a degree in more than one subject area or 'Mass Communication and Documentation' in the case of a degree in a single subject.

In July to September 2017, the employment rates for graduates with an undergraduate degree varied from 95% for graduates with a degree in medicine to 84% for graduates with a degree in languages.

Those graduates with an undergraduate degree in medicine or engineering had the highest employment rates and the highest average gross annual wage. Average gross annual wages were £45,000 for those with a degree in engineering and £44,000 for those with a degree in medicine.

Those graduates with an undergraduate degree in linguistics, English and classics, and languages were both less likely to be employed and were more likely to receive a lower average gross annual wage.
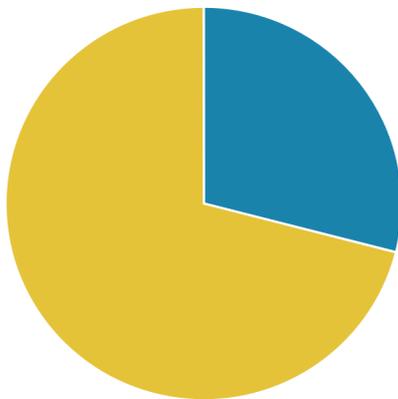
8 . Graduates from the top UK universities were earning more than graduates from other UK universities

Figure 12a: Graduates[1] with an undergraduate degree[2] from Russell Group Universities[3] and from non-Russell Group Universities

July to September 2017, UK

Figure 12a: Graduates^1^ with an undergraduate degree^2^ from Russell Group Universities^3^ and from non-Russell Group Universities

July to September 2017, UK

Source: Office for National Statistics

Notes:

1. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

2. Not all graduates have an undergraduate degree. To see the list of qualifications classified as graduate qualifications please see the user guidance to the report.

3. The Russell Group defines themselves as a group "that represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector".
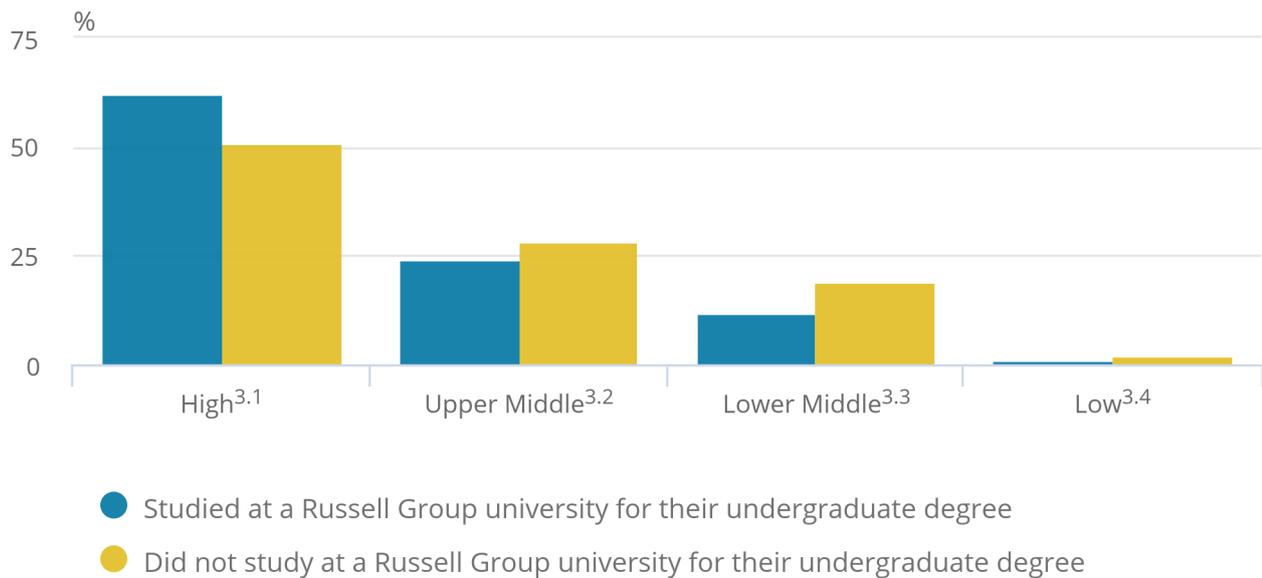
To see a full list of the Russell Group universities please see the user guidance in the report.

Figure 12b: Percentage of graduates[1] with undergraduate degrees[2] in each skill level of job[3] by whether or not they studied for their undergraduate degree at a university within the Russell Group[4]

July to September 2017, UK

Figure 12b: Percentage of graduates^1^ with undergraduate degrees^2^ in each skill level of job^3^ by whether or not they studied for their undergraduate degree at a university within the Russell Group^4^

July to September 2017, UK

- Studied at a Russell Group university for their undergraduate degree
- Did not study at a Russell Group university for their undergraduate degree

Source: Labour Force Survey

Notes:

1. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

2. Not all graduates have an undergraduate degree. To see the list of qualifications classified as graduate qualifications please see the user guidance to the report.

3. The skill level groups are created by grouping jobs together based on their occupation according to the Standard Occupation Classification (SOC) 2010 lower level groups. The occupation group is not available for some workers, these have been excluded from the total.

   Occupations were grouped by the skill level required according to the following guidelines:

   3,1. High – This skill level is normally acquired through a degree or an equivalent period of work experience. Occupations at this level are generally termed 'professional'or managerial positions, and are found in corporate enterprises or governments. Examples include senior government officials, financial managers, scientists, engineers, medical doctors, teachers and accountants.

   3,2. Upper-middle – This skill level equates to competence acquired through post-compulsory education but not to degree level. Occupations found at this level include a variety of technical and trades occupations, and proprietors of small business. For the latter, significant work experience may be typical. Examples of occupations at this level include catering managers, building inspectors, nurses, police officers (sergeant and below), electricians and plumbers.

   3,3. Lower-middle – This skill level covers occupations that require the same competence acquired through compulsory education, but involve a longer period of work-related training and experience. Examples of occupations at this level include machine operation, driving, caring occupations, retailing, and clerical and secretarial occupations.

   3,4. Low – This skill level equates to the competence acquired through compulsory education. Job-related competence involves knowledge of relevant health and safety regulations and may be acquired through a short period of training. Examples of occupations at this level include postal workers, hotel porters, cleaners and catering assistants.
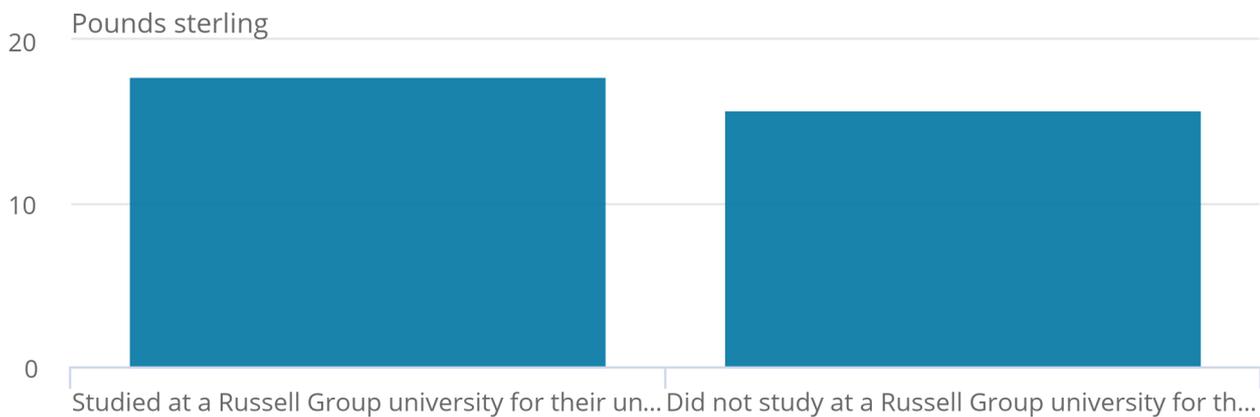
4. The Russell Group defines themselves as a group "that represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector".

Figure 12c: Average[1] hourly pay[2] for graduates[3] with undergraduate degrees[4] by whether or not they studied at a university within the Russell Group[5]

July to September 2017, UK

Figure 12c: Average^1^ hourly pay^2^ for graduates^3^ with undergraduate degrees^4^ by whether or not they studied at a university within the Russell Group^5^

July to September 2017, UK
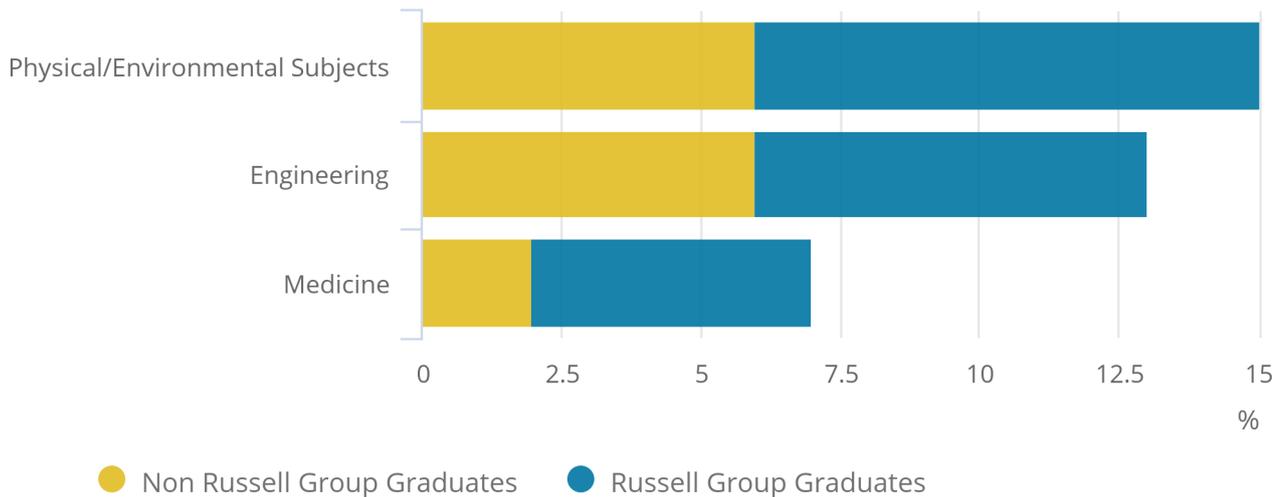

Source: Labour Force Survey

Notes:

1. The average used is the median.

2. The average gross hourly pay does not include those who are self employed

3. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

4. Not all graduates have an undergraduate degree. To see the list of qualifications classified as graduate qualifications please see the user guidance to the report.

5. The Russell Group defines themselves as a group "that represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector".

Figure 12d: Percentage of Russell Group[1] and non Russell Group graduates[2] who studied Medicine, Engineering or Physical/Environmental Sciences

July to September 2017, UK

Figure 12d: Percentage of Russell Group^1^ and non Russell Group graduates^2^ who studied Medicine, Engineering or Physical/Environmental Sciences

July to September 2017, UK

Source: Labour Force Survey

Notes:

1. The Russell Group defines themselves as a group "that represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector".

2. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

To see a full list of the Russell Group universities please see the user guidance in the report.

Considering all graduates with an undergraduate degree living in the UK in July to September 2017, there were 29% that attained their undergraduate degree in a "Russell Group" university (Figure 12).

The Russell Group defines itself as a group "that represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector". To see a full list of the Russell Group universities please see the user guidance section.

Those graduates with an undergraduate degree from a Russell Group university earned on average £2.13 more an hour than those with an undergraduate degree from a university outside the Russell Group. This can be partly explained by the fact that 61% of Russell Group graduates work in high-skilled posts compared with 49% of non-Russell Group graduates.

There seems to be two main reasons Russell Group graduates are more likely to work in highly-skilled and highly-paid posts. Firstly they are more likely to have an undergraduate degree in a subject such as medicine or dentistry, engineering and physical or environmental sciences. Secondly the entry requirements for Russell Group universities tend to be higher.
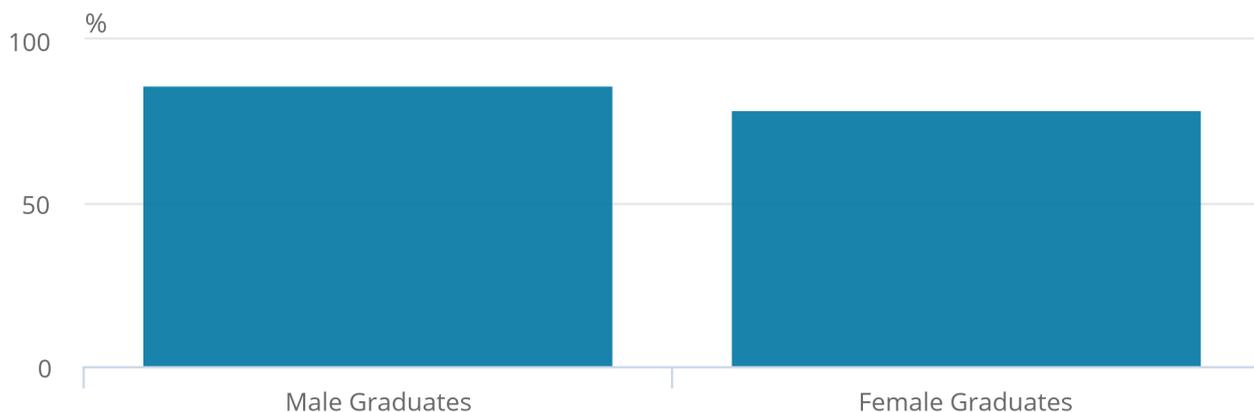
9 . Male and female graduates

Figure 13a: Employment rates[1] for male and female graduates[2]

July to September 2017, UK

Figure 13a: Employment rates^1^ for male and female graduates^2^

July to September 2017, UK

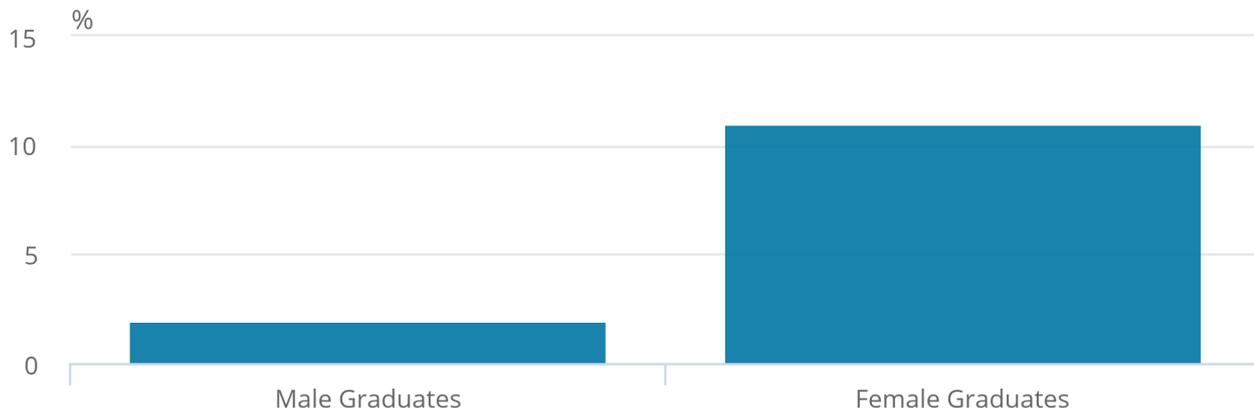**Source: Labour Force Survey**

Notes:

1. The employment rate is the number of employed graduates as a percentage of all graduates

2. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

Figure 13b: Percentage of male and female graduates[1], inactive due to looking after the family and/or home

July to September 2017, UK

Figure 13b: Percentage of male and female graduates^1^, inactive due to looking after the family and/or home

July to September 2017, UK

Source: Labour Force Survey

Notes:

1. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.
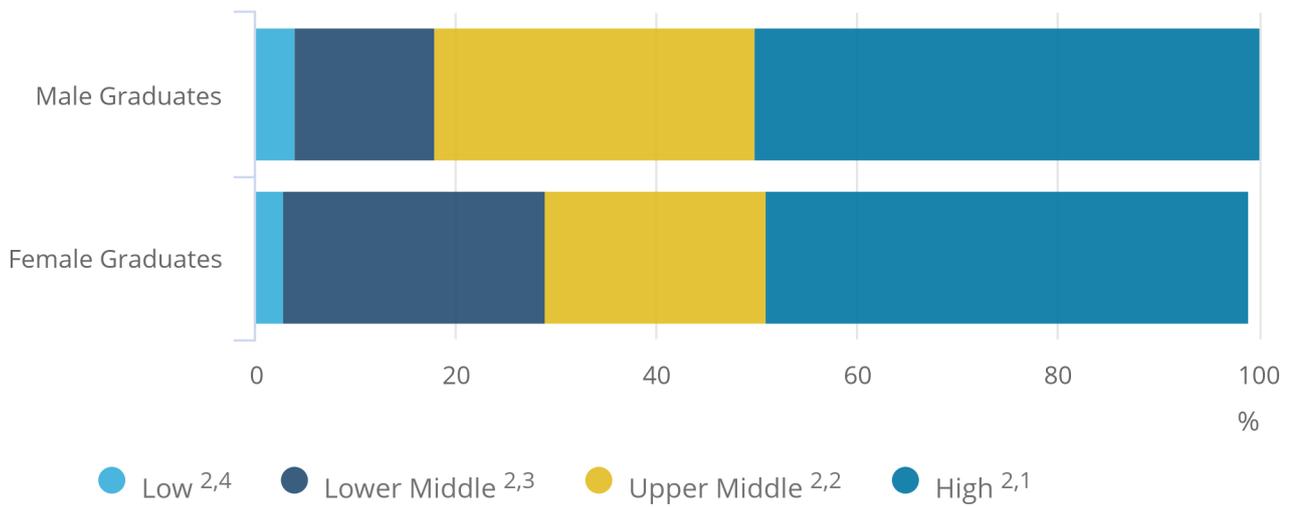
In July to September 2017, male graduates had higher employment rates (86%) than females (79%) (Figure 13) and were more likely to have a high- or upper-middle-skill job. The employment rate for female graduates may be slightly lower because they were more likely to state that they were out of the labour force in order to look after the family and/or home; 11% of female graduates stated this compared with 2% of male graduates.

Figure 14a: Male and female graduates[1], by skill level of their job[2]

July to September 2017, UK

Figure 14a: Male and female graduates^1^, by skill level of their job^2^

July to September 2017, UK

Source: Labour Force Survey

Notes:

1. A graduate is defined as a person who is aged betwenn 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

2. The skill level groups are created by grouping jobs together based on their occupation according to the Standard Occupation Classification (SOC) 2010 lower level groups. The occupation group is not available for some workers, these have been excluded from the total.

   Occupations were grouped by the skill level required according to the following guidelines:

   2,1. High – This skill level is normally acquired through a degree or an equivalent period of work experience. Occupations at this level are generally termed 'professional' or managerial positions, and are found in corporate enterprises or governments. Examples include senior government officials, financial managers, scientists, engineers, medical doctors, teachers and accountants.

   2,2. Upper-middle – This skill level equates to competence acquired through post-compulsory education but not to degree level. Occupations found at this level include a variety of technical and trades occupations, and proprietors of small business. For the latter, significant work experience may be typical. Examples of occupations at this level include catering managers, building inspectors, nurses, police officers (sergeant and below), electricians and plumbers.

   2,3. Lower-middle – This skill level covers occupations that require the same competence acquired through compulsory education, but involve a longer period of work-related training and experience. Examples of occupations at this level include machine operation, driving, caring occupations, retailing, and clerical and secretarial occupations.
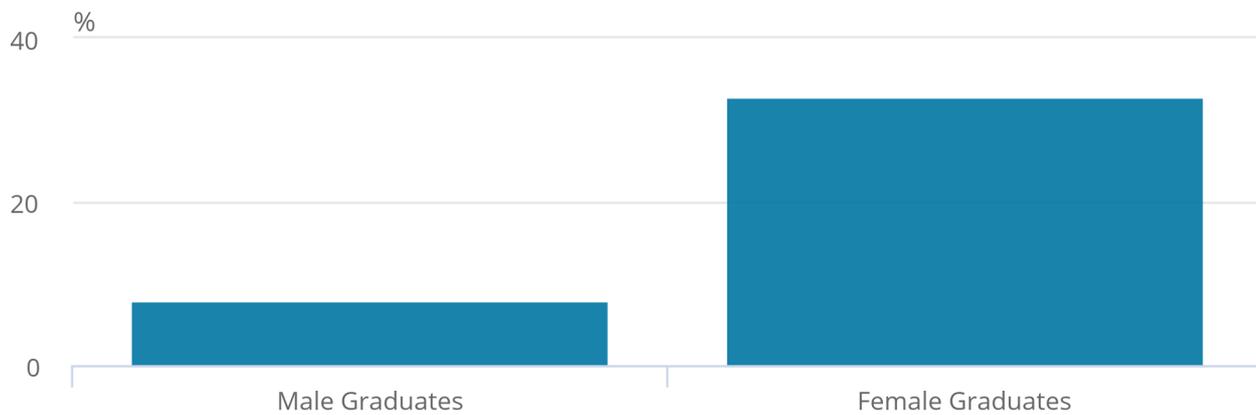
   2,4. Low – This skill level equates to the competence acquired through compulsory education. Job-related competence involves knowledge of relevant health and safety regulations and may be acquired through a short period of training. Examples of occupations at this level include postal workers, hotel porters, cleaners and catering assistants.

Figure 14b: Percentage of male and female graduates[1] working in part time roles

July to September 2017, UK

Figure 14b: Percentage of male and female graduates^1^ working in part time roles

July to September 2017, UK

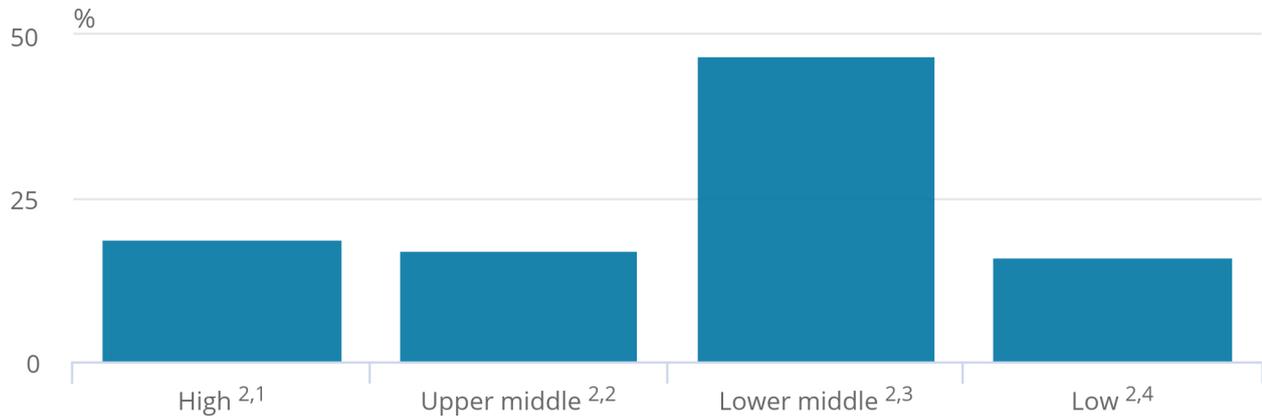

Source: Labour Force Survey

Notes:

1. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

Figure 14c: Percentage of part time workers [1] employment by skill level [2] of occupation

July to September 2017, UK

Figure 14c: Percentage of part time workers^1^ employment by skill level^2^ of occupation

July to September 2017, UK

Source: Labour Force Survey

Notes:

1. People in the UK refers to people aged between 21 and 64 who are not enrolled on any educational course

2. The skill level groups are created by grouping jobs together based on their occupation according to the Standard Occupation Classification (SOC) 2010 lower level groups. The occupation group is not available for some workers, these have been excluded from the total.

   Occupations were grouped by the skill level required according to the following guidelines:

   2,1. High – This skill level is normally acquired through a degree or an equivalent period of work experience. Occupations at this level are generally termed 'professional' or managerial positions, and are found in corporate enterprises or governments. Examples include senior government officials, financial managers, scientists, engineers, medical doctors, teachers and accountants.

   2,2. Upper-middle – This skill level equates to competence acquired through post-compulsory education but not to degree level. Occupations found at this level include a variety of technical and trades occupations, and proprietors of small business. For the latter, significant work experience may be typical. Examples of occupations at this level include catering managers, building inspectors, nurses, police officers (sergeant and below), electricians and plumbers.

   2,3. Lower-middle – This skill level covers occupations that require the same competence acquired through compulsory education, but involve a longer period of work-related training and experience. Examples of occupations at this level include machine operation, driving, caring occupations, retailing, and clerical and secretarial occupations.

   2,4. Low – This skill level equates to the competence acquired through compulsory education. Job-related competence involves knowledge of relevant health and safety regulations and may be acquired through a short period of training. Examples of occupations at this level include postal workers, hotel porters, cleaners and catering assistants.

Focusing on male and female graduates in work, the percentage of male and female graduates in high-skill and low-skill jobs was similar. However, female graduates were less likely to be in upper-middle-skill jobs and more likely to be in lower-middle-skill jobs (Figure 14).

Overall in July to September 2017, of all female graduates 33% were working part-time while compared with only 8% of male graduates. While 47% of people working in lower- middle- skill roles were working part-time, only 17% and 19% of people in upper-middle-skill and high-skill roles were.
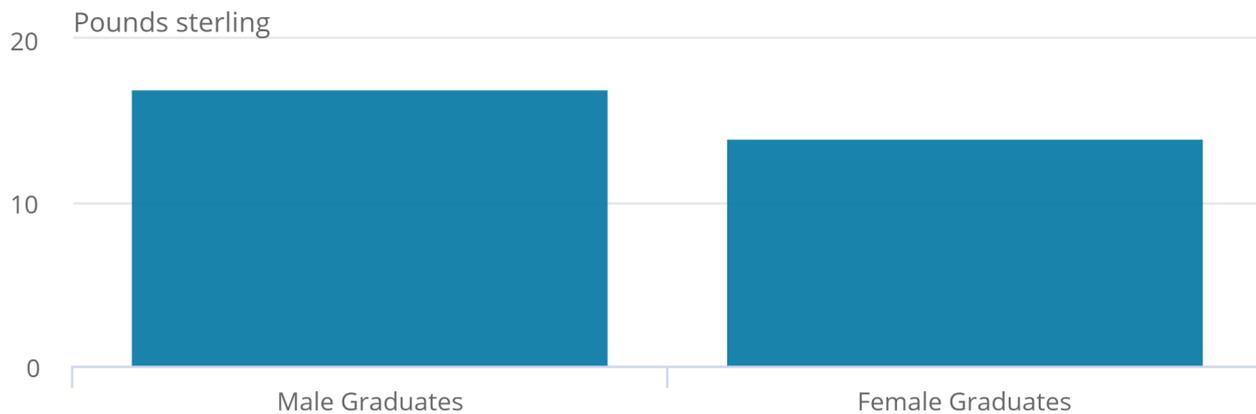
Male graduates were earning more than female graduates in July to September 2017

Figure 15a: Average[1] gross hourly pay[2] for male and female graduates[3]

July to September 2017, UK

Figure 15a: Average^1^ gross hourly pay^2^ for male and female graduates^3^

July to September 2017, UK

Pounds sterling

Male Graduates	Female Graduates

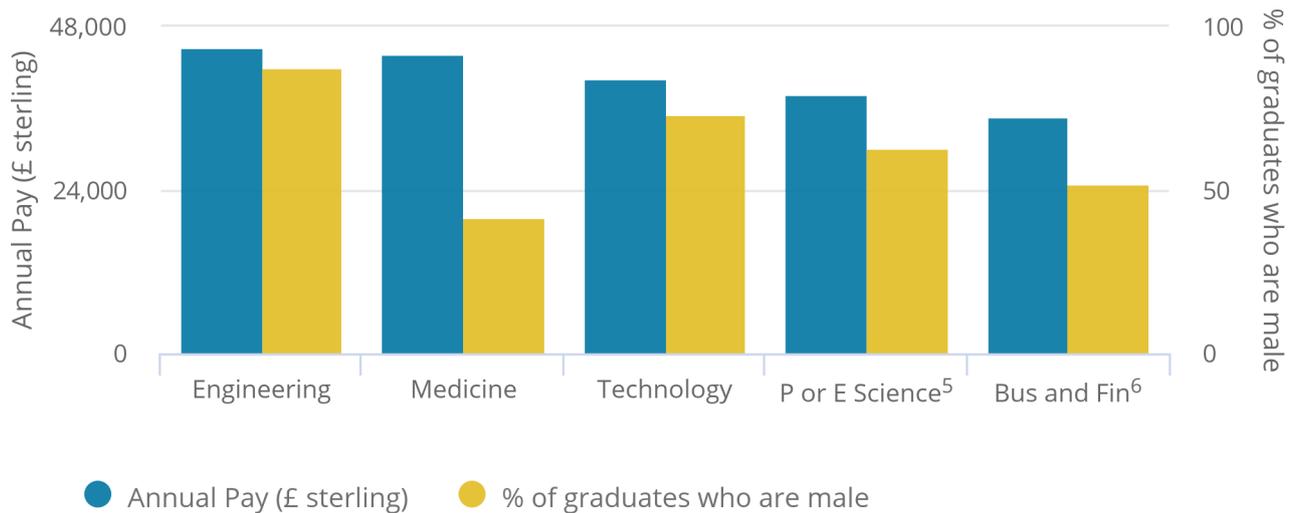**Source: Labour Force Survey**

Notes:

1. The average used is the median

2. The wages earned by those who are self employed are not included

3. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

Figure 15b: Average[1] annual pay for graduates[2] with undergraduate degrees[3] in medicine, physical or environmental science, maths or computer science, engineering or architecture[4] and percentage who are male

July to September 2017, UK

Figure 15b: Average^1^ annual pay for graduates^2^ with undergraduate degrees^3^ in medicine, physical or environmental science, maths or computer science, engineering or architecture^4^ and percentage who are male

July to September 2017, UK

● Annual Pay (£ sterling)   ● % of graduates who are male

Source: Office for National Statistics

Notes:

1. The average used is the median.

2. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

3. Not all graduates have an undergraduate degree. To see the list of qualifications classified as graduate qualifications please see the user guidance to the report.

4. The subject of degree is taken from the main subject studied at degree level if the degree was in more than one subject area.

5. P or E Science equals physical or environmental science.

6. Bus and Fin equals business and finance.

Concentrating on all employed graduates in July to September 2017, men earned on average £3 more an hour than women (Figure 15). This can be partly explained by the subjects male and female graduates with degrees studied. Out of the top five subjects associated with the highest average gross annual earnings, four of them were subjects which male graduates are more likely to have studied than female graduates: medicine, engineering, technology and physical or environmental subjects.

Female graduates being more likely to work part-time may also explain the differences in pay for male and female graduates. While working part-time should not affect a person's hourly wage it may affect career progression which will in turn affect hourly pay.

10 . Graduates across areas of Great Britain

Half of people living in London were graduates

For regional analysis we now consider people living in Great Britain between July 2016 and June 2017.

The area with the highest concentration of graduates was London with 50% of the population being graduates. In contrast only 33% of the population were graduates in the North East (Figure 16).
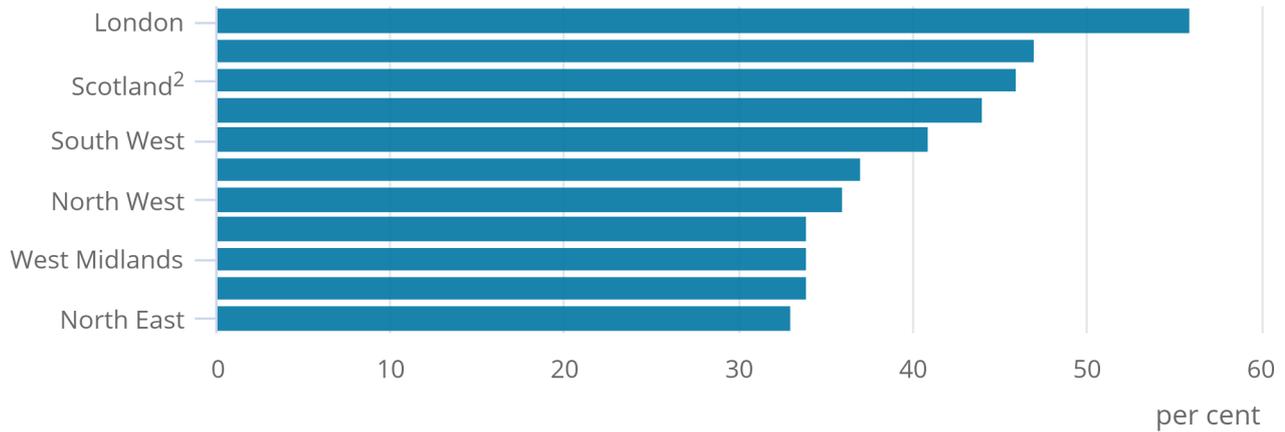
Please note, because of differences in the education system, people in Scotland can attain a graduate level qualification at the age of 20. These people have been left out of our analysis, which may mean that the concentration of graduates in Scotland was higher than reported here.

Figure 16a: Graduates[1] across areas of Great Britain

July to June 2017

Figure 16a: Graduates^1^ across areas of Great Britain

July to June 2017

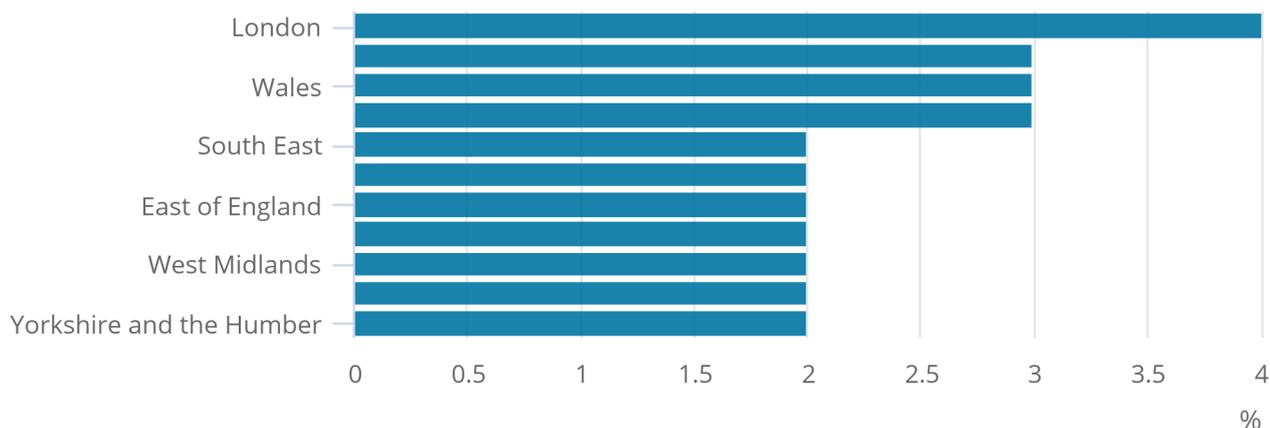**Source: Annual Population Survey**

Notes:

1. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

2. Please note that some graduates living in Scotland will have been excluded as the population we have focused on is aged 21 or above but due to differences in the education system a person in Scotland can gain a graduate level qualification by the age of 20.

July to June 2017

Figure 16b: Unemployment rates^1^ for graduates^2^ across areas of Great Britain

July to June 2017

Source: Annual Population Survey

Notes:

1. A graduate is defined as a person who is aged between 21 and 64, not enrolled on any educational course and who has a level of higher education above A level standard.

2. The unemployment rate is the percentage of the labour force that are unemployed. The labour force is everyone who is employed or unemployed

3. Please note that some graduates living in Scotland will have been excluded as the population we have focused on is aged 21 or above but due to differences in the education system a person in Scotland can gain a graduate level qualification from the age of 20.

London had the highest graduate unemployment rates; this may be explained by the average age of graduates living in these areas. The average age of a graduate in London was 38 while in the remaining areas of Great Britain the average age of a graduate was 43 or over. This could be due to younger graduates having had less time to search for work and being less likely to have a clearly defined career path; therefore they may be more likely to be unemployed. Also the high concentration of graduates in London meant there was greater competition for graduate jobs.

Notes for: Graduates in the UK labour market July to September 2017

1. Elias, P. and K. Purcell (2013) 'Classifying graduate occupations for the knowledge society'. Futuretrack Working Paper No. 5. Warwick Institute for Employment Research.

2. All data included in this report.

11 . User guidance

Types of higher education that lead to a person being classified as a graduate:

- Higher degree

- NVQ level 5

- Level 8 Certificate

- Level 7 Diploma

- Level 7 Certificate

- Level 8 Award

- First degree or foundation degree

- Other degree

- NVQ level 4

- Level 6 Certificate

- Level 7 Award

- Diploma in higher education

- Level 5 Diploma

- Level 5 Certificate

- Level 6 Award

- HNC/HND/BTEC higher etc

- Teaching further education

- Teaching secondary education

- Teaching primary education

- Teaching foundation stage

- Teaching level not stated

- Nursing etc

- RSA higher diploma

- Other higher education below degree

Types of education classified as equivalent to an A level:

- Level 4 Diploma

- Level 4 Certificate

- Level 5 Award

- NVQ level 3

- Advanced/Progression (14 to 19) Diploma

- Level 3 Diploma

- Advanced Welsh Baccalaureate International Baccalaureate GNVQ/GSVQ advanced

- A-level or equivalent RSA advanced diploma

- OND/ONC/BTEC/SCOTVEC National etc

- City and Guilds Advanced Craft/Part 1

- Scottish 6 year certificate/CSYS

- SCE higher or equivalent

- Access qualifications

- AS-level or equivalent

- Trade apprenticeship

- Level 3 Certificate

- Level 4 Award

Types of education classified as equivalent to an A* to C grade GCSE:

- NVQ level 2 or equivalent

- Intermediate Welsh Baccalaureate

- GNVQ/GSVQ intermediate

- RSA diploma

- City and Guilds Craft/Part 2

- BTEC/SCOTVEC First or General diploma etc

- Higher (14 to 19) Diploma

- Level 2 Diploma

- Level 2 Certificate

- O-level, GCSE grade A*-C or equivalent

- Level 3 Award

Types of education classified as "other" qualification:

- NVQ level 1 or equivalent

- Foundation Welsh Baccalaureate

- GNVQ/GSVQ foundation level

- Foundation (14 to 19) Diploma

- Level 1 Diploma

- CSE below grade 1, GCSE below grade C

- BTEC/SCOTVEC First or General certificate

- SCOTVEC modules

- RSA other

- City and Guilds foundation/Part 1 Level 1 Certificate

- Level 2 Award

- YT/YTP certificate

- Key skills qualification

- Basic skills qualification

- Entry level qualification

- Entry level Diploma

- Entry level Certificate

- Level 1 Award

- Entry level Award

- Other qualification

Russell Group Universities:

- University of Birmingham

- University of Bristol

- University of Cambridge

- Cardiff University

- Durham University

- University of Edinburgh

- University of Exeter

- University of Glasgow

- Imperial College London

- King's College London

- University of Leeds

- University of Liverpool

- London School of Economics and Political Science

- University of Manchester

- Newcastle University

- University of Nottingham

- University of Oxford

- Queen Mary, University of London

- Queen's University Belfast

- University of Sheffield

- University of Southampton

- University College London

- University of Warwick

- University of York