Department for Business Innovation & Skills

Graduate Labour Market Statistics: Methodology Note

Introduction

1. *Graduate Labour Market Statistics* (hereafter referred to as GLMS) is produced by the Department for Business, Innovation and Skills (BIS). The GLMS Q3 2014 release published on the 9th December 2014 was the first publication in the series and the GLMS are classed as Experimental Statistics.

2. GLMS will be published on a regular quarterly basis on the second Tuesday of the last month of the quarter. The planned publishing dates for 2015 are 10th March, 9th June, 8th September and 8th December.

3. The GLMS report uses the quarterly Labour Force Survey (LFS) data to look at the labour market outcomes of graduates and postgraduates, including quarterly changes and longer term trends, and compares them with those of non-graduates. Due to the devolution of Higher Education policy, only individuals domiciled within England are considered.

4. This document provides guidance for users regarding the generation and interpretation of figures in the GLMS publication.

Definitions and Coverage

Graduates and non-graduates

5. *Graduate* – defined as individuals whose highest qualification is an undergraduate degree at Bachelors level. This category also includes those classified as graduates who are currently enrolled in education courses, including studying towards a Master's or PhD.

6. *Postgraduate* – defined as individuals whose highest qualification is any degree higher than an undergraduate degree, such as a Master's or PhD. This category also includes those who have attained a Postgraduate Certificate in Education, as well as those in the category "other postgraduate degrees or professional qualifications".

7. *Non-Graduates* – defined as individuals whose highest qualifications are at a lower level than an undergraduate degree (National Qualification Framework (NQF[1]) Level 5 or below). This includes individuals with Foundation Degrees, Apprenticeships, A-Levels or GCSEs as their highest qualification, as well as people with lower or no qualifications. It also includes non-graduates who are enrolled on education courses, such as A-level qualified individuals who are at studying at university. For a list of qualifications included in each definition please see Annex A.

8. Individuals whose highest qualification is at NQF Level 6, 7 or 8 but the qualification is not classed as a degree are not considered as part of this analysis.

9. The definitions have been used to provide information on the outcomes of those that complete a degree, compared to those that do not. This provides monitoring data to inform Higher Education policy.

10. It should be noted that the definitions of *graduates* and *non-graduates* in Graduate Labour Market Statistics differ from those used in certain other publications which focus on graduate outcomes, such as the Office of National Statistics' (ONS) "Graduates in the Labour Market 2013", which defines graduates as those whose highest qualifications are NQF Level 4 or higher. The statistics in this release are not directly comparable with those publications due to the differences in definitions.

Population

11. Outcomes are presented for two different age groups: the Working Age Population and the Young Population.

12. *Working Age Population* – all individuals domiciled in England aged 16-64.

13. *Young Population* – all individuals domiciled in England aged 21-30.

14. *GLMS* provides a breakdown of outcomes for a 'young' sub-population. This is to reflect the fact that the large majority (87%)[2] of those studying an undergraduate degree are under the age of 30, and that new entrants to the labour market are likely to have a limited amount of work experience. Analysis of this sub-group allows comparisons between similarly aged graduates and non-graduates.

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[1] https://www.gov.uk/what-different-qualification-levels-mean/compare-different-qualification-levels
[2] https://www.hesa.ac.uk/index.php?option=com_content&view=article&id=1897&Itemid=634

Employment

15. *Employed* – individuals that had at least one hour of paid employment in the reference week. This includes individuals that worked both full time and part time.

16. *High Skill Employment* – a job categorised within the Standard Occupation Classification (SOC) codes 1-3, also sometimes referred to as a 'graduate job'. SOC 1-3 includes managers, directors, professional occupations and associate professional and technical occupations. For more information on SOC please see the ONS website.[3]

17. *Unemployed* – individuals that were not in employment during the reference week and were actively seeking work.

18. *Economically inactive* – individuals that were not employed and did not seek work over the reference period.

19. *Employment Rate* – the <u>proportion of the total specified population</u> who are employed*.* The total population will vary based on whether we are focussing on the working age population (16-64 year olds) or the young population (21-30 year olds). For example the employment rate for the working age population would be:

$$\frac{Employed\ in\ the\ working\ age\ population\ (16-64)}{Total\ working\ age\ population\ (employed, unemployed\ and\ inactive)(16-64)} \times 100$$

Compared to the employment rate for the young population:

$$\frac{Employed\ in\ the\ young\ population\ (21-30)}{Total\ young\ population\ (employed, unemployed\ and\ inactive)(21-30)} \times 100$$

20. *High Skill Employment Rate(HSER)* – the <u>proportion of the total specified population</u> who report being in high skill employment. The total population will vary based on whether we are focussing on the working age population (16-64 year olds) or the young population (21-30 year olds). The high skill employment rate for the working age population is as follows;

$$\frac{High\ skill\ employed\ in\ the\ working\ age\ population\ (16-64)}{Total\ working\ age\ population\ (employed, unemployed\ and\ inactive)(16-64)} \times 100$$

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[3] http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/index.html
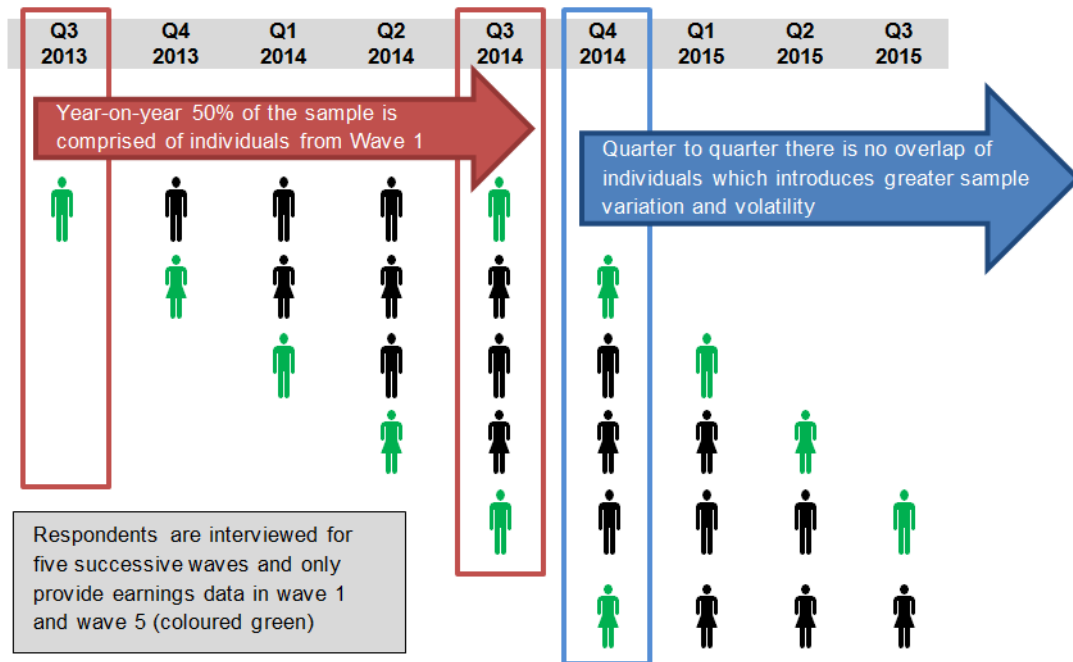
21. The HSER presented in table 1.1 and 1.2 in the GLMS is <u>not</u> the proportion of those employed that are in a high skill job; it is the proportion of <u>all</u> graduates that are in a high skill job. For example, in Q3 2014 the High Skill Employment Rate (HSER) for working age graduates was 68%, which mean almost 7 out of 10 of <u>all</u> graduates aged 16-64 were in a high skill job.

22. *Unemployment Rate* – the <u>proportion of the specified economically active population</u> (i.e. in work or unemployed) who are unemployed. This excludes individuals who are economically inactive. The unemployment rate for the working age population is as follows;

$$\frac{Unemployed\ in\ the\ working\ age\ population\ (16-64)}{Economically\ active\ (employed\ and\ unemployed)\ in\ the\ working\ age\ population\ (16-64)} \times 100$$

Earnings

23. Populations are specified as above. Earnings are calculated as the annual equivalent of the *median* gross weekly earnings of individuals who are in <u>full-time</u> employment, including overtime pay. Individuals working on a part-time basis are not included in the earnings analysis. Earnings are rounded to the nearest £500 and are in nominal terms.

24. Quarter-on-quarter changes in earnings data has been removed from the main GLMS note because they are susceptible to large fluctuations. This is due to the methodology of the Labour Force Survey; each quarter's sample is made up of five waves. Respondents are interviewed for five successive waves at three-monthly intervals and 20% of the sample if replaced every quarter (see infographic below).

25. Respondents only provide earnings data in waves 1 and 5 of the survey (coloured green below) compared to other key indicators such as employment that are reported for all waves. Year-on-year earnings comparisons are more robust as 50% of the sample reporting their earnings are the same individuals that provided earnings data in the same quarter last year. This provides a longitudinal element to the data and allows us to monitor earnings over time. Each quarter the sample that reports earnings data is 100% different to the previous quarter. Although this is a random sample of households, this introduces greater uncertainty as to whether the quarterly changes are due to actual changes in median earnings or reflect differences in the sample. For example, those in Q4 2014 may have lower average work experience than those in Q3 2014 which could result in lower earnings.

Figure 1: Labour Force Survey earnings data collection

Coverage

26. *GLMS* only covers individuals domiciled in England as authority over Higher Education has been devolved to Scotland, Wales and Northern Ireland.

Data

27. *GLMS* is produced using data from the UK quarterly Labour Force Survey (LFS)—a survey of households living at private addresses in the UK. Its purpose is to provide information on the UK labour market which can then be used to develop, manage, evaluate and report on labour market policies. For more information on the methodology and quality of the LFS data please refer to the ONS website.[4]

28. *Weighting*: The LFS collects information on a sample of the population. To enable us to make inferences from this sample to the entire eligible population we must weight the sample data. This entails assigning each responding or imputed case a weight, which can be thought of as the number of people in the population which that case represents. These weights are calculated such that they sum to a set of known population totals, and the weights of an entire dataset will sum to the eligible population of the UK.[5] For further information on LFS weighting, please refer to the ONS User Guidance for the LFS.

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[4] http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/labour-market-statistics/index.html
[5] Ibid.

29. All statistics from 2013 onward listed in *GLMS* are calculated using the 2014 population weights. Statistics prior to 2013 use 2011 or 2010 population weights as calculated by the ONS. The effect is of the change in weighting is generally negligible (usually 0.1 percentage points or zero).

30. *GLMS* only provides simple outcome measures based on survey data and do not control for the differences in characteristics between graduates and non-graduates. This means that the outcomes reported for the different groups may not be wholly attributable to the fact that an individual holds a particular qualification. That is, other factors such as regional variations, parental background, gender, innate ability or ethnicity may also have an impact on employment and earnings outcomes that we do not measure in this analysis.

31. For a more detailed econometric analysis of the earnings and employment differentials between graduates and non-graduates, see BIS research, "The impact of university degrees on the lifecycle of earnings: some further analysis".[6]

32. The complete SPSS syntax used to derive these figures or their roots from the LFS is included as a worksheet in the accompanying Excel workbook available on the gov.uk website.

Revisions Policy

33. *GLMS* are classed as experimental statistics and there may be changes to the coverage of the statistics based on feedback from users. There may also be changes to the statistics produced should there be any changes to the Labour Force Survey questions or coverage, or changes in population weights as recommended by the ONS. Any changes to *GLMS* will be explained in an update to the Methodology Note.

URN: BIS/15/173

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[6] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/229498/bis-13-899-the-impact-of-university-degrees-on-the-lifecycle-of-earnings-further-analysis.pdf

Annex A

List of Qualifications within Each Category:

Postgraduate

Master's Degree
PhD or Doctorate
Postgraduate Certificate in Education (PGCE)
Other Postgraduate Degree or Professional Qualification

Graduate

Bachelor's Degree, also referred to as first degrees

Non-Graduate

Examples:
Foundation Degrees (NQF Level 5)
Higher National Diploma (NQF Level 5)
Higher National Certification (NQF Level 4)
A-Levels (NQF Level 3)
Advanced Apprenticeship (NQF Level 3)
GCSEs (NQF Level 2)
Intermediate Apprenticeship (NQF Level 2)
National Vocational Qualification Levels 1 - 4 (NQF Levels 1 - 5)
Foundation Diploma (NQF Level 1)
GCSE at grades D – G (NQF Level 1)
No Qualifications

Qualifications not considered in this analysis:
Undergraduate degrees that are not at Bachelors level
Professional Diplomas, Certificates or Awards at Levels 6, 7 or 8