Longitudinal Educational Outcomes (LEO) from Universities: 2016/17: Scotland

An Official Statistics publication for Scotland

Scottish Government
Riaghaltas na h-Alba
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Advanced Learning and Skills

This Official Statistics release presents employment and earnings outcomes for graduates of higher education five years after graduation. This is the third publication in Scotland to use the Longitudinal Education Outcomes (LEO) dataset to track higher education graduates as they move from higher education into the workplace.

This publication is being released in conjunction with the Department for Education's (DfE). The DfE release, which contains further detailed datasets, can be accessed via: https://www.gov.uk/government/collections/statistics-higher-education-graduate-employment-and-earnings#history

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Longitudinal Educational Outcomes (LEO): Median total earnings five years after graduation

Graduates:
2010/11 Academic year
Earnings:
2016/17 Tax year

The **median total earnings** of UK domiciled first degree graduates from Scottish Higher Education Institutions (HEIs) was **£27,100** five years after graduation

SIMD

Graduates from the 20% least deprived areas earned **£3,700** more than graduates from the 20% most deprived areas

Graduates from the 20% <u>least</u> deprived areas earned **£28,300**

simd
0   20   40   60   80   100
most   least

Graduates from the 20% <u>most</u> deprived areas earned **£24,600**

Gender

Male graduates earned **£3,100** more than female graduates

Male graduates earned **£29,100**

Female graduates earned **£26,000**

Disability

Graduates with no known disability earned **£2,300** more than disabled graduates

Graduates with no known disability earned **£27,300**

Disabled graduates earned **£25,000**

www.gov.scot
Source: Longitudinal Educational Outcomes from Universities: 2016/17: Scotland

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Contents

Developments & Improvements

Since the previous release in June 2018 of Graduate Outcomes by University (subject and gender), there have been a number of developments & improvements in the LEO data and the publication:

- This release is now published as Official Statistics.

- Median earnings now include PAYE and self-employed graduates as part of a total earnings figure. As such numbers in this release are not comparable to last years publication as only PAYE was reported.

- Subjects are now grouped by the Common Aggregation Hierarchy (CAH). Previously they were grouped by the Joint Academic Coding System (JACS). See 'Data Quality' for more information on this change.

- Median earnings by Disability and Scottish Index of Multiple Deprivation (SIMD) have been included for the first time in this release. Further work is underway to include more equalities data in future releases.

Years after graduation

The time periods[1] used in this publication are five years after graduation. This refers five full tax years after graduation. So, for the 2010/11 academic year of graduation the figures five years after graduation refer to employment/earnings outcomes in the 2016/17 tax year. This is displayed graphically in figure 1 as the cohort in **bold**.

Comparisons between the earnings of the graduation cohorts by Scottish Higher Education Institution and subject should be treated with caution because of the small cohort numbers.

Figure 1: Relationship between academic year, tax year, and definitions of 'years after graduation' used in this publication

2016/17 publicaton		Tax Year				
		2012/13	2013/14	2014/15	2015/16	2016/17
Academic year of graduation	2010/11	1 year		3 years		**5 years**
	2011/12		1 year		3 years	
	2012/13			1 year		3 years
	2013/14				1 year	
	2014/15					1 year
	2015/16					

The cohort in **bold** are covered in this publication, other years are available in the accompanying DfE datasets[1]

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[1] This publication focuses on graduates and their earnings in the tax year. For time periods one, three and ten years after graduation please see tables published by the Department for Education. https://www.gov.uk/government/statistics/graduate-outcomes-leo-outcomes-in-2016-to-2017

Scotland and GB Comparison

Figure 2 shows a comparison of the distribution of total earnings of graduates from universities in 2010/11 for Scottish and all GB HEIs five years after graduation[2]. Overall, the median total earnings of UK domiciled first degree graduates from Scottish HEIs was £27,100. This compares to £26,000 for GB HEIs (Note: subject studied has a large influence on earnings and this may account for the differences between Scotland and GB median earnings). In contrast, of the 34 subject areas, graduates of Scottish HEIs had higher median earnings in 12 of the subject areas compared to the median earnings for all GB HEIs.

Earnings of graduates also varied across subjects. For example, those who studied Medicine & Dentistry at Scottish HEIs had median total earnings of £50,500 five years after graduation. In contrast, those who studied Creative Arts & Design at Scottish HEIs had median total earnings of £19,300 five years after graduation. For GB HEIs the same variation can be seen in these subject areas. Median earnings can vary between subject and institution for various reasons. Different institutions will offer different courses that are considered to be in the same subject category, but could lead to vastly different career paths. See 'Data Quality' for some of the other issues to consider when looking at this data.

Subjects are ordered from those with the highest median earnings to the lowest median earnings for Scotland. The boxes represent the inter-quartile range (quartile 1 to quartile 3) – the earnings of the middle 50 per cent of graduates in each subject will fall in the box.

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[2] Figure 2 above is not comparable with Figure 1 in the DfE's publication. The below figure is a distribution of the number of graduates in HEI's by earnings. DfE figure 1, is a distribution of the median earnings for each university in Great Britain.

Figure 2: Distributions of total earnings of graduates* by subject area, five year after graduation (lower quartile, median and upper quartile), Scotland, and GB, 2016/17 tax year
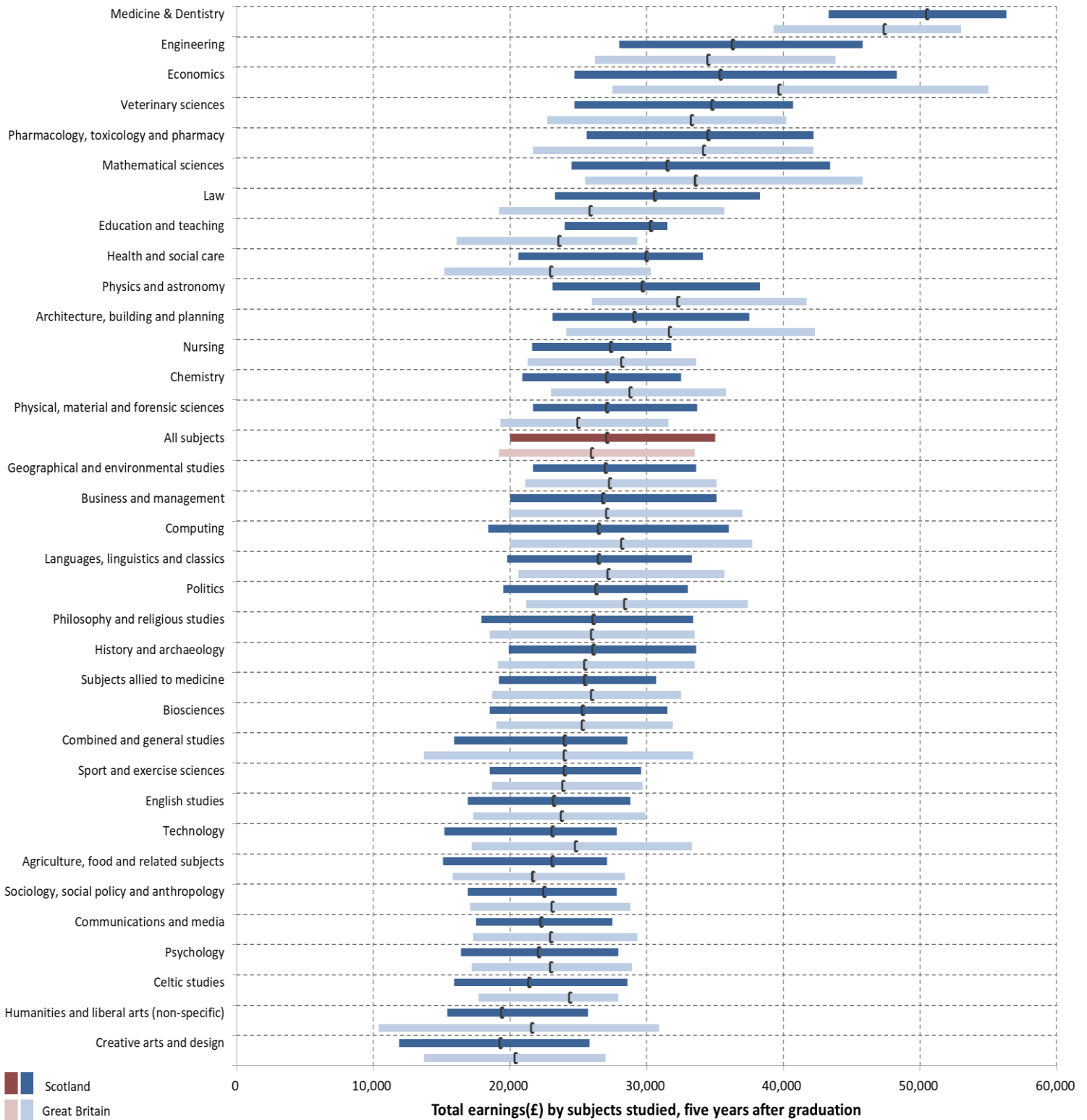
*UK domiciled First degree qualifiers 2010/11.
Hours worked are not taken into account.

Gender

Figure 3 shows the median total earnings for graduates from Scottish Institutions five years after graduation split by subject area and gender. It shows that male graduates in 2010/11 were earning £29,100 in 2016/17 compared to £26,000 for female graduates. In 27 out of 34 subjects, males have higher median earnings than females five years after graduation. The largest difference is seen in 'Physics and Astronomy', where male graduates had median total earnings of £30,100 compared to £24,700 for female graduates.

Female median earnings only exceed males in 4 out of 34 subjects five years after graduation. Of these subjects, the largest difference is seen in 'Technology' where females had median total earnings of £24,900 compared to £21,100 for male graduates.

Due to small numbers of male graduates for the subjects 'Celtic Studies' and 'Humanities and liberal arts', we have suppressed these figures for both genders.

'Education and teaching' was the only subject where the median earnings between males and females was equal. Those who graduated in this subject in 2010/11 were earning £30,300.

Median earnings can vary between subject and gender for various reasons. See 'Data Quality' for some of the issues to consider when looking at this data. The Common Aggregation Hierarchy (CAH) has been used to group subjects into 34 categories. See 'Methodology' section for more information on the CAH.

Figure 3: Distributions of total earnings of graduates* by subject area, five year after graduation (lower quartile, median and upper quartile), male and female, Scotland, 2016/17 tax year

Total earnings(£) by subjects studied, five years after graduation

Male
Female
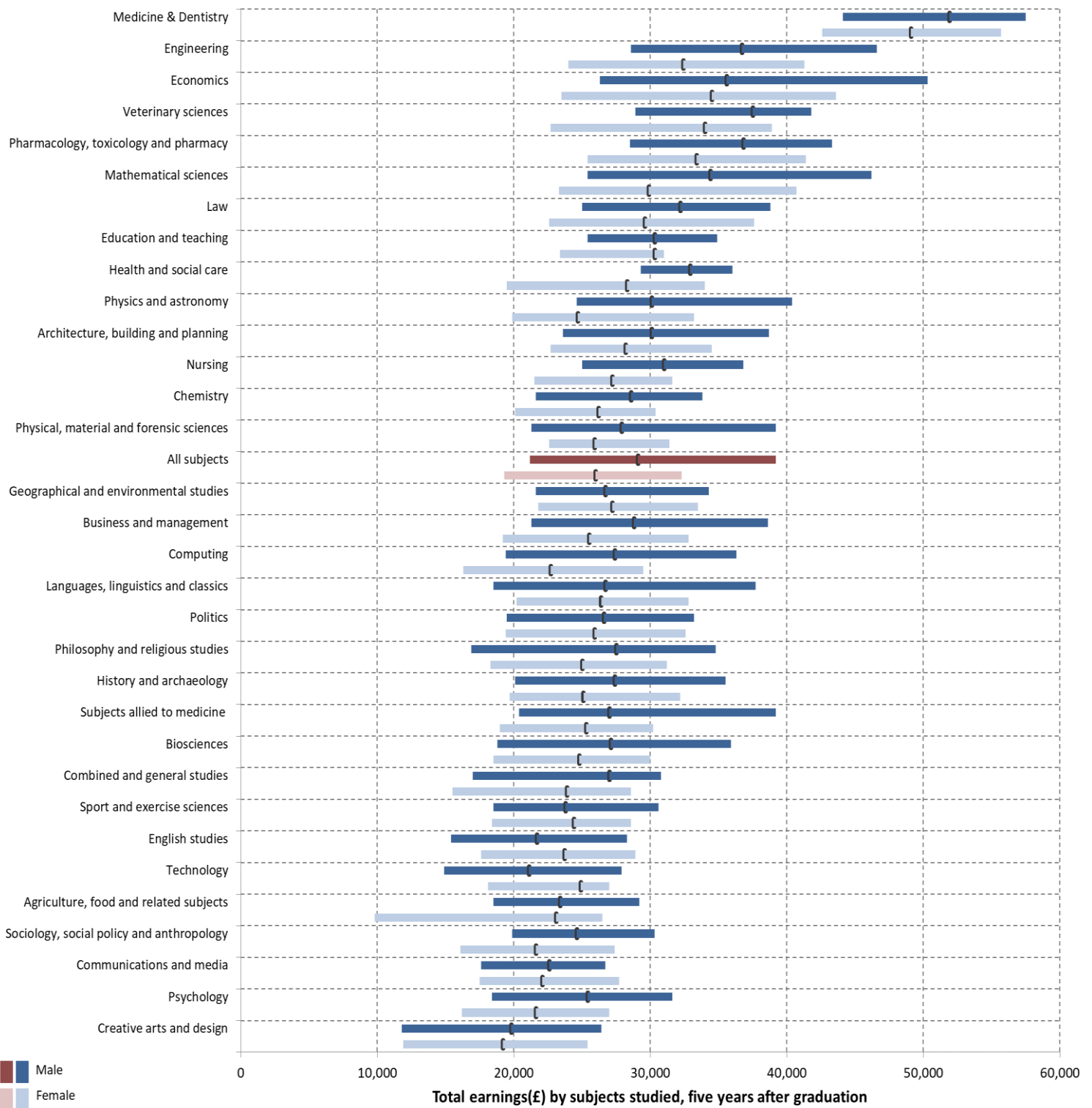
*UK domiciled First degree qualifiers 2010/11.
Hours worked are not taken into account.

Table 1: Median total earnings of graduates* by subject studied and gender five years after graduation, 2016/17 tax year

Subject	Median total earnings 2010/11 cohort (£)		
	Male	Female	Scotland
Medicine & Dentistry	51,900	49,100	50,500
Engineering	36,700	32,400	36,300
Economics	35,600	34,500	35,400
Veterinary sciences	37,500	34,000	34,800
Pharmacology, toxicology and pharmacy	36,800	33,400	34,500
Mathematical sciences	34,400	29,900	31,500
Law	32,200	29,600	30,600
Education and teaching	30,300	30,300	30,300
Health and social care	32,900	28,300	30,000
Physics and astronomy	30,100	24,700	29,700
Architecture, building and planning	30,100	28,200	29,100
Nursing	31,000	27,200	27,400
Chemistry	28,600	26,200	27,100
Physical, material and forensic sciences	27,900	25,900	27,100
Geographical and environmental studies	26,700	27,200	27,000
Business and management	28,800	25,500	26,800
Computing	27,400	22,700	26,500
Languages, linguistics and classics	26,700	26,400	26,500
Politics	26,600	25,900	26,300
Philosophy and religious studies	27,500	25,000	26,100
History and archaeology	27,400	25,100	26,100
Subjects allied to medicine	27,000	25,300	25,500
Biosciences	27,100	24,800	25,300
Combined and general studies	27,000	23,900	24,000
Sport and exercise sciences	23,800	24,400	24,000
English studies	21,700	23,700	23,200
Technology	21,100	24,900	23,100
Agriculture, food and related subjects	23,400	23,100	23,100
Sociology, social policy and anthropology	24,600	21,600	22,500
Communications and media	22,600	22,100	22,300
Psychology	25,400	21,600	22,100
Celtic studies	x	x	21,400
Humanities and liberal arts (non-specific)	x	x	19,400
Creative arts and design	19,800	19,200	19,300
All subjects	**29,100**	**26,000**	**27,100**

*UK domiciled First degree qualifiers 2010/11.
 Hours worked are not taken into account.
'x' denotes that data have been suppressed to prevent disclosure. All figures associated with cohorts smaller than 11 have been suppressed. All cells based on counts of 1 or 2 have been suppressed, and further suppression has been implemented to prevent disclosure by subtraction.

Disability

Table 2 shows the median total earnings for graduates from Scottish Institutions five years after graduation split by gender and disability. It shows that individuals who graduated in 2010/11 with no known disability were earning £27,300 in 2016/17 compared to £25,000 for disabled individuals.

It shows that males earn more than females both for those with no known disability and those who are disabled. Males who graduated in 2010/11 with no known disability were earning £29,300 in 2016/17 compared to £26,200 for females with no known disability. Disabled males who graduated in 2010/11 were earning £26,600 in 2016/17 compared to £24,000 for disabled females.

The recorded type of disability that a student has is on the basis of the student's own self-assessment. See 'Methodology' section for more information.

Table 2: Median total earnings of graduates* by disability status and gender five years after graduation, 2016/17 tax year

Disability	Median total earnings 2010/11 cohort (£)		
	Male	Female	Scotland
No known disability	29,300	26,200	27,300
Disabled	26,600	24,000	25,000

*UK domiciled First degree qualifiers 2010/11. Hours worked are not taken into account.
In line with HESA's collection policy, where it is not known whether or not a student has a disability, the student will be recorded as 'No known disability'. See HESA's website for more details: https://www.hesa.ac.uk/collection/c16051/a/disable.

Scottish Index of Multiple Deprivation (SIMD)

Table 3 shows the median total earnings for graduates from Scottish Institutions five years after graduation split by Scottish Index of Multiple Deprivation quintiles. It shows that median total earnings decreases sequentially with each quintile as deprivation increases, from the highest earnings in Q5 – 20% least deprived areas to the lowest earnings in Q1 – 20% most deprived areas. Individuals from Q5 – 20% least deprived areas who graduated in 2010/11 earned £28,300 in 2016/17 compared to those from Q1 – 20% most deprived areas who earned £24,600 in 2016/17.

The differences in earnings between quintiles may be partially reflected by subject and institution choice. Individuals from the 20% most deprived areas are less likely to attend certain universities than those from other areas, and are less likely to do Medicine and Engineering[3] which have higher median earnings.

Table 3: Median total earnings of graduates* by SIMD five years after graduation, 2016/17 tax year

SIMD Quintile	Median total earnings 2010/11 cohort (£)
Q1 - 20% Most Deprived	24,600
Q2	26,100
Q3	26,200
Q4	27,000
Q5 - 20% Least Deprived	28,300

*Scottish domiciled First degree qualifiers 2010/11. Hours worked are not taken into account.
(Note: SIMD 2009 has been used in this release, as this was the index available during the 2010/11 academic year.)

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[3] 'The Commissioner for Fair Access discussion paper: retention, outcomes and destinations' has been used for evidence on subject and university choice for individuals from 20% most deprived areas:
https://www.gov.scot/publications/commissioner-fair-access-discussion-paper-retention-outcomes-destinations/

Institution Level

Table 4 shows the median total earnings for graduates from Scottish Institutions five years after graduation split by subject area and institution.

Due to small numbers of graduates in some subjects in certain institutions and some institutions not offering particular subjects, this table includes suppressed and missing values. Median earnings can also vary between subjects for various reasons.

Different institutions will offer different courses that are considered to be in the same subject category, but could lead to vastly different career paths. For this reason, Table 4 should not be used as a means to rank institutions or subjects.

More information is available in the 'Data Quality' section, which outlines some of the issues to consider when looking at this data.

Table 4: Median total earnings of graduates* by subject area and institution five years after graduation, 2016/17 tax year

	The University of Aberdeen	University of Abertay Dundee	The University of Dundee	Edinburgh Napier University	The University of Edinburgh	Glasgow Caledonian University	Glasgow School of Art	The University of Glasgow	Heriot-Watt University	Queen Margaret University, Edinburgh	The Robert Gordon University	Royal Conservatoire of Scotland	The University of St Andrews	SRUC	The University of Stirling	The University of Strathclyde	University of the Highlands and Islands	The University of the West of Scotland
Medicine & Dentistry	51,100	-	50,400	-	50,400	-	-	53,500	-	-	-	-	42,700	-	-	-	-	-
Subjects allied to medicine	25,500	23,300	44,100	16,000	27,800	26,500	-	24,800	-	24,800	26,300	-	x	-	-	23,600	-	22,200
Pharmacology, toxicology and pharmacy	x	-	x	-	31,700	25,400	-	26,800	-	x	38,100	-	-	-	-	37,500	-	-
Nursing	-	27,100	27,700	26,600	x	27,400	-	26,300	-	28,800	27,200	-		-	28,000	-	x	27,600
Engineering	43,400	x	38,400	31,500	40,500	34,100	-	35,400	33,900	-	42,400	-	-	-	-	36,600	33,300	34,200
Biosciences	21,300	x	26,500	21,600	27,900	23,800	-	24,900	20,000	-	29,400	-	24,900	25,500	26,300	24,700	-	24,200
Sport and exercise sciences	28,000	22,000	x	21,700	30,500	-	-	24,100	23,800	-	28,700	-	-	-	x	24,000	-	22,000
Psychology	25,600	20,900	20,800	20,800	29,800	23,200	-	23,800	23,300	20,400	-	-	27,400	-	22,500	22,700	-	18,600
Veterinary sciences	-	-	-	x	34,700	-	-	36,500	-	-	-	-	-	-	-	-	-	-
Agriculture, food and related subjects	x	-	x	-	x	-	-	x	x	-	-	-	-	23,500	-	-	x	-
Physical, material and forensic sciences	26,700	-	23,400	-	29,700	23,100	-	26,600	c	-	27,600	-	28,900	-	-	29,600	x	x
Chemistry	x	23,800	x	-	29,500	-	-	27,100	25,200	-	-	-	28,700	-	-	27,200	-	21,300
Physics and astronomy	x	-	x	-	36,300	-	-	25,800	31,500	-	-	-	32,700	-	-	28,200	-	x
Geographical and environmental studies	25,500	-	26,700	-	30,900	-	-	26,900	x	-	-	-	32,400	23,200	23,400	23,200	x	-
Mathematical sciences	x	-	x	x	34,500	x	-	32,600	30,600	-	-	-	40,400	-	29,500	28,400	-	x
Computing	x	25,800	28,200	24,300	36,500	22,500	-	36,500	35,200	-	24,700	-	x	-	29,900	34,300	21,300	22,400
Technology	x	19,600	-	-	x	24,200	-	x	-	-	-	-	-	-	-	-	-	-
Architecture, building and planning	36,900	-	25,300	28,300	28,000	35,600	27,600	x	31,200	-	26,100	-	-	-	-	26,800	-	-
Creative arts and design	19,900	-	19,300	20,100	19,400	22,000	17,900	18,500	20,300	19,100	20,500	20,600	-	-	-	18,100	15,400	17,100
Sociology, social policy and anthropology	25,000	21,600	x	22,000	25,800	21,700	-	23,300	x	-	19,800	-	24,100	-	23,200	x	x	16,000
Economics	35,800	-	25,200	-	44,500	-	-	40,300	x	-	x	-	43,200	-	x	29,500	-	-
Politics	27,100	-	23,600	-	31,900	-	-	25,200	-	-	-	-	31,800	-	25,100	24,300	x	17,400
Health and social care	-	-	24,300	-	31,300	34,100	-	x	-	24,400	32,200	-	-	-	x	33,600	19,500	x
Combined and general studies	x	-	-	-	23,100	-	-	-	-	-	-	-	x	-	-	-	-	24,800
Law	33,500	22,800	29,100	25,200	35,000	26,000	-	35,100	x	-	29,800	-	-	-	24,800	31,000	-	22,500
Business and management	30,400	24,200	27,900	25,100	35,100	25,100	-	33,500	26,200	24,000	29,700	-	40,500	21,200	26,200	31,500	22,600	21,900
Communications and media	-	-	-	23,900	-	20,500	-	x	-	20,700	22,600	-	x	-	21,500	x	-	22,000
Languages, linguistics and classics	24,900	-	25,600	x	31,000	-	-	25,000	25,500	-	-	-	31,000	-	23,100	25,500	-	20,100
English studies	20,500	-	19,500	21,000	25,400	-	-	23,400	x	-	-	-	28,200	-	21,700	22,300	-	-
Celtic studies	x	-	-	-	x	-	-	x	-	-	-	-	-	-	-	-	x	-
History and archaeology	23,900	-	22,500	-	28,800	-	-	25,200	-	-	-	-	32,200	-	22,700	24,300	x	-
Philosophy and religious studies	24,900	-	x	-	28,600	-	-	24,600	-	-	-	-	31,200	-	24,500	-	x	-
Humanities and liberal arts (non-specific)	x	-	-	-	x	-	-	-	-	-	-	-	x	-	-	-	x	-
Education and teaching	30,300	-	28,500	-	30,300	-	-	30,300	x	-	-	-	x	-	31,100	28,700	19,600	28,800

* UK domiciled First degree qualifiers 2010/11, Hours worked are not taken into account.

'-' denotes there are zero individuals, 'x' denotes that data have been suppressed to prevent disclosure. Median earnings can vary greatly due to a variety of courses and career paths, and should not be used to rank universities or subjects.

Methodology

Background methodology

Further detailed information is available in the Department for Education releases:

https://www.gov.uk/government/collections/statistics-higher-education-graduate-employment-and-earnings

Higher Education Institutions

This publication covers graduates from Higher Education Institutions. The corresponding DfE publication (https://www.gov.uk/government/collections/statistics-higher-education-graduate-employment-and-earnings) includes Higher Education delivered at English Further Education Colleges.

Suppression and rounding

In line with disclosure control rules, information based on fewer than 11 graduates has been supressed. This follows HESA's suppression methodology.

All counts have been rounded to the nearest five, percentages to one decimal place and earnings to the nearest £100.

Data Quality

Users should be aware of some limitations around the data included in this publication;

Mode:

The employment data covers those with records submitted through the Pay As You Earn (PAYE) system and the Self-Assessed system. Neither systems collect information on the number of hours worked; therefore, whether an individual is working full-time or part-time cannot be ascertained. We are exploring the opportunity to link the LEO data to the Annual Survey of Hours and Earnings (ASHE), which will allow for a subset of the LEO data to contain information on full-time and part-time work patterns.

Career Path:

Different subjects will lead to different career paths, with some careers requiring further learning and training after the completion of their first degree. This in turn may distort the median salaries one, three and five years after qualification.

Subject groupings and intake:

The subject groupings reported can cover a wide range of courses, some of which may yield higher median earnings than others. The selection of courses available at

HEIs will vary as will the student intake to each course. As different courses can yield different median earnings, care should be taken when comparing subjects across different HEIs.

A new subject coding framework called HECoS will be implemented for the academic year starting in the autumn of 2019. This moves away from the previous coding framework JACS (used in our prior releases). Other organisations including HESA, DfE, and UCAS are moving to using the HECoS subject coding framework. As part of this transition, a Common Aggregation Hierarchy (CAH), which acts as a bridge between HECos and JACS has been used. The DfE publication has also made this change.

The CAH has three versions. CAH2 (34 subject groupings) is used in this release. To ensure comparability throughout, we have used CAH2 in all of our tables that include subject.For this publication, we have published our subject groupings by CAH groupings.

More information on the HECos and CAH can be found on HESA's website: https://www.hesa.ac.uk/innovation/hecos

Open University:

HESA made changes in the way they record Open University graduates by country of national centre in academic year 2013/14. Since figures in this release date to before this year Open University graduates who registered at any of the four national centres are included in the 'Open University in England'.

Region:

The Destination of Leavers from Higher Education (DLHE) survey tells us that first degree leavers from certain universities such as the University of St Andrews and the Universitiy of Edinburgh are more likely to obtain work in other parts of the UK, like London. We are exploring the opportunity to link the LEO data to the Inter-Departmental Business Register (IDBR), which will allow for a subset of the LEO data to contain information on region and sector of employment.

Attainment:

Prior attainment bands are not provided for Scottish Institutions. No prior attainment is recorded for Scotland as the National Pupil Database (NPD) only records those who completed A levels at an English school. Coverage at HEIs in Scotland would therefore be limited to graduates who completed their A-levels in England before pursuing higher education in Scotland. The NPD also only covers qualifications obtained since 2002, meaning the majority of mature students are not expected to have an A level record on the NPD. Therefore mature students are not included in prior attainment calculations.

POLAR:

HESA do not publish POLAR figures for Scotland, as Scotland's relatively high participation rate and the high proportion of higher education students in further education colleges could misrepresent Scottish contributions to widening participation. Following that line of reasoning, this publication does not include POLAR figures for Scottish HEIs either.

Time period

The time period for which employment and earnings data is reported in this publication is five years year after graduation. This refers to the full tax year five years after graduation. So, for the 2010/11 graduation cohort the figures five year after graduation refer to employment and earnings outcomes in the 2016/17 tax year.

Employment outcomes

Outcomes are presented for graduates that have been successfully matched to the Department for Work and Pensions' Customer Information System (CIS) or if they have been matched to a further study instance on the HESA Student Record. In this publication these individuals are referred to as matched. Graduates that have not been matched to CIS or a further study record are referred to as unmatched.

Graduates that have been matched are then placed in one of five outcomes categories. These are:

Activity not captured: graduates that have been successfully matched to CIS but do not have any employment, out-of-work benefits or further study records in the tax year of interest. Reasons for appearing in this category include: moving out of the UK after graduation for either work or study, or voluntarily leaving the labour force.

No sustained destination: graduates with an employment or out-of-work benefits record in the tax year in question but were not classified as being in 'sustained employment' and do not have a further study record.

Sustained employment only: graduates are considered to be in sustained employment if they were employed for at least one day for five out of the six months between October and March of the tax year in question or if they had a self-employment record in that tax year.

Sustained employment with or without further study: includes all graduates with a record of sustained employment regardless of whether they also have a record of further study. A graduate is defined as being in further study if they have a valid higher education study record at any UK HEI on the HESA database in the relevant tax year. The further study does not have to be at postgraduate level to be counted.

Sustained employment, further study or both: includes all graduates with a record of sustained employment or further study. This category includes all graduates in the 'sustained employment with or without further study' category as well as those with a further study record only.

Annualised earnings

Earnings figures are only reported for those classified as being in sustained employment and where we have valid earnings record from the P14. Those in further study are excluded, as their earnings would be more likely to relate to part-time jobs. Earnings from self-assessment are not included.

For each graduate, the earnings reported for them on the HMRC P14 data for a given tax year are divided by the number of days recorded in employment across that same tax year. This provides an average daily wage that is then multiplied by the number of days in the tax year to calculate their annualised earnings.

This calculation has been used to maintain consistency with figures reported for further education learners after study. It provides students with an indication of the earnings they might receive once in stable and sustained employment.

The annualised earnings calculated are slightly higher than the raw earnings reported in the tax year. This is because the earnings of those who did not work for the entire tax year will be higher when annualised. The difference between the annualised and raw figures decreases as time elapses after graduation. Median annualised earnings one year after graduation are around £1,000 higher than the median raw earnings reported in the P14 data. Five years after graduation, the median annualised earnings are less than £500 higher than the median raw earnings.

All earnings presented are nominal. They represent the cash amount an individual was paid and are not adjusted for inflation (the general increase in the price of goods and services).

Total earnings

The total of annualised PAYE earnings and raw self-assessment earnings. If an individual has earnings only through PAYE or self-assessment, then their total earnings will be equal to their PAYE or self-assessment earnings.

Total earnings figures are only reported for those classified as being in sustained employment and where we have valid earnings record from the P14 or for those who have self-assessment earnings for that tax year.

These self-assessment earnings only includes profits from partnership enterprises and profit from sole-trader enterprises. As the self-assessment data does not include any information on the number of days worked for a tax year, the earnings cannot be annualised.

Scottish Index of Multiple Deprivation (SIMD)

The SIMD ranks small areas (data zones) in Scotland from most deprived to least deprived. The SIMD overall rank is calculated from the individual ranks of seven domains: Income, Employment, Health, Education/skills, Housing, Geographic access, and Crime. The quintiles represent 5 equal groups of the SIMD ranks, with quintile 1 representing the 20% most deprived areas, and quintile 5 representing the 20% least deprived areas.

We have used SIMD 2009 as this was the index available during the 2010/11 academic year, which aligns with the graduation cohort for this publication.

Further detailed information is available in the SIMD publication: https://www.gov.scot/publications/scottish-index-multiple-deprivation-2016/

Disability status

Disability status is collected by HESA in the student records. This data includes the type of disability a student has based on their own self-assessment. For this release, we have only included this data broken down into "No known disability" and "Disability". Further detail is available at HESA's website: https://www.hesa.ac.uk/collection/c16051/a/disable

Background

The Small Business, Employment and Enterprise Act 2015 enabled the UK government, for the first time, to link higher education and tax data together to chart the transition of graduates from higher education into the workplace. The Department for Education (DfE) commissioned the Department for Work and Pensions (DWP) to link Higher Education Statistics Agency (HESA) records for the whole of the UK to the tax and benefits records.

This release presents employment and earnings outcomes for leavers of higher education five years after graduation. This publication is the third release in Scotland, to use the Longitudinal Education Outcomes (LEO) dataset to track higher education graduates as they move from higher education into the workplace.

This publication looks at those who graduated with a first degree qualification from higher education institutions (HEIs) in Great Britain, concentrating on those classified as UK domiciled prior to entry to higher education. Figures are presented for all first degree graduates and have not been split by full-time or part-time modes of study. On average, matching of over 95 per cent of each graduate cohort to tax and/or benefit data has been achieved.

The employment data covers those with records submitted through the Pay As You Earn (PAYE) system and records submitted through the self-assessment system. The core purpose of PAYE is to collect tax and its coverage reflects this. Up until April 2013, employers were not required to supply information to HMRC for individuals who earned below the Lower Earnings Limit (LEL) for National Insurance contributions, although for large employers these individuals were thought to be included due to the methods of data transfer. Since then, employers have been required to provide earnings information for all employees if even one employee of the company is paid above the LEL threshold. The self-assessment data captures the activity of individuals with income that is not taxed through PAYE, such as income from self-employment.

The PAYE and self-assessment systems do not collect information on the number of hours worked; therefore, whether an individual is working full-time or part-time cannot be ascertained currently. We are exploring the opportunity to link the LEO data to the Annual Survey of Hours and Earnings (ASHE), which will allow for a subset of the LEO data to contain information on full-time and part-time work patterns.

Self-assessed earnings are not published in isolation, rather they are included as part of a total earnings figure. See 'Total earnings' under Methodology for more information on this. All figures are based on UK tax, benefit and student records only: activity of those who move abroad to work or study after graduating is not reflected in the employment or further study figures. Instead, these individuals are categorised as 'activity not captured'.

Glossary

Academic year: Runs from 1 August to 31 July. For example, the 2012/13 academic year ran from 1 August 2012 to 31 July 2013.

The Customer Information System (CIS): A computer system used by the Department for Work and Pensions that contains a record for all individuals that have been issued with a National Insurance (NINO) number. It contains basic identifying information such as name, address, date of birth and NINO.

First degree qualification: This covers qualifications commonly known as bachelor's degrees and also includes postgraduate bachelor's degrees at H level. Not all undergraduate courses are included: for example, the Professional Graduate Certificate in Education (PGCE), foundation degrees and Higher National Diplomas (HND) are excluded. Note that it does not necessarily mean that the degree is the first higher education qualification undertaken by the student.

Further study: The HESA Student Record is used to identify instances of further study in higher education, Students enrolled on further education courses, on some initial teacher training enhancement, booster and extension courses, or whose study status is dormant or who were on sabbatical are excluded from this indicator. Each tax year spans two academic years; therefore, graduates will be flagged as being in further study if they have a HESA record in one of these two academic years.

HEI: Higher Education Institution.

Higher Education Statistics Agency (HESA): HESA collect data from universities, higher education colleges and other specialist providers of higher education. In this publication we have used the HESA Student Record to identify our graduate base population and higher education further study instances.

Common Aggregation Hierarchy (CAH): A standardised way of classifying academic subjects and modules that allows for consistent analysis across the HECoS and JACS coding frames. CAH has been designed to act as a bridge between an upcoming coding frame (HECoS) and the old coding frame (JACS). In this publication we group subjects using CAH2 subject groupings.

Nominal earnings: Nominal earnings represent the cash amount an individual was paid. They are not adjusted for inflation (the general increase in the price of goods and services).

PAYE: HMRC's system to collect Income Tax and National Insurance from employment. The LEO project uses information from the P45 to ascertain employment spell length and from the P14 (P60) to determine annual earnings.

Self-assessment: Self-assessment data captures the activity of individuals with income that is not taxed through PAYE, such as income from self-employment, savings and investments, property rental, and shares.

Sustained annualised earnings: The calculated average daily wage across the tax year grossed up to the equivalent annual figure.

Total earnings: The total of annualised PAYE earnings and raw Self-assessed earnings.

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