

The labour market outcomes of De Montfort University graduates

Final Report for De Montfort University



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Glossary

Acronyms

DMU	De Montfort University
HE	Higher Education
HESA	Higher Education Statistical Agency
ILR	Individualised Learner Record
IQR	Interquartile range
LEO	Longitudinal Education Outcomes dataset – see Section 1.1
LFS	The UK Labour Force Survey – see Section 1.2
NPD	National Pupil Database
YAG	Years After Graduation
CAH	Common Aggregation Hierarchy

LEO Definitions

Graduation cohort	The LEO data are organised by graduation cohort. A graduation cohort comprises all students who graduated from an HE provider in a given academic year. The information presented in sections 2 to 4 of this report refers to three graduation cohorts (2014/15, 2016/17, and 2018/19) of first-degree graduates observed in the tax year 2020/21 (i.e. 1, 3, and 5 years after graduation, respectively).
LEO comparison group	In Sections 2 to 4 of this report, we present the data on labour market outcomes of first-degree graduates from DMU alongside comparable information for graduates from a comparison group formed of all other higher education (HE) providers located in the East Midlands, excluding the University of Nottingham.
Median annual earnings	The LEO data reports information on the median earnings of graduates by tax year, graduation cohort, gender, HE provider, and subject area (Level 2 of the CAH) or region of residence. Aggregation across specifications is performed using weighted averages (using the number of graduates in each cell as weights). All LEO earnings figures are presented in 2020/21 prices.

IQR annual earnings

The LEO data reports information on the lower and upper quartile of the earnings distribution of graduates by tax year, graduation cohort, gender, HE provider, and subject area (Level 2 of the CAH) or region of residence. This information was used to define the Interquartile Range (IQR) of the earnings distribution. Aggregation across specifications was performed using weighted averages (using the number of graduates in each cell as weights). All LEO earnings figures are presented in 2020/21 prices.

Sustained employment only

A graduate must be in paid employment for at least one day in five out of six months between October and March of a given tax year to be classified as being in 'sustained employment' in a given tax year. In the chart, we refer to it as "Employment only" and the definition excludes those who are in both employment and further study.

Sustained employment, further study, or both

This definition covers all those in sustained employment only, further study only or a combination of employment and study. In the chart, we refer to it as "Employment, further study, or both".

Executive summary

What do graduates from DMU study?



Around 70% of **male first-degree graduates** in 2018/19 graduated with a degree in one of the following five subject areas: **Business and management** (27% of all graduates), **Computing** (14%), **Social sciences** (11%), **Engineering and Technology** (9%) and **Subjects allied to medicine** (9%).

Amongst **females**, more than 1 in 5 (22%) first-degree graduates were in **Subjects allied to medicine** and around 18% in **Design, and creative and performing arts**. A smaller proportion of graduates (14%) were in **Business and management** while 13% were in **Social sciences**.

Where do they live after completing their study?

About **1 in 2** DMU first-degree graduates **live in the East Midlands five years after graduation**, compared to only 36% of graduates from other HE providers located in the region. A similar rate is observed also at 1 and 3 years after graduation.



How much do they earn?



Overall, based on **Longitudinal Education Outcomes data**, median annual earnings of first-degree graduates from DMU stand at approximately £26,300 per annum five years post-graduation. This is **in line with those of graduates from other similar HE providers located in the East Midlands, once subject area of specialisation and regional differences are factored in**. The only exceptions are male graduates in **Engineering and Technology** and **Business and management**, whose median annual earnings appear to be substantially lower than for graduates from HE providers in the comparison group.

What do they do after graduation?

Across most subject areas, the study found that a **larger proportion of DMU graduates remain in further study one year after graduation**, compared to graduates from similar HE providers located in the East Midlands. At 3 and 5 years after graduation, there are little differences in the percentage of graduates in employment between DMU and other comparable HE providers.



What is the earnings graduate premium (compared to any level 3)?



Using Labour Force Survey data for all graduates living in the East Midlands (irrespective of HE provider of study) and holding a first degree as highest qualification, we estimated that there is an average **hourly earnings premium of approximately 32% for male graduates and 36% for female graduates**, corresponding to **£5.70 and £4.90 per hour respectively** (compared to those holding a level 3 qualification).

1 Data

This study presents evidence on the **labour market returns** of **first-degree graduates** from **De Montfort University (DMU)**. The report uses two main data sources: the public data tables of the **Longitudinal Education Outcomes (LEO)** dataset and the **UK Quarterly Labour Force Survey (LFS)** microdata. Each data source is described in further detail in the following sub-sections. Table 1 provides information on the data used in each section of the report.

Table 1 Data sources

Section	Data	Period / Cohorts
2. What do graduates from DMU study?	LEO	2018/19 graduation cohort
3. Where do DMU graduates live 1, 3, and 5 years after graduation?		2014/15, 2016/17, and 2018/19 graduation cohorts observed in tax year 2020/21
4. What are the labour market outcomes of DMU graduates?		
5. What is the graduate premium in the East Midlands	LFS	LFS quarters between 2010q1 and 2023q4, all working-age adults (21-65)

Source: London Economics

1.1 The Longitudinal Education Outcomes (LEO) dataset

The Longitudinal Education Outcomes (LEO) dataset is a **matched individual-level dataset** published by the Department for Education. LEO combines information from a range of **educational data sources**¹ with administrative information on **earnings, employment, and benefits records**². The Department for Education periodically releases **data tables** (LEO Graduate and Postgraduate Outcomes³) **reporting summary statistics on the earnings distribution, employment status, and regional and sectoral mobility derived from the micro-level LEO database**. These tables present the information disaggregated based on tax year and graduation cohort (combined they define the variable "Years After Graduation" or YAG), region of residence, qualification level, HE institution of graduation, subject area of study, and sex of the individual (although information is not necessarily available cross-disaggregated across all these dimensions).

For this study, we used data tables providing **information at the level of HE provider** (LEO Graduate Outcomes provider level data⁴), to identify the outcomes of **first-degree graduates from De Montfort University** specifically. As a point of comparison, we also present data on graduates from the other HE providers in the East Midlands (excluding the University of Nottingham)⁵, which we refer to as the **comparison group**. Information at the HE provider level is disaggregated either at the

¹ Educational data sources consist of data on school (National Pupil Database (NPD)), further education (Individualised Learner Record (ILR)), and higher education (Higher Education Statistical Agency (HESA)) participation and attainment.

² Information on earnings, employment, and benefits records is generated from administrative data (HM Revenue and Customs P14, P45, and self-assessment data and the National Benefits Database from the Department for Work and Pensions).

³ Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/leo-graduate-and-postgraduate-outcomes>

⁴ Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/graduate-outcomes-leo-provider-level-data>

⁵ Graduates from the University of Nottingham were excluded from the analysis as it is a Russell group institution and its graduates are typically more geographically mobile than those from the other East Midlands universities and generally achieve higher earnings.

level of the subject of study⁶ or on the graduate region of residence (post-graduation), but cross-disaggregations across both dimensions is not available.

Figure 1 Structure of the LEO dataset – observable graduation cohorts

		Tax year of employment						
		14-15	15-16	16-17	17-18	18-19	19-20	20-21
Academic year of graduation	08-09	5 YAG						
	09-10		5 YAG					
	10-11	3 YAG		5 YAG				
	11-12		3 YAG		5 YAG			
	12-13	1 YAG		3 YAG		5 YAG		
	13-14		1 YAG		3 YAG		5 YAG	
	14-15			1 YAG		3 YAG		5 YAG
	15-16				1 YAG		3 YAG	
	16-17					1 YAG		3 YAG
	17-18						1 YAG	
	18-19							1 YAG

Source: London Economics

The latest data release covers the tax years between 2014/15 and 2020/21. For each tax year, it is possible to observe three cohorts of graduates, graduating 1, 3, and 5 years earlier, respectively.

For this study, we focus on information from the latest available tax year, i.e. 2020/21 (red box in Figure 1) and three cohorts of first-degree graduates who graduated in 2014/15, 2016/17, and 2018/19 respectively.

1.2 The UK Labour Force Survey (LFS)

The **Quarterly Labour Force Survey** is the official survey in the UK recording labour market outcomes and is based on a representative sample of the UK resident population. The Labour Force Survey is collected on a rolling sample of respondents designed to be retained for five consecutive survey waves (although the presence of attrition means that some of them will drop out before Wave 5). Information on employment is collected in each wave, while information on earnings is collected in waves 1 and 5 only. The main dimensions captured by the Labour Force Survey⁷ are the following:

- Demographics (e.g. age, sex, marital status, ethnicity, region of residence);
- Detailed educational attainment (including qualifications held and subject area of study for first degree and postgraduate courses);
- Labour market information on employment status, hours worked, hourly earnings, industry, occupation, firm size, length of employment etc.;

Overall, we used in the analysis all **LFS quarters** between **2010q1** to **2023q4** and focused on **working-age adults only** (aged between 21 and 65)⁸.

2 What do graduates from DMU study?

Using the latest graduation cohort from the LEO dataset (referring to the 2018/19 graduation year), it is possible to look at the distribution of DMU graduates and graduates from other HE providers in the East Midlands across different subject areas, broken down by gender (Figure 2).

⁶ Information on the subject of study is provided at Level 2 of the Common Aggregation Hierarchy (CAH). For this study, this has been remapped to CAH-level 1.

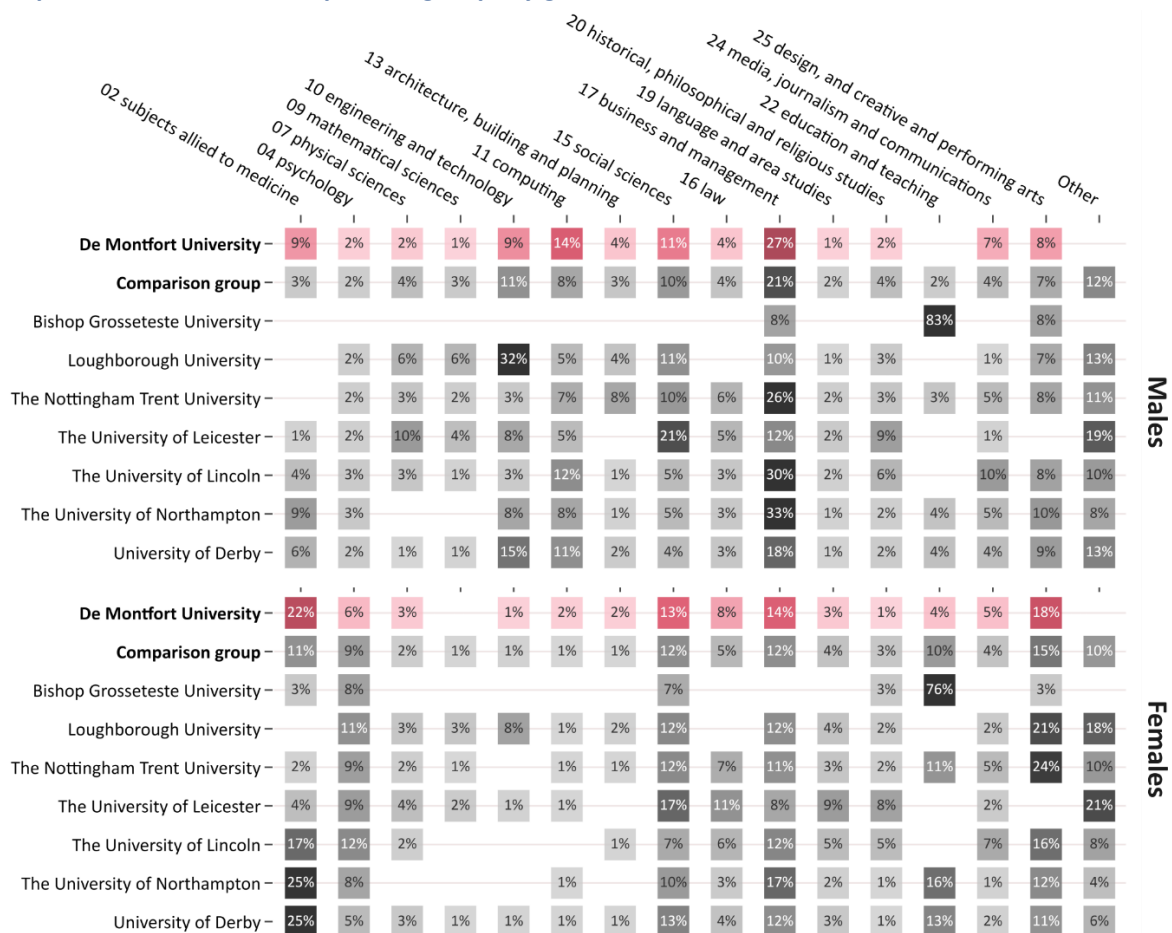
⁷ The 'standard' version of the LFS is immediately accessible from the UK Data Service under the End User Licence agreement.

⁸ It should be noted that LFS response rates, sample sizes (and in consequence quality) have declined over time, in particular over the last couple of years.

DMU graduates are typically concentrated in specific subject areas, in particular:

- Five key subject areas have a substantial proportion of both male and female graduates. These are: **Subjects allied to medicine** (9% and 22% for males and females, respectively); **Social sciences** (11% and 13%, respectively); **Business and management** (27% of male graduates and 14% of female graduates); **Media, journalism and communications** (7% and 5%, respectively); and **Design, and creative and performing arts** (8% and 18%, respectively).
- For **male students**, there are two additional key subject areas: **Computing** (14% of male graduates), and **Engineering and Technology** (9% of male graduates).
- For **female students**, there are two additional key subject areas: **Law** (8% of female graduates), and **Psychology** (6% of female graduates).

Figure 2 Subject distribution of the 2018-19 cohort of first-degree graduates from DMU and HE providers from the comparison group, by gender



Note: 'Other' include the following subject: '01 Medicine and Dentistry', '03 Biological and Sport Sciences', '05 Veterinary Sciences', '06 Agriculture, Food and Related Studies', '23 Combined and General Studies', '26 Geography, Earth and Environmental Studies'. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham).

Source: London Economics' analysis of LEO Graduate Outcomes data.

Looking at the other East Midlands HE institutions, DMU graduates are relatively more concentrated in **Subjects allied to medicine**, **Business and management** and **Computing** (for males), while DMU does not offer courses in a small number of subject areas (grouped under 'Other' for the comparison

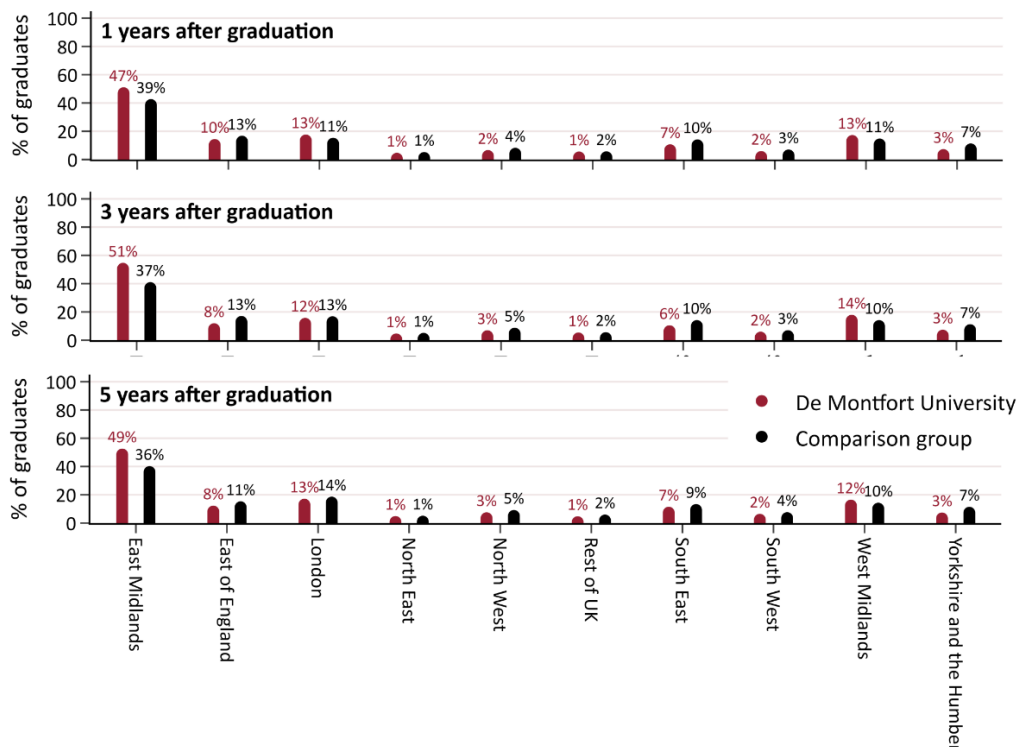
group of other HE institutions), in particular Medicine and Dentistry⁹, Biology, Veterinary sciences and Agriculture studies and Geography.

3 Where do DMU graduates live 1, 3, and 5 years after graduation?

To shed light on the role that DMU graduates play in the local economy of the East Midlands, Figure 3 depicts the **regional distribution** (based on region of residence) of **first-degree graduates in 2020/21**. The information is provided for three distinct cohorts: the 2018/19 graduation cohort (1 year after graduation, presented in the top row), the 2016/17 graduation cohort (3 YAG, middle row), and the 2014/15 graduation cohort (5 YAG, bottom row).

Compared to graduates from other comparable East Midlands universities, **a much higher proportion of DMU graduates remain in the East Midlands post-graduation**. One year after graduation, 47% of DMU graduates live in the East Midlands compared to 39% for other comparable East Midlands universities. This trend remains consistent for those who graduated 3 and 5 years earlier, with proportions standing at 51% and 49% respectively for DMU and 37% and 36% for graduates from comparable East Midlands universities. More generally, around 6 in 10 DMU graduates stay in the East and West Midlands regions one year after graduation (compared with approximately 5 in 10 for the comparison group).

Figure 3 Regional distribution of DMU graduates and graduates in the comparison group, by years elapsed since graduation



Note: A small proportion of graduates with foreign residence or with missing information have been removed. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham). See also Tables 3-5 in the Annex.

Source: London Economics' analysis of LEO Graduate Outcomes data.

⁹ Medicine and Dentistry is only offered by the University of Leicester in the group of institutions considered.

4 What are the labour market outcomes of DMU graduates?

In this section, we investigate the **labour market outcomes of graduates** from DMU and the comparison group focusing on **median annual earnings** and **employment status** in the tax year 2020/21 using LEO data. Similar to the previous section, the information is provided separately for those who graduated 1, 3, and 5 years before and is presented disaggregated by **region of residence** (Section 4.1) and by **subject area of study** (section 4.2)¹⁰.

4.1 Labour market outcomes by region of residence

Table 2 presents the median earnings 5 years after graduation of DMU graduates and graduates from other East Midlands HE providers, broken down by region of residence. Analogous information for the more recent cohorts is presented in Table 6 and Table 7 in the Annex.

It should be noted that this information is not available broken down by subject area of study. Therefore, the **earnings differences observed among the various providers are likely influenced by their different specialisation areas** (e.g. subjects allied to medicine for DMU graduates). Focusing on the East Midlands region (where around one half of DMU graduates live after graduation), **median annual earnings for DMU graduates** are generally **comparable to those of graduates from HE providers in the comparison group**, with the exception of graduates from Loughborough University and The University of Leicester (who have considerably higher earnings). The difference with these universities is likely to be driven (among other things) by a large number of Engineering and Technology graduates from the former, and Medicine and Dentistry graduates from the latter.

Table 2 Median earnings 5 years after graduation by region of residence and HE provider

	De Montfort University	Comparison group	Bishop Grosseteste University	Loughborough University	The Nottingham Trent University	The University of Leicester	The University of Lincoln	The University of Northampton	University of Derby
East Midlands	£24,800	£25,800	£24,500	£31,000	£25,600	£29,900	£24,500	£25,200	£24,500
East of England	£29,600	£30,500	£28,100	£41,600	£29,900	£31,600	£26,600	£25,600	£27,600
London	£29,900	£35,900		£43,100	£33,200	£36,900	£31,600	£27,400	£32,500
North East	£24,300	£26,300		£31,600	£25,400		£26,600	£26,600	£23,000
North West	£25,600	£28,300		£36,500	£26,100	£29,200	£25,900	£22,600	£23,500
South East	£28,800	£31,300		£37,200	£29,600	£32,700	£28,300	£26,600	£29,200
South West	£24,500	£30,400		£32,500	£26,800	£33,400	£40,500	£24,300	£23,700
West Midlands	£26,300	£27,100		£33,200	£27,000	£30,300	£24,600	£24,500	£24,100
Yorkshire and the Humber	£24,800	£25,500	£25,400	£31,900	£25,200	£27,400	£24,800	£23,400	£22,400
Total	£26,300	£28,600	£25,600	36,900	£27,700	£31,800	£25,900	£25,600	£24,800

Note: Information refers to the graduation cohort 2014/15 observed in the tax year 2020/21. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham). All figures are rounded to the nearest 100.

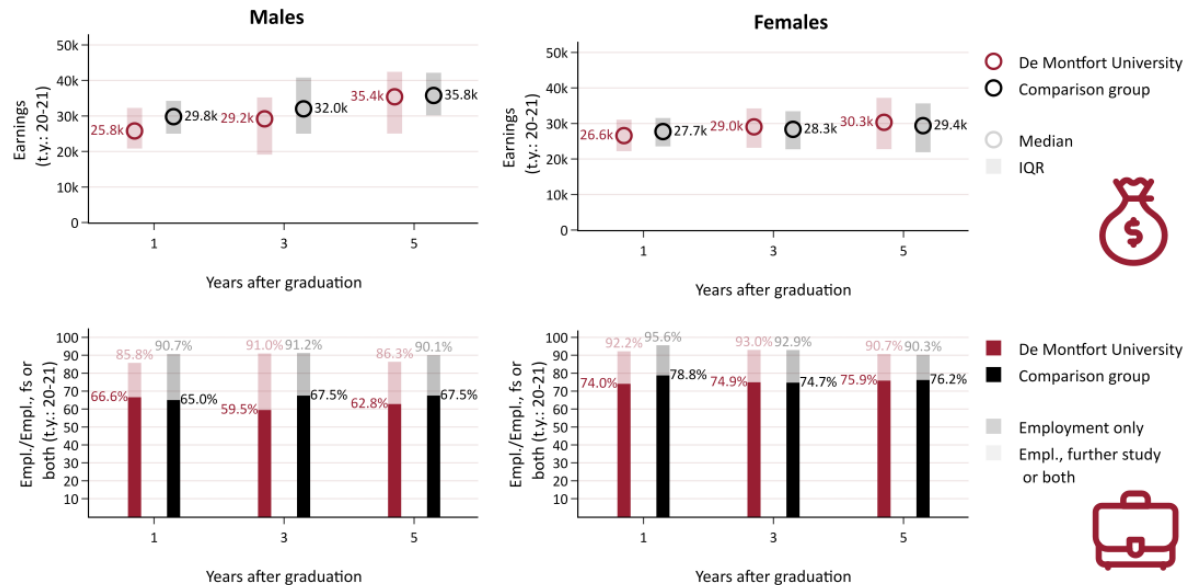
Source: London Economics' analysis of LEO Graduate Outcomes data.

¹⁰ In the published LEO data tables, information is not simultaneously available by region of residence and subject of study (i.e. we cannot observe graduates in a specific subject area living in the East Midlands).

4.2 Labour market outcomes by subject area of study

Subjects allied to medicine

Figure 4 Labour market outcomes of graduates in Subjects allied to medicine



Note: Information refers to the tax year 2020/21. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham). 't.y.' refers to tax year.

Source: London Economics' analysis of LEO Graduate Outcomes data. Icons by www.wishforge.games on freeicons.io.

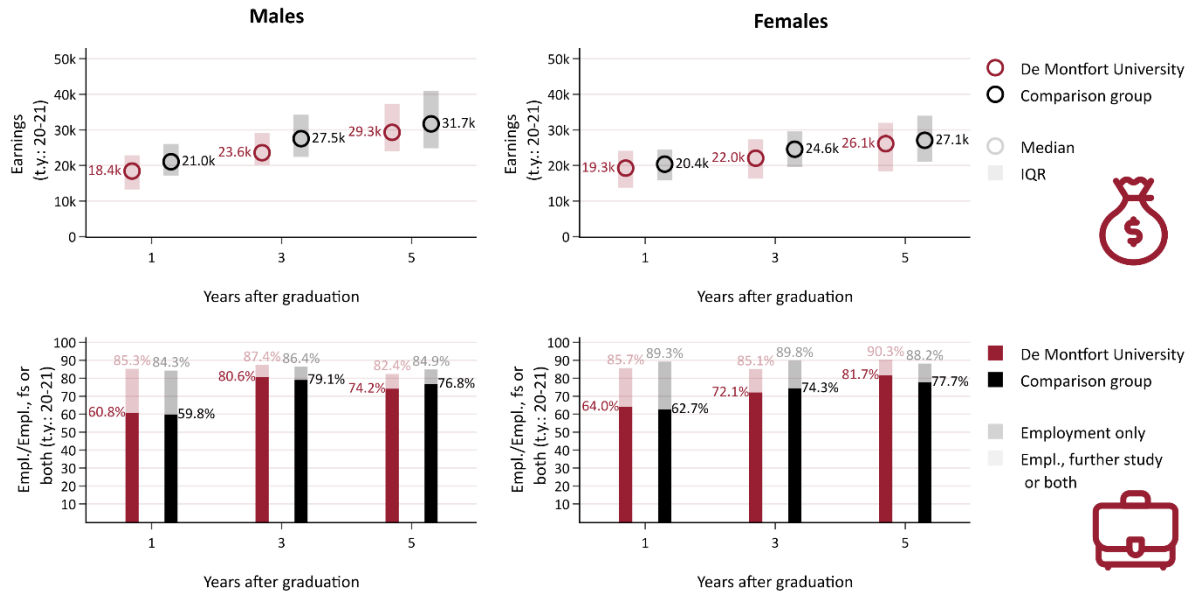
Figure 4 presents the 2020/21 labour market outcomes (earnings in the top panel and employment in the bottom panel) of **first-degree graduates** in **subjects allied to medicine** from DMU or from HE providers in the comparison group, by gender and years elapsed since graduation.

For **female graduates**, the analysis indicates that, compared to graduates from the other East Midlands HE providers, **median annual earnings** of graduates from DMU are slightly lower 1 year after graduation but slightly higher at 3 and 5 YAG: in fact, median annual earnings of DMU first-degree female graduates stand at **£26,600** for the cohort that graduated 1 year earlier (compared to **£27,700** for those graduating in a comparable HE provider), **£29,000** for the cohort graduating 3 years earlier (compared to **£28,300**), and **£30,300** for the cohort graduating 5 years earlier (compared to **£29,400**). In terms of employment status, the **proportion of DMU graduates in sustained employment only or in sustained employment, further study, or both** is in line with those of graduates from other East Midlands HE providers. It should be noted that five years post-graduation, there is a significant proportion of graduates in Subjects allied to medicine still in further study (in both groups).

For **male graduates**, the analysis indicates a progressive increase in the **median annual earnings** accrued by DMU graduates from **£25,800** to **£35,400**, as we move from recent graduates (1 year after graduation (YAG)) to graduates from earlier cohorts. Compared to graduates from HE providers in the comparison group, the median earnings of DMU graduates are lower 1 YAG (**£25,800** compared to **£29,800**) but the gap almost disappears 5 YAG (**£35,400** compared to **£35,800**). In terms of employment, for both DMU graduates and graduates for comparable HE providers, we observe a large share of individuals still in some form of education 1, 3, and 5 years after graduation. Graduates in sustained employment only amount to less than 70% of the total for all cohorts under consideration (even at 5 YAG), from both DMU and the comparison group.

Social sciences

Figure 5 Labour market outcomes of graduates in Social sciences



Note: Information refers to the tax year 2020/21. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham). 't.y.' refers to tax year.

Source: London Economics' analysis of LEO Graduate Outcomes data. Icons by www.wishforge.games on freeicons.io.

Figure 5 presents the labour market outcomes of **first-degree graduates** in **Social Sciences** from DMU or from HE providers in the comparison group, by gender and years elapsed since graduation (for the tax year 2020/21).

For **male graduates** the key findings are the following:

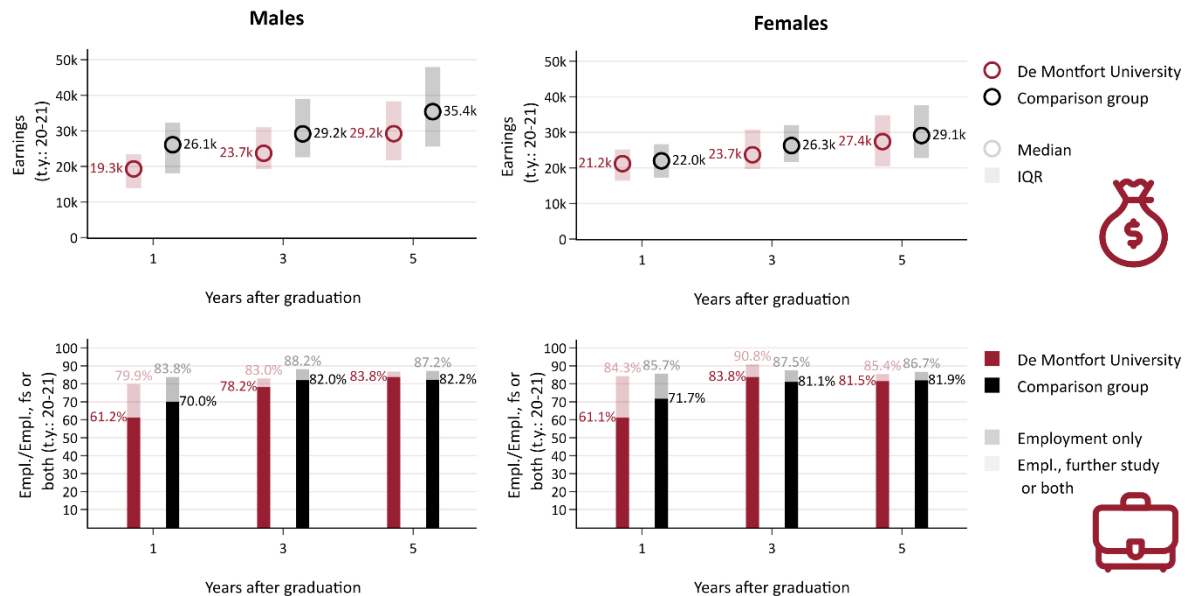
- Median annual earnings of DMU graduates are typically £2,000-£4,000 lower than for graduates from other East Midlands HE providers, standing at £18,400 for graduates from the 2018/19 cohort (1 YAG), £23,600 for graduates from the 2016/17 cohort (3 YAG), and £29,300 for graduates from the 2014/15 cohort (5 YAG).
- The proportion of graduates in sustained employment only or in sustained employment, further study, or both at 1 or 3 years after graduation (2018/19 cohorts and 2016/17 cohort) is typically slightly higher for DMU graduates than for graduates from the HE providers in the comparison group. Around 60.8% of DMU graduates were in sustained employment only (compared to 59.8% for other graduates in the comparison group), and 80.6% (compared to 79.1%), for the 2018/19 and 2016/17 cohorts respectively.

For **female graduates**:

- Median annual earnings of DMU graduates for all graduation cohorts considered are in line with or marginally lower than for graduates from HE providers in the comparison group.
- In terms of employment, we observe similar employment levels for DMU graduates at 1 and 3 years after graduation compared to graduates from HE providers in the comparison group. Conversely, at 5 YAG, around 81.7% of DMU female first-degree graduates were in sustained employment only in 2020/21 compared to 77.7% of graduates from other East Midlands HE providers.

Business and Management

Figure 6 Labour market outcomes of graduates in Business and Management



Note: Information refers to the tax year 2020/21. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham). 't.y.' refers to tax year.

Source: London Economics' analysis of LEO Graduate Outcomes data. Icons by www.wishforge.games on freeicons.io.

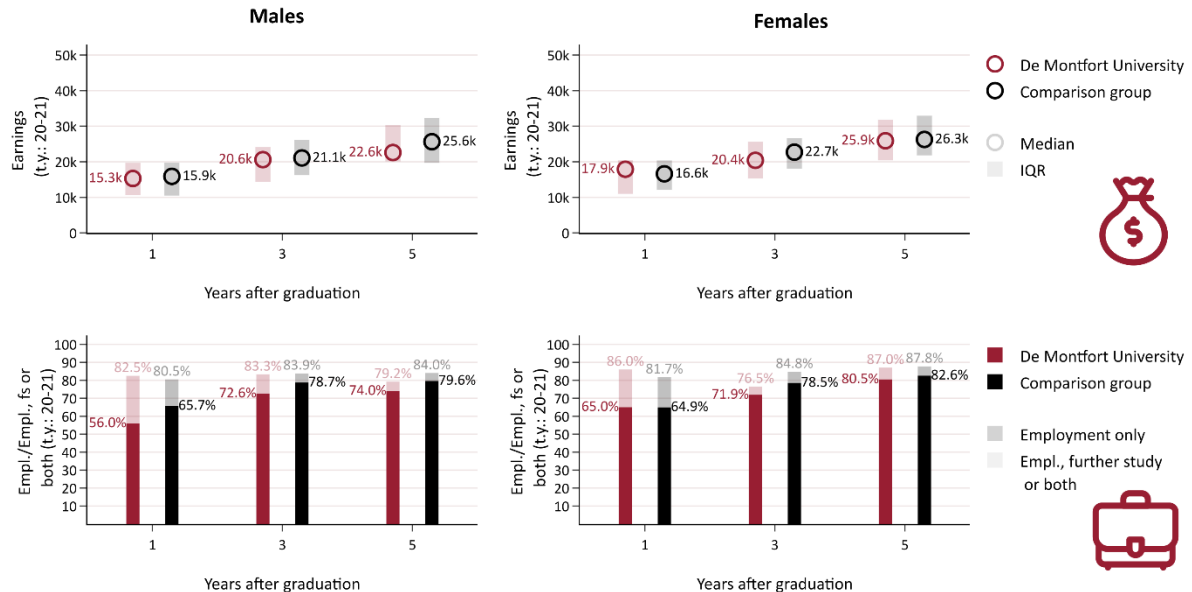
Figure 6 presents the 2020/21 labour market outcomes of **first-degree graduates** in **Business and Management** from DMU and HE providers from the comparison group, by gender and years elapsed since graduation.

For **male graduates**, the analysis indicates **lower median annual earnings** for graduates from DMU compared to graduates from HE providers in the comparison group. The gap stands at £6,800 (or 35%, £19,300 relative to £26,100) for the cohort graduating one year earlier but decreases to £6,200 (or 21.2%, £29,200 relative to £35,400) for the cohort graduating 5 years earlier. A higher proportion of male graduates from DMU are in further study at 1 year post-graduation (19% versus 14%) and this is reflected by the proportion in sustained employment only one year after graduation (61.2% compared with 70%). However, this gap is reversed at 5 years post-graduation.

For **female graduates**, the analysis indicates that the earnings of DMU graduates are very similar to those achieved by graduates from HE providers in the comparison group: median earnings stand at £21,200 for the cohort graduating one year earlier (compared to £22,000 for other HE providers); £23,700 for the cohort graduating 3 years earlier (compared to £26,300); and £27,400 for the cohort graduating 5 years earlier (compared to £29,100). For **male graduates**, the analysis indicates that a substantially larger proportion of DMU female graduates are in further study one year after graduation compared to graduates from HE providers in the comparison group (23.1% compared to 14.0%), while the proportion in sustained employment is higher or very similar at 3 and 5 YAG.

Media, journalism, and communications

Figure 7 Labour market outcomes of graduates in Media, journalism, and communications



Note: Information refers to the tax year 2020/21. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham). 't.y.' refers to tax year.

Source: London Economics' analysis of LEO Graduate Outcomes data. Icons by www.wishforge.games on freeicons.io.

Figure 7 presents the 2020/21 labour market outcomes of **first-degree graduates** in **Media, journalism and communications** from DMU or from HE providers in the comparison group, by gender and years elapsed since graduation.

For **females**:

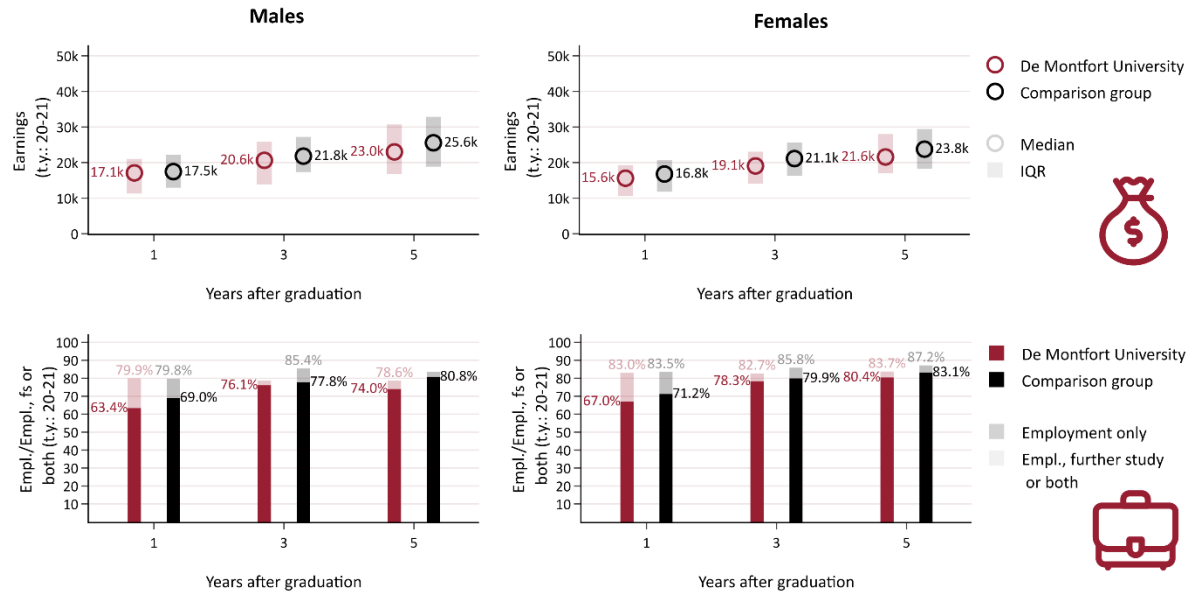
- Compared to the comparison group, median annual earnings of DMU graduates are higher 1 YAG, lower 3 YAG and very similar 5 YAG. In particular, median annual earnings stand at £17,900 1 YAG (compared to £16,600 for graduates in the comparison group); £20,400 for 3 YAG (£22,700); and £25,900 5 years after graduation (£26,300)
- Employment outcomes are in line for the 2018/19 and 2014/15 graduation cohorts (1 and 5 YAG), with approximately 65% of graduates in sustained employment only for the most recent graduation cohort and 81%-83% in the oldest cohort. Looking at graduates from the 2016/17 cohorts (3 YAG), only 71.9% of DMU graduates are in sustained employment only, compared to 78.5% of graduates from HE providers in the comparison group.

For **males**:

- Median annual earnings of DMU graduates range from £15,300 for the 2018/19 graduation cohort (1 YAG) to £22,600 for the 2014/15 graduation cohort (5 YAG). These figures are in line with those graduates from HE providers in the comparison group at 1 and 3 YAG, while they are lower at 5 YAG.
- In terms of employment, approximately 26.5% of DMU graduates from the 2018/19 cohort were still in some form of education one year after graduation, compared to 14.8% of graduates from HE providers in the comparison group. On the other hand, the proportion in employment only is lower than the corresponding proportion observed for graduates in the comparison group.

Design, and creative and performing arts

Figure 8 Labour market outcomes of graduates in Design, and creative and performing arts



Note: Information refers to the tax year 2020/21. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham). 't.y.' refers to tax year.

Source: London Economics' analysis of LEO Graduate Outcomes data. Icons by www.wishforge.games on freeicons.io.

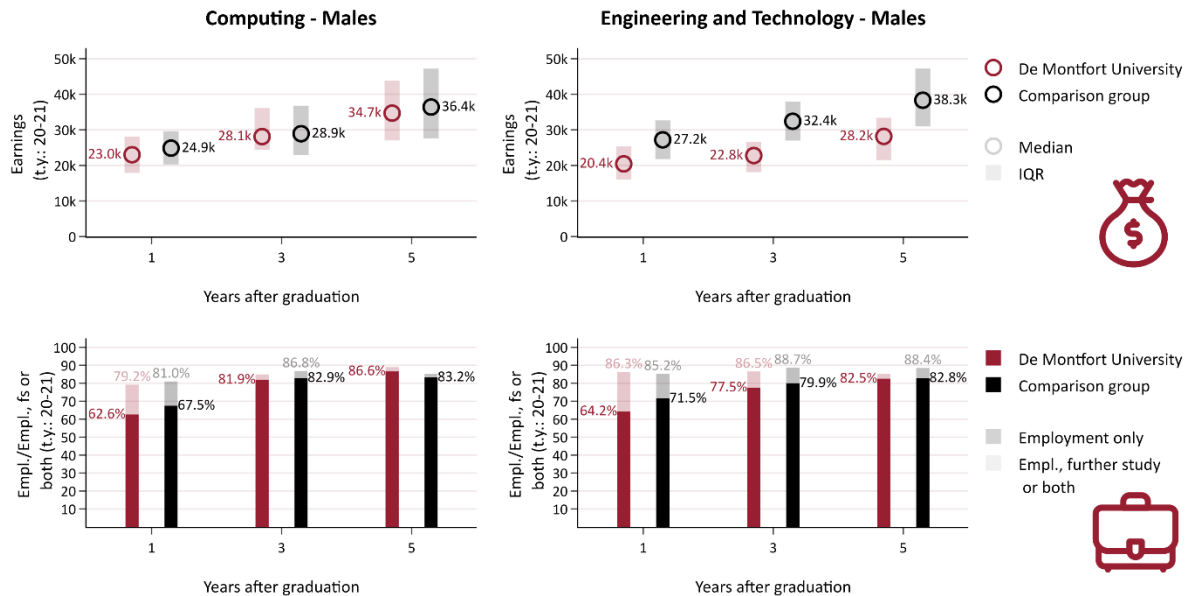
Figure 8 presents the 2020/21 labour market outcomes of **first-degree graduates** in **Design and creative and performing arts** from DMU or from HE providers in the comparison group, by gender and years elapsed since graduation.

For both **male and female graduates**, the **median annual earnings** of DMU graduates are **in line** with those of graduates from other East Midlands universities for the cohorts graduating 1 or 3 years earlier, and only **slightly lower** for the cohort graduating 5 years earlier. In particular, for males (females), the median earnings of the cohort graduating 1 year earlier (1 YAG) stand at £17,100 (£15,600 for females); £20,600 (£19,100) the cohort graduating 3 years earlier (3 YAG); and £23,000 (£21,600) for the cohort graduating 5 years earlier (5 YAG). In contrast to other subject areas that show significant gender differences in median annual earnings, the gender earnings gap is minimal for graduates in Design, Creative, and Performing Arts, for both DMU graduates and graduates from HE providers in the comparison group.

In line with findings for other subject areas, the analysis suggests that recent graduates from DMU are **more likely to be undertaking further study one year after graduation**, compared to graduates from comparable universities. Indeed, among DMU male (female) graduates, around 16.5% (16.0%) are still in some form of education one year after graduation, compared to 10.8% (12.3%) of graduates from an institution in the comparison group. At 5 years after graduation, the percentage of graduates in employment only is slightly lower for DMU graduates compared to graduates in the comparison group, for both males (74.0% compared to 80.8%) and females (80.4% compared to 83.1%).

Computing, and Engineering and Technology (males only)

Figure 9 Labour market outcomes of graduates in Computing, and Engineering and Technology – Males only



Source: London Economics' analysis of LEO Graduate Outcomes data. Icons by www.wishforge.games on freeicons.io.

Figure 9 (left) presents the labour market outcomes in the tax year 2020/21 of **male first-degree graduates** in **Computing** (for male graduates only as there is only a small number of female graduates in this subject area).

Looking at **median annual earnings**, the earnings accrued by DMU graduates are slightly lower than those of graduates from HE providers in the comparison group, across all three cohorts. In particular, median annual earnings of the cohort graduating 1 year earlier stand at £23,000 (compared to £24,900 for graduates in the comparison group); at £28,100 for those graduating 3 years earlier (compared to £28,900); and at £34,700 for those graduating 5 years earlier (compared to £36,400).

In terms of **employment**, a lower proportion of DMU graduates are in sustained employment only compared to graduates in the comparison group one year after graduation (62.6% compared to 67.5%). However, similar to what was observed for other subject areas, a larger proportion of DMU graduates are in some form of education one year after graduating (16.6% compared to 13.5%). At 5 years after graduation the employment gap is reversed as 86.6% of DMU male first-degree graduates in computing are in employment only compared to 83.2% of graduates from HE providers in the comparison group.

Figure 9 (right) displays the 2020/21 labour market outcomes of **male first-degree graduates** in **Engineering and Technology** from DMU or from HE providers in the comparison group, broken down by years elapsed since graduation. As for Computing, the analogous information for females is not displayed due to the limited number of graduates at DMU for this subject area.

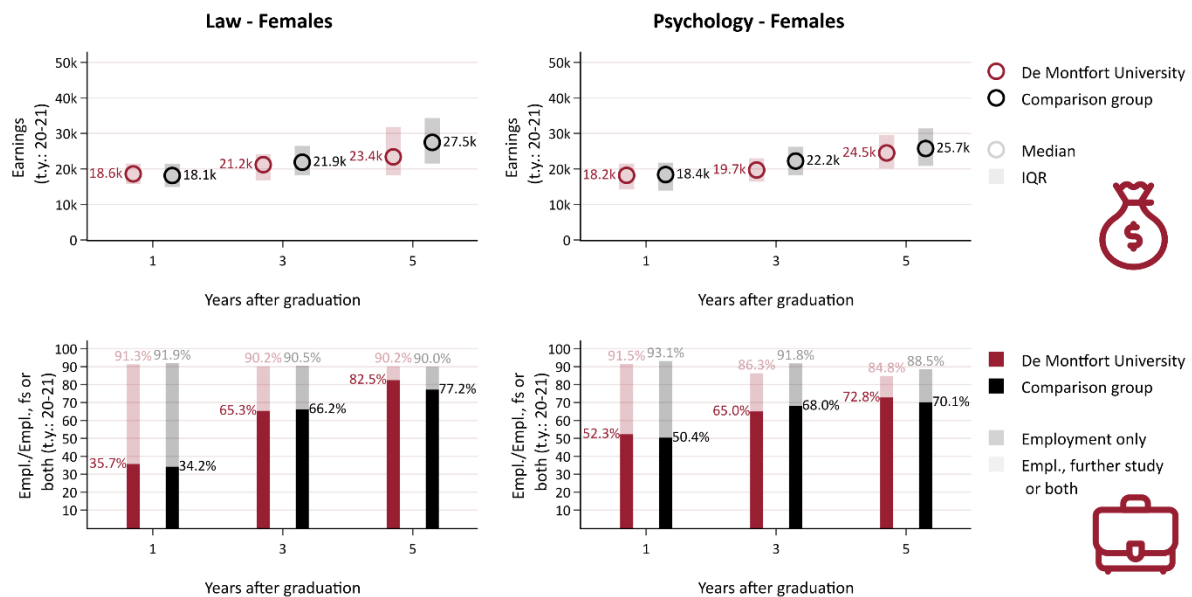
In terms of **median annual earnings**, the analysis suggests a substantial gap between DMU graduates compared to graduates from HE providers in the comparison group. The gap is persistent across all cohorts and widens as we move from more recent graduation cohorts to older ones (and

it is likely to be driven by the high proportion of graduates in Engineering and Technology from Loughborough University (who typically have higher earnings)).

Looking at **employment outcomes**, the analysis suggests a higher tendency of DMU graduates to remain in education one year after graduation compared to graduates in the comparison group (this result is common across most subject areas). However, at 3 and 5 years after graduation, the proportion of graduates in sustained employment only is similar for DMU graduates and graduates from HE providers in the comparison group.

Law, and Psychology (females only)

Figure 10 Labour market outcomes of graduates in Law, and Psychology – Females only



Note: Information refers to the tax year 2020/21. The comparison group is formed by all other East Midlands universities (excluding the University of Nottingham). 't.y.' refers to tax year.

Source: London Economics' analysis of LEO Graduate Outcomes data. Icons by www.wishforge.games on freeicons.io.

Figure 10 presents the 2020/21 labour market outcomes of **female first-degree graduates** in **Law** (left) and **Psychology** (right) from DMU or from HE providers in the comparison group, by years elapsed since graduation. The information for males is not presented due to the small number of graduates in this subject area.

Focusing on **female graduates in Law**:

- **Median annual earnings** of DMU graduates are in line with those of graduates from HE providers in the comparison group a 1 and 3 years after graduation (£18,600 vs £18,100 for the former and £21,200 vs £21,900 for the latter). However, a gap of around £4,000 is observed 5 YAG (£23,400 vs £27,500).
- In terms of **employment**, the analysis indicates little difference between DMU graduates and graduates from HE providers in the comparison group, for all three cohorts. Unlike all other subject areas considered in this report, more than 55% of graduates are still in some form of education one year after graduation.

Similarly, for **female graduates in Psychology**,

- **Median annual earnings** of DMU graduates stand at £18,200 for the 2018/19 cohort (1 YAG), £19,700 for the 2016/17 cohort (3 YAG), and £24,500 for the 2014/15 cohort, substantially in line with the median annual earnings observed for graduates in the comparison group.
- There are little differences in the **employment status** of DMU graduates and graduates from HE providers in the comparison group. As for Law, a relevant (albeit smaller) proportion of graduates is still in some form of education one year after graduation. This proportion declines as we move to older cohorts.

5 What is the graduate premium in the East Midlands?

In this section, we use data from the quarterly **UK Labour Force Survey** to investigate the **difference in real hourly earnings** between **first-degree graduates living in the East Midlands** (and holding a first degree as highest qualification) and **individuals in possession of any Level 3 qualification** (which is the standard requirement for university admission)¹¹. The percentage difference in earnings across the two groups was estimated using a regression model controlling for individual-level characteristics and then translated in monetary terms (£ per hour) based on the average hourly earnings paid to individuals in possession of Level 3 qualifications (baseline or counterfactual group).

The version of the LFS used does not contain information by university of graduation, so the analysis was undertaken considering earnings for all first-degree graduates living in the East Midlands (irrespective of university of graduation). To obtain large enough sample sizes, we pooled together all LFS quarters between 2010 quarter 1 and 2023 quarter 4 and consider all working-age individuals (aged between 21 and 65). The analysis considered graduates in different subject areas separately, but with a slightly different classification compared to the one used in the LEO analysis (as LFS categories follow a different classification and we had to aggregate similar subject areas together to obtain robust estimates).

The ‘**average return**’ was generated by **weighing the estimated coefficient for each subject area by the share of DMU graduates in that subject** (for males and females separately), based on the 2018/19 graduation cohort (from the LEO data presented in Figure 2). This means, for example, that Medicine and Dentistry graduates are assigned a zero weight and not included in the analysis (as Medicine and Dentistry qualifications are not offered by DMU), while Social Sciences graduates (including also those with a degree in Law or Business and management) have a large weight as they represent the largest category of DMU graduates. Below we recap the different steps undertaken in the analysis.

- | | |
|---------------|---|
| Step 1 | Consider all working-age LFS respondents living in the East Midlands and holding a first degree as highest qualification. Use as comparison group East Midlands residents holding any level 3 as highest qualification held. |
| Step 2 | Estimate the earnings differentials (for males and females separately) as the percentage difference in real hourly earnings between first-degree graduates in different subject areas and those holding any Level 3 qualification , controlling for personal (age, ethnic background, marital status, number of children, disability status), job characteristics (full-time or part-time, whether in |

¹¹ We excluded those with a single A level or AS levels only (as individuals holding these qualifications are unlikely to meet the eligibility criteria for university admission.)

Step 3

a temporary job, public or private sector, workplace size region of work) and time dummies (over the period 2010-2023).

Step 4

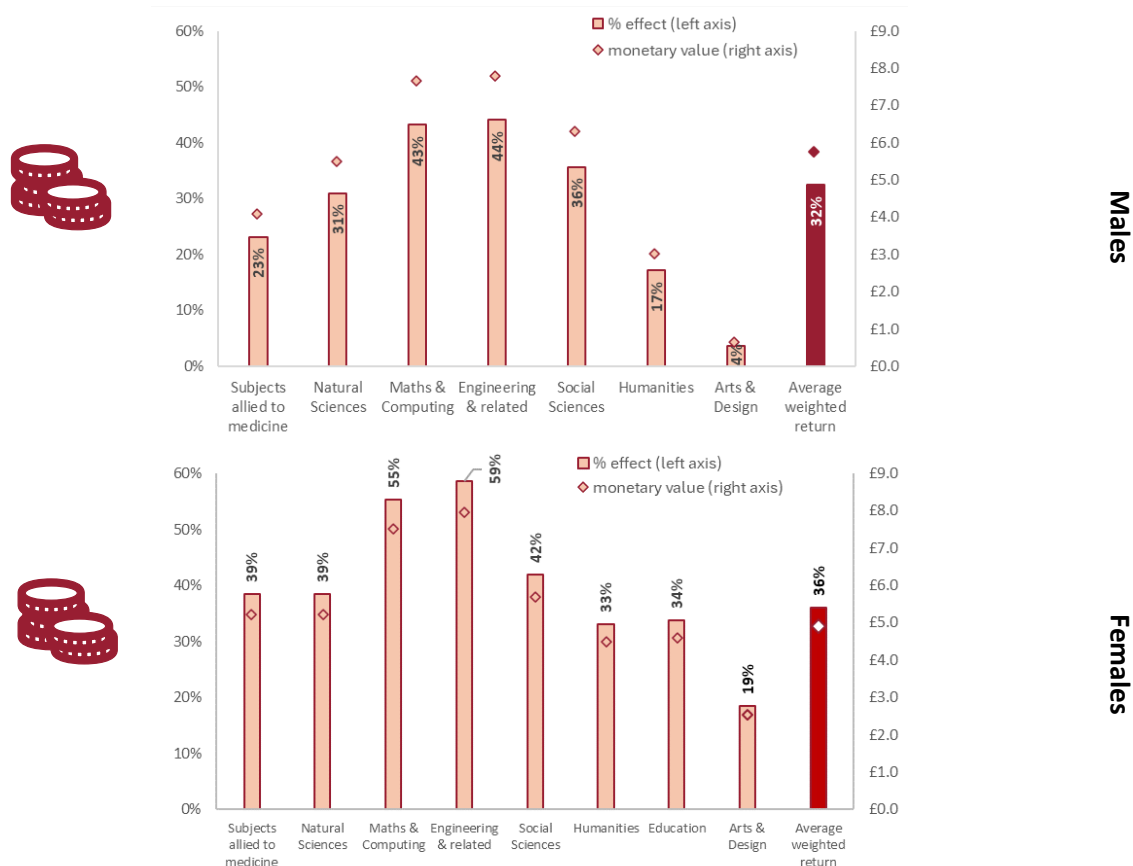
Generate an 'average' return applying as weights the proportion of DMU graduates in different subject areas (using information from the LEO data).

Convert these earnings differentials into monetary values, based on the average hourly earnings observed for the comparison group (any level 3).

The findings from the analysis are presented in Figure 11 and show strong earnings differentials for graduates, in particular those with a degree in Maths and computing, Engineering and Social Sciences qualifications. The earnings percentage differential is always higher for females compared to males, but that does not necessarily translate into a higher monetary value, as the comparison group (those holding a Level 3 qualification) have lower average hourly earnings compared to males (£13.40 for females compared with £17.40 for males).

The **average earnings differential for male graduates living in the East Midlands** (applying DMU subject weights) stands at **32%**, while the corresponding differential for **females** stands at **36%**. In **monetary terms** (considering the average earnings of the comparison group) this translates into **£5.70 in additional hourly earnings for 'typical' male DMU graduates** and **£4.90 in additional hourly earnings for 'typical' female DMU graduates** (expressed in March 2024 prices).

Figure 11 Earnings differentials for first-degree graduates compared to Level 3



Note: All earnings are adjusted using CPI and expressed in March 2024 prices. Percentage effect on the left axis and the corresponding monetary value on the right axis. East Midland residents only. Weighted by the proportion of DMU graduates across different subject areas in the 2018-19 LEO cohort.

Source: London Economics' analysis of Labour Force Survey data 2010-2023, ONS' CPI and DfE LEO.

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Annex 1 Additional tables

Table 3 Regional distribution of graduates 1 year after graduation by HE provider (tax year 20/21, graduation cohort 2018/19)

	De Montfort University	Comparison group	Bishop Grosseteste University	Loughborough University	The Nottingham Trent University	The University of Leicester	The University of Lincoln	The University of Northampton	University of Derby
East Midlands	46.9%	38.5%	71.1%	18.2%	41.1%	26.6%	39.5%	41.1%	56.7%
East of England	10.3%	12.6%	10.8%	14.8%	14.0%	11.1%	16.7%	13.4%	5.0%
London	13.5%	11.2%		17.4%	9.8%	21.2%	4.3%	17.4%	3.6%
North East	0.6%	1.1%		1.0%	1.1%	1.1%	1.7%	0.7%	1.1%
North West	2.5%	4.1%		6.0%	4.6%	5.0%	3.8%	1.2%	3.4%
Rest of UK	1.5%	1.6%		3.3%	1.3%	1.4%	2.0%	0.9%	1.0%
South East	6.6%	10.0%		18.9%	8.3%	12.3%	7.1%	13.6%	4.7%
South West	1.8%	2.9%		6.5%	2.0%	3.2%	2.6%	2.3%	1.9%
West Midlands	13.2%	10.7%		9.3%	12.6%	12.7%	5.5%	7.5%	15.7%
Yorkshire and the Humber	3.2%	7.2%	18.1%	4.6%	5.2%	5.4%	16.9%	1.9%	6.8%

Source: London Economics' analysis of LEO Graduate Outcomes data.

Table 4 Regional distribution of graduates 3 years after graduation by HE provider (tax year 20/21, graduation cohort 2018/19)

	De Montfort University	Comparison group	Bishop Grosseteste University	Loughborough University	The Nottingham Trent University	The University of Leicester	The University of Lincoln	The University of Northampton	University of Derby
East Midlands	50.6%	36.9%	70.2%	17.0%	37.7%	25.2%	36.6%	44.2%	53.6%
East of England	7.8%	13.0%	11.5%	14.1%	13.1%	13.0%	17.9%	15.6%	5.0%
London	11.6%	12.8%		22.3%	13.4%	18.9%	7.4%	13.5%	4.0%
North East	0.6%	1.0%		1.1%	1.1%	1.1%	1.8%		0.9%
North West	2.8%	4.7%		6.0%	5.8%	6.1%	4.0%	1.4%	4.0%
Rest of UK	1.3%	1.5%		2.9%	1.3%	2.4%	1.4%	0.0%	1.5%
South East	6.4%	10.1%		18.8%	7.9%	12.2%	7.0%	15.1%	4.8%
South West	1.8%	2.9%		5.1%	2.6%	3.7%	3.2%	1.6%	1.8%
West Midlands	13.8%	10.0%		8.6%	11.9%	11.5%	4.0%	7.3%	16.7%
Yorkshire and the Humber	3.3%	7.1%	18.3%	4.2%	5.3%	5.9%	16.6%	1.4%	7.7%

Source: London Economics' analysis of LEO Graduate Outcomes data.

Table 5 Regional distribution of graduates 5 years after graduation by HE provider (tax year 20/21, graduation cohort 2018/19)

	De Montfort University	Comparison group	Bishop Grosseteste University	Loughborough University	The Nottingham Trent University	The University of Leicester	The University of Lincoln	The University of Northampton	University of Derby
East Midlands	48.5%	36.1%	68.1%	15.7%	36.3%	23.7%	37.1%	43.3%	53.6%
East of England	8.2%	11.2%	12.1%	12.5%	10.8%	11.0%	14.8%	12.9%	5.5%
London	13.0%	14.5%		26.6%	16.1%	22.3%	8.7%	12.2%	3.2%
North East	0.8%	1.0%		1.0%	1.0%	0.7%	1.6%	0.7%	1.2%
North West	3.5%	5.1%		6.8%	6.5%	6.1%	4.1%	1.6%	4.7%
Rest of UK	0.6%	1.8%		3.2%	1.4%	1.9%	1.4%	1.6%	2.2%
South East	7.4%	9.3%		15.3%	7.6%	12.2%	6.7%	14.2%	3.8%
South West	2.4%	3.5%		5.8%	2.9%	5.4%	3.2%	2.9%	2.4%
West Midlands	12.4%	10.2%		8.3%	11.7%	11.7%	3.7%	9.0%	17.4%
Yorkshire and the Humber	3.3%	7.3%	19.8%	4.8%	5.8%	4.9%	18.7%	1.6%	6.1%

Source: London Economics' analysis of LEO Graduate Outcomes data.

Table 6 Median earnings 1 year after graduation by region of residence and HE provider (tax year 20/21, graduation cohort 2018/19)

	De Montfort University	Comparison group	Bishop Grosseteste University	Loughborough University	The Nottingham Trent University	The University of Leicester	The University of Lincoln	The University of Northampton	University of Derby
East Midlands	£20,400	£20,400	£19,000	£23,000	£19,300	£21,200	£19,700	£21,500	£20,800
East of England	£19,700	£21,300	£23,900	£25,600	£20,800	£20,800	£19,000	£21,200	£20,400
London	£19,300	£22,400		£26,600	£21,500	£21,900	£22,300	£17,500	£22,800
North East	£14,200	£19,900		£24,100	£18,200	£19,900	£20,600		£18,100
North West	£17,900	£20,700		£25,200	£19,000	£23,400	£19,700	£15,300	£17,500
South East	£20,400	£22,600		£25,200	£21,200	£22,600	£22,300	£21,500	£20,300
South West	£18,600	£22,000		£24,500	£18,600	£22,800	£25,900	£16,400	£19,600
West Midlands	£19,000	£20,100		£23,000	£19,700	£20,400	£18,400	£20,400	£19,300
Yorkshire and the Humber	£19,700	£20,200	£20,600	£24,300	£19,000	£21,200	£18,800	£19,000	£22,600
Total	£19,700	£20,900	£19,700	24,800	£19,700	£21,500	£19,700	£20,800	£20,400

Note: All figures are rounded to the nearest 100.

Source: London Economics' analysis of LEO Graduate Outcomes data.

**Table 7 Median earnings 3 years after graduation by region of residence and HE provider
(tax year 20/21, graduation cohort 2016/17)**

	De Montfort University	Comparison group	Bishop Grosseteste University	Loughborough University	The Nottingham Trent University	The University of Leicester	The University of Lincoln	The University of Northampton	University of Derby
East Midlands	£22,600	£23,500	£22,600	£27,400	£23,000	£25,600	£22,600	£23,700	£23,000
East of England	£24,100	£25,600	£25,600	£31,800	£24,800	£26,600	£23,000	£24,100	£23,400
London	£24,800	£29,500		£33,900	£28,100	£31,000	£26,600	£23,700	£26,300
North East	£20,100	£22,600		£29,900	£20,400	£25,700	£18,100		£22,600
North West	£23,000	£23,500		£29,200	£21,200	£24,800	£21,500	£20,800	£22,600
South East	£25,400	£27,300		£31,400	£26,300	£26,600	£25,900	£24,500	£24,500
South West	£22,600	£24,900		£28,800	£21,200	£29,000	£24,100	£23,700	£19,700
West Midlands	£23,000	£24,300		£27,900	£23,700	£25,900	£23,000	£24,100	£23,000
Yorkshire and the Humber	£20,800	£22,500	£20,600	£29,900	£23,000	£24,800	£20,800	£21,700	£20,800
Total	£23,000	£25,000	£22,300	30,700	£24,100	£26,600	£23,000	£23,700	£23,000

Note: All figures are rounded to the nearest 100.

Source: London Economics' analysis of LEO Graduate Outcomes data.



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