Employability in the Faculty of Arts and Social Sciences

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1 | Executive Summary

Interest in the returns of higher education is at a peak due to recent education reforms such as the increase in tuition fees and the forthcoming Research Excellence Framework. The primary aim of this research was to explore employment outcomes from studies in arts, humanities and social sciences and to benchmark these against studies in other disciplines. This involved considering both the financial and non-financial outcomes from higher education alongside the knowledge, experiences and personal development opportunities that motivated individuals to pursue studies in the arts, humanities and social science fields. This institution-specific approach provides a paradigm by which to discuss the sector-wide implications at a national and international level.

Using data gathered from thousands of Lancaster graduates, the report concludes that:

> Overall, the academic literature investigating the nature, size and significance of private and social economic returns to higher education leads to the conclusion that higher education qualifications generate positive employment outcomes for the individual, as well as positive macro-economic outcomes for the wider economy and society. However, understanding the links of causality between higher education and these positive individual or collective outcomes is a challenging exercise.

> Evidence suggests these links are conditioned by a plethora of interrelated variables including individual ability or demography, subject of study, the quality or reputation of higher education institutions or the equilibrium between higher education graduates' supply and demand within an economy at a particular moment in time; as well as a large number of other unobserved variables that fail to be modelled or be accounted for in the context of empirical research. Most importantly it must be recognised that financial returns represent just one aspect of how higher education can affect individuals and the societies in which they live, and therefore this report reviews and measures both the "value" and the "worth" of higher education.

> While financial rewards are clearly important for arts, humanities and social science graduates, the motivations for study and the associated 'rewards' are more multifaceted than the merely financial. The research conducted for this report demonstrates clearly that FASS students' sought to study subjects they were interested in and enjoyed exploring academically rather than would secure specific forms of employment. Given this pattern of motivation it is as important to ensure that non-financial rewards are clearly weighted in any assessment of the outcomes of studying arts, humanities and social science subjects as these aspects are fore-grounded by students and FASS alumni.

> From survey data of FASS graduates it is clear that both personal development goals and focussed skills development around their chosen career paths are the key elements drawn from their time in full time study. Indeed, many alumni acknowledge that employers need and value the skills that are developed during their degrees while also emphasising that their knowledge of the world in which they live is the most important aspect of what they have learned.

> These conclusions are reinforced by the interviews undertaken as part of the research, which also suggest that studying arts, humanities and social sciences offers the potential for an individual to develop a broad platform of knowledge, capabilities and behaviours which will greatly assist their entry into the labour market. Equipped with this blend of skills, and with ample drive and confidence, FASS graduates and postgraduates are able to 'open doors' in a difficult labour market and secure a fulfilling job, while also contributing to the well-being of themselves and society more widely.

In light of business requirements for graduates with increasingly global attributes, government needs to work collaboratively with institutions to better understand the value of such disciplines and the wider impact of FASS-subjects on an individual's holistic development – beyond merely the economic – and devise means to capture these impacts effectively.

2 | Introduction

This section describes our research objectives and outlines the methods implemented to address them.

Estimating the value of higher education has been a key focus of academics and policy-makers over recent times. However, it is arguable that interest in the returns of higher education is at a peak due to recent education reforms such as the increase in tuition fees and the forthcoming Research Excellence Framework. The purpose of this research was to provide additional empirical evidence to explore the value of higher education for individuals and wider society.

This research was commissioned by the Faculty of Arts and Social Sciences (FASS) at Lancaster University. The primary aim of this small-scale study was to explore employment outcomes from studies in arts, humanities and social sciences and to benchmark these against studies in other disciplines. This involved considering both the financial and non-financial outcomes from higher education alongside the knowledge, experiences and personal development opportunities that motivated individuals to pursue studies in the arts, humanities and social science fields. This institution-specific approach will provide a paradigm by which to discuss the sector-wide implications at a national and international level.

The overarching research aim comprises the following:

> to review existing literature and research around the returns on arts, humanities and social science related degrees to higher education;

> to investigate the employability and employment-path patterns of FASS alumni; and

> to discuss the benefits of FASS-related degrees to society.

Method

A four-stage methodology was implemented:

Stage 1 – Returns to higher education: a literature review

We reviewed academic literature mainly produced within the econometrics of higher education discipline to explore the existing knowledge-base in relation to the monetary value of higher education for the individual and society. Following a bespoke request placed with an expert librarian at the University of Derby, we collected a body of influential academic papers dating from the late 1990s to the present day. The papers were evaluated against our specific inclusion criteria which included journal ranking, number of citations and date of publication. They present the outcomes of mainly UK and USA based research that focuses on higher education private returns, wage premia, and social returns. Our review represents a synthesis of this existing literature. The full bibliography can be found in Appendix I of this report.

Stage 2 – Financial outcomes of studies at FASS: secondary data analysis

We statistically interrogated a total of 3,942 alumni records provided by Lancaster University to explore the financial outcomes of FASS alumni and compare these against alumni from other faculties at the university including the Faculty of Science and Technology (FST) and the Lancaster University Management School (LUMS)[1]. Records were selected based on graduation

[1] In addition to the 3,942 records from FASS, FST and LUMS, the available data included a total of 84 analysable records from the Faculty of Health and Medicine (FHM). The limited size of the sample for FHM is reflective of the age of the faculty which opened as recently as in August 2008. As the number of available records from FHM stands significantly lower than that for the other faculties at Lancaster University, we have excluded them from the scope of the analysis presented in this report.

date and availability of personal income data. Individuals who graduated before the year 2000 were excluded from our sample to minimise the effects of overtime differences in data-capture methods and maximise the comparability of available data. The period of time when income data was captured post-graduation from Lancaster University varies within the sample. As it cannot be identified based on available information, all records pre-2000 were excluded from our analysis to help ensure comparability. Moreover, our sample excludes records where personal income has not been recorded as this is the target variable in our analytical approach. A description of the sample is provided in Appendix II.

Records provided by Lancaster University were modified to make them amenable to statistical analysis; this included coding and banding data, as well as amending inconsistencies inherent to the dataset. Our analysis has focused on the distribution of graduates' income across and within Lancaster University faculties against a number of alumni characteristics. These include demographic background (gender, age and continent of origin) and higher education background (level of study, qualification awarded and graduation year).

Our analytical approach focuses on identifying income differentials. All variables included in the dataset for analysis are categorical (due to data-collection practices at Lancaster University); as a result, observed disparities across examined income-level distributions are tested for their statistical significance by means of χ^2 Test (a=0.01)[2]. Only statistically significant findings are reported. To estimate the strength of association between cross-tabulated categorical variables, our analysis reports association measurements including *Cramer's V*[3].

To identify predictors of income levels, our analysis employed the Chi-square Automatic Interaction Detection (CHAID) heuristic decision-tree method. This method explores and identifies variables or combinations of variables that most closely predict individual income levels. These variables refer to alumni's demographic and higher education background.

Stage 3 – Non-financial returns of higher education: an online survey of alumni

A short online survey was designed and administered to a random sample of 7,955 FASS alumni. In total, 1,125 responses were received representing a 14.1 per cent response rate. The survey explored a number of key themes to supplement our secondary data analysis, including motivations to study an arts, humanities or social science related degree; outcomes of studies at Lancaster University; and wider perceptions of arts, humanities and social science related degrees. Where possible, data regarding the gender, level of study and age of alumni was appended to our primary dataset from alumni records provided by Lancaster University and used to inform a more in-depth analysis of the survey findings. Our analysis presents frequencies and cross-tabulations; only statistically significant differences are reported by means of χ^2 Test (a=0.01).

Stage 4 – Alumni and academic views on the employability of arts, humanities and social sciences: in-depth interviews

We undertook in-depth interviews lasting up to one hour with 15 FASS graduates and three members of FASS academic staff. These explored respondents' views in relation to individual, wider economic and social returns on studies at FASS. Alumni interviewees were randomly selected from the alumni database, while academic staff was sampled in consultation with the project's Steering Group.

[2] Outcomes of the significance tests can be found within the main body of the report.
[3] Association measurements equal to (or larger than) 0.30 are generally deemed as strong, between 0.20 and 0.30 are generally deemed as moderate, and lower than 0.20 are considered as weak.

Report structure

The remainder of this report is structured as follows: **Section 2** presents the findings of our literature review whilst **Section 3** outlines the results of our secondary data analysis. **Section 4** summarises our descriptive and inferential statistical analysis of our online survey of alumni, and **Section 5** provides a synthesis of the themes emerging from our in-depth interviews with alumni and academic staff. **Section 6** outlines our conclusions.

Appendix I presents our bibliography, and **Appendix II** provides a description of our sample. Finally **Appendix III** provides a decision-tree visualisation of our CHAID analysis undertaken at Stage 3 of our methodology.

Acknowledgements

The research team would like to thank Professor C. May for his insightful comments and guidance throughout all phases of this research. We are also grateful to F. Wareing, M. Colclough, D. Richardson, C. Stevenson, J. Evans, H. Hardie, N. Fragel and P. Graves for their support during the implementation of our research methods. We would also like to thank the FASS academic staff members and alumni who informed our research.

3 | Returns to higher education: a literature review

This section presents a synthesis of findings from our review of literature relating to the econometrics of higher education.

The concept of "returns to higher education" stands at the epicentre of academic production in the econometrics of higher education discipline (Ehrenberg, 2003). Psacharopoulos (2009) distils definitions for several types of returns, including private and social returns; the two returns concepts most frequently cited in relevant literature.

Private returns represent an indicator which is calculated by looking at the costs and benefits that individuals gain by receiving higher education. The indicator illustrates the after-tax earnings afforded by individuals that have received higher education against the costs incurred attending a higher education institution relative to a group of individuals that did not pursue equivalent studies. Social returns, on the other hand, assess the efficiency of public spend on higher education. Their calculation is based upon the costs and benefits as realised by society as a whole. In this case, costs comprise the full costs of higher education and benefits reflect productivity differentials (Psacharopoulos, 2009).

However, a large number of research studies that claim to have approached returns to higher education qualifications implement methodologies that do not account for the magnitude of costs incurred by individuals pursuing higher education. Such estimations, identified by Psacharopoulos (2009) as *pseudo-returns*, estimate wage effects or differentials. In other words, they identify the earnings advantage or wage premium afforded by specific graduate groups.

Higher education private returns and wage premia

From the early 1990s, there has been a proliferation of interest in exploring private returns to higher education or higher education wage premia. Despite variations, empirical findings are highly consensual and consistently suggest that higher education employment outcomes are positive, sizable and significant. This is applicable across different higher education systems, economies or moments in time (see for example Arcidiacono, 2003; Blundell et al., 2000; Blundell et al., 2001; Blundell at al., 2003; Brewer et al., 1999; Chevalier, 2011; Conlon et al., 2011; Eide, 1997; Hilmer, 2000; Husain et al., 2009; Kelly et al., 2010; Light et al., 2004; O'Leary et al., 2005; O'Leary et al., 2008; Psacharopoulos, 2009; Walker et al., 2003; Walker et al., 2010).

However, as Blundell et al. (2000) note, disentangling the effects of undertaking higher education studies on individual earnings from the effects of other factors is not a straightforward exercise. Methodological limitations relating to the selection of individual-level data (Ehrenberg, 2003) and missing or unobserved parameters that possibly affect the earnings outcomes of higher education (Blundell et al., 2000) are likely to induce biases in the estimations of higher education impact on earnings. For the above reasons, a long-standing issue in the literature of econometrics of higher education is to understand not only the magnitude of private returns to higher education, but also the potential role of other parameters that possibly intermediate observed returns. Such parameters include institutional and individual characteristics.

Institutional status

The role of higher education institution status in determining the magnitude of returns to higher education or of higher education wage premia is underlined by several empirical studies. Based on USA labour market data, Brewer et al. (1999) illustrate that attending an elite

institution is associated with a significantly larger wage premium when compared to a middle or low-rated institution. Monks (2000) further confirms the disparity of earnings amongst USA higher education graduates in relation to the status of the institution where they studied, with graduates from elite institutions tending to earn more than those who attended less prestigious institutions.

UK based research conducted by Chevalier et al. (2003) generalises the above findings to the UK labour market. The authors highlight the role of institutional quality and prestige in future earnings through reference to findings which illustrate that graduates from elite Russell Group institutions experience significantly higher returns compared to their peers from less prestigious institutions. A more recent study by Husain et al. (2009) approaches the subject by accounting for institutional quality through a number of institutional performance indices. Calculated on Higher Education Statistics Agency data, these indices include the research assessment exercise score, faculty to student ratio, institutional retention rates, the total tariff score and the mean faculty salary and expenditure per pupil. This research confirms and enhances previous findings by identifying a positive return to attending a higher quality institution. Analysis shows that graduates from institutions in the upper quartiles of the quality distribution appear to afford significantly higher wages than graduates from institutions in the lower quartiles. What is more, analysis also indicates that returns to institutional quality have the propensity to increase over time.

However, Husain et al. (2009) argue that studies exploring how institutional status predicts employment outcomes may be vulnerable to bias brought about by individual characteristics and ability. Under the assumption that students with higher ability may be more likely to select or be selected by elite institutions, it is possible that part of elite-institution graduates' higher wage premia may be explained by their higher ability rather than institutional status itself.

Individual ability

In spite of the challenges in quantifying ability or even in accessing databases that include ability measurements, the role of individual ability in determining academic attainment and, consequently, future employment outcomes such as private returns or wage premia has been established in several studies. Blundell et al. (2000) underline the role of numeric and verbal ability in explaining employment outcome variations amongst UK graduates. According to the researchers, good performance in maths and reading ability tests at the age of seven is found to be associated with a higher chance of completing a first or higher degree and with a lower chance of completing a non-degree course or no course at all. In a later study, Blundell et al. (2003) further emphasise the role of individual ability variables in understanding returns to higher education qualifications in an unbiased way. Their analysis shows that, even though returns remain sizeable and significant after controlling for ability variables, ability factors reduce estimations of overall returns to higher education. This means that even though graduates tend to earn more than non graduates, differences in earnings between graduates and non graduates with similar ability levels tend to be much more moderate.

Demography

Demographic variables have also been the focal point of several studies in relevant literature highlighting the role of family and socio-economic background, gender, ethnicity, geography or education attendance patterns as determinants of higher education returns or of afforded wage advantages. Using British Birth Cohort panel data to explore how degree level qualifications impact on individual medium and long-term earnings, Blundell et al. (2000) compared individuals with higher education qualifications against individuals who obtained at least one A' Level qualification but did not go into higher education. They find that family background, to some extent, predicts educational attainment, with men from families with a higher number of siblings or men higher in the birth order being more likely to have achieved higher education qualifications. Empirical evidence, however, does not suggest that sibling variables predict educational attainment for females; a finding that underlines the importance of accounting for gender when approaching higher education employment outcomes.

Further exploring employment differentials related to gender, Blundell et al. (2000) report that higher education qualifications are not significant predictors of men's employment or self-employment rates. However, the authors observe that women with higher education qualifications are more likely to be employed than women with just A' Levels. Their analysis also indicates that returns to higher education degrees are consistently higher for women than for men. This finding gains further empirical support by a recently published study which suggests that returns to both undergraduate and postgraduate degrees are significantly higher for females than for males (Conlon et al., 2011).

Looking at the relationship between ethnicity and the higher education wage premium, Coleman (1993) found that wage premia are significantly higher for white men and women than for black men and women respectively. In addition, the study found that white women also afforded a higher wage premium than black men. However, in a more recent study, Monks (2000) suggests that white graduates experience lower returns when compared to non-white graduates. According to the same study, returns to postgraduate higher education qualifications are not differentiated by ethnic background. Based on these contradicting findings, it could be hypothesised that the role of ethnic background in relation to higher education returns or wage advantages has possibly undergone significant changes as social values relative to ethnic diversity evolve. This might not be the case in relation to socio-economic background, however, as Brand et al. (2010) evidence that men and women from a lower socio-economic background, who – as the authors observe – are most likely to benefit from a higher education qualification, are the least likely to obtain one.

Geographical factors induce significant disparities in higher education premium wages across UK regions for both male and female graduates according to O'Leary et al. (2008). Empirical evidence shows that return rates in London are more than double compared to any other region. The authors observe, however, that regional living cost disparities significantly account for variations in regional returns to higher education qualifications. For the majority of other regions, returns are largely comparable, with the South West being the only exception mainly because of highly unfavourable living costs (O'Leary et al., 2008).

Looking at the impact of educational attendance patterns on higher education returns, we find evidence that men who started but did not complete a higher education course, as well as men who started their studies in higher education later in life, earn less than those who started earlier. Both findings are not replicated for females (Blundell et al., 2000). Furthermore, Green et al. (2010) illustrate the role of over-qualification in relation to wage premia by finding that over-qualification induces significant wage penalties. However, the authors provide evidence that graduates in non-graduate jobs who do not report underutilisation of their skills (formal over-qualification) tend to experience less severe wage penalties in comparison to those in non-graduate jobs who underutilise their graduate skills (real over-qualification).

Studied subject

Monetary disparities in higher education premia or private returns depending on subject studied have drawn great research interest in relevant literature. Arcidiacono (2003), for example, in a USA based study observes that such disparities are in favour of those studying natural science and business science subjects. In a study that focuses on the Irish labour market, Kelly et al. (2010) find that graduates from medicine, veterinary, education, engineering, architecture, science, and computers and information technology are awarded the highest wage premia. Looking at data from the UK Labour Force Survey, Walker et al. (2003) suggest that individuals studying law, management or economics disciplines are likely to be afforded higher private returns than other graduates in the UK labour market. Acknowledging that ability disparities or other unobserved factors could be inducing biases in their observations, in a more recent study Walker et al. (2010) support a similar thesis. They find that studies in law, management and economics enhance wage premia for male graduates, while subject studied introduces insignificant variations in female graduates' earnings. Similar gender differentiations in relation to higher education subject returns have also been underlined by previous research. Blundell et al. (2000), for example, have argued that men with higher

education qualifications in biology, chemistry, environmental sciences and geography have significantly lower returns than for women with degrees in education, economics, accountancy, law and social sciences.

Interrogating UK Labour Force Survey data from the mid 1990s until 2009, Conlon et al. (2011) argue that medicine and dentistry degrees maximise higher education returns within the UK labour market for both men and women, while studies in mathematical and computer science, law, social studies, business studies, engineering and architecture are also related to returns above the average level. The authors argue that studies in linguistics or languages, biology, creative arts, historical and philosophical studies are linked to more limited employment prospects, as well as to relatively lower yet positive returns. They conclude with the finding that higher grade of honours, as well as postgraduate titles including Master's and Doctorate degrees, add significant extra wage advantages.

Chevalier (2011), surveying a cohort of UK graduates to investigate labour market attainment by subject of study, adds an interesting dimension to the discussion around the role of studied discipline. Using data from the Longitudinal Destinations of Leavers from Higher Education survey, he identifies a large heterogeneity in UK wages by studied subject, with health, science, and social science graduates earning more than education, humanities and arts graduates, while medicine graduates are found to earn more than any other graduate group. What is perhaps more interesting is his empirical evidence which suggests a large dispersion in wages within subjects themselves. The researchers argue that graduates who have studied a particular subject and possess strong ability characteristics may earn twice as much as those who have studied the same subject but have weaker ability characteristics. What is more, graduates who have studied a lower-paying humanities subject (such as psychology, for example) but have strong ability characteristics may be earning more than graduates who have studied high-paying disciplines (such as medicine) but have weaker ability characteristics. In fact, the authors argue that earnings diversity within subjects appears to be larger than earnings diversity across subjects (Chevalier, 2011) indicating that factors other than subject studied play a more central role in predicting employment outcomes.

The magnitude of private returns to higher education or of higher education premia has also been addressed in the context of supply and demand for higher level skills. While Walker et al. (2003) claim that the expansion in graduate supply keeps up with a growing demand, in a more recent study Moffit (2007) suggests that higher education returns decrease as the proportion of the population enrolling in higher education increases. In line with Moffit's (2007) observation, O'Leary et al. (2005) evidence impact on UK higher education wage premia driven by increases observed in the supply of graduates. Their analysis of Labour Force Survey data illustrates that there has been some moderation of the financial outcomes awarded to UK graduates; moderation primarily apparent within the stock of female graduates. The researchers argue that increases in demand for higher level skills may not have compensated for increases in graduate supply. They also emphasise that declines in wage premia are differentiated by the subject of study, with studies in maths, computing, engineering or technology only experiencing small identifiable premium changes in relation to other studies.

Overall, empirical evidence suggests that the continuing expansion of the supply of graduates is likely to be introducing downward trends to higher education wage premia. Based on existing literature, such trends may vary in relation to graduates' demography or subject studied (O'Leary et al., 2005). Given the significant expansion of higher education in the UK in the last 20 years, further research to explore the scale of the reduction in returns to higher education is required. According to Moffit (2007), the development of new, refined methods may be necessary to accurately capture the scope and magnitude of possible declines in higher education wage premia.

Findings seem to imply that the role of studied discipline as a determinant of employment outcomes is highly situational and intermediated by a large variety of factors including ability (Chevalier, 2011), demography (Blundell et al., 2000; Walker et al., 2010) or labour market specificities and the wider economic context (Arcidiacono, 2003; Kelly et al., 2010; Moffit, 2007;

O'Leary et al., 2005; Walker et al., 2003). Harvey (2000) lends support to this by challenging the role of subject as a predictor of employment outcomes and returns highlighting that the majority of vacancies filled in the UK do not require a degree in specific disciplines. Subject-specific knowledge is not the factor that primarily determines employment suitability for most graduate employment, with medicine and engineering being the main exceptions (Harvey, 2000).

Higher education social returns

Moretti (2004) observes that, despite the extensive theoretical literature that assumes that higher education has a significant and positive impact on the wider society, there is limited hard macro-economic evidence on the magnitude of this impact. However, his research adds significant evidence to indicate that spillovers or externalities from higher education are not just anecdotal. His evidence suggests that increases in the supply of higher education graduates has had a significant positive effect, not only on higher education graduates' wage levels, but also on high-school drop-outs' and school leavers' wage levels. Under the assumption that higher educated and lower educated workers are imperfect substitutes within labour markets, an increase in the share of the former will raise productivity within the share of the two latter groups. In addition, Moretti's (2004) analysis estimates that positive effects are larger for groups in the labour market that hold lower-level educational qualifications. A study by Canton (2007) which explored social returns to higher education within a macroeconomic framework reaches similar findings. This further highlights that a one-year increase in the average education level of the labour force has a significant upward impact on short-term and long-term overall productivity.

The Organisation for Economic Co-operation and Development (OECD) in a recently published report emphasises the wider economic and social impact of higher education. According to the OECD (2011), adults with higher levels of educational attainment are generally more likely than adults with lower levels of educational attainment to exhibit greater satisfaction in life. The same report identifies links between education levels and civic and social engagement such as electoral participation, political interest and participation in volunteering after controlling for demographic and income differences in the population. A report published by Million+ (2011) further underlines ways through which higher education contributes to economy and society by adding new scientific discoveries and ways of working and living, generating new ideas, creating wealth and improving quality of life outcomes.

Discussion

Overall, academic literature investigating the nature, size and significance of private and social economic returns to higher education leads to the conclusion that higher education qualifications generate positive employment outcomes for the individual, as well as positive macro-economic outcomes for the wider economy and society.

However, understanding the links of causality between higher education and these positive individual or collective outcomes is a challenging exercise. As empirical evidence suggests, these links are conditioned by a plethora of interrelated variables including individual ability (Blundell et al., 2000; Blundell et al., 2003) or demography (Blundell et al., 2000; Brand et al., 2010; Conlon et al., 2011; Green at al., 2010; Monks, 2000; OECD, 2011; O'Leary et al., 2008), subject of study (Arcidiacono, 2003; Blundell et al., 2000; Chevalier et al., 2011; Conlon et al., 2011; Kelly et al., 2010; Walker et al., 2003; Walker et al., 2010), the quality or reputation of higher education institutions (Brewer et al., 1999; Chevalier et al., 2003; Husain et al., 2009; Monks, 2000) or the equilibrium between higher education graduates' supply and demand within an economy at a particular moment in time (Moffit, 2007; O'Leary et al., 2005; Walker et al. 2003). What is more, causality between higher education studies and improved private and social returns may also be intermediated by a large number of other unobserved variables that fail to be modelled or be accounted for in the context of empirical research. Ongoing research in different contexts and through different methods is, therefore, crucial to help understand the

processes through which higher education affects the world at the individual and wider social level and to take into account how these processes may vary depending on the dynamics of graduate supply and demand within the labour market.

Whilst the monetary impacts of higher education are extremely topical in the context of current education policy, it must be remembered that financial returns represent just one aspect of how higher education can affect individuals and the societies in which they live. Alongside understanding the monetary returns to higher education, it is important to explore non-monetary returns and generate empirical evidence in relation to their nature, quality and importance to the individual and to society. Approaching and measuring both the "value" and the "worth" of higher education is the focus of our research, the findings from which are outlined in the sections that follow.

4 | Income distribution by faculty

This section explores the distribution of income by faculty in relation to demographic characteristics and higher education background.

Income levels

Figure 1 illustrates that over two-fifths (45.2%) of Lancaster University alumni who graduated between 2000 and 2010 were earning over £20,000 per year at the time they were surveyed. Over one-fifth (21.5%) were earning £30,000 or more.

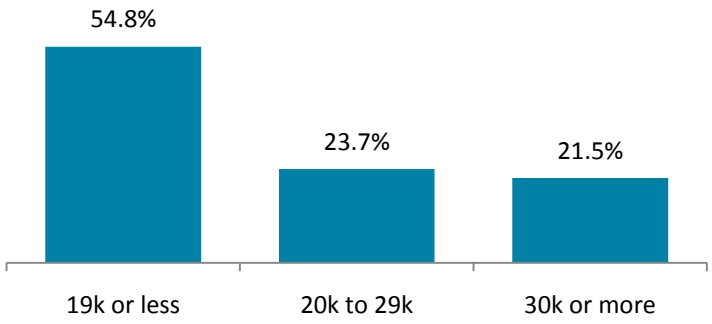

Figure 1: Overall income distribution; base=3,942

Income by faculty

Analysis identifies a strong association between graduates' income level and the faculty where they studied. Figure 2 illustrates that a higher proportion (40.6%) of individuals earning £30,000 or more per year are found within LUMS alumni. The income-level distributions of FASS and FST graduates are largely comparable.

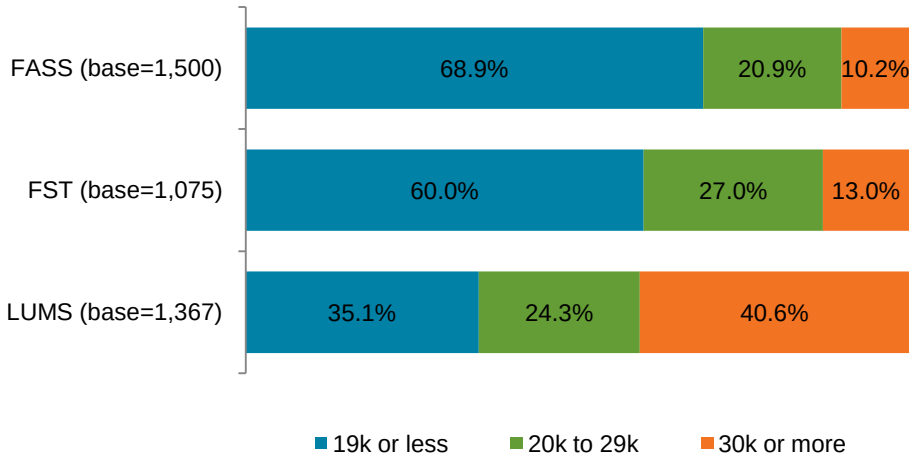

Figure 2: Income distribution by faculty [χ^2=523.651, *df*=4, *p-value*<0.01; *Cramer's V*=0.364]

Income by faculty and gender

Analysis identifies a moderate association between income level and faculty for both men and women. The proportion of male graduates earning over £30,000 per year at the time they were surveyed is almost double the proportion of female graduates across all faculties (Figure 3 and

Figure 4). Furthermore, data indicates that just under three-quarters (73.8%) of female FASS graduates earn up to £19,000 at the time they were surveyed. The equivalent proportion for males is 14.5 percentage points lower. Income levels for FASS and FST alumni are largely comparable both within the female and male population. However, LUMS graduates – and especially males – are more likely to earn £30,000 per year or more than graduates from other faculties.

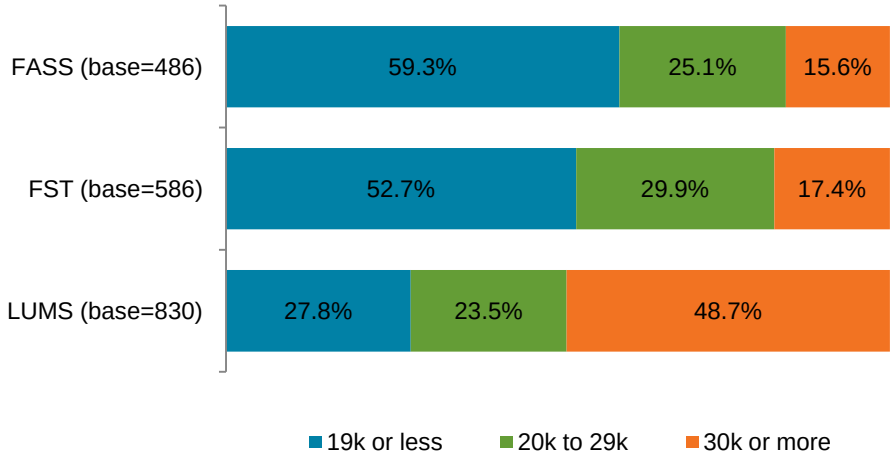

Figure 3: Income distribution by faculty for male graduates [χ^2=249.046, *df*=4, *p-value*<0.01; *Cramer's V*=0.256]

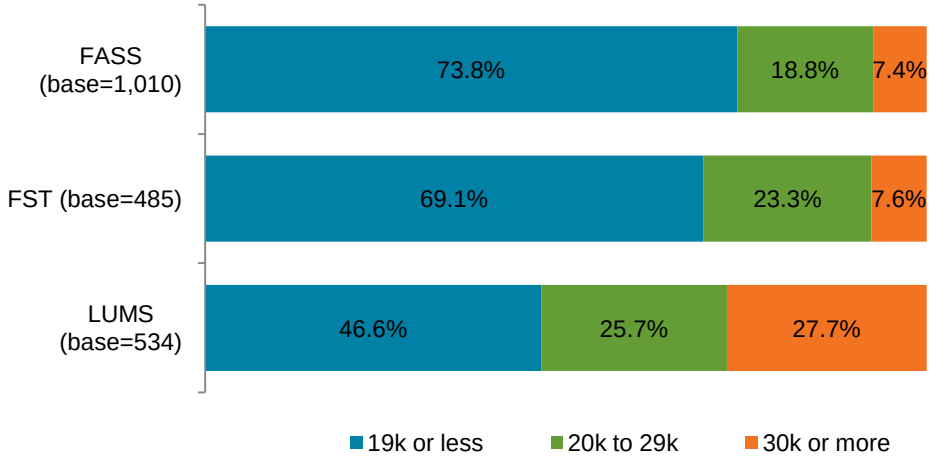

Figure 4: Income distribution by faculty for female graduates [χ^2=174.406, *df*=4, *p-value*<0.01; *Cramer's V*=0.207]

Income by faculty and age

Within graduates up to 30 years of age, analysis reveals an association of moderate strength between income level and faculty, with FASS alumni including the largest proportion of graduates earning up to £19,000 per year (74.1%). The link between faculty and income level is deemed as weak when analysis focuses on individuals of 31 to 35 years of age. However, for alumni of 35 years of age or older, this association proves strong. In this age band almost three-quarters (73.6%) of LUMS alumni earn £30,000 per annum or more, while almost one-third (31.4%) and one-quarter (23.3%) of alumni from FST and FASS respectively reported such earnings when surveyed (Figure 5, Figure 6 and Figure 7).

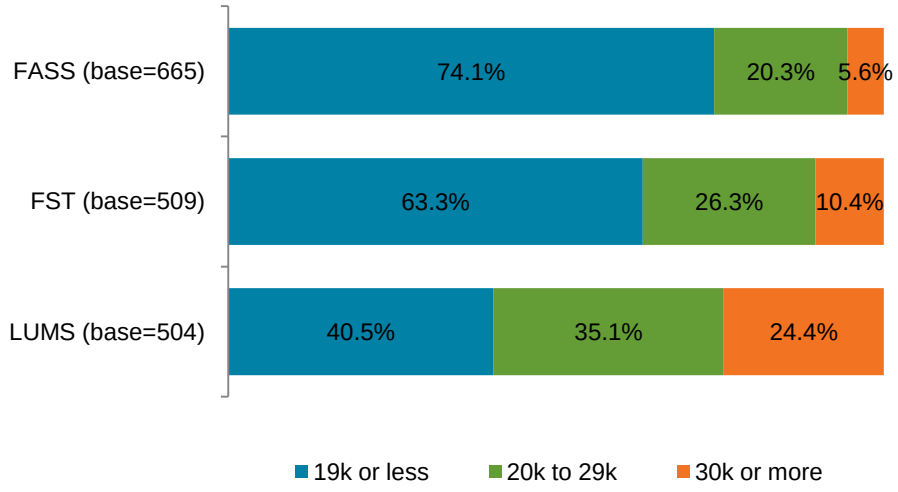

Figure 5: Income distribution by faculty for graduates of up to 30 years of age [χ^2=161.137, *df*=4, *p-value*<0.01; *Cramer's V*=0.219]

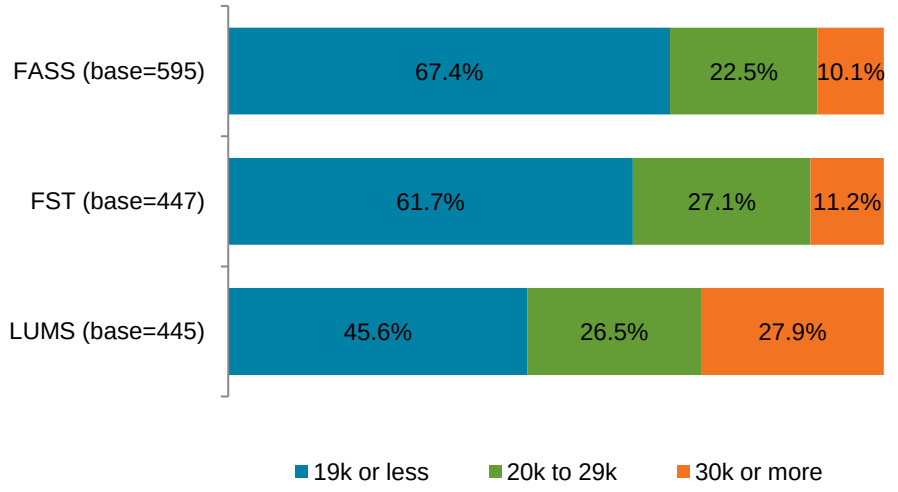

Figure 6: Income distribution by faculty for graduates of 31 to 35 years of age [χ^2=83.300, *df*=4, *p-value*<0.01; *Cramer's V*=0.167]

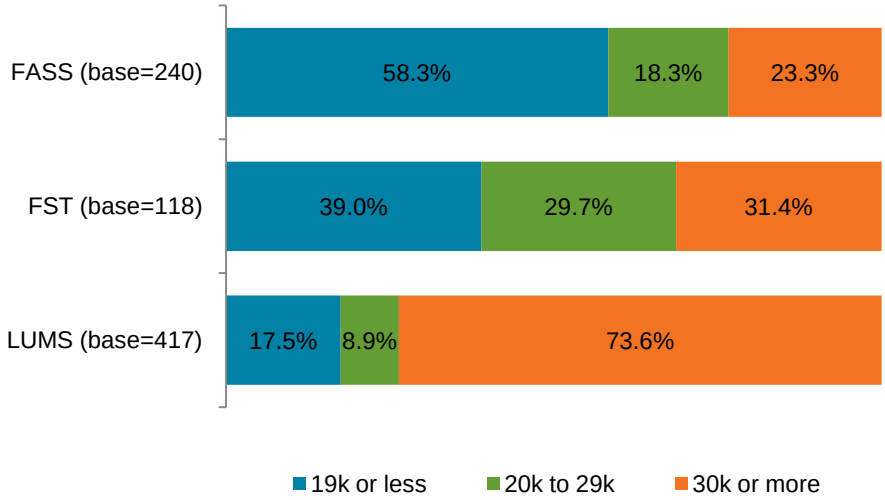

Figure 7: Income distribution by faculty for graduates of 36 years of age or over [χ^2=192.155, *df*=4, *p-value*<0.01; *Cramer's V*=0.352]

Income by faculty and country of origin

The association between faculty and income level is deemed very strong for alumni from Britain or other European countries. Just over two-thirds (68.5%) of FASS alumni from Britain reported income of up to £19,000 per year when surveyed. The equivalent proportion for FASS alumni from other European countries stands higher (84.7%) (Figure 8 and Figure 9). However, for graduates originating from an Asian country, the link between faculty and income level is moderate, while the proportion of FASS alumni earning £30,000 per year or more is 0.5 percentage points higher than the proportion of FST alumni (Figure 10).[4]

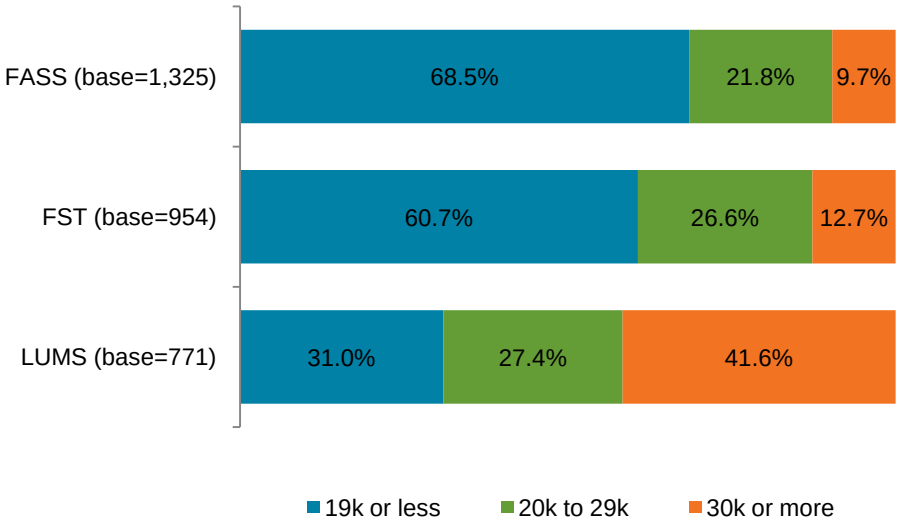

Figure 8: Income distribution by faculty for graduates originating from Britain [χ^2=426.962, *df*=4, *p-value*<0.01; *Cramer's V*=0.374]

[4] The sample of alumni originating from countries outside of Europe or Asia was not sufficiently large in order to conduct similar analyses.

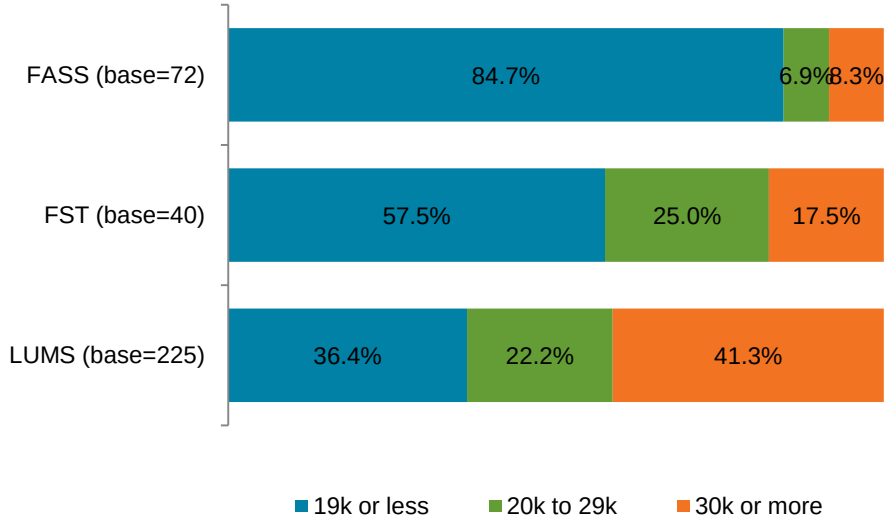

Figure 9: Income distribution by faculty for graduates originating from a country in Europe (excluding Britain) [χ^2=55.498, *df*=4, *p-value*<0.01; *Cramer's V*=0.406]

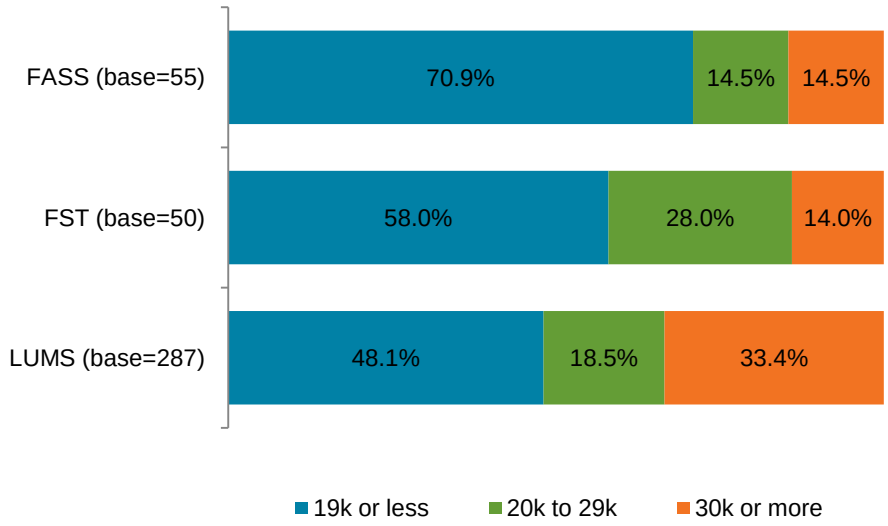

Figure 10: Income distribution by faculty for graduates originating from a country in Asia [χ^2=17.599, *df*=4, *p-value*<0.01; *Cramer's V*=0.212]

Income by faculty and level of qualification

For alumni holding a postgraduate qualification, income level is moderately associated with the faculty where they studied. Analysis indicates that one-fifth (20.6%) of FASS alumni with a postgraduate qualification earn £30,000 per year or more, while the equivalent percentage for FST and LUMS alumni stands at 27.0% and 55.8% respectively (Figure 12). Income level is more evenly distributed amongst alumni holding undergraduate qualifications. The proportion of LUMS alumni with an undergraduate qualification earning £30,000 per year or more is 13.3 percentage points higher than FST alumni and 15.2 percentage points higher than FASS alumni (Figure 11).

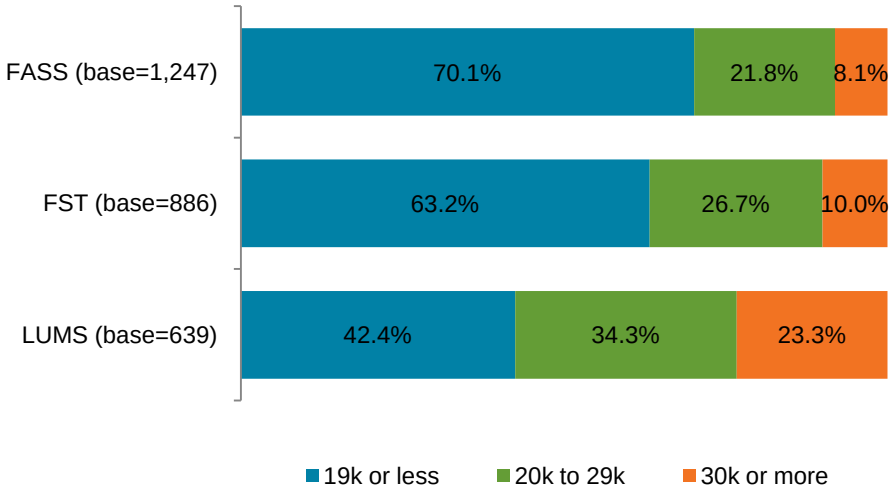

Figure 11: Income distribution by faculty for graduates holding an undergraduate qualification [χ^2=163.417, *df*=4, *p-value*<0.01; *Cramer's V*=0.172]

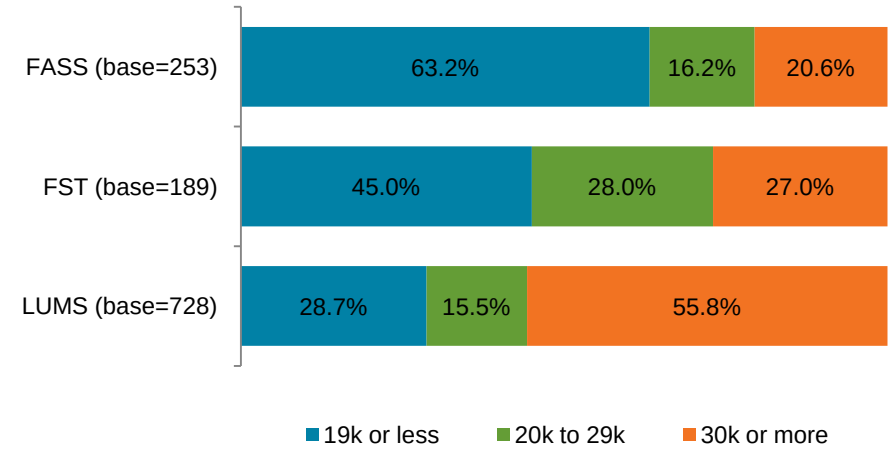

Figure 12: Income distribution by faculty for graduates holding a postgraduate qualification [χ^2=141.270, *df*=4, *p-value*<0.01; *Cramer's V*=0.246]

Focusing on postgraduate qualification holders in particular, statistical analysis indicates that, for individuals holding either a Master's degree or a Doctorate, the association between earnings and faculty is moderately strong (Figure 13 and Figure 14). For FASS alumni holding a Doctorate, two-fifths (40.7%) earn £30,000 per year or more. This proportion compares favourably to FST alumni where just over one-quarter (28.1%) of those holding a Doctorate have similar earnings. Evidence suggests that approximately three-fifths (63.0%) of individuals holding a Doctorate from LUMS earn £30,000 or more.

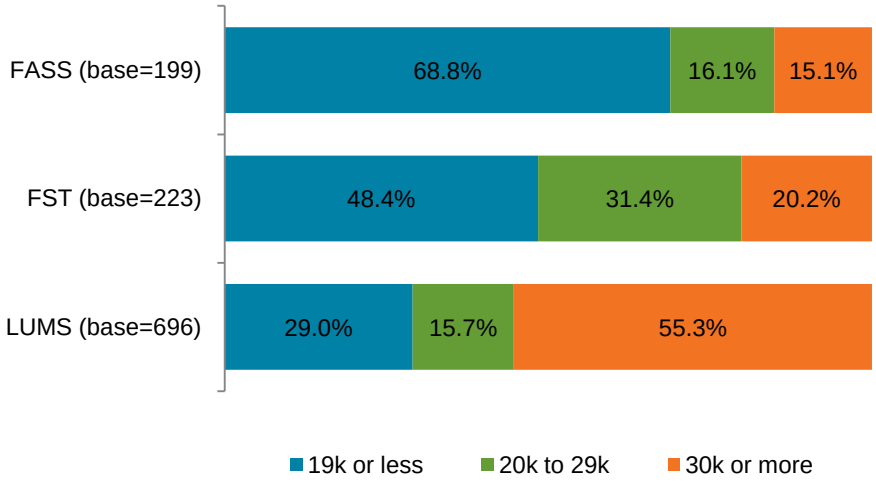

Figure 13: Income distribution by faculty for graduates holding a Master's degree [χ^2=180.154, *df*=4, *p-value*<0.01; *Cramer's V*=0.284]

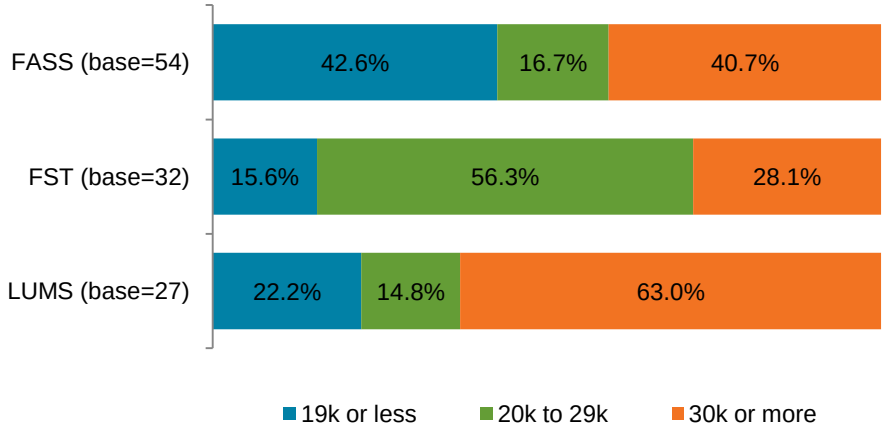

Figure 14: Income distribution by faculty for graduates holding a Doctorate [χ^2=23.379, *df*=4, *p-value*<0.01; *Cramer's V*=0.257]

Income by faculty and year of graduation

Analysis indicates that the association between an individual's income level and the faculty they graduated from is stronger for the period between 2006 and 2010 than for the period between 2000 and 2005. While the income-level distributions remain almost unchanged between the two examined periods for FASS alumni, analysis for both FST and LUMS identifies increases in the proportions of those earning over £19,000 per annum (Figure 15 and Figure 16).

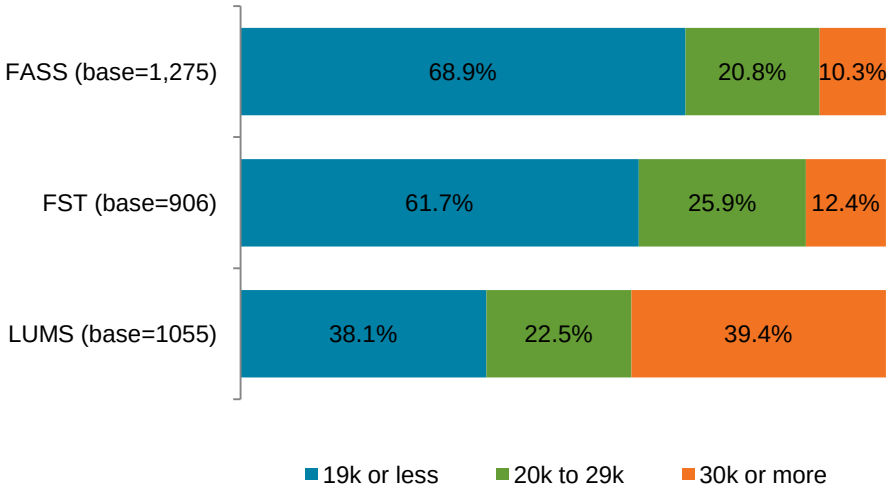

Figure 15: Income distribution by faculty for individuals who graduated between 2000 and 2005 [χ^2=388.539, *df*=4, *p-value*<0.01; *Cramer's V*=0.245]

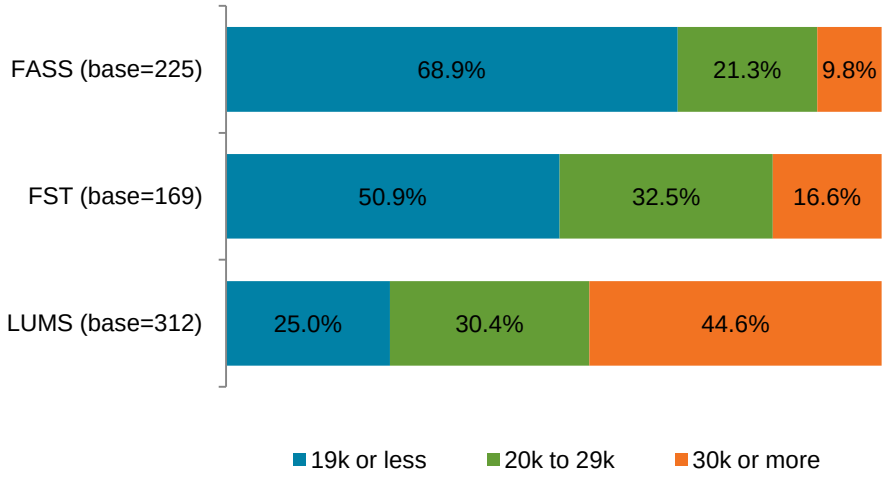

Figure 16: Income distribution by faculty for individuals who graduated between 20006 and 2010 [χ^2=130.493, *df*=4, *p-value*<0.01; *Cramer's V*=0.304]

Predictors of income levels

Analysis to identify the variables that best predict income level yields the following findings:

> LUMS alumni are the most likely to be earning £30,000 per year or more. They are followed by FST alumni and FASS alumni.

> Of FASS alumni, males of 36 years of age or above have the highest probability of earning £30,000 per year or more. They are followed by males of 31 to 35 years of age and females of 36 years of age or more.

> Females of up to 30 years of age have the lowest probability of earning £30,000 per year or more amongst FASS alumni.

> British, postgraduate qualification holders have the highest probability of earning £30,000 per year or more amongst FST alumni. Female undergraduates have the lowest probability.

> British LUMS alumni will almost certainly be earning £30,000 per year or more.

5 | Non-financial returns of higher education

This section summarises the findings from our online survey of FASS alumni.

Motivations for studying arts, humanities or social sciences

Alumni were asked to rate the extent to which they agreed with several statements about their motivations to study an arts, humanities or social science related degree. They provided answers on a scale from 1 to 10, where 1=I completely disagree and 10=I completely agree. The mean score for each statement is provided in Figure 17.

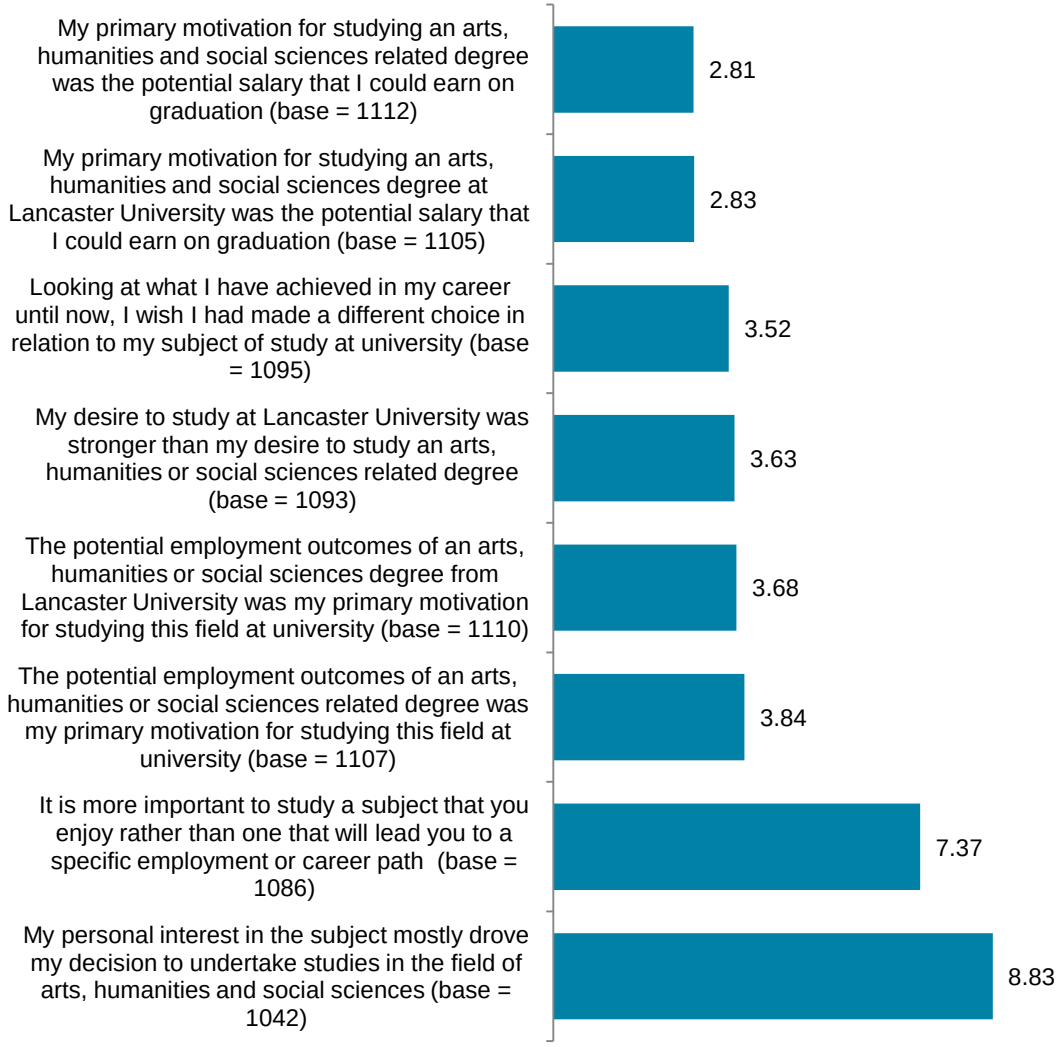

Figure 17: Motivations for studying an arts, humanities or social science related degree

The data strongly indicates that FASS alumni were significantly more motivated by satisfying their personal interests and enjoyment as opposed to pursuing a specific career path or financial returns. FASS alumni were highly motivated by their personal interest in arts, humanities or social sciences (8.83) and agree that it is more important to study a subject you enjoy rather than one that will lead to a specific employment or career path (7.37). This is supported by the low scores attributed to the potential salary they could earn upon graduation (2.81) or the potential employment outcomes (3.84) of an arts, humanities and social science related degree.

Further inferential analysis using demographic data has provided additional insight into alumni's motivations for studying arts, humanities or social sciences. Analysis of the age of alumni indicates that, whilst younger alumni provide scores that are consistent with the trend observed in Figure 17, there are statistically significant differences for some statements when compared to older alumni. Those aged 21 to 25 (6.90) and 26 to 30 (7.14) agree to a lesser extent than those aged 46 or above (7.96) that it is more important to study a subject that you enjoy rather than one that leads to a specific employment or career path. In addition, those aged 21 to 25 (4.42) and 26 to 30 (3.91) provided higher scores than those aged 46 or above (3.01) in relation to being motivated by the potential employment outcomes of an arts, humanities or social science degree from Lancaster University. Once again, the influence of Lancaster University was a significant discriminator with alumni aged 21 to 25 (3.32) providing higher scores than those aged 46 or above (2.64) in relation to being motivated by the potential salary they could earn after studying arts, humanities or social sciences at Lancaster. Although these differences are only small, they suggest that employment outcomes have become increasingly more important over recent years following the introduction and subsequent increase in university tuition fees. However, in comparing differences based on the age of alumni it is important to note that this research represents a snapshot in time. In this context, differences between younger and older alumni observed in relation to variables may also be reflective of individuals' personal maturity and the shifts in values and priorities this entails.

Outcomes of studying arts, humanities or social sciences

The survey included several statements relating to the employment and skills outcomes experienced by FASS alumni. Alumni were asked to what extent they agreed with these statements on a scale from 1 to 10, where 1=I completely disagree and 10=I completely agree). The mean score for each statement is provided in Figure 18.

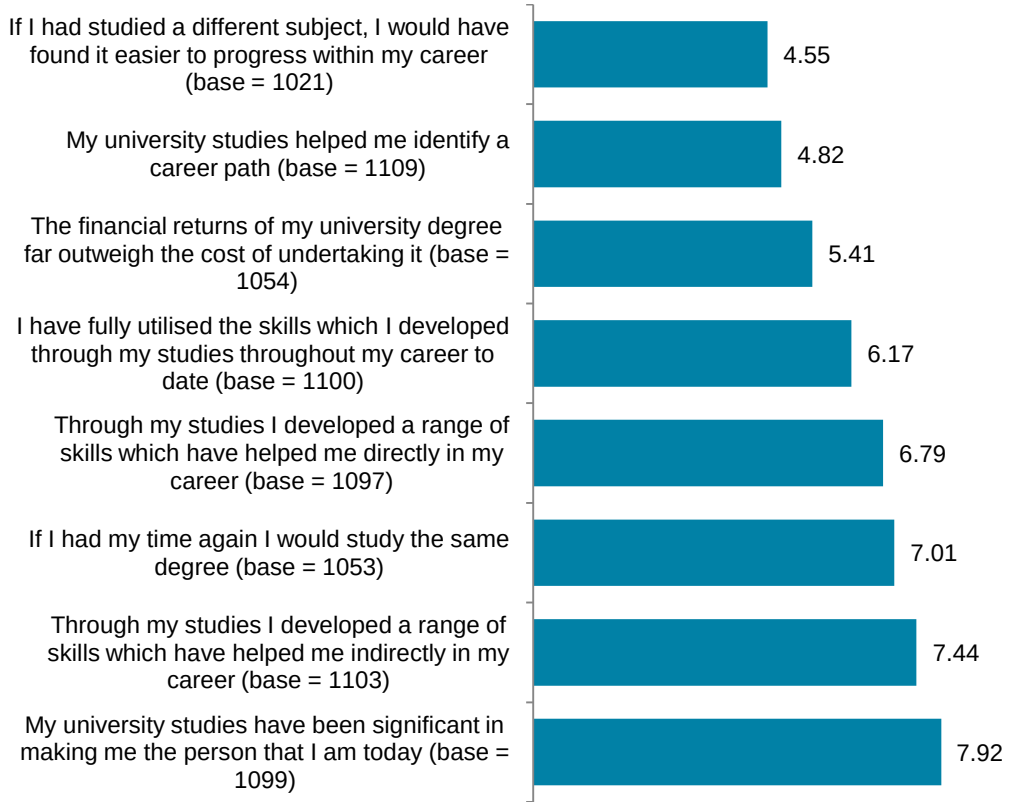

Figure 18: Outcomes for alumni who studied an arts, humanities or social science related degree

The findings show that FASS alumni are positive about the outcomes of their university studies. They strongly agree that their studies in arts, humanities or social sciences have been significant in making them the person they are today (7.92) and agree that their studies enabled them to develop a range of skills that have helped them directly (6.79) and indirectly in their careers (7.44). Furthermore, alumni disagree that studying a different subject would have made it easier for them to progress within their career (4.55). However, alumni were ambivalent about the extent to which their university studies helped them to identify a career path (4.82). Overall, these findings suggest that alumni are satisfied with the outcomes of their studies, although they would value more support to link their university studies to specific employment paths.

Analysis by qualification level adds further insight to these findings. Postgraduates (7.88) agree to a greater extent than undergraduates (6.99) when asked if they would study the same degree again. Moreover, postgraduates (4.46) disagree that the financial returns of their studies outweigh the cost of undertaking them, whilst undergraduates (5.73) mildly agree with this statement.

Further inferential analysis by age group indicates that younger graduates rate their career related skill developments less favourably than older graduates, with graduates aged 21 to 25 agreeing to a lesser extent than those aged 46 or above that their studies developed a range of skills which have directly (6.42 and 7.32 respectively) or indirectly (7.05 and 7.96 respectively) helped them in their careers. Additionally, those aged 21 to 25 (5.57) provide lower scores than those aged 46 or above (6.68) in relation to making full use of the skills developed through their studies in their career to date. Whilst these findings are to a large extent unsurprising due to older alumni having had the opportunity to progress further in their careers, there are some additional differences worthy of consideration. Younger graduates have a slightly more negative outlook on the financial return of their studies with 21 to 25 year olds (4.29) mildly disagreeing that the financial returns of their studies outweigh the costs of undertaking it, whilst those aged 31 to 35 (5.99), 36 to 45 (5.92) and 46 or above (6.45) agree with the statement. Additionally, whilst those aged 46 or above disagree (4.10) that studying a different subject would have eased their career progression, those aged 21 to 25 have a more neutral viewpoint (5.25). Although younger alumni are more likely to be at the beginning of their careers and therefore in more junior positions when compared to their older counterparts, increases in tuition fees, the current economic climate and competitive graduate market may offer explanations for the slightly less favourable employment outcomes experienced by these younger individuals.

Wider perceptions of arts, humanities and social sciences

Alumni were asked to rate the extent to which they agreed with several statements regarding wider perceptions of arts, humanities or social science related degrees. They provided answers on a scale of 1 to 10, where 1=I completely disagree and 10=I completely agree. The mean score for each statement is provided in Figure 19.

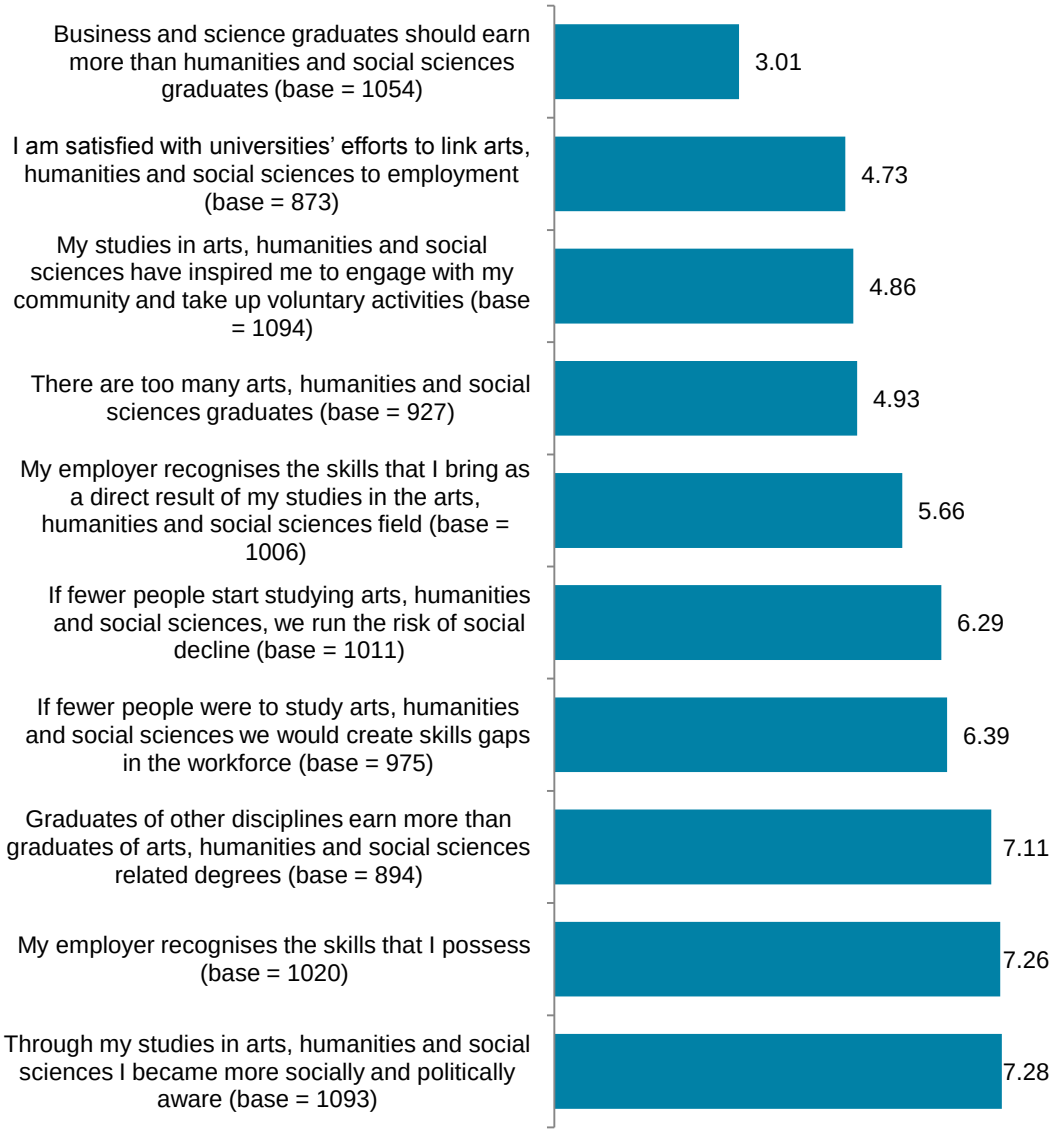

Figure 19: Wider perceptions of arts, humanities or social science related degrees

Whilst respondents agree that their employers recognise their skills (7.26), the extent to which employers consider these to be as a direct result of their studies provided a more neutral response (5.66). Further support for the value of arts, humanities and social sciences was obtained from alumni who agreed that if fewer people studied these degrees there would be skills gaps in the workforce (6.39) and we would run the risk of social decline (6.29). Alumni agree that graduates of other disciplines earn more than arts, humanities and social science graduates (7.11), but they strongly disagree that graduates of business and science subjects should earn more (3.01). Collectively, these statements provide strong support for the benefits of arts, humanities and social science related degrees for wider society, although once again there is evidence of alumni's dissatisfaction with the university's efforts to link arts, humanities and social sciences to employment (4.73).

Further inferential analysis of these results by respondents' ages provides a deeper understanding of the wider perceptions of arts, humanities and social science related degrees. Those aged 46 or above (7.13) agree to a greater extent than those aged 21 to 25 (5.73), 26 to 30 (5.94) and 31 to 35 (6.15) that a reduction of students studying arts, humanities or social science related degrees will run the risk of social decline. This indicates that older graduates more strongly recognise the benefits that these subjects bring to society.

Whilst those aged 31 to 35 (4.58), 36 to 45 (4.72) and 46 or above 4.02) disagree that there are too many arts, humanities and social science graduates, those aged 21 to 25 (6.22) agree with this statement. Additionally, those aged 21 to 25 (4.50) and 26 to 30 (4.48) are also mildly dissatisfied with the university's efforts to link these subjects to employment compared to those aged 46 or above (5.45). These findings add further evidence to suggest that employment outcomes have become more important over recent years with the escalating costs of higher education and more competitive graduate jobs market.

6 | Perspectives on arts, humanities and social sciences

This section summarises findings from in-depth interviews with fifteen alumni and three academics at FASS and discusses: factors motivating students to choose arts, humanities and social sciences; the impact of FASS studies on employability; and wider societal impacts.

Motivation to study

Personal interest

There was consensus amongst alumni and academics that the principal motive to study arts, humanities or social science disciplines is typically related to the individual's passion for the discipline itself. There was a sense that studying an area of great personal interest would bring about satisfaction in itself.

> *"I wanted to do something I felt very engaged in and felt like I could get something out of."*
>
> FASS alumnus

For alumni, the opportunity to pursue a specific career path or obtain monetary rewards was less important when choosing their studies than their inherent desire to explore a specific field within arts, humanities or social sciences. Indeed, most alumni were not expecting to be able to draw together *"a strategic life plan"* for their career prior to enrolling on their FASS programme. That said, alumni did consider potential career options to some extent, recognising that these disciplines could potentially provide them with a wide range of pathways to pursue on graduation rather than 'pigeon holing' them into a particular vocation. Interestingly, alumni indicated that the vocational potential of their qualification was more important when they were choosing the subject of their postgraduate studies than when deciding on their undergraduate course. Certainly graduates were better placed to select a postgraduate course once they had chosen a career direction. Most viewed time at Lancaster's Faculty of Arts and Social Sciences as a valuable opportunity to explore their own interests and abilities further and become better equipped to decide upon a career after graduation.

For many alumni, prior academic achievement in the field was likely to have increased personal interest and, consequently, enhanced motivation towards undertaking a specific discipline in arts, humanities or social sciences. Many FASS alumni were keen to embark upon a subject in which they could potentially excel and emerge with a good honours degree. Although contrary to popular belief, embarking on a FASS subject such as Music, English or French Studies (as opposed to a strictly vocational subject) was not regarded by alumni as taking an 'easy option' but conversely as a challenging prospect: *"If I can do this, I can do anything."*

Influence of family and peers

Alumni indicated that a variety of information sources had been used to assist their choice of academic path; these were mainly informal and included the influence of family and peers. Around half of alumni found that their family were supportive of their choice of degree programme at Lancaster University, but only one graduate indicated that their family specifically encouraged their subject choice – in this case a gifted linguist encouraged his daughter to pursue languages as part of her degree. Broadly speaking, a lack of knowledge or understanding of FASS discipline areas meant that family members were unable to provide well informed advice or guide their child's selection. Typically peers and siblings were much more

informed and supportive given their own knowledge or experience of similar contemporary programmes, and their understanding of a wider range of career pathways.

Overall, it seemed that family members had little influence over an individual's decision to follow the arts, humanities or social sciences academic route. This view was supported by academics who stated that support from parents or guardians is largely dependent on how well they are informed about potential employment outcomes from studies in such disciplines.

> *"Parents may find it difficult to grasp that arts, humanities or social science graduates develop a set of skills that is applicable to a wide variety of vocations."*
>
> FASS academic

Academics acknowledge that increasing parents' or guardians' awareness of the different discipline choices and associated employment options should become a greater focus of higher education institutions. This is especially important in the context of increasing tuition fees and amid a widespread leaning towards vocational training within the higher education sector.

Alongside parental advice, socio-economic factors also played some part in influencing career and subject choices. A minority of the alumni acknowledged that their degree choice may have been different if they had not been able to receive financial backing from their parents or other forms of external support (e.g. a bursary) to support their period of study. In retrospect, without such support, individuals may have been more inclined to have started a vocational discipline which lends itself directly to a profession such as engineering or accounting. Those students from relatively affluent backgrounds felt they had the opportunity to choose their own career pathway based on personal interest and not on the immediate need to earn a living.

> *"Although people who study these subjects do so because they are passionate about them, increased fees and the economic climate are likely to make people think more about their employability outcomes and choose subjects they deem as being more employable – particularly because parents sometimes pay for tuition fees."*
>
> FASS alumnus

Access to advice and information

In addition to the leverage of close family and friends in informing subject choice, the majority of alumni also received some form of careers information, advice or guidance (IAG) from the public domain. Most indicated that IAG was received from their school either through teachers or dedicated careers advisors. In fact, two alumni were actively encouraged by teachers, who were former students themselves or who knew university staff, to pursue a course with FASS based on its reputation. However, several alumni did not find school-led careers guidance to be sufficiently specific, especially in the case where students were exploring more specialist subjects such as music. This opinion was formed based on the acknowledgement that the "*information tends to be very general and not always that helpful*".

Despite the potential for school leavers to be informed through careers interviews or materials available on the web, for most FASS alumni school or careers input was not a significant catalyst in their subject choice. Such sources of information, advice and guidance played only a minor role in informing the decisions of alumni. However, most students found the Lancaster University literature available (e.g. the prospectus) and, in particular, the open day to be a much more valuable and informative source of information for a prospective student. It was "*the strength of what was on offer in the prospectus*" that persuaded them to opt for studying at Lancaster.

Attractiveness of institution and faculty offer

According to alumni, the status and reputation of higher education institutions can play a part in students' decision making by presenting the university as more attractive to them or their family. The majority of alumni expressed an interest in Lancaster University based on its "*good reputation*" as the "*Oxford of the North*", as well as reports of departmental excellence. For most, UK university league table rankings were taken into consideration both in terms of the overall institutional ranking as well as the scores for the discipline itself. However, although it is deemed important, status and reputation is somewhat peripheral since most alumni considered several alternatives amongst the plethora of higher education institutions.

There was consensus amongst alumni that the FASS course offer was highly attractive and this was a significant factor in final subject choice. For example, alumni cited the flexibility of programme design, the propensity to select from inter-disciplinary options (such as a combination of French, Politics and Psychology) and opportunities for combining studies with a year overseas. The rich nature of the FASS programme offer "*made it stand out*" amongst other options. Lastly, several alumni acknowledged that the location and ambience of Lancaster was also an important factor in determining their choice. Indeed, most had a very positive experience of visiting the campus on open days and felt there was a "*community feel*" to the collegiate system which they found very attractive. Others were keen to study in a location which differed from their home town or city and would give them a distinctive community perspective.

Capability development

Behaviours

Academics argue that studies in arts, humanities and social sciences help individuals internalise a large variety of socially desirable traits and behaviours, while offering the chance to develop skills and competencies that are highly employable in different vocational contexts. This view was supported by alumni who highlighted the role of their studies and experiential learning in nurturing particular traits. Predominately, alumni indicated a noticeable increase in self-confidence, self-esteem, independence and adaptability. They also acknowledged that their learning experience helped them to discover the depths of their own learning capacity and apply this to different contexts. Moreover, for most alumni, FASS provided an opportunity for personal development and a chance to become more self-aware and generally a "*better rounded*" individual.

> *"I developed confidence in myself and the ability to make decisions... It is just as important to a company that you actually go and make a decision, and even get it wrong sometimes, rather than just not knowing what to do... I gained a deeper insight into myself."*
>
> FASS alumnus

Arguably, however, the development of such traits stems just as much from an individual's holistic learning experience at Lancaster as well as the faculty or programme experience. More often than not, alumni recognised that it was a blend of course experiences combined with the broader institutional experience which was significant in shaping their behaviours and mindset.

Knowledge

A minority of alumni indicated that they were able to transfer aspects of their learning directly to their job and frequently use their subject knowledge in their current roles. These particular individuals have progressed on from university to take up roles which relate in some way to their primary or secondary area of study. Specific examples cited by alumni included: application of (English) knowledge to writing academic papers and developing degree programme content; application of marketing theory to an advertising role; and utilisation of media studies knowledge to a role in television. Other alumni cited examples of particular

module elements which they found to be beneficial in their job role; these typically involved putting knowledge into practice, such as turning ideas into commercial prospects.

Skills and capabilities

In addition to gaining expert knowledge in their specific subject area, graduates were incited to develop a core platform of skills either implicitly or explicitly. The majority of FASS alumni acknowledged that they were taught to become independent and creative thinkers and consider a wide range of topic areas. They all developed investigative skills enabling them to critically assess, analyse and synthesise available material and conduct research. Alumni also learned to flexibly apply these skills to different contexts.

> *"Social science degrees help you to think about things that aren't black and white and deal with things individually."*
>
> FASS alumnus

Students also described the way in which their programme experience had cultivated skills which broadly adhere to employers' definitions of employability skills[5]. Notably, these comprised common capabilities such as: problem solving, verbal and written communication (of varying genres), and presentation skills.

> *"I am able to write creatively, draft reports and document [things] succinctly."*
>
> FASS alumnus

The other principal areas of skills mentioned related to interpersonal or project management capability. Alumni attested to their growth in ability to work within a team, make group decisions and manage resources.

Additional benefits were felt by those FASS students that had the opportunity to take part in an industry placement or work experience as an integral element of their programme. Direct experience of working in industry gave students an insight into real-life business and certainly complemented their knowledge or technical expertise assimilated through their degree or Master's programme. For instance, alumni had the opportunity to learn about and follow processes or systems which they found to be highly relevant and valuable in subsequent employment contexts – i.e. knowing how to approach the submission of planning applications or managing events. Furthermore, alumni were impressed with the opportunity their placement offered in as far as learning how to network, build contacts and enhance their team-working skills. To sum up, this practical immersion was viewed as "*immediately relevant*" to employability skills since it "*helps thinking on your feet and dealing with problems as they arise*".

Alumni and academics suggest that young people develop the skills to plan their future employment trajectory, including further study, through the self-development and self-discovery mobilised while studying an arts, humanities or social science discipline. In this context, skills gained in less vocationally orientated qualifications are still likely to lead to a career that is important, meaningful and satisfactory to the individual.

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[5] Institute of Directors (2007). Institute of Directors Skills Briefing: graduates' employability skills. London: Institute of Directors.

> *"Having a degree that wasn't too specific vocationally gave me more options... Without my degree in History and Politics I wouldn't have linked my natural ability to listen and help people to a career choice or career path... I went on to work more directly with people, work with their problems and help them understand themselves better."*
>
> FASS alumnus

Employment outcomes

Readiness for the labour market

Alumni indicated that it can be challenging to find a way into employment for arts, humanities and social science graduates as some may feel relatively unprepared for the labour market. This view was reinforced by academics who described how graduates of these disciplines compete within the wider graduate market (mainly in the service industry) as opposed to a vocationally specific job market as a direct result of the degree that they have undertaken. Nevertheless, both alumni and academics agree that all individuals entering the job market potentially face these challenges and this is not specific to those who have studied these disciplines. Whilst those graduating from vocational disciplines may be able to embark upon a more focused industry or job specific search from the outset, employers may not necessarily view these candidates as job ready either and decide they still require more 'polishing' before being offered a job. In some ways, having a vocational focus too early on in an individual's career can limit possibilities and the potential to pursue different avenues.

> *"Vocational training as a university degree narrows you; it limits you... With a degree in social sciences you have a breadth of opportunities and then, perhaps with one year's training, you can go into a profession that you really want to do... You have a much broader base of understanding."*
>
> FASS academic

Indeed, the extent to which a graduate or postgraduate is viewed as job ready is very much dependent on a recruiter's entry level requirements, including whether they differentiate among applicants based on degree subject, and their level of investment in graduate training and development. That said, at the same time academics acknowledge that greater effort must be invested by higher education institutions in the provision of careers advice, as well as linking university to industry.

Pathways to employment

Discipline choice may influence an individual's particular pathway to gaining employment. Those students graduating from an arts, humanities or social science discipline rather than vocational studies may not experience a linear pathway directly from studies into a job, but rather take a more circuitous route. It is accepted that some will go on to postgraduate studies (where they are able to specialise) or undertake professional training before deciding upon a career path whereas graduates from vocationally related disciplines may follow a more direct or prescriptive route. These graduates are perhaps eligible to apply for industry relevant graduate programmes such as those offered by blue-chip employers such as Shell or PWC on completion of their studies (although there are relatively few places on such programmes).

Although studies in other disciplines with a greater vocational focus may lead more directly to an employment path, interviewees indicated that arts, humanities and social science graduates find ways to overcome challenges and discover pathways that lead to successful and satisfactory careers. Alumni also acknowledged that the likelihood of finding a job post studies is influenced by the extent to which, and at what point, the individual has developed clear career aspirations. Several cited experiences of FASS peers who were undecided about their career direction both prior to and post university and needed a period of time to explore

vocational options after graduating. The onus is on graduates themselves to pro-actively develop their own career plan either independently or in conjunction with careers advisors rather than relying on employers to offer them a relevant role and associated graduate training and development programme. FASS alumni also recognised that students graduating from these disciplines may need to be more resourceful in their approach to career development. This is also symptomatic of the challenging economic climate and the need for job seekers to adopt new approaches to finding employment.

Impact of FASS studies on job acquisition and earnings

A higher education qualification is deemed as an important asset in its own right as it paves the way to graduate jobs and, consequently, to more favourable monetary rewards. Alumni and academics agree that some employers attribute significant value to arts, humanities and social science graduates who bring different qualities into their graduate roles, questioning the norm and providing alternative and innovative insights.

> *"Employers strike me as being very interested in students that can be ...independent and creative and be able to get certain things done, and that's what we're focusing on."*
>
> FASS academic

> *"Having a degree opened doors... Showing that I've done that extra step opened doors... People could see that if I'm capable of doing that, then I'm capable of working in their organisation and building up in it."*
>
> FASS alumnus

However, alumni also indicated that graduates emerging from certain disciplines may be perceived by employers as being less employable compared to specialisation in vocational subjects such as engineering, finance or business, but this is very much dependent on the specific subject taken and the nature of the industry. Alumni reported that some employers, for example, actively request FASS subjects such as International Relations. Moreover, the experience of alumni would suggest that many employers are also open-minded about their candidates' academic backgrounds. Qualities such as "fit with the organisation" and personal attributes and behaviours described earlier in this chapter are often of higher weighting than degree choice.

The majority of alumni found that in reality their subject choice had a positive impact on their employment outcome and provided a plethora of employment opportunities. Furthermore, particular alumni felt that their time at Lancaster has been the fundamental driver for their career development or job acquisition.

> *"I feel that the time I experienced studying music at Lancaster has got me where I am now."*
>
> FASS alumnus

It is difficult to draw a direct correlation between discipline and earning potential. Alumni thought that linkages to a prestigious institution such as one of the Russell Group may be regarded as important but not in most instances. That said, the majority of alumni were not convinced that their degree or Master's had a huge bearing on their current income or future earning potential. Alumni alluded to a raft of other factors which may well be more influential including an individual's drive, confidence, ruthlessness and persistence. Similarly, ability to progress up the career ladder was viewed to be just as much based on an individual's attitude and determination rather than their prior studies. The overriding message was that there are opportunities in the labour market and it is the individual's responsibility to take advantage of them.

> *"You have to be realistic and take all the training opportunities thrown at you."*
>
> FASS alumnus

Whilst alumni view their investment in studies in arts, humanities or social sciences as significant in financial terms, most alumni perceive their studies overall as a profitable investment both in monetary and non monetary terms. Indeed, alumni indicated that the investment was valuable on different levels – an investment on a personal level (self development) and an investment in their career and life ahead. For many, the experience at Lancaster is remembered as a fulfilling and pleasurable one.

> *"Over the past seven years or so I've had a good time. I've really enjoyed what I've done. I'm happy doing what I'm doing now. I would do it all over again"*
>
> FASS alumnus

However, given the rise in tuition fees across higher education, alumni recognised that if they had the opportunity to study again they may not be prepared to pay the cost of tuition fees demanded for many programmes.

Wider impacts

Economic impact

Alumni and academics attribute an important economic role to the arts, humanities and social science disciplines. Academics argue that the wider economic role of these disciplines is evident through scientific contributions that boost creative economies and lead to innovation and the development of new concepts or products. It is also evident through the development of theories that question the economic status quo, proposing new solutions or approaches to the challenges faced by the economic world and individuals within it. At the same time, for alumni the wider economic importance of arts, humanities and social sciences manifests itself through their own participation and contribution to the economic world. Alongside this, the social impact of arts, humanities and social sciences should not be underestimated. The social impact is epitomised in the disciplines' contribution in enhancing cultural enrichment and extending global knowledge.

> *"Arts, humanities and social sciences are our conscious attempt to think what it is to be human, what it is to be a society, what it is to be a culture or a community."*
>
> FASS academic

This is an area of impact which is not fully appreciated by those outside of academia.

Personal contributions

Alumni talked of their personal contributions to the organisation where they worked, their community and also wider society. Interestingly, the contributions highlighted were diverse and reflective of the breadth and depth of what can be achieved by studying at FASS. For instance, one alumnus enthusiastically relayed their role in public affairs and their contribution to both policy development and democracy, as well as driving cultural change. Specifically the individual oversaw the development of new legislation to bring about improvements in health care. Another alumnus described their contribution to the *"well-being of people at large"* through their production of music (in orchestras) and underlined how important it is for people to have *"a healthy and colourful life"* – particularly in times of recession. In other cases, individuals made further contributions to their field outside of the workplace. For example, alumni indicated how they have helped others in society through fundraising activities; assisting

with community activities, such as organising book clubs; and supporting the elderly in their locality. However, alumni concluded that overall members of the general public may not be able to fully recognise the importance of studying arts, social sciences or humanities, nor the significance of non-economic achievements.

> *"Any sort of achievement in the arts or social sciences is downplayed and disregarded… it's not just about having the best product, it's about talking to people and networking and actually arts graduates are dead good at all that… naked law alone won't win a case."*
>
> FASS alumnus

Alumni were a little disheartened that arts subjects in particular may be undervalued in comparison to other *"high-flying"* business careers where impact may be easier to measure in economic terms. Despite this, alumni were reassured that their local communities typically appreciate the impact of their individual contributions if they are direct beneficiaries (and receive support or engage in an activity) or if they are well informed about such contributions.

Measuring impact

Both alumni and academics acknowledge that it is difficult to fully capture and quantify the wider economic and social impact of arts, humanities and social sciences because of its breadth, depth and the fact that the benefits can often happen outside of the workplace. They recognise that people seldom realise the importance of the whole sector and the value that it brings to society. Furthermore, alumni felt that government's view of such disciplines was perhaps misunderstood and therefore undervalued.

Under political pressures for the impact of academic activity to be measured on evidence-based assessment, alumni and academics express concern that the arts, humanities and social sciences risk reduced funding and low popularity amongst prospective students. Alumni and academics were unanimous in their view that appropriate methods must be developed that will better capture and evidence wider economic and social impact.

> *"The current policy, which has focused so much on individuals and expenditure, spending money, earning money, and linking that to a university education is very destructive, and I fear it could deplete the number of students coming into social sciences... If it does then I think it will actually have a long-term effect on society. It will not just create skills shortages... It will be a change in the complexion of the culture... A barbarisation of society, a de-civilisation, which people in the middle of won't notice very quickly. They will historically notice, of course. They'll look back on it and say, 'Oh God!'..."*
>
> FASS academic

Discussion

Alumni and academics alike acknowledge that the benefits of studying arts, humanities and social science disciplines are varied. In brief, embarking upon a FASS discipline offers the potential for an individual to develop a broad platform of knowledge, capabilities and behaviours which will greatly assist their entry into the labour market. Equipped with this blend of skills, and with ample drive and confidence, FASS graduates and postgraduates are able to 'open doors' in a difficult labour market and secure a fulfilling job. Whilst alumni and their academic counterparts recognise the broader value of FASS disciplines, higher education institutions need to raise the profile of these subjects and communicate more broadly their symbolic value to prospective students, parents, careers advisors and teachers. It is vital, especially at a time where institutions need to promote the added value of their programmes, that all those who interface with the talent pipeline are well informed about the benefits of FASS studies. In light of business requirements for graduates with increasingly global attributes, government needs to work collaboratively with institutions to better understand the value of such disciplines and the wider impact of FASS on an individual's holistic development – beyond merely the economic – and devise means to capture these impacts effectively.

7 | Conclusions

This section outlines the conclusions emerging from our research.

Here we bring together the key conclusions emerging from our research:

Motivation

There is a significant volume of evidence to indicate that students studying arts, humanities and social science do not start their studies with the primary intention of maximising their earnings through their professional career. Students are instead motivated by a strong internal drive to increase knowledge or explore artistic areas of personal interest and develop a broad set of skills that offer them the option to pursue a range of career paths.

Furthermore, FASS alumni and academics emphasise that students in arts, humanities and social science disciplines are able to develop a large variety of transferable traits, behaviours, and capabilities that help them gain successful employment. Alongside their discipline-specific knowledge and expertise, they can become independent, critical and imaginative thinkers who are able to analyse and synthesise materials, produce solutions, communicate effectively, and work in teams. For alumni, these skills are instrumental in informing their career decisions and making them a well rounded person. However, family, friends and teachers often have limited recognition of the diverse range of skills that may be developed through studies in arts, humanities and social sciences. This is problematic when individuals are attempting to make informed choices about what they want to study.

FASS students appear more interested in the non-monetary outcomes rather than material returns. Our empirical evidence suggests that developing oneself and gaining confidence, increasing knowledge and cultural understanding, knowing more about human nature, or increasing political awareness are returns that FASS alumni highly value from their studies; returns they value more than the monetary or employment outcomes.

Given the influence of informal and formal sources of IAG, it is imperative that more work is done to communicate the wider benefits of studying arts, humanities and social sciences and the potential employment opportunities. Parents, teachers and careers advisors need to be more aware so that they can help individuals make informed choices about their study options. Given the increase in tuition fees and necessity for universities to 'sell' their courses to students, institutions need to be more proactive about promoting these disciplines in a way that demonstrates the broader impact it can have on students' career opportunities.

Financial returns

Over two-fifths of Lancaster University graduates who left university between 2000 and 2010 with either an undergraduate or postgraduate degree earn over £20,000 per year. It was also noted that there is an association between income level and the faculty where graduates studied, with LUMS alumni the most likely to earn £30,000 per year or more. At the same time, alumni from FST and FASS are just as likely as each other to be earning this level of salary. These findings align to a large extent with those from wider literature which indicates a link between subject studied and individual earnings. Whilst graduates with a degree in arts, humanities and social sciences may in some contexts earn less than other qualification holders, it is important to acknowledge these students are not primarily motivated by financial returns. Instead they consider that a degree is an important asset in its own right. In this context, alumni perceive their studies overall as a profitable investment when both monetary and non-monetary returns are considered.

Factors influencing financial returns

Within existing literature it is generally accepted that findings may include biases stemming from data quality or sample selection issues. Furthermore, there is strong evidence that such findings may be largely influenced by factors such as institution quality, the demographic profile of the surveyed sample or its ability levels. In this context, there are many other variables which account for income differentials in addition to subject studied. Our analysis confirms the role of demography in understanding disparities in the income distribution amongst graduates. Across all faculties, males are more likely to earn more than their female counterparts, while moderate income disparities may also be identified in relation to country of origin. Income levels increase by age across all faculties in scope of this research. For FASS alumni in particular, the chance of someone earning £30,000 or more a year is 316% higher when they are 36 years or older than when they are 30 or under.

Whilst our analysis does not account for differences in ability, it is worth noting that postgraduate students from all faculties are more likely to earn more than undergraduates. For FASS alumni in particular, holders of postgraduate qualifications are 154% more likely than holders of undergraduate qualifications to be earn £30,000 or more per year, while almost two-fifths of FASS postgraduate degree holders with a Doctorate earn this amount per year. Perceiving studies at postgraduate level as a proxy of academic or other abilities, we could argue that findings featuring in this report are likely to be linked to ability levels in our sample.

Further support for other factors affecting the relationship between discipline and earning potential is evidenced through our in-depth interviews. Alumni confirmed that an individual's drive, confidence and persistence are key factors affecting career progression, and reinforced how graduates of the same discipline can have very different outcomes based on their own personality and aspirations.

Employment and wider social outcomes

The absence of an obvious career choice after studying arts, humanities and social science disciplines encourages graduates to consider postgraduate, professional and other vocational qualifications to help them decide on a particular career. FASS alumni recognise that their studies cultivate an ongoing aspiration for further learning and training which increases their employability and employment outcomes, including income levels. Whilst alumni did not always follow a linear pathway, their studies opened the way towards further studies and graduate job roles. In this context, they navigate challenges and identify pathways that lead to successful and satisfactory careers. That said, there was consensus from alumni that more efforts need to be made by universities to help students identify progression routes.

Arts, humanities and social science alumni and academics agree that they can play a role in wider economic and social prosperity. Contributing new creative ideas, questioning and challenging current thinking, improving economic and social practices, informing policy developments and, most importantly, enriching the global knowledge and cultural capital, these disciplines achieve widespread impacts on the economy and society. However, this impact is often too difficult to quantify and measure. Where political pressure is applied to academia to evidence its economic and social impact, arts, humanities and social sciences need to remain focused to ensure "human civilisations are not de-civilised".

Appendix 1 | Bibliography

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Appendix 2 | Sample description

We present the characteristics of the sample on which our analysis was conducted.

Our analysis was conducted on a sample of 3,942 alumni from FASS, FST and LUMS. Figure 20 indicates that the representation of the three faculties in our sample is largely comparable. There is an almost equal split between genders (Figure 21), while younger people of up to thirty years of age account for almost two-fifths (42.6%) of our sample (Figure 22). Alumni featuring in the sample report a large variety of countries of origin; however, Britain dominates accounting for almost four-fifths (78.5%) as can be seen in Figure 23.

Almost four-fifths (82.1%) of alumni in our sample graduated between 2000 and 2005 (Figure 24), while just under three-quarters (70.3%) hold a qualification at undergraduate level (Figure 25). Bachelor's degree holders (including holders of undergraduate certificates) dominate the sample (68.7%). They are followed by individuals holding a Master's degree (including those holding postgraduate certificates) (28.4%) and by individuals with published or unpublished Doctorates (2.9%) (Figure 26).

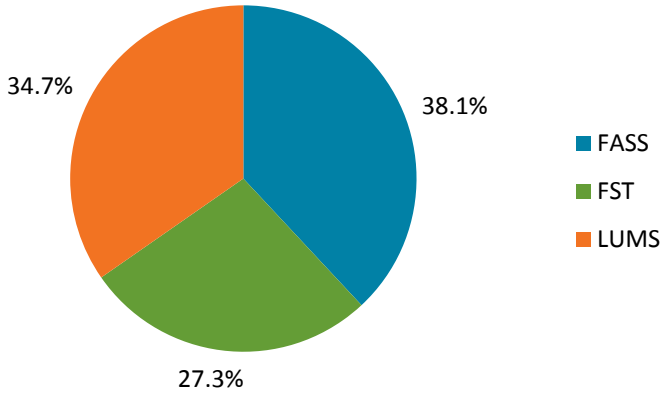

Figure 20: Sample distribution by faculty; base=3,942

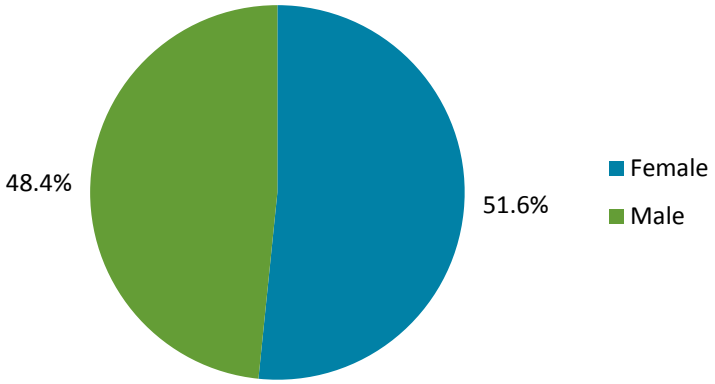

Figure 21: Sample distribution by gender; base=3,931

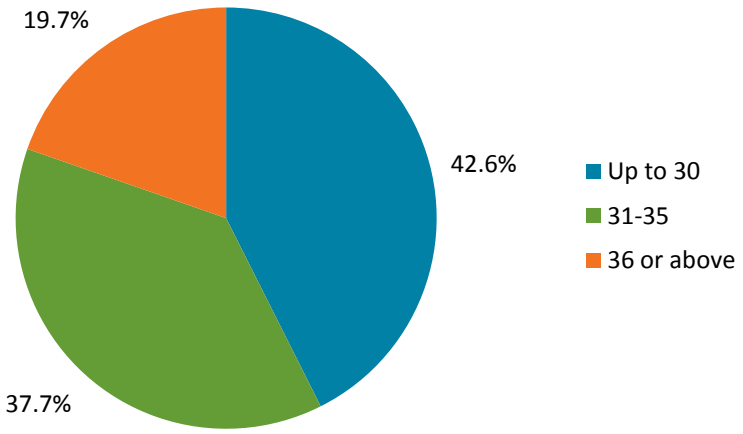

Figure 22: Sample distribution by age; base=3,940

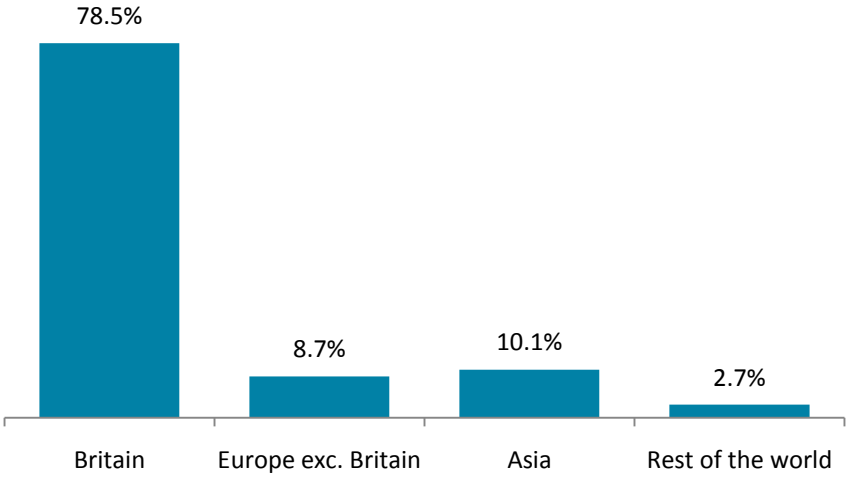

Figure 23: Sample distribution by continent of origin; base=3,885

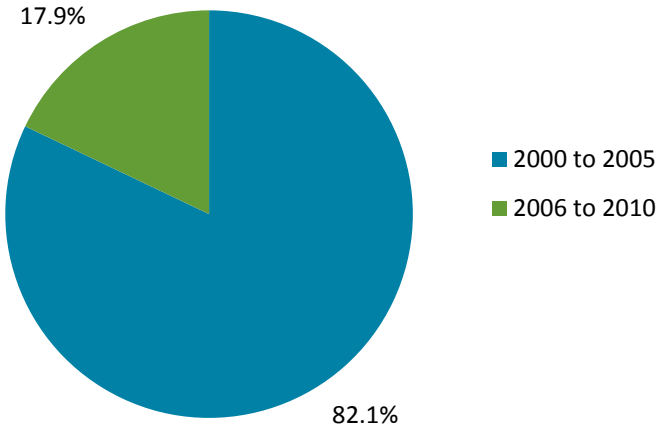

Figure 24: Sample distribution by year of graduation; base=3,942

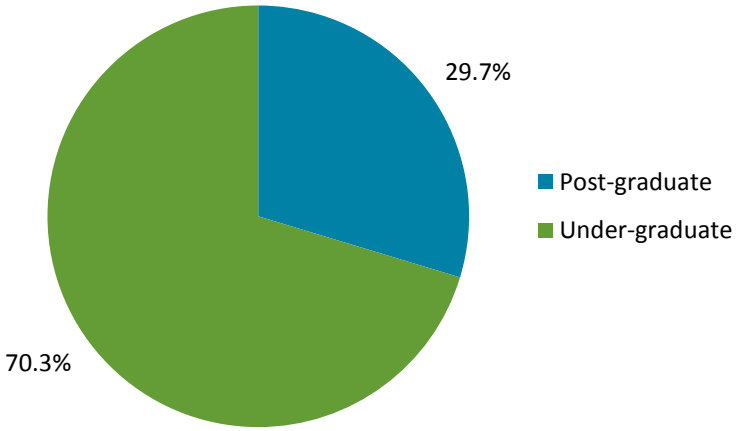

Figure 25: Sample distribution by qualification level; base=3,942

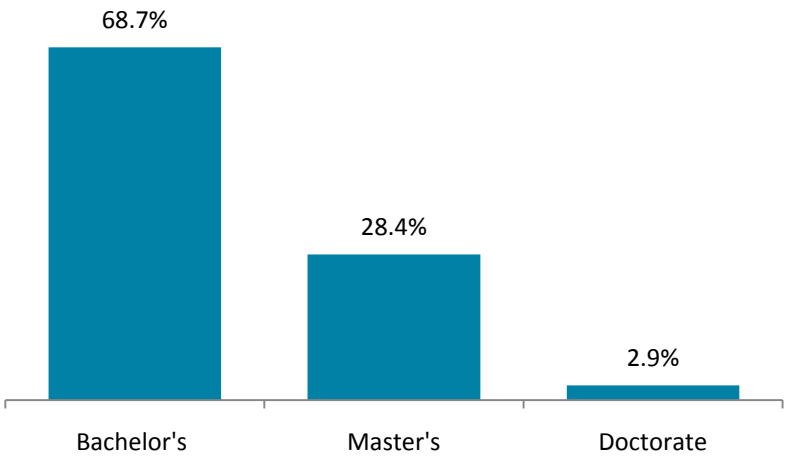

Figure 26: Sample distribution by type of qualification; base=3,936

Appendix 3 | Predictors of income levels: Decision-Tree model