
The Brighton Factor Revisited: Does it work and is it important?

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The second stage of the Brighton Factor research

Do graduates stay in Brighton and Hove?
What happens to them?

How do graduates' careers develop in
Brighton and Hove?

What is the Brighton Factor?

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Introducing the second stage of the Brighton Factor research and the three research papers

In 2007 the Institute for Employment Studies and the Career Development and Employment Centre (CDEC, now known as the Careers and Employability Centre) at the University of Sussex began research to explore the aspirations and expectations of the university's graduates, particularly those who stay on in the city of Brighton and Hove and in the wider county after they graduate. The research was initiated out of a concern that the quality of life offered by the city encourages graduates to stay on after leaving university but that these 'stayers' are competing in a wide pool and may suffer underemployment due to the nature of the local labour market. This local labour market, although vibrant and growing, has a dual economy with highly skilled jobs supported by lower skilled front-line service jobs and high levels of out-migration of residents.

The first stage

The first stage of the research therefore aimed to quantify the extent to which students at the University of Sussex (those from the region and those from further away) wished to stay on in the city after graduating, who wanted to stay and why, and to explore their expectations for work in the short and medium-term in the city.

Almost 650 final year students at the University took part in a survey to explore future plans – what they wanted to do, where they would like to be, and how they thought they might get there. They also provided feedback on their university experience and their thoughts about the city of Brighton and Hove. The results of this stage of research are presented in the first research report *The Brighton Factor: New graduates and their local labour market* (Pollard et al., 2008).

Overall, the research indicated that the University of Sussex does well at attracting students from across the country (and from overseas), and the city itself has a part to play here. Students have a very positive experience at the University and find Brighton and Hove is a nice place to live, offering a good quality of life. A substantial group of students (more than one third) hope to stay on in the city or nearby after graduating, at least in the short term, to live and/or work. Indeed, more graduates plan to stay on in the city after graduating than plan to move away, which provides the city with a pool of talent.

Students expect to gain work soon after graduating and anticipate finding work in a range of sectors, particularly in the public sector and in the creative sector, and are looking for employers that are reputable and responsible and that can challenge them, give them opportunities to develop and reward them appropriately. However, students do not expect to move straight into graduate entry schemes with blue chip companies. Instead they anticipate some degree of turbulence in the first few months after graduating, working in lower level (non graduate) jobs temporarily whilst they gain work experience before moving on to career jobs.

When looking for somewhere to settle after leaving university, students look for a friendly atmosphere, affordable housing, good public transport and good social facilities and healthcare. When looking for a place to work, a pleasant environment is considered to be particularly important but students are also attracted to locations with many graduate level opportunities, high salary levels and low unemployment. The city of Brighton and Hove is felt to provide a good quality of life – a friendly atmosphere, a seaside location with plenty of green space, easy access to London, a good range of social facilities and a vibrant arts and culture scene – and is therefore an attractive location for graduates to settle in. However, students were concerned about the affordability of housing, and the road congestion in the city. They are also particularly concerned about the perceived limited numbers of graduate level opportunities and large reputable companies, and low salary levels in the city. These are all key aspects in location decisions, and despite a strong attraction to the city these concerns appear to be driving expectations to leave the city upon graduation.

The second stage

In 2008 the team began a second stage of research to explore whether graduates' expectations were met, how early careers develop in the local labour market, the factors that help and hinder careers, and whether the city of Brighton and Hove continued to influence their decisions about where to live and work. It explored individual experiences to understand whether 'staying on' is a good thing for graduates. This stage of the research also explored the impact of retaining graduates on the city itself, to understand whether 'staying on' (graduate retention) is a good thing for the city.

The second stage of research involved three distinct elements and three separate research papers – each using a different research approach, a different research specialist, and a different set of data subjects. All three elements examine the same issue – graduate retention – but from a different perspective. Each of the elements/papers is described below.

The first research paper, *Do graduates stay in Brighton and Hove? What happens to them?*, presents findings from a statistical analysis of both Brighton Factor survey

data and secondary data on graduate destinations and labour market actions six months after leaving the University of Sussex. Data on actual destinations is matched to data on expected outcomes (or aspirations) of the University's graduates at an individual level to create a powerful dataset enabling us to explore whether graduates' expectations were met. It also enables us to contrast the experiences of those who stayed on in the city of Brighton and Hove with those who moved away.

The second research paper, *How do graduates' careers develop in Brighton and Hove?*, presents findings from a qualitative exploration of local graduate labour market experiences. The paper makes use of in-depth interviews with individuals from the University of Sussex who planned to stay living and working in Brighton and Hove after graduating. It examines the various ways in which these individuals navigated the move from study into local employment and developed their early careers, and considers the influences and motivations behind career decisions, and the role of the city in these decisions.

The third research paper, *What is the Brighton Factor?*, presents findings from an econometric analysis of the association between city performance and graduate talent. The paper uses econometric analysis of a range of national data to explore relationships between measures of economic performance, quality of life and graduate flows at city level. Data for 100 cities across the UK are examined but specific attention is given to findings and issues for the city Brighton and Hove to once again examine the strength and impact of the *Brighton Factor*.

The Brighton Factor revisited: findings and conclusions

Together these papers present a picture of the impact of the Brighton Factor: how well Brighton and Hove does in retaining its graduate talent, what really happens to the University of Sussex graduates who stay on in the city, how their careers develop, and the importance of these graduates to the city.

They show that the city of Brighton and Hove performs well on many of the measures found to be positively associated with attracting and retaining graduates. The city has a large graduate population, a high level of public service provision, an enterprise culture, and a perceived vibrant arts and cultural scene – all factors associated with retaining graduate talent and associated with growth of knowledge-based industry. The city of Brighton and Hove is highly regarded by students and graduates, and is seen as a desirable place to live, and so has a head start on many UK cities.

Graduate expectations and aspirations for the labour met are realistic and largely met both in the city and beyond, at least in the short-term. Graduates expect to, and do, take time to settle into their careers. Many graduates leave university without clear career goals and can feel somewhat under-prepared for finding and securing employment. For those staying on in Brighton and Hove, initial

employment decisions can be opportunity driven which may pigeon-hole some graduates into inappropriate careers. However, work experience can lead to more permanent roles, and initial underemployment tends to iron itself out as graduates move from stop-gap jobs into career jobs.

Further academic study is a common initial destination, often combined with employment; many graduates are loyal to the University – one third of those who engage in further study stay on at the University of Sussex to do so. Actual employment status at six months largely reflects graduates' expectations and the majority gain work in the broad type of job or industry they had anticipated. Graduates also find work in the locations they had hoped to be in, and for many this is the South of England (often reflecting their home locations prior to study). However, some graduates may have to spread the net wider when searching for jobs to consider locations they are less familiar with, revealing the need for labour market flexibility.

Satisfaction with Brighton and Hove as a place to live and work is high. Graduates who stay on in the city after graduating have a strong desire to do so, and qualitative feedback suggests they are prepared to make career sacrifices, at least in the short-term, to continue to take advantage of the vibrant art and culture scene and 'the young, relaxed vibe.' However, statistical analysis of labour market outcomes indicates that those staying on in Brighton and Hove are not significantly disadvantaged in employment terms.

There is a perceived lack of affordable housing in the city and it is one of the most expensive council tax cities in the UK which can impact on graduate flows. Indeed, concerns about affordability of housing, alongside the perception of limited graduate opportunities, and the lower levels of graduate salaries on offer in the city can pull individuals away from the city after graduating. There is an enduring perception that it is difficult for graduates to satisfy their career goals in Brighton and Hove in the long-term; the appeal of the city therefore has a lifespan and over time graduates become increasingly prepared to move away to find appropriate career opportunities. The city has all the core requirements for being a wealthy, economically dynamic city but its potential has not been fully realised to date, and its economic endowment does not translate into the level of income and wealth that is apparent in other cities. Also, any potential advantage in graduate retention could be lost if graduate talent continues to be under-utilised and perceptions around limited career opportunities and concerns about housing are not addressed.

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Research Paper 1: Do graduates stay in Brighton and Hove? And what happens to them?

A statistical analysis of secondary data on graduate destinations and labour market actions

Will Hunt

This research paper is the first in the series of three to examine the effect that a city has on student and graduate expectations and plans for when they leave university and, in turn, the effect that their decision whether or not to stay has on the cities themselves. The paper uses statistical analysis of data capturing the activities of graduates six months after leaving the University of Sussex. It matches data on actual outcomes post graduation to data on expected outcomes (or aspirations) of the university's graduates, at an individual level, to create a powerful dataset enabling us to explore whether graduates' expectations were met. It also enables us to contrast the experiences of those who stayed on in the city of Brighton and Hove with those who moved away - to examine the impact of the *Brighton Factor*.

The paper forms part of the second stage of research initiated in 2007 by the Institute for Employment Studies and the University of Sussex, and published as *The Brighton Factor: New graduates and their local labour market* (Pollard et al., 2008).

This paper finds graduate expectations and aspirations are met, at least in the short-term, more specifically:

- Actual employment status at six months largely reflects graduates' expectations and the majority gain work in the broad type of job or industry they had anticipated.
- Further academic study is a common destination, often combined with employment, and many graduates are loyal to the university - with one third of those engaging in further studying staying on at the university to do so.
- Graduates find work in the locations they had hoped to be in, and for many this is the South of England (often reflecting their home locations prior to study).
- Some graduates may have to spread the net wider when searching for jobs to consider locations they are less familiar with, revealing the need for labour market flexibility.
- Satisfaction with Brighton and Hove as a place to live and work is high - those staying on in Brighton and Hove largely choose to do so and are not significantly disadvantaged in employment terms (they don't appear to be trading off employment advantages for quality of life considerations).
- However, concerns about graduate salaries, graduate opportunities and affordability of housing in the city can pull individuals away from the city after graduating.

Introduction

In April 2007, students in their final year of study at the University of Sussex were invited to take part in a postal survey exploring their thoughts and feelings about the University, their perceptions about living and working in Brighton and Hove, and their plans for the future, when they graduated and looking further ahead. This was known as the Brighton Factor survey and provided an insight into the expectations and aspirations of the University's graduates: those who wanted to stay on in the city of Brighton and Hove after graduating and what they hoped to achieve in the local labour market, and also those who expected to move away. The findings from this research were published as *The Brighton Factor: New graduates and their local labour market* (Pollard et al., 2008).

This study indicated that many final-year students (more than one third) anticipated staying on in the city after graduating. This number included not only those who were originally from the local area but also those who had been attracted to the city and the University from further afield, and thus contribute a potential source of 'talent' for the city. These individuals felt the city offered them the quality of life they sought – good public services (specifically health care and public transport) and a good environment (friendly atmosphere, good restaurants, bars, green spaces etc.). These graduates also felt the city could offer them the employment they sought at least in the short-term and they anticipated gaining work in the city or nearby and to be working in a range of roles, most commonly teaching or academic occupations, creative roles, not-for-profit activities and business services. However, there were concerns about the labour market in Brighton and Hove, in terms of a perceived limited number of graduate level opportunities (and therefore increased competition) and the level of pay, as well as wider concerns about the affordability of housing. Indeed, these concerns were commonly cited by final-year students expecting to move away after graduating as their reasons for planning to leave the city.

In January 2008, six months after graduating, these same individuals (like most graduates) took part in the Higher Education Statistics Agency¹ (HESA) Destinations of Leavers from Higher Education survey. This captures information about initial career experiences – what graduates are doing six months on in terms of work and study activity.

¹ The Higher Education Statistics Agency (HESA) is the key source of statistics about publicly funded higher education in the UK. Each year, on behalf of HESA universities survey their graduating cohort to explore labour market destinations six months after graduating. The survey covers postgraduates and undergraduates, those who studied full-time and part-time, and those who were domiciled in the UK or elsewhere in the EU (overseas students are not covered by the survey). Of the cohort graduating from the University of Sussex in 2006/07 (the same cohort covered by the Brighton Factor survey) 2,539 individuals were surveyed and 2,026 individuals responded giving a response rate of 80 per cent.

Combining these two data sources for each individual – adding the HESA data on actual destinations to the Brighton Factor survey data on expectations and aspirations – allows us to see what has really happened now that those final-year students are graduates, and to explore whether or not their short-term expectations have been met, particularly for those who anticipated staying on in the city. This paper presents findings from the statistical analysis of these data.

Methodology

The HESA is the key source of statistics about publicly funded higher education in the UK. Each year, universities provide the HESA with standardised data on their students, staff and graduates – data captured through their management information systems and through surveys. In this paper we use the data provided by the University of Sussex to HESA as part of the Destination of Leavers from Higher Education survey for the 2006/07 cohort, and analysis of this data undertaken by the University's Careers and Employability Centre¹, to summarise the outcomes for the whole of the University's graduating cohort (covering postgraduates, undergraduates, those who studied full- and part-time, and those from the UK and wider EU)². This sets the context for the main focus of the paper, which is to explore the outcomes of a sub-group of respondents – those UK domiciled graduates known to have responded to both the Destinations of Leavers of Higher Education survey and the Brighton Factor survey. For this sub-group of 327 individuals, their responses to the Destinations survey were linked to their responses to the Brighton Factor survey to compare expectations with actual outcomes at an individual level.

Context

Analysis³ of the entire graduating cohort of the University of Sussex shows that the majority gained employment soon after graduating (66 per cent of undergraduates and 79 per cent of postgraduates), and very few were unemployed six months after graduating. Of those in work, many were in graduate level employment⁴ (68 per cent of working undergraduates) working for a range of employers in a variety of sectors, including: business; health, social care, and charities; education; finance; and retail. Average salaries were around £19,000 for those from undergraduate programmes and £24,600 for those from postgraduate

¹ Formerly known as the Career Development and Employment Centre (CDEC)

² Of the graduating 2006/07 cohort 2,539 individuals were surveyed and 2,026 individuals responded giving a response rate of 80 per cent.

³ For further information see *Career Development Survey 2007: A report on the destinations of leavers from Sussex University in 2007* (2008) CDEC.

⁴ Using the Purcell and Elias framework, see <http://www2.warwick.ac.uk/fac/soc/ier/research/completed/7yrs2/rp6.pdf>

programmes. Incomes for those working in Sussex postcodes (including Brighton and Hove) were slightly lower.

In terms of location, half (48 per cent) of those from undergraduate programmes who were in work and two thirds (65 per cent) of postgraduates in work were working in the Sussex region, mainly Brighton and Hove (based on postcode information). So the county retains half of the University's graduates – at least in the short-term.

Many graduates continued with their study after graduating – taking on further study – and often choosing to stay on at the University to do so. Approximately a quarter of graduates (27 per cent of those from undergraduate programmes and 24 per cent of postgraduates) were undertaking further study six months after graduating. Masters level study was most common, followed by study towards a postgraduate diploma or professional qualification including the teaching qualification, PGCE. Half of those reporting further study had stayed on at the University of Sussex to do so, highlighting the loyalty and attachment graduates have to the University and the city of Brighton and Hove.

Comparing actual destinations in aggregate with expectations gathered from the Brighton Factor survey shows that outcomes are largely in line with aspirations. The proportion anticipating being employed six months after leaving the University closely corresponds to the proportion actually in work and, similarly, the proportion going on to further study almost matches that expecting to do so. In addition, anticipated employment sectors generally correspond with actual employment sectors – gaining work in the public, voluntary or charitable sectors, and in financial services, was common. However, creative industries, science and biotechnology companies and ICT organisations do not feature as highly in actual destinations as final-year students had anticipated. This suggests that some graduates may have revised their goals or found it harder to gain work in these sectors than they had expected. Anticipated location also broadly corresponds with actual work location, suggesting that those final-year students who wanted to stay on in the region to live are doing so and also working locally (rather than commuting). Indications of marginally lower salary levels for those gaining work in Brighton and Hove may not be problematic as the Brighton Factor study results suggested that those planning to stay on to work in the city placed less importance on the financial package offered by employers than those anticipating moving away to find work.

Understanding the matched sample

Matching responses from both surveys (the actual outcomes of the HESA's Destinations survey and the Brighton Factor survey of anticipated outcomes) at an individual level gives a sub-group of just over 300 graduates with a profile that broadly corresponds to the profile of the University's final-year student

population¹. Exploring the outcomes of this group therefore provides an insight into the actual experiences of the University's graduates – particularly in terms of how well expectations for the labour market, both in the city and more generally, are met; and whether those who remain in the city fare better or worse than those who leave.

The profile of the matched sample

Just under a quarter (21 per cent) of the graduates in our matched sample were postgraduates; more than three quarters were female (78 per cent); just under three quarters (71 per cent) were 25 or younger in their final year of study; and eight per cent were from a black or minority ethnic background (see Appendix 1.1). Almost one third had studied arts and humanities subjects (including languages, drama, media and film studies, 30 per cent); a quarter had studied professional subjects (such as medicine, education, law, social work, business or management, 25 per cent); one in five had studied life sciences (including psychology, 19 per cent); 15 per cent had studied social sciences; and approximately one in ten had studied technical subjects (such as maths, informatics, engineering, design, physics or astronomy, 9 per cent).

All were home students in that they were living in the UK before starting their studies at the University, however almost three quarters were living in London and the South East before their studies (see Table 1).

Exploring key labour market outcomes

In terms of key labour market outcomes, the vast majority of graduates in the matched sample were employed six months after graduating. Over half (57 per cent) were in full-time work; five per cent were in part-time work; and a further one in ten (11 per cent) were combining work with further study. Only a very small proportion were working unpaid (two per cent). A sizeable minority (15 per cent) had gone on to further study of some kind. Very few were unemployed and looking for work (only four per cent), and a similar proportion were outside of the labour market (four per cent were not available for employment).

¹ Broadly corresponds in terms of age, ethnicity and subject, although is biased towards women. The data have not been weighted to correct for this gender bias, as we are dealing with individual level data.

Table 1: Matched sample profile - region of domicile, subject of study, and age

	Frequency	%
<i>Region of domicile</i>		
South East or London	236	72
Elsewhere in UK	91	28
Total	327	100
<i>Subject of study</i>		
Professional subjects	81	25
Technical subjects	28	9
Social sciences (inc economics, politics, anthropology)	49	15
Life sciences (inc psychology)	63	19
Arts and humanities	99	30
Other	7	2
Total	327	100
<i>Age (at January 2008)</i>		
21 to 24	228	70
25 to 29	49	15
30 to 44	35	11
45 or over	15	5
Total	327	100

Base: All UK domiciled matched cases

Source: *Destinations of leavers from University of Sussex 2008, Brighton Factor Survey 2007, IES 2009*

Overall therefore, three quarters of our matched sample of graduates were in some form of paid employment six months after graduating and this is remarkably similar to the proportion who, when surveyed in their final year, expected to be in paid work¹ (see Table 2). Comparing anticipated outcome with actual outcome for each graduate finds that, in general, graduates' actual activity reflected their expectation:

- The vast majority expecting to be in work were indeed in work after six months (84 per cent)
- On balance, those expecting some other activity such as further study or time out were indeed not in work (56 per cent). However it would appear that of the small group of graduates who did not expect to be in paid work in the short-term after graduating, many had taken up employment – either by necessity or by choice (see Figure 1).

¹ When we take into account those respondents who said that they expected to combine work with study. Indeed 60 per cent expected some form of paid work six months after graduation and 13 per cent said they expected to be undertaking further study. Although respondents were asked to estimate only one outcome, several gave multiple outcomes and this tended to be some form of paid work combined with study.

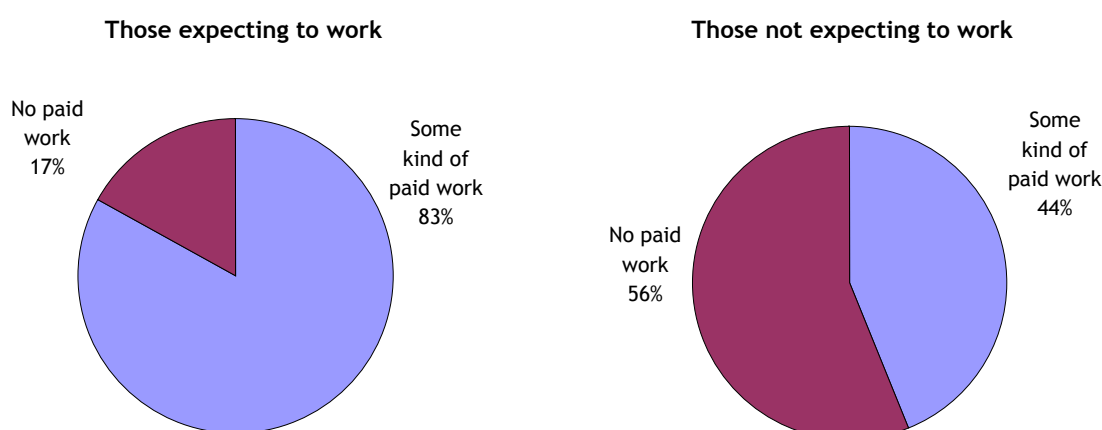
Table 2: Comparing expected activity six months after graduation (Brighton Factor survey) with actual labour market outcomes (Destinations survey)

	Expected %	Actual %
Paid work (full-time, part-time, self-employed)	60	62
Work and study	15	11
<i>All paid work</i>	75	74
Further study only	13	15
Unemployed	-	4
Other (eg time out, voluntary work)	12	8
<i>Total</i>	<i>100</i>	<i>100</i>
<i>Base (N)</i>	<i>326</i>	<i>326</i>

Base: All UK domiciled matched cases

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Figure 1: Comparing expected labour market activity with actual activities six months after graduating



Base: All UK domiciled matched cases, N=243

Base: All UK domiciled matched cases, N=82

Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

A closer look at employment

We can look at the nature of the employment both anticipated and gained, in terms of occupation and industry to see how well expectations were met. Exploring occupations we find that outcomes fit broadly with expectations. Six months after leaving the University just over three fifths (61 per cent) of graduates were in the kind of work they had anticipated (using broad occupational categories). Although, the numbers of graduates within each anticipated occupational group are too small to support detailed analysis of the specific occupations achieved, Table 3 illustrates the range of related and unrelated jobs held by graduates six months after graduating.

Table 3: Examples of achieved occupations compared to anticipated occupation

Anticipated occupational group for Jan 2008	Examples of jobs achieved (where similar)	Examples of jobs achieved (where unanticipated)
Health and social care	Social workers, probation, housing and welfare officers, health care professionals	Financial institutions and office managers, protective service associate professionals
Teaching or academic	Secondary, primary and special needs teachers	HR officers, sales representatives
Business, financial or legal	Business and finance associate professionals, HR officers, accountants	ICT professionals, journalists and newspaper/periodical editors
Scientific research, analysis and development	Science professionals, research professionals	Artistic and literary occupations, conservation and environmental protection officers
Information and communications technology	ICT professionals	Science and engineering professionals, business and finance associate professionals
Local government and civil service	Public service administration professionals,	Filing and records clerks, library assistants/clerks
Police, army or fire brigade	Protective service occupations	-
Development/community/charity	Officers of non-governmental organisations	Housing and welfare associate professionals, marketing associate professionals
Creative (eg media, design, arts)	Graphic design, journalists and newspaper/periodical editors, software professionals	Researchers, estate agents, PAs/secretaries
Sports, leisure or travel	Travel and tour guides	General office assistants/clerks
Marketing, Sales, public relations and advertising	Marketing associate professionals, public relations officers, buyers and purchasing officers	Business and finance professionals, HR officers, graphic designer
Administrative, clerical or secretarial	Administrative occupations: records, accounts clerks, general office clerks	Librarians, business and finance associate professionals, marketing associate professionals
Retail, catering or bar staff	Pub landlords/managers, sales representatives, waiters	Youth, community, housing and welfare officers, business and legal associate professionals

Base: All UK domiciled matched cases that indicated job expectations for Jan 2008

Source: *Destinations of leavers from the University of Sussex 2008, Brighton Factor Survey 2007, IES analysis, 2009*

In terms of industry or sector of employment, once again outcomes broadly reflected expectations, and two thirds (66 per cent) of graduates gained work in the broad industry or sector that they had anticipated working in (see Table 4 for examples). The public sector accounted for the largest proportion of both anticipated work and actual work (see Figure 2), although a greater proportion of graduates gained work in the private sector than had expected to.

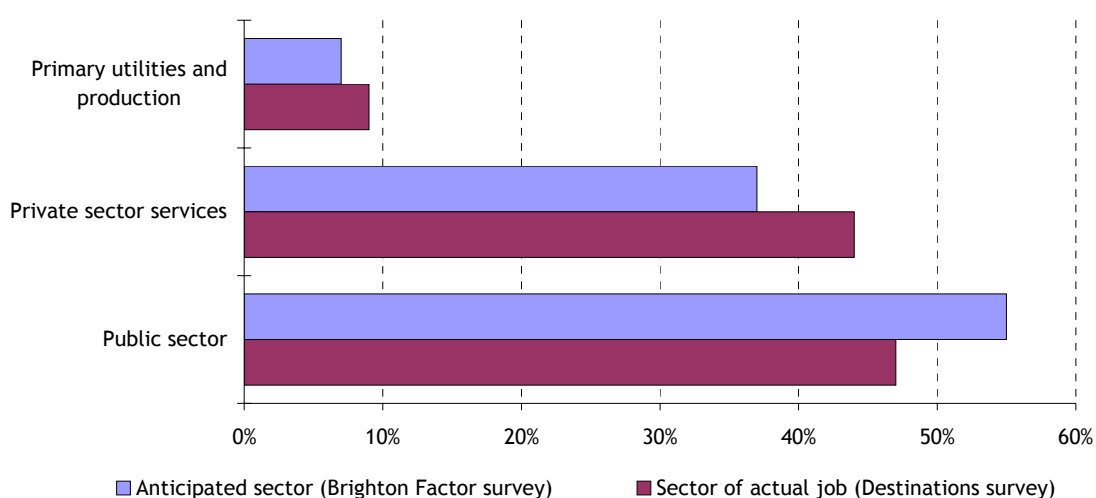
Table 4: Examples of achieved sectors compared to anticipated sector

Anticipated sector	Examples of sector achieved
Science/biotechnology	Manufacture of pharmaceuticals, research and development, higher education
Environment	Research and development
Information and communications	Research and development, business activities, recruitment, public administration
Financial services	Insurance, credit and finance, banking, telecommunications, accounting
Business and legal services	Legal activities, accounting, design consultancy, publishing, finance
Retail/wholesale	Retail, travel, recruitment, social work, radio and television
Leisure/tourism/hospitality	Hotel and restaurants, banking, health and social work
Creative industries/new media	Publishing, music industry, radio and television, computers and software, business and management consultancy, retail, higher education
Public service sector	Primary, secondary, adult and higher education, health and social work, defence, justice and public safety
Voluntary/not-for-profit/charity sector	Charities, adult education, health work, local government, recruitment
Food and drink	Hotels and restaurants, food retail, travel, transport
Construction	Building

Base: All UK domiciled matched cases that indicated job expectations for Jan 2008, and all UK domiciled matched cases in work

Source: *Destinations of leavers from University of Sussex 2008, Brighton Factor Survey 2007, IES 2009*

Figure 2: Comparing anticipated job sector six months after graduation (Brighton Factor survey) with actual job sector (Destinations survey)



Base: All UK domiciled matched cases that indicated job expectations for Jan 2008 (N=215), and all UK domiciled matched cases in work (N=243)

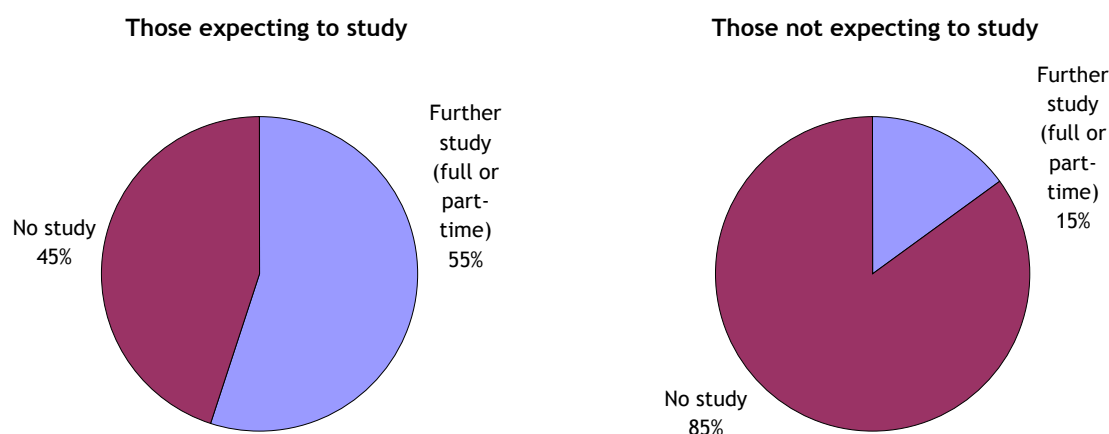
Note: due to differences in the questions, the surveys' category definitions do not match precisely. (Anticipated sector was computed using the Brighton Factor survey and was defined as: Primary utilities and production (a; b; c; o; n eg agriculture, manufacturing, utilities and construction); Private sector services (d; e; f; g; h; i; j; m); and Public sector (k; l). Sector of current work was computed from Destinations survey using SIC and defined as: Primary utilities and production (ABCDEF); Private sector services (GHIJKOP); and Public sector (LMNQ). (see Appendix 1.2))

Source: *Destinations of leavers from University of Sussex 2008, Brighton Factor Survey 2007, IES 2009*

A closer look at further study

One quarter (26 per cent) of our matched sample of graduates were undertaking some form of further study six months after graduation and this closely corresponds with their expectations (28 per cent had anticipated further study). The common occurrence of further study also reflects findings from the first Brighton Factor study where many (three out of five) final-year students anticipated that they would need additional qualifications to achieve their medium-term goals. In our matched sample, those from undergraduate courses were more likely to go on to further study than those who graduated from postgraduate courses. For those not anticipating further study in the short-term, again their expectations were largely met as the vast majority (85 per cent) were not doing so. However, of those anticipating further learning in the months after leaving the University, only just over half (55 per cent) were actually engaged in study (see Figure 3). This indicates that many graduates may have to adjust their plans for further study – it may prove to be too costly, too difficult to access or may no longer be appropriate at this stage in their careers. Instead graduates may choose to delay this until further into their careers.

Figure 3: Comparing expected study activity with actual study activity six months after graduating



Base: All UK domiciled matched cases, N=91 Base: All UK domiciled matched cases, N=234

Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

It is interesting to note that amongst those who did continue with their studies after graduating, a substantial group (42 per cent) were combining their study with some form of paid work. Anticipating multiple activities at the start of one's career was not uncommon, 15 per cent had expected to do so; and across all of our matched sample graduates more than one in ten (11 per cent) were actually combining work with study six months after leaving the University.

The vast majority of graduates undertaking further study were registered on a course of some kind (90 per cent), as opposed to carrying out private/unsupervised study, working on their portfolio, or studying as a research student. The most common qualifications aimed for were taught Masters (30 per cent) and postgraduate diplomas/certificates (29 per cent, see Table 5). More than one in three (37 per cent) of those engaged in further study had stayed on at the University of Sussex to do so, and a further eight per cent had also stayed locally, choosing to study at the University of Brighton (see Figure 4). This indicates a high degree of loyalty amongst the University's graduates both to the University of Sussex itself and also to the city, and corresponds with the findings of the first Brighton Factor study. When all final-year students were surveyed, more than four out of five were satisfied with their time at the University, felt they had made the right choice in studying at Sussex and indeed would recommend the University as a good place to study; and almost half said they would consider further study themselves at the University in the future.

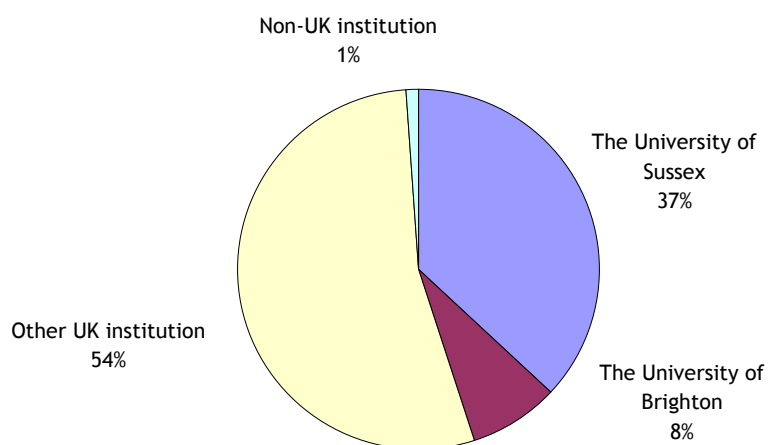
Table 5: Details of further study activity (Destinations survey)

Qualification aim	%
Higher degree by research	6
Higher degree by taught course	30
Postgraduate diploma or certificate	29
First degree	5
Other diploma or certificate	6
Professional qualification	14
Other qualification	8
Not aiming for a qualification	2
<i>Total</i>	<i>100</i>
<i>Base (N)</i>	<i>86</i>

Base: All UK domiciled matched cases in further study

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Figure 4: Details of further study activity: Institution attended (Destinations survey)



Base: All UK domiciled matched cases in further study, N=83

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

The most common reasons cited for deciding to undertake further study were career and skills related, with half (50 per cent) of those undertaking further study saying it was 'to change or improve my career options' and just under half (45 per cent) suggesting that it was 'to develop a broader or more specialist range of skills or knowledge'. Indeed, for many of those engaging in further study, this is seen as a way or route to achieving their wider career goals, as when questioned in their final year nearly three quarters (72 per cent) said that they would probably or definitely need further qualifications to be able to achieve their goals.

Personal interest and enjoyment were also cited by a number of graduates as a motivator to undertake further study (27 per cent cited interest in the content of the course, and 23 per cent cited enjoying their course and wanting to continue). For some though, further study was a necessity. Around a quarter (24 per cent) of

those who were in work and studying said that it was a requirement for their job, although this figure should be treated with caution due to the low numbers of respondents involved (see Table 6).

Table 6: Reasons for engaging in further learning (Destinations survey)

Reason	%
Requirement for my job*	24
To develop a broader or more specialist range of skills or knowledge	45
To change or improve my career options	50
Because I was interested in the content of the course	27
Because I had enjoyed my first course and wanted to continue studying	23
I wanted to go on being a student/I wanted to postpone job hunting	0
I had been unable to find a suitable job	3
<i>Base (N)</i>	<i>64</i>

Base: All UK domiciled matched cases in further study, excludes 'Don't know'

Notes: *Base for this item is 'those in work who are undertaking further study', N= 37

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Table 7: Need for additional qualifications to achieve career goals (Brighton Factor Survey)

Need?	%
No	25
Probably yes	18
Definitely yes	54
Don't know	4
<i>Total</i>	<i>100</i>
<i>Base (N)</i>	<i>85</i>

Base: All UK domiciled matched cases in further study

Source: *Destinations of leavers from University of Sussex 2008, Brighton Factor Survey 2007, IES 2009*

Exploring locations

A key aspect of the Brighton Factor research has been to explore the importance of location in graduates' decisions and experiences, and more specifically to examine what happens to those who stay on in the city of Brighton and Hove and the wider county after they graduate. The Brighton Factor survey of final-year students indicated that over one third of students from across all levels of study and courses planned to stay on and live in the city after they graduated, many of these planning to do so to take advantage of the quality of life factors that the city offers (the atmosphere, the facilities and the cultural and social scene).

Of our matched sample of graduates who were in paid employment six months after graduating, the vast majority had stayed on in the South East of England to

work (87 per cent). Nearly a quarter (24 per cent) had remained in the city of Brighton and Hove to work after their studies. This represents a greater proportion than were found to be working in London (17 per cent). Almost half (47 per cent) were working elsewhere in Sussex or the wider South East. One in ten were working elsewhere in the UK, and just three per cent were working overseas (the latter corresponds with the national picture for all full-time UK domiciled graduates, where only three per cent of those in work were found to gain employment outside of the UK¹). However, it should be noted that this pattern may understate the true movement away from the South East to other parts of the UK and overseas across the University's entire graduating cohort, as those moving away are likely to have been harder to contact and therefore have a lower response rate. In addition, EU and overseas graduates, who have a much greater propensity to leave the UK after their studies, are not included in this analysis.

The proportion of our graduates actually working within the South East of England and London is strikingly similar to the proportion who planned to work within the region (88 per cent)². However, a lower proportion of graduates ended up working in London than had planned to do so, and similarly a lower proportion ended up working in Brighton and Hove than had planned to do so (see Figure 5). This may indicate that when searching for jobs after graduating, individuals spread the net wider than anticipated and begin to consider areas they have less familiarity with or consider moving back home. This move to greater flexibility in choice of location is echoed in the second paper in this series of research papers which takes a qualitative approach to exploring the careers of graduates who stay on in the city. This paper suggests that graduates recognise they may need to be flexible about the activities and lifestyles they pursue – making trade-offs between priorities such as salary, job content, lifestyle and location.

Focusing on graduates working in the South East, analysis indicates that the majority of these are working in three key postcode areas (ie at the 2 digit level):

- the **RH** postcode area which covers 11 postcode districts including Crawley, Horsham, Burgess Hill, East Grinstead, Dorking and Reigate (accounting for one third, 33 per cent, of those working in the South East)

¹ Using data from Destinations of Leavers from Higher Education 2006/07: Table F, HESA, 2008

² It should be noted that although an attempt has been made to make anticipated and actual location of employment at six months after graduation as comparable as possible there may be some variation in definition between the two. Anticipated location of work relies on respondents' own interpretation of the following categories: 'Brighton and Hove', 'Elsewhere in Sussex', 'London', 'the wider South East', and 'Elsewhere (please specify)'. Actual location of employment six months after graduation was based on the postcode area of employer reported by graduates in DLHE, and was based on the classification outlined in Appendix 3.

- the BN postcode area which covers ten districts including Brighton and Hove, Worthing, Eastbourne and Shoreham-by-sea (accounting for 24 per cent)
- the TN postcode area covering nine districts including Hastings, St Leonards-on-Sea, Wadhurst and Tunbridge Wells (accounting for 15 per cent).

This corresponds to some degree with the ‘Sussex Coast Diamond’ area of growth and investment outlined in the recent discussion paper published by the Brighton and Hove Economic Partnership (2008). The Diamond has at its centre the city of Brighton and Hove and includes the areas covered by the East and West County Councils, and Adur, Lewes, Horsham and Mid Sussex District Councils.

Figure 5: Actual work location (Destinations survey) compared to expected work location (Brighton Factor survey) six months after graduating



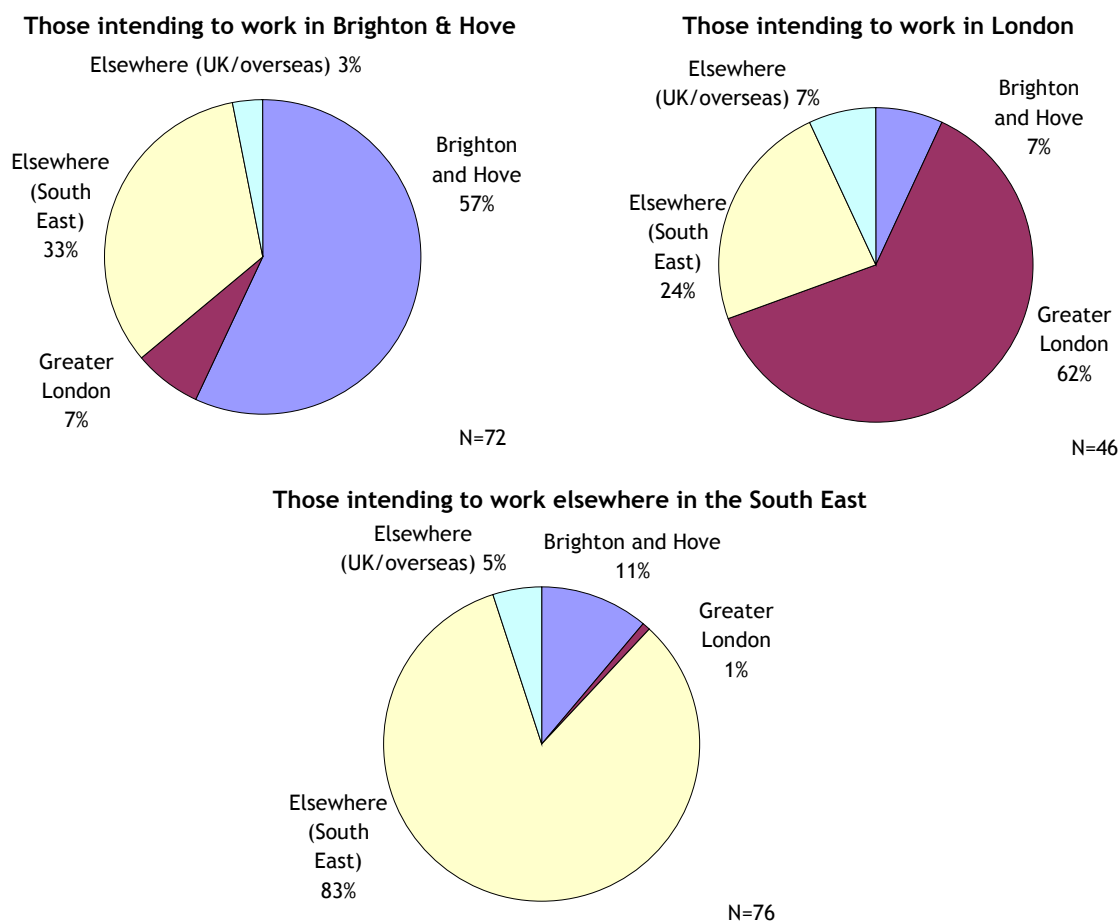
Base: All UK domiciled matched cases in paid employment (where location known) (N=314 and 228)

Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

Overall, just over half (55 per cent) of our graduates in the matched sample gained work in the broad geographical area that they had planned to. Again, this indicates the extent of flexibility in labour market decisions, as almost half gained work somewhere other than where they had hoped to. It also indicates that whilst Brighton and Hove loses some of those who intend to stay, it gains others who had intended to move away (see Figure 5).

- Of those who planned to stay on to find work in Brighton and Hove after graduating, just over half (57 per cent) actually did so. A small number of those planning to stay on in Brighton and Hove (seven per cent) actually found work in London, and one third (33 per cent) were working elsewhere in Sussex or the wider South East.

Figure 5: Comparing expected work location with actual work location six months after graduating



Base: All UK domiciled matched cases in paid employment

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

- Nearly two-thirds (62 per cent) of those who aimed to find work in London achieved their goal. Again, a small number of those planning to work in London (seven per cent) actually ended up working in Brighton and Hove, and just under a quarter found work elsewhere in Sussex or the wider South East.
- The vast majority (83 per cent) of those who anticipated working elsewhere in South East England (ie neither in Brighton and Hove nor London) did end up doing so. However, one in ten (11 per cent) found work in Brighton and Hove.

Exploring quality of employment

It is possible to explore the quality of employment our graduates had six months after graduating using a range of measures: whether the job was classified as a graduate level job (objective measure developed by Purcell and Elias¹ using a recognised categorisation of occupations); whether a degree was considered to be

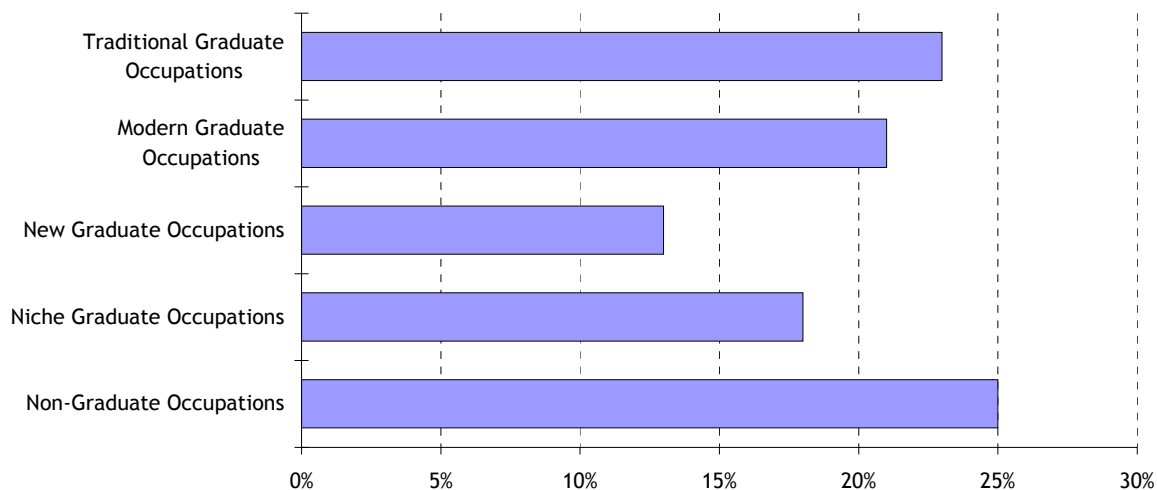
¹ See for example <http://www2.warwick.ac.uk/fac/soc/ier/research/completed/7yrs2/rp6.pdf>

formal entry requirement (subjective measure based on graduate perception and recall); and pay (objective measure based on labour market value). Using these measures we can see whether those graduates who choose to stay in Brighton and Hove have a different quality of role than those who move away.

Analysis of the matched sample, for those in work, shows that approximately three quarters of graduates were in graduate level work six months after graduating. These graduates were working in traditional graduate roles (23 per cent, particularly postgraduates) such as university teaching; in modern or new graduate jobs (34 per cent) where an undergraduate degree is becoming a requirement including marketing or business and related associate professionals, housing and welfare officers, and chartered accountants; and niche graduate jobs (18 per cent) where there are specialist niches requiring the skills and knowledge acquired during higher education. Similarly, three quarters of working graduates said their qualification was either a formal requirement or expected for their job (50 per cent) or was an advantage in getting their job (20 per cent). Graduates in work were asked to report their earnings (full-time annual income) and just over one fifth earned more than £23,000 a year, and the highest earner had a salary of £30,000.

However, approximately a quarter of matched sample graduates were working in non-graduate level jobs, a quarter were in jobs where a degree was not needed (and where further work experience was considered important to be able to move on), and two in five were earning less than £19,000. Examples of non-graduate jobs held by the matched sample include: administrative assistants and office clerks, travel agents, call centre operatives and debt collectors, sales and retail assistants, and waiters/waitresses. This suggests that, soon after graduating, one in four working graduates were in lower paying jobs that did not make use of their graduate skills and knowledge. However, these may be jobs that individuals can grow over time or use to gain relevant work experience and then progress within an organisation or industry (stepping stone jobs). Findings from the first Brighton Factor study indicate that gaining this type of lower level or entry employment in their early careers was not unexpected by the University's graduates. It also suggests that those wanting to stay on to find work in the city of Brighton and Hove were more likely than those intending to leave, to anticipate working in these types of non-graduate level jobs after graduating. Although all graduates anticipated that these would only be temporary jobs and that they would be able to move to more professional roles, those more suited to graduates, over time.

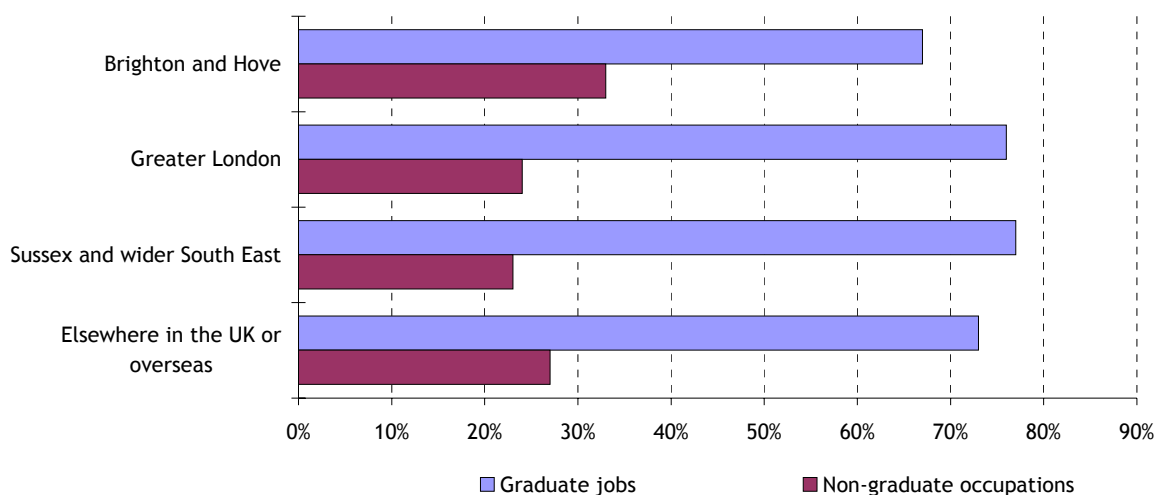
Figure 6: Types of jobs held by graduates six months after graduation (Destinations survey)



Base: All UK domiciled matched cases in paid employment (N=238)

Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

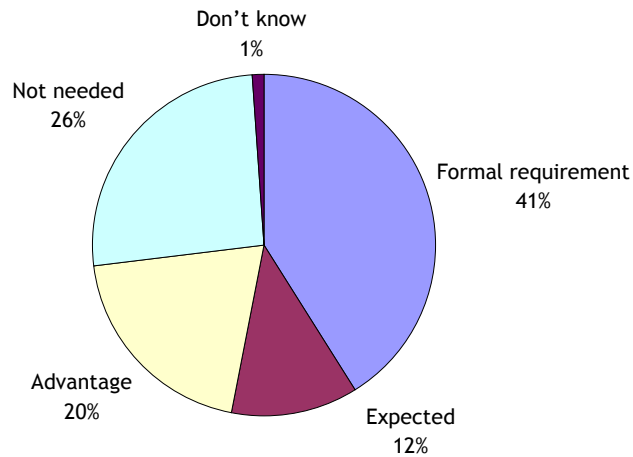
Figure 7: Type of occupation held, by location of employment (Destinations survey)



Base: All UK domiciled matched cases in paid employment (N=228)

Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

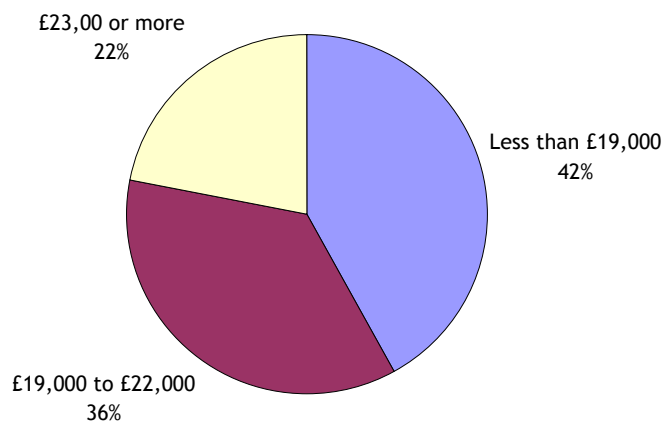
Figure 8: Whether qualification was required for employment (Destinations survey)



Base: All UK domiciled matched cases in paid employment (that answered the question) (N=197)

Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

Figure 9: Salary in paid employment (pro rata) (Destinations survey)



Base: All UK domiciled matched cases in paid employment with known earnings (N=116)

Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

A closer look at quality of employment and work location

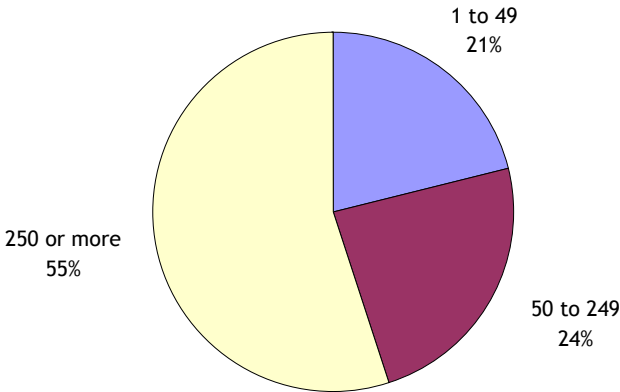
Analysis indicates that the quality of employment appears to vary by location of employment. However, the number of graduates here is small and the patterns suggested should be treated as indicative only. A higher proportion of those staying on in Brighton and Hove appear to be in non-graduate jobs and to be in work not requiring a degree when compared to those working in Greater London or elsewhere in Sussex and the South East – but these findings are not statistically significant.

In terms of pay, there was no real variation in average income by location of employment. The annual salary for those working in the Brighton and Hove area and also for those working elsewhere averaged around £19,000. However, there are indications of a greater polarisation of incomes within the Brighton and Hove area than found on average – with both a greater proportion of graduates on lower incomes and also a greater proportion on higher incomes. Again, the numbers involved here are small and should be treated with caution, yet this pattern corresponds with wider patterns of a dual economy noticed for the city that were outlined in the first Brighton Factor research report.

Size of employer can be linked to quality of employment as larger companies tend to be associated with greater progression opportunities, more formalised training and development and also higher salaries. The majority of the graduates surveyed who were in work after six months were working in larger organisations (companies with 250 or more employees). However, size of employer was not significantly associated with location of employment, and graduates working in Brighton and Hove were not significantly more or less likely to work for a large employer.

These findings suggest a possibility of underemployment for a minority of graduates staying on in Brighton and Hove. However, as outlined in the second paper in this series, underemployment may not be a problem for graduates, at least in the short-term. Indeed, some graduates may choose to take non-graduate jobs such as bar work and admin. work, or choose to stay on in the jobs that they were doing whilst studying as a stop-gap while they think through their next steps. However, as noted in the paper, there is a danger that graduates can become stuck for longer than they had intended in these jobs.

Figure 10: Size of employer for those in paid employment (Destinations survey)



Base: All UK domiciled matched cases in paid employment (where size of employer is known) (N=186)

Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

Exploring factors influencing graduates' decisions

It is interesting to explore the importance of a range of factors on graduates' decisions about who to work for, where to look for work and where to live; and to see whether the relative importance of these factors differs between those graduates who remained in Brighton and Hove to work and those who moved away. This will give us an insight into the factors that may be encouraging graduates to stay in the city or pull graduates away from the city, and the factors that those who stay on may be willing to compromise on.

A closer look at choosing employers

The first Brighton Factor report noted how final year students were looking to find employers who could provide interesting and challenging work, and training and development opportunities. Final-year students would also consider the financial package offered, the reputation of the company in the industry and the geographical location of the work when choosing an employer to work for. Generally, the size of the employer, and whether or not they employed other graduates or offered a graduate entry scheme was considerably less important. These patterns hold true for our matched sample of graduates.

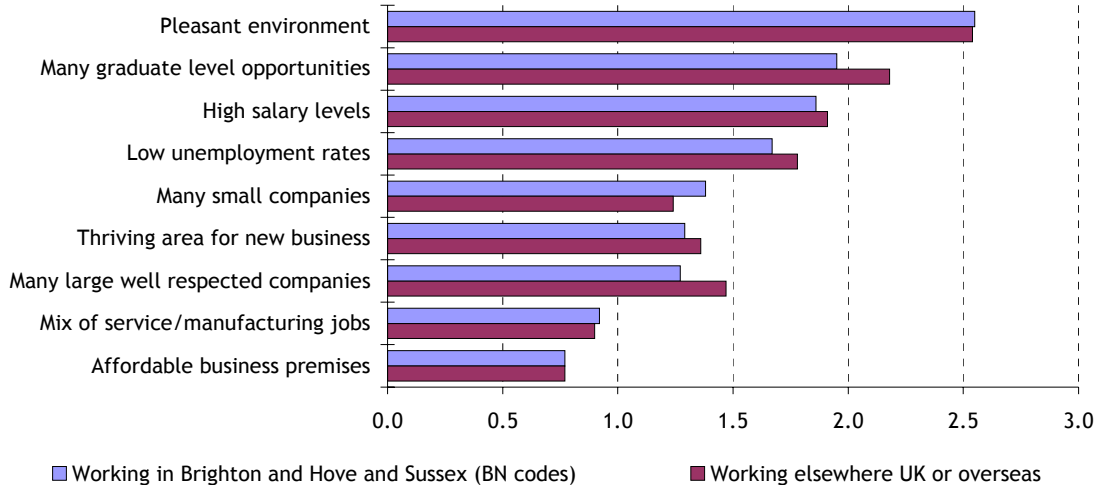
Although there was little difference in the relative importance of employer factors between those who gained work in Brighton and Hove and those working elsewhere, there were some indications that graduates who stay in the city may want a slightly different employment experience. This group emphasised corporate social responsibility (eg ethical and environmental policies), opportunities to work alongside other graduates, and opportunities for interesting and challenging work. They also placed relatively less importance on employer reputation in the sector than those who moved out of the city for work.

A closer look at choosing a work location

The previous report also indicated that for final year students the most important factors when choosing somewhere to work were perceptions about the general environment, the number of graduate level opportunities, generosity of salary levels, and unemployment rates. Again, these patterns hold true for our sample of matched graduates who are, in essence, looking for a location that will provide a pleasant work environment and easy access to well-paid graduate level employment. In terms of Brighton and Hove's performance on these measures the majority (80 per cent) of graduates said that they were satisfied that Brighton and Hove offered a pleasant environment. However, considerably fewer were satisfied that Brighton offered graduate level opportunities (just 20 per cent were satisfied), and they were generally ambivalent (neither satisfied nor dissatisfied) about the salary levels and unemployment rates in the city.

It is interesting to note differences in the relative importance of certain factors between those who gained work locally (in Brighton and Hove and the surrounding area) and those who gained work further afield. Those working away from the city placed greater importance on graduate level opportunities, salary levels, low unemployment rates and many large well respected employers than those getting a job locally. Graduates working outside of Brighton and the surrounding area were less likely to say that they were satisfied with Brighton and Hove on any of the aspects listed but the difference was not statistically significant. Conversely, for those who stayed on in the city to work, work aspects were relatively less important, yet they generally had a more positive opinion of the city and its quality of employment.

Figure 11: Importance of factors when choosing where to work by location of current employer



Base: UK domiciled matched cases in employment (N=80 and 148)
 Note: *Importance is scored on a 4 point scale from 0= 'none', 1= 'some', 2= 'quite', 3= 'very'
 Source: *Destinations of leavers from the University of Sussex 2007, Brighton Factor Survey 2007, IES analysis, 2009*

A closer look at choosing where to live

When surveyed in their final year at the University of Sussex, our matched sample of graduates felt that the general atmosphere of a place and the availability of social facilities were the most important factors to consider when choosing somewhere to live: particularly a friendly atmosphere, good restaurants, cafes and bars, a wide range of shops and boutiques, and green open space. The city of Brighton and Hove was perceived to offer these quality of life aspects. Other more practical factors of importance when choosing somewhere to live were seen as availability of affordable housing, good public transport, and a good standard of health care. Although generally satisfied with public transport in the city, there was some degree of dissatisfaction with the standard of health care (13 per cent

dissatisfied, and 47 per cent neither satisfied nor dissatisfied) and particularly with the affordability of housing (57 per cent were dissatisfied).

Again, it is interesting to note differences in the relative importance of certain location factors between those who gained work locally (in Brighton and Hove and the surrounding area) and those who gained work further afield¹.

Those working away placed greater importance on the affordability of housing in location decisions than those who stayed locally to work. Indeed, for those working away this would appear to be the most important factor when choosing somewhere to live and so may be driving their location decisions. Although affordability of housing was still relatively important for those who stayed on in the city to work they were more likely to place greater importance on the friendly atmosphere and social facilities than on affordable housing. However, that is not to say that those staying on do not perceive there to be challenges in this regard, as 63 per cent were dissatisfied with the availability of affordable housing in Brighton.

Those staying locally placed relatively higher importance than those moving away on many of the quality of life factors including: green spaces, the arts and cultural scene, sport and leisure facilities, having a young and diverse community, along with a good record in community safety, well-maintained streets, and no air pollution. Those staying locally also tended to be more satisfied than those moving away with these aspects of city life (although the differences were generally not statistically significant).

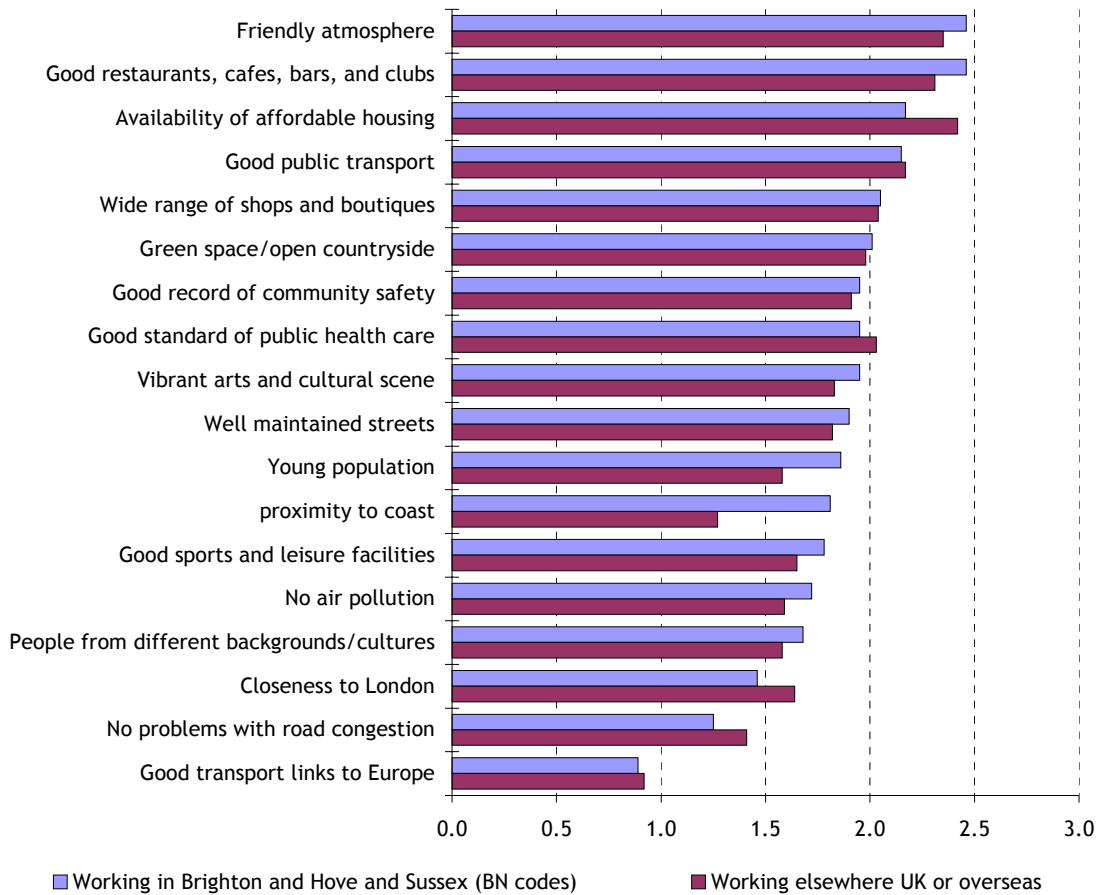
Exploring general attitudes about living and working in Brighton and Hove

The vast majority (89 per cent) of our matched sample graduates, when surveyed in their final year, felt that Brighton and Hove was a good place to live. However, there was some uncertainty about whether it was a good place to gain graduate employment (45 per cent were unsure about this), although almost half (48 per cent) felt they would be able to find a job in the city that would match their qualification.

Brighton and Hove was seen as a good place to live by both those who had gained work in the city and its surrounding areas and those who were working further away. However, those working outside of the city and its surrounds were significantly less likely than those working locally to feel that they would be able to find a job locally to match their qualifications when they were surveyed in their final year (41 per cent compared to 62 per cent).

¹ Note: it is only possible to explore differences by actual work location as home location is not captured in the Destinations survey.

Figure 12: Importance of factors when choosing where to live by location of employment

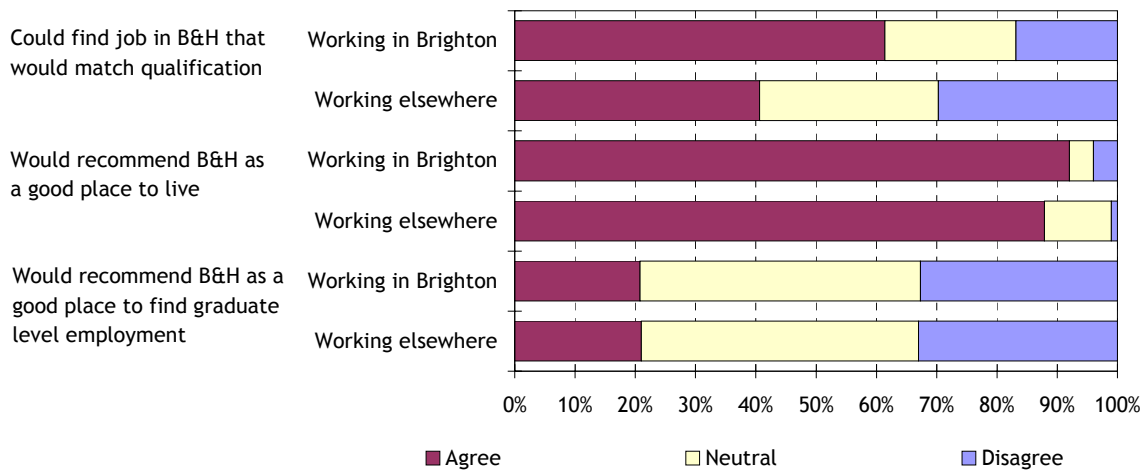


Base: All UK domiciled matched cases in paid employment (N=80 and 148)

Note: *Importance is scored on a 4 point scale from 0= 'none', 1= 'some', 2= 'quite', 3= 'very'

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Figure 13: Attitudes to living in Brighton and Hove and opportunities by employment location



Base: All UK domiciled matched cases in paid employment

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Conclusions

This paper combines data from the Brighton Factor survey of final year students at the University of Sussex with data from the Destinations survey of graduate outcomes to explore what really happens to graduates as they make the transition from university into the labour market and whether or not their short-term expectations are met. It also explores the Brighton Factor effect on graduates to see whether those who stay on in the city after graduating are relatively disadvantaged in labour market terms – trading off employment outcomes for a better quality of life.

Linking anticipated outcomes to actual outcomes at graduate and postgraduate level six months after graduating, our findings are largely positive with graduates gaining work after graduating, work that tends to be of a graduate level, and work that meets their expectations. Indeed, the majority (between three fifths and two thirds) of graduates had gained work in the broad type of job and/or industry that they had anticipated. There are some indications however of graduates becoming more flexible with their plans, particularly those aiming to take some time out or taking up further study initially after graduating, as many were in work six months after leaving the University. In addition to this, those hoping to gain work after graduating in the creative industries or science, biotechnology or ICT companies might find it harder to gain work in these sectors than anticipated.

A substantial group of graduates anticipated staying on in the city after graduating and many do so, some stay on to find work or to continue to live in the city whilst working nearby, and others stay on to continue with their studies. Indeed, of those engaging in further study, almost half stayed on in the city to do so. This indicates the loyalty that graduates feel to the city, and to the University in particular.

Our findings suggest that, generally, graduates find work in the locations that they had hoped to be in. The vast majority of our graduates gained work in the South East of England (including London), reflecting both the profile of their home location prior to study but also their expectations. However, slightly fewer graduates ended up working in Brighton and Hove or in London than had expected to. This suggests that when searching for jobs, graduates may find they need to return home or to spread the net wider to consider areas they have less familiarity with in order to continue to benefit from the quality of life aspects they value, particularly the areas between Brighton and London and areas to the east and west of Brighton along the coast.

The findings also indicate that those graduates staying on in the city after leaving the University largely choose to do so and are not disadvantaged in employment terms. They are in paid work, have positive opinions about the employment opportunities in the city and are looking for responsible employers that can offer them interesting work. There was some variation in terms of the level of

occupation achieved at six months by location of employment. However, there is no statistical evidence to suggest that those working in Brighton and Hove were any less likely to be working in some kind of graduate level job; and although there may be some indication of a degree of wage polarisation for those graduates working in Brighton and Hove, the average income was not significantly lower than the average income across all graduates regardless of work location (at £19,000).

Finally, satisfaction with Brighton and Hove as a place to live and work was high, although there were some concerns shared by all about the cost of housing and road congestion. Those working away from Brighton and Hove and the surrounding area appeared no less satisfied with Brighton and Hove than those staying on to work. However, there is some evidence to suggest that some graduates are pulled away from Brighton and Hove out of concerns about the adequacy of the local infrastructure and limited availability of graduate opportunities. In addition, those working away were less likely to have felt that they could find a job that matched their qualifications than those working in Brighton and the surrounding area.

Emerging issues for the University of Sussex

The findings from this paper offer valuable insights into students' expectations in accessing jobs on graduation and how these are subsequently met in labour market outcomes. The key messages for the Careers and Employability centre discussed in this report could be used in the future to:

- highlight the loyalty of the students to the University and to the quality of life offered by the city of Brighton and Hove, and encourage the careers team to explore new ways of utilising this
- acknowledge the realistic nature of students' expectations of possible initial experiences in the labour market and their awareness of the broad range of opportunities available
- continue to network widely with a range of employers in the South East region
- build on this knowledge to develop resources for emphasizing the distinctive characteristics of the local labour market within the Sussex diamond but also draw attention to opportunities in the wider South East
- contribute to national debates in higher education about students' aspirations and graduate experiences of the labour market.

Appendix 1.1: Additional tables

Table A1: Exploring the profile of matched survey respondents

	University of Sussex final-year students (population)		Brighton Factor survey respondents (sample)			Survey respondents with matched destinations (matched sample)		
	N	%	N	%	Response rate	N	%	Response rate
All	2,045	100	441	100	22	327	100	16
<i>Level of study</i>								
PG	443	22	149	34	34	70	21	16
UG	1,602	78	289	66	18	257	79	16
Other, not defined	-	-	3	<1		-	-	
<i>Gender</i>								
Female	1,262	62	340	77	27	256	78	20
Male	783	38	101	23	13	71	22	9
Total	2,045	100	441	100	-	327	100	-
<i>Age (at time of sample/BF survey)</i>								
Under 21	91	4	39	9	43	33	10	36
21-24	1,416	69	258	59	18	199	61	14
25-29	267	13	69	16	26	48	15	18
30-44	201	10	53	12	26	34	10	17
45 or older	70	3	22	5	31	13	4	19
Total	2,045	100	441	100	-	327	100	-
<i>Ethnicity</i>								
White	1,833	90	403	91	22	299	92	16
Black and minority ethnic background	204	10	38	9	19	27	8	13
Total	2,037	100	441	100	-	326	100	-

Base: UK domiciled students/graduates

Source: *Destinations of leavers from the University of Sussex 2008, Brighton Factor Survey 2007, IES analysis, 2009*

Table A2: Actual activity six months after graduation (Destinations survey)

Actual activity	%
Full-time work only (inc. self-employment)	57
Part-time work only	5
Voluntary/unpaid work	2
Work and further study	11
Further study only	15
Assumed unemployed	4
Not available for employment	4
Other	2
<i>Total</i>	<i>100</i>
<i>Base (N)</i>	<i>326</i>

Base: All UK domiciled matched cases

Source: Destinations of leavers from the University of Sussex 2008, Brighton Factor Survey 2007, IES analysis, 2009

Table A3: Expected activity six months after graduation (Brighton Factor survey)

Expected activity	Valid %
Graduate scheme	9
Permanent employment	30
Temporary employment/self-employed	21
<i>All paid work</i>	<i>60</i>
Further study	13
Taking time out	10
Combination of above (usually work with study)	15
<i>All study (inc. combination of activities)</i>	<i>28</i>
Other (eg home with family, voluntary work)	2
Total	100
Base (N)	326

Base: All UK domiciled matched cases

Source: Destinations of leavers from the University of Sussex 2008, Brighton Factor Survey 2007, IES analysis, 2009

Table A4: Actual study activity six months after graduation (Destinations survey)

<u>Actual study activity</u>	<u>%</u>
Full-time study	18
Part-time study	8
No study	74
Total	100
<i>Base (N)</i>	326

Base: All UK domiciled matched cases

Source: Destinations of leavers from University of Sussex 2008, Brighton Factor Survey 2007, IES 2009

Table A5: Employment status of those in further study (Destinations survey)

<u>Employment status</u>	<u>%</u>
Paid full-time employment	30
Paid part-time employment	12
<i>Any paid work</i>	42
Voluntary/unpaid work	1
Further study only	57
Total	100
<i>Base (N)</i>	86

Base: All UK domiciled matched cases in further study

Source: Destinations of leavers from University of Sussex 2008, Brighton Factor Survey 2007, IES 2009

Table A6: Salary, by location of employment (per cent) (Destinations survey)

<u>Salary</u>	<u>Brighton and Hove, and Sussex (BN codes)¹²</u>	<u>Elsewhere</u>	<u>Total</u>
Less than £19,000	49	42	44
£19,000 to £22,000	27	38	35
£23,000 or more	24	21	22
Total	100	100	100
<i>Base(N)</i>	33	77	110

Base: All UK domiciled matched cases in paid employment

Source: Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009

¹² 'Brighton and Hove/Sussex (BN codes)' includes all those working in the wider BN postcode area (ie at the two digit postcode level). Figures in the table are shown for this broader area around Brighton and Hove due to the low base size for income for those working in Brighton and Hove only.

Table A7: Size of employer for those in paid employment, by location of employment (Destinations survey)

Size of employer	Brighton and Hove	Sussex and wider South East	Greater London*	Elsewhere UK or overseas*	Elsewhere UK or overseas (inc. London)	Total
1 to 49	21	24	21	13	17	21
50 to 249	14	31	21	30	25	25
250 or more	66	45	59	57	58	54
Total	100	100	100	100	100	100
Base (N)	44	83	29	23	52	179

Base: All UK domiciled matched cases in paid employment (where size of employer is known)

Note: *these figures should be treated as indicative only due to the small bases involved

Source: Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009

Table A8: Salary (pro rata), by size of employer for those in paid employment (Destinations survey)

Salary	1-249	250 or more	Total
Less than £19,000	48	33	39
£19,000 to £22,000	40	36	38
£23,000 or more	12	31	22
Total	100	100	100
Base (N)	50	58	108

Base: All UK domiciled matched cases in paid employment (where size of employer is known)

Source: Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009

Table A9: Importance of factors when choosing an employer (Brighton Factor survey)

Factor	Mean score*	Not important at all %	Of some importance %	Quite important %	Very important %	Base N
Interesting/challenging work	2.68	<1	1	29	70	327
Training and development opportunities	2.28	<1	14	43	43	327
Geographical location	2.13	3	18	42	37	327
Sound ethical policy	1.96	6	20	46	28	327
Financial benefits package	1.95	3	24	48	25	327
Reputation within the industry	1.91	3	25	49	23	327
Sound environmental policy	1.70	8	32	45	16	327
Offers graduate entry scheme	1.25	25	37	27	11	327
Employment of other graduates	0.93	34	42	21	3	327
Size of company	0.88	33	48	16	3	327

Base: All UK domiciled matched cases

Notes:*where 0= 'Not important at all'; 1= 'Of some importance'; 2= 'Quite important'; and 3= 'Very important'

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Table A10: Importance and satisfaction with factors when choosing somewhere to work (Brighton Factor survey)

Area to work has ...	Importance of factor	Satisfaction with Brighton and Hove			Base N
	Mean score	Dissatisfied %	Neutral %	Satisfied %	
Pleasant environment	2.54	2	18	80	327
Graduate level opportunities	2.06	37	43	20	327
High salary levels	1.85	26	51	23	327
Low unemployment rates	1.66	23	57	20	327
Many large well respected businesses	1.41	25	48	27	327
Thriving area for new businesses	1.31	13	51	35	327
Many small companies	1.29	9	47	45	327
Mix of service and manufacturing jobs	0.93	18	58	24	327
Affordable business premises	0.80	35	55	9	327

Base: All UK domiciled matched cases

Note: Mean scores range from 0 (not important) to 3 (very important)

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Table A11: Importance of factors when choosing where to work and satisfaction with Brighton and Hove, by location of current employer

Factor	Working in Brighton and Hove and Sussex (BN codes)		Working elsewhere UK or overseas	
	Mean score*	Satisfied, %	Mean score*	Satisfied, %
Pleasant environment	2.55	85	2.54	77
Many graduate level opportunities	1.95	24	2.18	21
High salary levels	1.86	26	1.91	20
Low unemployment rates	1.67	25	1.78	18
Many small companies	1.38	45	1.24	41
Thriving area for new business	1.29	38	1.36	30
Many large well respected companies	1.27	28	1.47	25
Mix of service/manufacturing jobs	0.92	24	0.90	25
Affordable business premises	0.77	7	0.77	7
<i>Base (N)</i>		80		148

Base: UK domiciled matched cases in employment

Note: *Importance is scored on a 4 point scale from 0= 'none', 1= 'some', 2= 'quite', 3= 'very'

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Table A12: Importance of factors when choosing where to work and satisfaction with Brighton and Hove, by location of current employer

	Working in Brighton and Hove and Sussex (BN codes)		Working elsewhere UK or overseas	
	Mean score*	Satisfied, %	Mean score*	Satisfied, %
Pleasant environment	2.55	85	2.54	77
Many graduate level opportunities	1.95	24	2.18	21
High salary levels	1.86	26	1.91	20
Low unemployment rates	1.67	25	1.78	18
Many small companies	1.38	45	1.24	41
Thriving area for new business	1.29	38	1.36	30
Many large well respected companies	1.27	28	1.47	25
Mix of service/manufacturing jobs	0.92	24	0.90	25
Affordable business premises	0.77	7	0.77	7
<i>Base (N)</i>		80		148

Base: UK domiciled matched cases in employment

Note: *Importance is scored on a 4 point scale from 0= 'none', 1= 'some', 2= 'quite', 3= 'very'

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Table A13: Importance of factors when choosing where to *live* and satisfaction with Brighton and Hove (Brighton Factor survey)

Area to live has ...	Importance of factor Mean score	Satisfaction with Brighton and Hove				Base (N)
		Dissatisfied %	Neutral %	Satisfied %	Total %	
Friendly atmosphere	2.39	5	17	79	100	327
Good restaurants, cafes, bars, and clubs	2.35	2	4	95	100	327
Availability of affordable housing	2.34	57	29	14	100	327
Good public transport	2.22	11	18	72	100	327
Wide range of shops and boutiques	2.04	1	9	90	100	327
Green space/open countryside	2.01	6	23	71	100	327
Good standard of public health care	2.00	13	47	40	100	327
Good record of community safety	1.91	12	51	37	100	327
Vibrant arts and cultural scene	1.90	3	12	85	100	327
Well maintained streets	1.82	20	39	40	100	327
People from different backgrounds/cultures	1.72	11	23	66	100	327
Good sports and leisure facilities	1.71	10	34	56	100	327
Young population	1.69	3	10	87	100	327
No air pollution	1.65	25	47	27	100	327
Closeness to London	1.64	3	15	81	100	327
Proximity to coast	1.53	<1	4	96	100	327
No problems with road congestion	1.34	53	34	13	100	327
Good transport links to Europe	0.94	12	42	46	100	327

Base: All UK domiciled matched cases

Note: *Importance is scored on a 4 point scale from 0= 'none', 1= 'some', 2= 'quite', 3= 'very'

Source: Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009

Table A14: Importance of factors when choosing where to *live* and satisfaction with Brighton and Hove, by location of employment

	Working in Brighton and Hove and Sussex (BN codes)		Working elsewhere UK or overseas	
	Mean score*	Satisfied, %	Mean score*	Satisfied, %
Friendly atmosphere	2.46	76	2.35	79
Good restaurants, cafes, bars, and clubs	2.46	97	2.31	93
Availability of affordable housing	2.17	11	2.42	13
Good public transport	2.15	75	2.17	73
Wide range of shops and boutiques	2.05	93	2.04	89
Green space/open countryside	2.01	71	1.98	70
Good record of community safety	1.95	41	1.91	38
Good standard of public health care	1.95	43	2.03	35
Vibrant arts and cultural scene	1.95	89	1.83	84
Well maintained streets	1.90	51	1.82	37
Young population	1.86	81	1.58	87
Proximity to coast	1.81	99	1.27	96
Good sports and leisure facilities	1.78	61	1.65	53
No air pollution	1.72	33	1.59	25
People from different backgrounds/cultures	1.68	66	1.58	66
Closeness to London	1.46	88	1.64	79
No problems with road congestion	1.25	10	1.41	15
Good transport links to Europe	0.89	47	0.92	44
Base (N)		80		148

Base: All UK domiciled matched cases in paid employment

Note: *Importance is scored on a 4 point scale from 0= 'none', 1= 'some', 2= 'quite', 3= 'very'

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Table A15: General attitudes on living in Brighton and Hove and opportunities (Brighton Factor survey) (per cent)

	Disagree	Neutral	Agree	Total	Base (N)
Could find job in B&H that would match qualification	27	25	48	100	317
Would recommend B&H as a good place to live	3	9	89	100	318
Would recommend B&H as a good place to find graduate level employment	33	45	22	100	317

Base: All UK domiciled matched cases

Source: *Destinations of leavers from University of Sussex 2007, Brighton Factor Survey 2007, IES 2009*

Appendix 1.2: Sectors of employment

Anticipated sector was computed using the Brighton Factor survey question 10i (Section C). Sector of current work was computed from the Destinations survey using Standard Industrial Classification (SIC) codes. The categorisation used is based on the following coding scheme:

Broad sector	Anticipated industry from Brighton Factor survey	Sector of actual employment from Destinations survey
Primary utilities and production	<ul style="list-style-type: none"> a) Engineering/advanced engineering b) Science/biotechnology c) Environment o) Construction n) Manufacturing 	<ul style="list-style-type: none"> A) Agriculture and forestry B) Fishing C) Mining and quarrying D) Manufacturing E) Electricity, gas and water supply F) Construction
Private sector services	<ul style="list-style-type: none"> d) Information and communications technology e) New media (digital media and web technology) f) Financial services g) Business and legal services h) Retail/wholesale i) Leisure/tourism/hospitality j) Creative industries (inc TV, arts, journalism, publishing) m) Food and drink o) Construction 	<ul style="list-style-type: none"> G) Wholesale and retail trade; repair of motor vehicles, motorcycles and personal household goods H) Hotels and restaurants I) Transport, communication and storage J) Financial activities K) Property development, renting, business and research activities O) Other community, social and personal services P) Private households with employed persons
Public sector	<ul style="list-style-type: none"> k) Public service sector l) Voluntary/not-for-profit/charity sector/social enterprise 	<ul style="list-style-type: none"> L) Public administration and defence; social security M) Education N) Health and social work Q) International organisations and bodies

Appendix 1.3: Locations and regions

Anticipated location/region of work

Anticipated location of employment was based on responses to the Brighton Factor survey question 13b (Section C). The response categories presented to respondents were: 'Brighton and Hove'; 'London'; 'elsewhere in Sussex'; 'the wider South East'; 'Elsewhere'. In order to make comparisons with region of domicile prior to study and with actual location of employment six months after graduation, in some cases the categories 'elsewhere in Sussex' and 'elsewhere in the South East' were combined to make 'Elsewhere in Sussex and the South East'.

Location/region of domicile and location/region of employment

Location/region of domicile was based on responses to the Brighton Factor survey question 1b (Section A), and made use of postcodes reported at the two and three digit level (ie postcode area and postcode district). Location/region of employment was based on location of employer reported in the Destinations survey and also made use of postcodes at the two and three digit level. Both were subject to the coding scheme outlined below. For some analyses it was necessary to group categories together. Common groupings used were:

- Brighton and Hove grouped together with Sussex (BN codes) to make 'Brighton and Hove/Sussex (BN codes)' (sometimes referred to as 'Brighton and surrounds')
- Sussex (BN codes) grouped with the wider South East to make 'Sussex and wider South East'
- Grouping together the final ten regions in the table below to make 'Elsewhere UK' and where relevant, work locations outside of the UK were added and categorised as 'Elsewhere UK or overseas'.

Location/region	Postcode areas/districts included
Brighton and Hove	BN1, BN2, BN3
Sussex (BN codes)	All other BN codes (excluding BN1, BN2 and BN3)
Wider South East	CT, DA, GU, KT, ME, MK, OX, PO, RG, RH, SL, SM, SO, TN and parts of CR
Greater London	All Central London postcode areas within the London Postcode District, and all other three digit postcode districts that predominantly fall within the Greater London Postcode area.
South West	E, EC, N, NW, SW, SE, W, WC and parts of BR, CR, EN, IG, TW, HA, UB
Eastern	BA, BH, BS, DT, EX, GL, PL, SN, SP, TA, TQ, TR
West Midlands	AL, CB, CM, CO, HP, IP, LU, NR, RM, SG, SS, WD
East Midlands	B, CV, HR, WV
Yorkshire and Humber	LE, NG, NN
North West	DN, LS, YO
North East	M, WN
Wales	NE
Scotland	CF, LL, SA
Northern Ireland	G, IV
Channel Islands and Isle of Man	

Research Paper 2: How do graduates' careers develop in Brighton and Hove?

A qualitative exploration of graduates' experiences of navigating the local labour market

Freddie Sumption

This research paper is the second in the series of three to examine the effect that a city has on student and graduate expectations and plans for when they leave university and, in turn, the effect that their decision whether or not to stay has on the cities themselves. The paper makes use of in-depth interviews with individuals from the University of Sussex who planned to stay living and working in Brighton and Hove after graduating. It examines the various ways in which these individuals navigated the move from study into local employment and developed their early careers; and considers the influences and motivations behind career decisions, and the role of the city in these decisions - to examine the impact of the *Brighton Factor*.

It forms part of the second stage of research initiated in 2007 by the Institute for Employment Studies and the University of Sussex, and published as *The Brighton Factor: New graduates and their local labour market* (Pollard et al., 2008).

This paper finds graduates take time to settle into careers, more specifically:

- Many graduates leave university without clear career goals and can feel somewhat under-prepared for finding and securing employment, and this corresponds with other research findings.
- Initial employment decisions can be opportunity driven which may pigeon-hole some graduates into inappropriate careers.
- Work experience can lead to more permanent roles, and initial underemployment tends to iron itself out as graduates move from stop-gap jobs into career jobs.
- Graduates who stay on in the city after graduating have a strong desire to do so, and are prepared to make career sacrifices, at least in the short-term, to continue to take advantage of the vibrant art and culture scene and the 'young, relaxed vibe'.
- There is an enduring perception that Brighton and Hove is unable to satisfy career goals in the long-term - the appeal of the city therefore has a lifespan and, over time, graduates become increasingly prepared to move away to find appropriate career opportunities.

Introduction

In April 2007 students in their final year of study at the University of Sussex were invited to take part in a postal survey exploring their thoughts and feelings about the University, their perceptions about living and working in Brighton and Hove, and their plans for the future, for when they graduate and looking further ahead. This was known as the Brighton Factor survey and provided an insight into the expectations and aspirations of the University's graduates: those who wanted to stay on in the city of Brighton and Hove after graduating and what they hoped to achieve in the local labour market, and also for those who expected to move away. The findings from this research were published as *The Brighton Factor: New graduates and their local labour market* (Pollard et al., 2008).

Two years after this cohort graduated, the Institute for Employment Studies conducted interviews with 18 individuals who planned to stay living and working in Brighton and Hove to find out what activities they had been engaged in since leaving university. In particular, the interviews sought to ascertain the various ways in which students navigated the move from study into local employment, from the early stages of thinking about appropriate careers, to undertaking work experience and job-seeking and developing their careers. Discussions with graduates also considered the influences and motivations behind their career decisions, and in particular the role of Brighton and Hove in these decisions.

This paper presents findings from these interviews. We use some key terms which require preliminary definition. The term '**job**' refers to any work activity – usually paid but occasionally unpaid – that the participant has undertaken or plans to undertake. A participant's job may or may not be related to their choice of career. We also use the term '**career**' which we define as the occupation or work area for which the participant is trained, is actively pursuing, or plans to pursue for a period of time. Related to this concept, our term '**career goal**' refers to a standard or position that an individual wishes to have attained at some point in the future. A '**career plan**' refers to the path (often a series of jobs) they propose to take in order to meet a specific career goal.

Methodology

The interviewees were contacted by email and invited to take part in a telephone interview. Each interview lasted between 30 minutes and one hour and was conducted using a semi-structured interview guide that focused on:

- when the interviewee first started thinking about careers
- the importance of various factors in deciding where to live and work

- the transition from university into the labour market, including any problems with seeking or securing appropriate work
- the individual's satisfaction with their current activity and the extent to which this fits in with their early goals or plans
- what they would have done differently, with hindsight
- the support they received – and/or would have liked to receive – at each stage
- future aspirations and plans.

As the purpose of the research was to ascertain the nature of graduates' decision-making and the issues they faced in the local labour market, interviewees were selected purposively.

Firstly, the sample was limited to those who had either planned to stay and/or who had actually stayed, in Brighton and Hove after graduating (using information derived from the Brighton Factor survey and the HESA six-month follow-up survey 'Destinations survey').

Within these groups, interviewees were selected on the basis of their expected and actual activity six months after graduation to give a group with a range of backgrounds and outcomes (for example, whether they were in a 'graduate' or 'non-graduate' job, whether their original domicile was Sussex or further afield, and variables including gender, age and degree subject). Of the eighteen graduates interviewed, five were male, four were mature students (over the age of 21 at the time of starting their degree), three were originally domiciled in the Brighton and Hove area – although nearly all (14) were originally from the South East or London. Four studied vocational subjects, while the others were evenly split between social sciences, natural sciences and humanities.

Quotations are used to illustrate findings throughout the report, however all names have been changed.

How do graduates make career decisions?

While each individual's career path and experiences are unique, three distinct 'types' emerged from the analysis, based on the way the participants approached career decisions, both while studying and in employment. These are described briefly here and may be useful in understanding the choices certain groups of students make, and the weight of various influences on these choices. These are accompanied by individual case studies, which illustrate what career paths may look like for different groups of students.

Drifters

The group of 'Drifters' represents about half of the students interviewed. On the whole they arrived at university without any specific plans for their careers, and did not start thinking about jobs until late in their final year or until they had actually graduated. Participants in this group generally approached job-seeking in a haphazard fashion and were more likely to respond to opportunities that happened to float past (for instance, job offers from existing contacts), rather than approaching the task systematically. Students in this group are likely to benefit most from early guidance, but may also be the hardest to engage. The University recognises that tutors may be in a better position to provide early information and encouragement, as they have regular contact with the students. Extra-curricular activities could continue to be promoted as this will help students to get a job.

Jack, a young Biology graduate, arrived at university without a specific career plan, and admits to 'coasting through university without a clue what I was going to do afterwards'. While he was studying, he ran a club night and attended a project management course run by the Careers and Employability Centre (formerly CDEC) specifically for students undertaking such activities. Although he did not realise it at the time, he later discovered that these activities would be 'of far more interest to employers than what I studied at university'. After graduating, a friend fixed him up with a stop-gap administrative post at the organisation where she was working in Brighton. Having a 'nine to five job with no responsibilities' allowed him to 'pay the bills and have a proper think about what I really wanted to do'. He looked into various careers, including aviation, the Police force and local council jobs, taking a graduate position at the latter for several months. Although this job had progression opportunities, he decided it was 'too slow-paced' for him. A friend sent him a link to a job at a small private company - also in Brighton and Hove - where he has worked for over a year and which he feels suits him much better. His advice to other graduates in his position would be 'not to set your heart on the first thing you do, because you don't really know what kind of things you will like until you try them'.

Navigators

The group of 'Navigators' comprises those who arrived at university with a good idea of what they wanted to do afterwards and were therefore able to direct their studies, selecting study options, work experience and job search towards finding employment that would help them meet their goals. Because their career paths are largely pre-determined by the nature and hierarchy of the sector (in the short term at least) they have limited flexibility in their decision-making and are able to 'navigate' through the process, as long as they stick to their career map. This group is most likely to be helped through the provision of guidance on specific steps such as how and when to seek work experience, filling in application forms and job interview technique.

Ellie, a mature graduate, studied social work at university (having changed from American Studies in the first year). She decided early in on her course that she wanted to work with children in the long term, but undertook her compulsory placement at an adults' care centre 'partly because it was close to my home, but also because I thought it would be good to get experience in another area [of social work]'. It was important to her to find work close to Brighton and Hove as she has a young family and is settled here. However, after graduating, she struggled to find a job working with children locally, because 'it's very competitive and obviously I didn't have the experience [with children] that some of the other applicants had'. She spent several months looking for work, during which time she attended a session run by the local council, aimed at helping people apply for public sector jobs: 'They told us how to fill in the application forms, so things like giving evidence of how you meet each bit of the job description ... I realised I'd been doing lots of things wrong'. She was eventually offered - and accepted - a job working with adults but is planning to cut back her hours in order to gain work experience with children. Ideally, this would enable her to secure more permanent work near Brighton and Hove. However, she recognises that competition is high in Sussex and is prepared to move away if necessary. With hindsight, she would have 'made sure I got the right work experience in the first place' and spent more time applying for jobs before graduating, making sure her application was relevant.

Explorers

The group of 'Explorers' comprises those who have taken a proactive approach to career-planning. While many studied towards non-vocational degrees they often sought advice from tutors or careers services early on during their studies to explore the various options, and many undertook work experience placements during the university holidays. Some had secured employment before graduating but those who had not tended to enter the labour market feeling that they had an informed understanding of the range of opportunities available and what they wanted from a job. Once in work, they enjoy their jobs, but tend to have their eye on other options. While they may consider location and other factors, job content is the priority. These students already tend to make good use of the information, advice and guidance the Careers and Employability Centre offers, to help them decide on a career path. However, many in this group tend to assume that London is the only option for those serious about their career, and do not look locally (where their potential may be utilised). The University may be able to encourage these types of students to consider alternative locations beyond London, as well as staying in Brighton and Hove by promoting industries and jobs locally and within commuting distance (for instance, the Sussex Coast Diamond).

Paula, a young graduate, studied English and History at university. She did not have any preconceived career ideas before starting her degree, and first visited the Careers and Employability Centre in her first year to seek out information about the career destinations of previous graduates of her subject. After an interview with a careers adviser in her second year, she applied for a summer placement at a Media production company in London: 'The person at the Careers and Employability Centre talked to me about different careers and the media job looked interesting, so I thought it would be a good idea to try and get an internship first and see if I liked it.' Towards the end of her third year, a full-time position became available at the organisation, for which she was invited to apply; after a short, informal interview she was offered - and accepted - the post. Although she would have liked to stay local ('if I could do this job in Brighton then I definitely would') she felt that this was too good an opportunity to pass up, and moved to London after graduating. She did not consider commuting as 'it's quite a demanding job and I wanted some kind of work-life balance'. Although she is satisfied with her job she still keeps her eye out for other jobs: 'I don't particularly want to move but it's good to know what else is out there ... if there was something that really jumped out at me then I'd go for it'.

When do students start thinking about careers?

As illustrated above, students varied in the way they approached the planning process and when they sought out careers information. Generally, as one would expect, graduates started thinking about careers at some point during their university course and, as such, tutors and the University careers service were the sources of advice and guidance most frequently referred to in the interviews.

Students engaged with the Careers and Employability Centre in different ways

'Explorers' reported visiting earlier on than the other groups, often with a view to browsing the lists of potential careers or looking for work experience placements.

However, most students interviewed made their first visit to the Careers and Employability Centre in their third year, either to ask for information packs or for one-to-one careers guidance. While most felt that the career-focused interviews helped get them thinking about their options, they often had unrealistic expectations about the support the service was able to provide:

'I just wanted someone to tell me what to do and how to do it, but it was more like a counselling session, they asked me about my interests and drew a diagram.'

Jack, young Biology graduate

Some also reported attending the industry talks, careers fairs and workshops run by the Careers and Employability Centre, particularly when these were promoted by tutors. On the whole, all the students felt that the centre was a visible presence,

and that it provided the right support for those motivated to plan their careers early. A number expressed regret that they had not started thinking about careers earlier, conceding that they had underestimated the amount of thought, research and action required in planning their careers and securing a job.

'I remember thinking "oh yeah I've got to get around to doing that sometime". I thought I could just rock up, come away with a list of options and start applying for jobs.'

David, young Theoretical Physics graduate

Late or limited engagement with careers support, and correspondingly leaving university with no clear plans is not uncommon as has been highlighted in other quantitative research. For example, the recent HECSU Future Track research¹³ identified that two thirds of students do not use their higher education careers service, and research undertaken by the Institute for Employment Research found that 45 per cent of graduates are unclear about career direction upon leaving university.

As will be highlighted in the next section, this delay sometimes made it harder for students to compete in the labour market, since they had not had the opportunity to undertake relevant work experience or extra-curricular activities. This undoubtedly made the job-seeking process longer and more arduous for many.

'If I'd known earlier how hard it was to get a job, I would have definitely tried to get some work experience while I was studying.'

Helen, mature Psychology graduate

Interestingly, however, the majority of those who felt they had left their career search too late also felt that there was little that could have been done to engage them earlier on:

'To be fair, the support was there. It just didn't occur to me to use it. It just wasn't part of my mental landscape I suppose.'

Jack, young Biology graduate

'You're in this little bubble the whole way through uni and then you have this massive "Aargh" moment when you realise you're about to graduate and you don't have a clue what you're going to do ... [but] being realistic I don't think there's anything or anyone that could have persuaded me to get my act together earlier.'

George, young Politics graduate

¹³ Purcell K, Elias P, Atfield G, Behle H, and Ellison R, with Hughes C, Livanos I and Tzanakou C (2009) *Plans, aspirations and realities: taking stock of higher education and career choices one year on: Findings from the Second Futuretrack Survey of 2006 applicants for UK Higher Education*. HECSU, Manchester

Academic staff had a strong impact on students' early career ideas ...

Tutors had an influence on students' early career ideas, mainly through keeping them informed of events run by the Careers and Employability Centre and encouraging them to attend talks by industry professionals visiting the department. For those studying vocational subjects, tutors were often a highly influential source of advice and support, often encouraging them to follow a particular path as well as keeping them informed about opportunities in the industry and providing them with contacts.

While many found this useful, particularly those studying vocational subjects, some felt that their tutors were too forceful in putting their views across and served to discourage students from following their dreams. One psychology student recalled a comment a tutor had made at the beginning of her degree:

'He basically said to our class "you probably all think you're going to be clinical psychologists, but only one in fifty makes it, so don't get your hopes up, it's very competitive". So basically I just thought well it won't be me then and I never even looked into it.'

Jessica, mature Health Psychology graduate

Such instances illustrate the power that tutors exert – perhaps unknowingly – on their students early on in the planning process and highlights the importance of striking a careful balance between encouraging students to aim high, while at the same time keeping a realistic outlook.

... but parents and lifestyle factors did not feature so highly

Few reported that they had consulted parents or peers early on in their career planning process. However, there were a couple of exceptions where parents were in a position to advise and support their children in a particular area of work. Indeed, with hindsight one felt grateful for the head start.

'My mum put me in touch with a couple of her friends who had jobs [working with children]. So I got a summer job at a children's centre after the first year, and that helped me get the job I've got now.'

Sally, young Psychology graduate

At this stage, very few students recalled being influenced by location although this may have been implicit in their career choices: for instance, a mother of young children living in Brighton and Hove chose to study social work since her partner's job required her family to move frequently and she needed a job she could practice anywhere. For others, the opportunity to stay local was simply an additional benefit. Asked whether location had affected her choice of career, one graduate, a teacher living near Brighton and Hove, reported:

'I always wanted to be a teacher, I never thought about doing anything else but yeah it is a bonus that I can do it here.'

Marie, young Education graduate

However, for the vast majority of 'traditional' students – those coming straight into HE from school or college – location did not figure at all at this stage. In particular, those who had specific career ambitions from early on in their degrees reported that they would be prepared to move almost anywhere to achieve their goals.

How do graduates move from university into the local labour market?

So how did students set about gaining employment and what problems did they face? Again, this depended heavily on their decision-making style and the extent to which they had specific ambitions for their careers. Generally speaking, students who had developed firm career goals tended to have a relatively smooth transition into the labour market, both in terms of seeking and attaining employment.

What support did students access when job-seeking?

For the majority of students, the first port of call was the web, although they used it in different ways. Those with specific career plans often targeted their search at particular websites advertising jobs in their industry and preferred location.

'There were three or four websites which I looked at about once a week and they had pretty much all the IT jobs in the area.'

David, young Theoretical Physics graduate

Students who had a less clear idea about their career ambitions often used the web to 'browse' potential careers, many using well-known job sites such as the 'Guardian Jobs' website and 'CharityJob' to get a feel for the kind of work available.

'Until then I didn't have a clue what people actually did, apart from the standard jobs everyone's heard of, like banker, doctor, teacher.'

Helen, mature Psychology graduate

A number also looked at the 'Prospects' website to find out what kinds of jobs previous students on their degree course had done, before seeking work in these areas.

Students also visited the Careers and Employability Centre at this stage, again for a variety of reasons. Those who had started applying for jobs were often interested in the CV analysis and sessions to improve interview technique, while one attended the workshop on assessment centres. Others visited to browse the jobs on the

notice board, often looking for something temporary to tide them over until they had decided on their next steps.

Personal contacts became a more important source of support at the job-seeking stage, particularly for those who had no firm ambitions for their careers, and a handful of the participants reported getting their first jobs through their peers or parents' friends. While these jobs were often intended to be stop-gap posts to afford the graduates some thinking time, they often ended up leading to something more permanent with opportunities for career development. One participant, who acquired temporary work through her mother's friend, has now been promoted to a different role within another department and is hoping to progress within the organisation.

What were the main barriers they faced?

When it came to the job selection process, students reported a variety of different experiences and problems. Perhaps the most common difficulty was simply getting to the interview stage, a few reporting that they had applied for 20 or 30 jobs and received no invitations to interview. On reflection some felt that they could have increased their competitiveness by selling their skills more effectively or simply paying more attention to detail

'It sounds really basic but just stuff like looking at the job spec and then making sure you say why you fit.'

Ellie, young Social Work graduate

Those students who attended the CV clinics run by the Careers and Employability Centre, or consulted websites or books for tips found them helpful, however some admitted that they did not realise the value of such sessions until they had already been turned down for jobs, meaning that engaging students and repeating the key messages about job-hunting (although difficult) is important.

The value of extra-curricular activities and part-time work to participants became clear when initial applications are unsuccessful, even where it was not related to the job in question. This was a surprise for many, who in some cases had not thought to mention – or had even intentionally omitted – their hobbies.

'Even things like running a club night or working in a bar can show how you've managed a project or dealt with difficult customers.'

Louise, young English graduate

'One thing you have to get your head round is that employers aren't interested in your degree, they are just thinking "can you do the job?" and "are you going to fit in?".'

Helen, mature Psychology graduate

Those who had undertaken work experience in an area specific to their industry felt that this had been particularly valuable, either because it had enabled the student to demonstrate their commitment to the industry and understand the work area (and therefore prepare a better application), or because it helped them to get a foot in the door at a particular company. One student who had undertaken work experience for a media organisation between her second and third year at university effectively bypassed the official selection process when she applied for a job there after graduating:

'I didn't really have an interview as such, just a chat with a couple of the senior people who I hadn't worked with before. But it was all very informal.'

Paula, young English and History Graduate

Once students reached the interview stage, the same points applied about the need to sell their skills and to choose examples from all aspects of the applicant's experience that highlight the attributes the employers are seeking. Those who had been turned down for jobs often sought feedback, which helped them to improve their interview technique or skills.

'They said, "You need to think aloud more in the interview, we need to hear the way you think".'

Jessica, mature Health Psychology graduate

'They said my application was good but my computer skills weren't good enough, so I have to work on that.'

Carrie, mature Media Studies and French graduate

While most students managed to find some kind of work locally within a few months of graduating, a couple spent several months unemployed. Interestingly, it was those who were least focused about what they wanted to do who struggled most, perhaps because, by applying for a large number of jobs, they were unable to spend time tailoring their CV to each role.

'I was literally applying for absolutely every job going, I didn't even stop to think about whether I wanted it.'

Helen, mature Psychology graduate

How do graduates describe their early career experiences?

The first couple of years after graduating were turbulent for many of the graduates, as they began to settle into working life, reassess their career goals and other elements of their lives such as location and work-life balance.

‘Underemployment’ was not always a problem in the short term ...

The first *Brighton Factor* report highlighted concern about underemployment in the city of Brighton and Hove due to the high competition for jobs. Indications of underemployment in the city were also shown in the first research paper of this series, at least in the short term (six months after graduating). This found a higher proportion of graduates in the city, than those working elsewhere, were working in non-graduate jobs and in jobs not requiring a degree, for example, working as office clerks, call centre operatives and sales assistants. However, the difference was marginal and not statistically significant.

Indeed, a number of the graduate participants in the interviews reported that they had undertaken a ‘non-graduate job’, but this was often through choice and did not usually reflect an inability to secure suitable work.

For example, some graduates who had no immediate career plans on leaving university reported that they had actively sought out non-graduate jobs such as bar work or administration as a stop-gap while they thought about their next steps. Brighton and Hove has no shortage of such work, particularly in the summer season, so it is perhaps not surprising that students decide to stay on in the city.

‘Like a lot of students I think I coasted through uni without giving a lot of thought to what I wanted to do next ... I think my advice to any student in that position would be to get a low-pressure job, anything at all where you don’t have to use your brain too much, and give yourself a few months to step back think about where you really want to be.’

Jack, young Biology graduate

Staying in Brighton and Hove may also be the path of least resistance for graduates who already have accommodation here and those who worked part-time during their studies and are offered the opportunity to stay on full-time. Talking about their reasons for staying in the city after graduating, two participants commented:

‘Basically it was apathy. The lease on my house didn’t run out for a few months and the other guys, my flatmates, were staying on so I thought “why not?”’

David, young Theoretical Physics graduate

‘I thought about lots of different jobs [while studying] but never anything where I thought “I definitely want to do that” ... I was working in a shop anyway in my second and third year and when I left I just increased my hours there.’

Kate, young Sociology graduate

For graduates such as these – all of whom are now working in what they consider to be career jobs – underemployment may be a short-term issue of transition from university to the labour market, which corrects itself within a year or so.

... but a few did become entrenched in inappropriate jobs

However, there were graduates who become 'stuck' for longer periods in jobs that did not fit their interest or skill level. For instance, one felt frustrated by the lack of variety in her job as an administrative assistant, which she had originally taken on as a stop-gap in the months after leaving university. Having since set her hopes on a career in media, she reported feeling pigeon-holed by prospective employers due to her lack of relevant experience.

'I've never felt this kind of job was really for me ... I've applied for other stuff but when people see your CV and it's only got one thing on it, they think it's all you can do.'

Jo, young International Relations graduate

Several graduates commented that their peers had been in similar situations, having committed to living in Brighton and Hove (for example, by renting accommodation) assuming they would be able to find a more appropriate job eventually, and then becoming more entrenched in jobs that they felt were inappropriate. While this is a universal complaint among graduates early on in their careers, it may be exacerbated by the competition for jobs in Brighton and Hove – particularly in popular industries such as the media.

How did graduates move into more appropriate employment?

One graduate was able to climb out of a 'non-graduate' job through promotion within the same organisation. Helen, a social sciences graduate, took a job as an administrative assistant in a small charitable organisation, having spent several months unemployed. Within a year she had undertaken training, completed an NVQ and been promoted to a customer-facing role which she found more fulfilling:

'I was lucky because I had a pretty enlightened manager who was really hot on training and she pushed me quite hard to move up.'

Helen, mature Psychology graduate

Such experiences illustrate one way in which effective staff management can help businesses capitalise on the skills and potential of their workforce, and retain staff who might otherwise move on after a few months. This approach is likely to be particularly effective in the case of recent graduates, who often have an open-minded attitude to their careers.

For another graduate who found herself in this position, the solution was to go back to university. Having worked as a PA in a large public sector organisation for two years, she has chosen to study physiotherapy, based on her desire to 'do

something that helps people' as well as to stay living and working in the Brighton and Hove area.

Flexibility is key – and staying local may involve some 'sacrifice'

Another graduate, who had worked in three potential 'career-jobs' recognised that a certain amount of flexibility may be valuable in the first couple of years after graduating.

'One thing I'd say [to other graduates] is don't expect to fall in love with the first job you have, because you don't know what it's like or what you're like, really.'

Jack, young Biology graduate

At this stage most graduates were indeed flexible, not just in terms of the activities they pursued – which often involved grabbing unexpected opportunities – but also in terms of their lifestyle. While most of the graduates interviewed had expressed an intention to live and work in Brighton and Hove at the time of the first survey, the first couple of years in the labour market often forced them to make trade-offs between priorities such as salary, job content, lifestyle and location.

Even those living and working locally in jobs they enjoyed, sometimes felt that they were sacrificing something – often a higher salary or range of development opportunities. One graduate who lived and worked in Brighton and Hove for a while after graduating realised within a few months that his expectations were unrealistic, and sought employment in a similar role in London with a higher salary, although he continues to live in Brighton.

'I wanted to buy a house, I wanted to be able to go on holiday and not have to worry about money ... I was skint all the time working in Brighton.'

Alex, young Economics graduate

Other graduates had also decided to opt for what they felt was the best of both worlds, by living in Brighton and Hove and commuting to London. However, this also involved financial and time sacrifices as one participant testified:

'[The commute] is fine for a little while, I have my little routine. But yeah it does get exhausting ... we will probably end up moving closer to London.'

Lilly, young International Relations graduate

How satisfied are graduates with their current job and future prospects?

In the original Brighton Factor survey, before the students left university, they cited work content as most important factor when looking for a job. At the time of

the follow-up, the majority of interviewees were satisfied with their work in terms of the variety and complexity of tasks they were required to carry out.

Most felt that their work was appropriate to their skill level ...

Most also felt that their degree had contributed to their proficiency in the job, whether or not they had studied towards a vocational degree. Graduates felt strongly that the general experience of study had helped them to prepare for certain aspects of working life.

'[University] helps you to think about things in a particular way, a more critical way.'

Louise, young English graduate

'Just general confidence I guess, working in a team, and also having to write reports.'

Felicity, young Biological Sciences graduate

Those who had engaged in extra-curricular activities also felt that, as well as helping them get through the interview process, these had furnished them with some of the more generic skills necessary at work.

One explained how running a university club night had helped him with project management in his current role.

'It doesn't sound like it's relevant at all but a lot of it is the same, meeting deadlines, trying to get other people to meet deadlines, and juggling that with uni work.'

Jack, young Biology graduate

There were also some instances of graduates working in roles they did not consider to be influenced by their degree. However, this did not always indicate that the employee was unfulfilled or failing to pursue career goals. One participant, having worked for three years as a bar tender (including part-time while studying) had recently been offered a management role at another pub, and plans to use her experience to set up a festival bar and catering business. Although she is not using the generic or topic-based skills she developed as a student, she feels that her career is fulfilling and has direction:

'I wouldn't say I'm using my degree at all, no ... in this kind of job it's all about doing the job and getting experience.'

Melanie, Contemporary History graduate

This is not to say that graduates in this position did not derive any value from their degree. Indeed, there was a tendency amongst the participants to cite only technical skills as products of their degree, rather than everyday generic skills such as the ability to analyse a problem, articulate points clearly and manage one's own time, the sources of which are harder to identify (but which may well be developed through studying at university level).

In the context of growing concern about underemployment in the city, it is also worth noting that such lack of awareness of generic graduates skills may account for the number of 'non-graduate jobs' undertaken by graduates in Brighton and Hove, particularly in the abundant hospitality and catering industry where they may wish to build up experience and contacts before starting up their own business. Similarly, small and charitable organisations, which are plentiful in Brighton and Hove and a popular choice with graduates, may not have the capacity to offer specific 'graduate' roles, instead requiring all candidates to work their way up from the 'non-graduate' (often administrative) roles at the bottom.

Satisfaction includes non-work related factors too

There were also some graduates who had prioritised other lifestyle factors over their careers and for whom 'quality' of work or progression was less important. Family ties, extra-curricular activities, a pleasant living environment and a short commuting time were key considerations for some, and often compensated for less-than-perfect jobs and salaries. Indeed, the first research paper of this series found that work aspects (such as plentiful graduate opportunities, higher salaries, low unemployment, and large well respected companies) were less important in the location decisions of those who stayed on in the city to find work than to those who moved away. Generally, those staying locally placed relatively higher importance on quality of life factors (such as green spaces, the arts and cultural scene, sport and leisure facilities, and the young and diverse community), and had a much more positive opinion about these aspects of city life and also the quality of employment on offer.

One graduate, while he enjoys his job and finds it 'interesting enough' during working hours, feels that he has sacrificed a higher salary and faster progression opportunities for a job that offers a better work-life balance. Another reported that, although she could work harder to progress her career if she chose to, she enjoyed the freedom working in a low-pressure environment brings:

'I couldn't be one of those people who works crazy hours in the city and gets home at midnight. I like the fact that I can leave the office at 5 and not think about work again'

Felicity, young Biological Sciences graduate

Such findings support hypotheses of an emerging generation of 'happily under-employed' graduates, those who are not career-motivated and work below what they feel is their potential, gaining their fulfilment from extra-curricular activities such as sport or arts, rather than their careers. While the extent of this phenomenon cannot be ascertained from our sample, it makes sense that Brighton and Hove, with its seaside location, proximity to the South Downs and Sussex countryside and thriving arts and culture scene, would attract the kind of graduates for whom lifestyle is a key consideration.

Again, there were some for whom decisions were influenced by non-career-related factors, through necessity rather than choice. Those with young children felt they could not apply for jobs with a long commute, or uproot their children by moving away.

The aspect of their jobs about which graduates were almost unanimously dissatisfied was salary, which was perceived to be considerably lower than for an equivalent role in London, and out of line with property prices. This presented a particular dilemma for those graduates – most of the sample – who were keen to settle in Brighton and Hove, yet also wanted to save up capital to put down a deposit on a property.

Looking to the future - can Brighton and Hove satisfy career goals?

Looking ahead, most felt that they were making good progress towards establishing a career in their chosen field although, as discussed previously, some had needed to leave Brighton and Hove to achieve this. Those who worked in the public sector and those in creative and IT roles felt that Brighton and Hove had provided (and would continue to provide) ample opportunity to develop their careers and to move around, once they had managed to get their first job in the industry and gained some experience. David, an IT graduate, had had three jobs since leaving university and was able to find a new one quickly after being made redundant a year after graduating:

'It took me a while to get my first job as it's quite a competitive industry. But there's no shortage of jobs ... I've been lucky in that I've been able to move around, and once you start getting contacts in the industry you'll always get work.'

David, young Theoretical Physics graduate

A handful were concerned about the absence of opportunities for career development in the local area, particularly where their work required specialisation and appropriate jobs were perceived to be few and far between. They tended to be fairly fatalistic about this:

'If I leave my job I'll have to leave Brighton, because there just isn't that much around here It would have to be a pretty good job [to make me leave Brighton], but you have to go where the opportunities are.'

Jessica, mature Health Psychology graduate

'You're not meant to do a post-doc at the same university where you do your PhD ... when I finish my PhD I'll have to move away.'

Kelly, young Biochemistry graduate

While it is not clear how thoroughly they had researched opportunities locally, the perception among many career-motivated graduates was that in order to get ahead at work, you have to be prepared to move away. This was echoed by the findings of the first research paper in this series, where those moving away from the city after graduating tended to feel that they would not be able to find a job locally that would match their qualifications. Interestingly, even amongst those interviewees prepared to live in Brighton and Hove and commute to London, few had considered jobs in places between London and Brighton and Hove, such as East Croydon and the area around Gatwick, and were not aware whether or not opportunities existed there in their industries. Yet findings from the first research paper in this series showed graduates were spread across a fairly wide range of work locations in the South East: working in RH postcodes covering Crawley, Horsham, Burgess Hill, East Grinstead, Dork and Reigate; in BN postcodes that would include Brighton and Hove and also Worthing, Eastbourne and Shoreham-by-Sea; and in TN postcodes, including Hastings and Tunbridge Wells.

In spite of evidence that graduates were starting to commit to a career or location at the two year point, most were still very flexible in their future plans, and very little was non-negotiable. Rather, decisions involved a complex trade-off between several factors including family, friends, salary, costs, work-life balance and living environment which varied in importance according to the individual and their stage of life or career.

Much of the time graduates' decisions were driven by necessity rather than choice. For instance, some of those who expressed the strongest preference to stay local in the future – generally older graduates, those with young families and those originally from the area – sometimes felt that change was inevitable, perhaps due to a partner's work or the need to be closer to family in another part of the country.

For some graduates, the appeal of Brighton may wear off ...

In some cases, Brighton and Hove's appeal to 'traditional' graduates – namely its reputation as a young, fun city – may have a lifespan, that is they may feel that they have 'outgrown' the city after a couple of years. One commented that he felt Brighton and Hove was set up for young students and people over 30, but not the ones in between.

'You go to the bars you went to as a student and they're all 18 and 19, you feel really old ... [Brighton and Hove] is fine for older people because you've got all the sophisticated cocktail bars and restaurants.'

David, young Theoretical Physics graduate

This perception was not unique amongst the participants of this research. However, it may not be specific to Brighton and Hove, so much as a wider trend in graduate movement across many university towns and cities. Recent research¹⁴ found that graduates staying on in the area after leaving university tend to do so only for a couple of years, before moving on, often back to their original domicile.

For others, particularly 'traditional' graduates and those originally domiciled elsewhere, the decision to leave Brighton and Hove may simply reflect a desire for change for its own sake. Living abroad, travelling, experiencing life elsewhere in the UK or just 'doing something different' were cited as factors that may cause them to leave.

... but most would consider coming back in the future

Whatever their future plans, all felt that Brighton and Hove had a lot to offer in terms of quality of life and many commented that, should they move away, they would consider moving back to the area in the future. In particular, some felt that the city and surrounding area would be a good place to raise a family and to settle in the long term.

Conclusions

This paper uses qualitative research to explore graduates' perceptions of their early career experiences in the Brighton and Hove labour market and finds that the majority of students interviewed left university without clearly defined career goals, and as a result the first few months after graduating were often turbulent. Many felt under-prepared for the job-seeking and selection processes, they reported finding it difficult to sell their skills effectively on application forms and struggling with interview technique. Those staying in Brighton and Hove often reported spending longer than expected unemployed or in a non-career job.

Career decisions were often opportunity-driven in the short-term, with many taking up employment or work experience offered through personal contacts. Often such work led into more permanent roles with opportunities for development. However, some graduates felt that they had become 'pigeon-holed' in inappropriate careers.

There was some evidence of underemployment in the months after leaving university, but this tended to iron itself out after a year or so as graduates moved from 'stop-gap' jobs into 'career' jobs. A few participants were still in jobs they felt were inappropriate to their skill level at the time of the follow up: some had been

¹⁴ Cowling M (2009), *The Geographical Distribution of UK Talent: causes and consequences*, Working Paper WP24, Institute for Employment Studies.

unable to find appropriate work, but some had chosen their lifestyle over their career, opting for a low-pressure job with few responsibilities and a better work-life balance.

Location, specifically the desire to stay in Brighton and Hove was an important factor in graduates' decisions, particularly in the first couple of years after graduating. They cited the seaside location, vibrant art and cultural scene and 'young, relaxed vibe' as key attractions and many were prepared to make career sacrifices to stay local. However, staying in Brighton and Hove was rarely non-negotiable, and was balanced against other factors, most frequently an absence of career opportunities (with exception of a few industries – public services, IT, media and arts – there is an enduring perception that Brighton and Hove is unable to satisfy career goals in the long term). Others included family commitments, friends' plans and salaries (which were perceived to be low and out of line with living costs). In the long term, graduates became increasingly prepared to move away to achieve career goals.

There is some evidence that Brighton and Hove's appeal has a lifespan, particularly for young graduates, who felt that they were outgrowing the student scene or simply felt like a change. However, most said that they would consider coming back to live and/or work in the city again in the future.

Emerging issues for the University of Sussex

The findings from this paper offer valuable insights into the behaviour of University of Sussex graduates in the local labour market. By grouping the experiences of the 18 participants in the telephone interviews into a typology of behaviours, the study offers an important framework for the University of Sussex academic leaders to consider the broader implications for employability, and career-awareness curriculum development and for the University's Careers and Employability Centre to use in continuing to reflect on and develop the quality of the service. The definitions of the characteristics of the three categories – Drifters, Navigators and Explorers discussed in this report could be used in the future to:

- Refresh the careers team's understanding of the range of students' perspectives, expectations and behaviour concerning the transition from the University to the labour market.
- Stimulate theoretical discussions amongst the careers staff about the characteristics of Drifters, Navigators and Explorers and how they might interact with the service.
- Offer a starting point from which the careers team can evaluate the current range of career theories and models used and develop new interventions at the guidance policy level to change behaviours.

- Encourage careers staff to develop current activities and resources to reflect the needs and behaviour of students and recent graduates from the three categories.
- Discuss with students the importance of quality of life issues and possible trade offs between factors in choosing to work in the local labour market.
- Continue to develop flexible ways of communicating with students whether Drifter, Navigator or Explorer. This might include re-considering both the methods of communication, as well as the messages about what services the Careers and Employability Centre offers.
- Contribute to national debates in higher education about career models and theories and their application to practice.

Research Paper 3: What is the Brighton Factor?

An econometric analysis of the association between city performance and flows of graduate talent

Dr Marc Cowling

This research paper is the last in the series of three to examine the effect that a city has on student and graduate expectations and plans for when they leave university and, in turn, the effect that their decision whether or not to stay has on the cities themselves. The paper uses econometric analysis of a range of national data to consider the economic geography of talent in the 100 largest cities in the UK in an attempt to understand more about what shapes and drives this spread of talent and the economic consequences of having more (or less) talent. It also identifies where the city of Brighton and Hove is located within this framework and the implications of the city's characteristics on graduate decisions about staying on after leaving university, and on economic performance. This allows us to once again examine the strength and impact of the *Brighton Factor*.

It forms part of the second stage of research initiated in 2007 by the Institute for Employment Studies and the University of Sussex, and published as *The Brighton Factor: New graduates and their local labour market* (Pollard et al., 2008).

This paper highlights the range of economic and social considerations that influence inflows of students to cities and their subsequent retention. Entrepreneurial activity (business start-ups), good local culture (in terms of sports and leisure facilities, theatre and concert halls, and parks and open spaces), larger cities, good quality housing, and public provision of goods and services all attract new graduate talent, as does the presence of graduates in the local labour market - creating a mutually reinforcing dynamic.

The paper shows that the city of Brighton and Hove performs well on many of these measures found to be positively associated with attracting and retaining graduate talent but has a relatively low wealth and productivity, more specifically:

- Brighton and Hove is highly regarded by students and graduates, and is seen as a desirable place to live, and so has a head start on many UK cities.
- The city has a large graduate population, a high level of public service provision, an enterprise culture, and a perceived vibrant arts and cultural scene - all factors associated with retaining graduate talent and associated with growth of knowledge-based industry.
- There is a perceived lack of affordable housing and it is one of the most expensive council tax cities in the UK which can impact negatively on graduate flows.

- The city has all the core requirements for being a wealthy, economically dynamic city but its potential has not been fully realised to date, and any potential advantage in graduate retention could be lost if graduate talent continues to be under-utilised.

Introduction

In April 2007 students in their final year of study at the University of Sussex were invited to take part in a postal survey exploring their thoughts and feelings about the University, their perceptions about living and working in Brighton and Hove, and their plans for the future, for when they graduate and looking further ahead. This was known as the Brighton Factor survey and provided an insight into the expectations and aspirations of the University's graduates: those who wanted to stay on in the city of Brighton and Hove after graduating and what they hoped to achieve in the local labour market, and also for those who expected to move away. The findings from this research were published as *The Brighton Factor: New graduates and their local labour market* (Pollard et al., 2008).

Using this survey data along with a range of other national data on graduate destinations and city performance, we can explore: the importance of factors in graduates' decisions about whether to stay on in their university city (in particular to stay on in Brighton and Hove); how well Brighton and Hove does in retaining its graduate talent and in other measures of economic performance; and the importance of graduates to the city – essentially, the implications of graduate retention.

Hypothesis

The creation and distribution of human capital, often termed 'talent', has been recognised in economic geography as an important factor in the locational decisions of firms (Florida, 2002), and at a more general level as a key driver of economic growth (Romer, 1990). The early work of Jacobs (1961) argues that cities play an important role in attracting and integrating talented people, whilst Ullman (1958) considered similar issues in the context of regional economic development, and Lucas (1988) makes a broader argument that clustering of talented people drives productivity growth which in turn raises incomes at the city and regional level. Berry and Glaeser (2005) contend that it is entrepreneurs choosing knowledge-intensive modes of business that drive clustering of skilled people in cities, whilst Faggian and McCann (2006), and Florida (1999) argue that universities act as a conduit to bring talent into cities.

Over the last few decades, the socio-economic experiences of cities and regions in the UK have varied substantially. Whilst some of this dispersion can be explained by purely geographic factors, the really interesting questions relate to economic

growth and quality of life and how these impact on people's locational decisions. In this context, one particularly interesting sub-group of the population, in both an economic and quality of life context, is (primarily young) people who enter a process by which they attend a Higher Education Institution (HEI), subsequently graduate, and join the labour market or drop out of it. The locational decisions of these individuals, and flows that derive from these decisions are hugely interesting, and of great importance, as they possibly represent the greatest flow of human capital around a region or country at a given point in time. Furthermore, they have fewer geographical mobility barriers thus are more closely aligned to the open economy model of the city or region. It is also the case that an individual's decision over choosing an HEI and their expectations for when they graduate (as explored in the first Brighton Factor survey) might be quite different than their actual labour market decision post-graduation. Specifically, we might expect that quality of life issues might be more important in the HEI decision than the labour market decision. Yet there may be an element of hysteresis with graduates becoming reluctant to move away from their HEI location if they enjoy the quality of life.

In this paper we hypothesise that the ability of a locality, such as the city of Brighton and Hove, to retain its incoming students and graduates is related to its innovative capacity (which in turn is linked to its stock of qualified individuals and size of population), as well as to quality of life, labour market conditions, and general economic conditions. We test this hypothesis and then examine which particular aspects of quality of life and which economic factors affect locational decisions. We also explore the extent to which graduates contribute to the city in terms of its innovative capacity and economic performance.

Methodology

To explore factors influencing locational decisions, we use national data to focus on eight categories of variables: (1) diversity; (2) technology and innovation; (3) talent; (4) entrepreneurship; (5) housing; (6) culture; (7) population; and (8) value added. The data refer to the 100 largest cities, by population, in the UK excluding the capital city, London. London is excluded as it is 50 times larger than the average UK city and is a truly international city. Further details of the measures adopted for each of the eight categories are given in Table 1.

How well does Brighton and Hove perform ...

... in terms of talent?

The *basic talent* measure is simply the proportion of the adult population with an undergraduate degree and above. This data is derived from the 2001 population census. Here Brighton and Hove has a very high share at 42 per cent graduates

compared to the UK city average of only 26 per cent. This corresponds with local level data outlined in the first Brighton Factor report where the city was shown to outperform the rest of Sussex, the wider South East and the UK on this measure.

Four additional measures of talent are also used which relate to recently graduated university students. These four measures are derived from the Higher Education Statistical Agency (HESA) Destinations of Leavers Survey which tracks graduates as they begin their working lives post-university, and are mapped onto local authority (city) level areas. The measures are all defined as the proportion of graduates out of the total relevant population.

- The first, *new female talent*, relates to female graduates who left their home to move to a new university city and then subsequently remained in that city after graduation. As such it represents a talent flow into the host university city. On this measure Brighton and Hove, at 24 per cent, is marginally higher than the UK university city average of 23 per cent.
- The second, *new male talent*, is the equivalent for male graduates, and on this measure Brighton and Hove, at 31 per cent, is much higher than the UK university city average of 25 per cent.
- The third measure, *new talent in talented jobs*, represents new graduate talent into a host university city who were working in graduate level employment within six months of graduation. Here Brighton and Hove, at 15 per cent, is substantially lower than the UK university city average of 24 per cent.
- The fourth measure, *new super talent*, relates to the proportion of new graduate talent with first-class or upper second-class degrees who moved to their university city and remained in that host city after graduating. Brighton and Hove performs well here with 26 per cent, compared to the UK university city average of 20 per cent.

The data indicates that for Brighton and Hove the issue is not retaining young graduate talent, but providing jobs at a commensurate level (essentially, how can the city make the most effective use of those graduates who want to stay? – an issue that prompted the initial *Brighton Factor* research study). Findings from the first study indicate that underemployment is a concern for those about to graduate, and the city is not perceived to offer many graduate level opportunities or felt to be a good place to find graduate level employment.

This is also echoed in the first and second research papers in this series, where underemployment in the city is acknowledged but is largely regarded as a short-term challenge, a conscious choice made by graduates as they trade off career opportunities for a better quality of life, or a way to buy them time to decide on their next career steps.

... in terms of quality of life?

There are several aspects to quality of life that we can examine with national data – culture, diversity, housing, population and presence of a university.

Looking first at *culture*, several measures of cultural amenities are combined into a culture domain constructed by the UK government as a component of its Index of Multiple Deprivation. The items included in this domain are sports and leisure facilities, theatre and concert halls, and parks and open spaces. Here, despite its reputation as a vibrant city, surprisingly Brighton and Hove falls below the UK average (here standardised to zero) with a culture index score of -0.50. However, the first Brighton Factor study indicated that graduates felt the city offered plenty of green space, a good range of social facilities and a vibrant arts and cultural scene. Similarly, the other research papers in this series find graduates who stay on in the city after leaving the University of Sussex have strong positive opinions about the quality of life offered by Brighton and Hove, including the cultural experience. The city is close to London and all of the Capital's facilities but also offers a range of attractions of its own – hosting internally recognised festivals such as the Brighton Festival and Pride, each attracting more than 100,000 people to the city; has more than 30 conservation areas; and a variety of open spaces, including three green flag parks, and much of the city is covered by a nature conservation designation.

The measure of *diversity* refers to the ethnic diversity of the population. It is derived from the 2001 population census and reflects the proportion of the total population who do not classify themselves as White British. In this sense it is a locational quotient. Brighton and Hove is one of the least ethnically diverse cities in the UK despite its reputation for embracing diversity. Indeed, corresponding with its reputation, the first Brighton Factor study found that the majority of graduates felt the city did have people from different backgrounds and cultures.

The measure used to explore *housing* is representative of the average council tax bill for individuals. This is a local tax falling on the individual household. This is an alternative to house prices which are subject to substantial inter-temporal variability. It can be argued that council tax captures quality and size of housing, as well as local provision of public goods and services which makes it more suited to this research. This is derived from government statistics for the UK. In this respect Brighton and Hove is one of the most expensive council tax cities in the UK at £1,004 per annum compared to the UK average of £904 per annum. This is an issue highlighted in the first study and reflected in graduates' concerns, as only a small minority felt that affordable housing was available in the city. It was also raised in the first research paper in this series focusing on graduate outcomes, where it was hypothesised that the lack of affordable housing may be pulling graduates away from the city soon after graduating.

Two other measures or variables are also interesting and related to quality of life:

- The size of the *population* (which we use later as a control variable) which is derived from the population census for 2001. City size is important as the largest cities are often an attractor of company head offices and generally have important historical and cultural legacies that may impact on an individual's locational decision. At almost 248,000 Brighton and Hove is just above the UK average but considerably below the largest city (excluding London).
- Presence of a *university*, as indicated by Higher Education Funding Council (HEFCE) data. Some UK cities have universities that were founded hundreds of years ago and are woven into the culture of a city as well as being a major actor in the socio-economic system of a city. Recent research has highlighted considerable difference in labour markets between university and non-university cities in the UK (Cowling, 2008). Brighton and Hove has two universities: the University of Sussex was founded in the 1960s and the University of Brighton, which is a former polytechnic that gained university status in 1992.

... in terms of economic performance?

Again, there are several aspects of economic performance that we can examine – using measures relating to entrepreneurship, income and technology.

One measure of openness and vibrancy is the inflow of new, *entrepreneurial*, businesses as entrepreneurs start up new firms to take advantage of perceived new market opportunities and gaps in the provision of goods and services. In this respect the measure is the proportion of new firms normalised as a percentage of the existing stock of firms. This variable is captured for two time periods, 1997 and 2003, and is derived from UK government VAT statistics. In both time periods Brighton and Hove is above the UK city average for entrepreneurship, although this advantage is diminishing over time. Findings from the first Brighton Factor study also indicate that the city is perceived to have many small companies and to be a thriving area for new businesses.

The measure used to capture *income* is the gross value added per worker and is derived from the population census for 2001 and government input-output tables. As such, it is total gross value added created by the working population of each city divided by the working population. Alternative measures such as income per capita were also available. Here, Brighton and Hove, at £14,879, is below the UK average of £16,725. This corresponds with data outlined in the first study, that the city has high levels of employment in low-paying sectors and is perhaps over-reliant upon lower and intermediate service-sector employment. It also links with general graduate perceptions that the city does not have high salary levels.

As technology and innovation is associated with productivity growth and hence growth in real incomes, the measure to examine *technology* is the proportion of the total business stock that can be classified as operating in knowledge-based industries. This is available for 1997 and 2003. It is derived from government statistics and calculated using detailed industry codes. Regarding knowledge-based business activity, Brighton and Hove performs well above the UK average and, despite some catch-up from other cities, holds its position as a technology driven city.

Table 1: Core variables and their descriptive statistics

Variable	Obs	Brighton	UK Mean	Std Dev	Min	Max
Talent (degree)	93	0.42	0.28	0.08	0.15	0.53
Talent (college)	93	0.15	0.16	0.03	0.10	0.23
New female talent	50	0.24	0.19	0.11	0.02	0.58
New male talent	50	0.31	0.19	0.11	0.06	0.67
New talent in talented jobs	50	0.15	0.17	0.11	0.05	0.63
New super-talent	50	0.26	0.19	0.10	0.06	0.57
Culture index	82	-0.50	0.00	1.00	-1.94	2.59
Diversity (fractional ethnic)	83	0.06	0.16	0.13	0.03	0.70
Housing (council tax, £s)	88	1,004	904.11	100.99	576.24	1,171.54
Population	95	247,817	211,158	138,616	78,833	977,087
University (1,0)	95	1.00	0.58	0.50	0	1
Entrepreneurship 1997	95	0.05	0.03	0.01	0.01	0.06
Entrepreneurship 2003	95	0.04	0.03	0.01	0.01	0.06
Income per capita 2003 (£s)	80	11,086	10,363	2,124	7,700	19,269
Gross value added per worker 2002 (£s)	93	14,879	16,725	4,972	9,232	32,145
Technology (Knowledge Business 1997)	93	0.23	0.17	0.05	0.10	0.38
Technology (Knowledge Business 2003)	93	0.24	0.20	0.06	0.12	0.43

Source: Cowling, IES, 2009

Exploring associations between talent and socio-economic factors

Looking at linkages between new graduate talent and city performance begins to illustrate the importance to cities in attracting students and retaining graduates.

The economic geography of talent

The economic geography of talent is very uneven across UK cities. On average 28 per cent of the population of the largest 100 UK cities had a university degree or above in 2001. Yet cities like Oxford and Cambridge, not surprisingly, have high graduate shares amongst the local population, accounting for 53.3 per cent and

46.8 per cent of the population. Both are higher than the top-ranked region of Washington DC at 42 per cent reported in Florida (2002). Other UK cities with high graduate shares are Brighton and Hove, Bradford, Winchester, and Harrogate, all cities with over 40 per cent graduate shares. However, this contrasts with Ipswich, which has the lowest graduate shares at 14.9 per cent, and Blackpool, Stoke-on-Trent, Dover and Colchester, cities that all have graduate shares considerably below 20 per cent. The interesting feature is that these cities are geographically diverse being located widely across UK regions.

Looking at new graduate talent (as noted earlier, those moving to study and staying on after graduation) the spread is equally uneven. The highest ranked UK city for retaining new graduate talent from outside is Belfast at 61.2 per cent. Glasgow, at 42.3 per cent, Aberdeen, at 40.3 per cent, and Edinburgh, at 36.7 per cent, also rank highly. The notable feature is that these are all historically important, large cities, in Northern Ireland and Scotland. Outside of these important regional university cities, Brighton and Hove is average. Cities with the lowest new graduate talent retention are Colchester, at 5.4 per cent, Wallsall, at 6.7 per cent, Lancaster, at 7.9 per cent, Chelmsford, at 8.3 per cent, and Canterbury, at 8.4 per cent.

The importance of graduate talent to cities

Using correlation analysis we find a range of associations (see Table 2). Technology is correlated with talent, entrepreneurship and incomes all in a positive, and significant, way. These relationships appear fairly stable over time. Talent, *per se*, is correlated with the presence of a university in a city, higher entrepreneurial activity, higher culture index scores, and higher incomes. Entrepreneurship, *per se*, is correlated with higher culture index scores and higher incomes. It is also noted that larger sized cities are also correlated with more graduate talent of all types, and also with more talent in general. Further, new graduate talent is correlated with better housing and public goods and services. So these correlations provide some support for the a priori hypotheses drawn from Florida (2002) positing linkages between talent, technology and incomes. An interesting aspect is the additional link, or mechanism by which this might occur, which allows a role for the entrepreneur. The possible inherent advantages that large cities have in attracting inflows of new talent to add to their existing higher stocks of talent is also noteworthy.

It is interesting to look at some of these associations in greater detail.

Table 2: Correlation analysis results - exploring associations between core variables

	Housing	Diversity	Technology 1997	Technology 2003	Talent	University	Culture	GVA per worker	New female talent	New male talent	New talent in talented jobs	New super talent	Population
Housing	1.00												
Diversity	-0.14	1.00											
Technology 1997	-0.11	0.13	1.00										
Technology 2003	-0.04	0.09	0.93	1.00									
Talent	0.05	0.01	0.42	0.57	1.00								
University	-0.00	0.00	-0.01	0.03	0.31	1.00							
Culture	-0.11	-0.09	0.20	0.27	0.28	0.08	1.00						
GVA per worker	-0.13	0.31	0.68	0.64	0.27	0.34	-0.01	1.00					
New female talent	0.31	-0.04	0.03	0.10	0.36	0.15	0.07	0.02	1.00				
New male talent	0.31	0.03	0.12	0.18	0.42	0.23	0.13	0.03	0.93	1.00			
New talent in talented jobs	0.30	0.11	0.10	0.15	0.37	0.16	0.03	0.11	0.94	0.96	1.00		
New super talent	0.33	0.00	0.11	0.18	0.39	0.18	0.11	0.08	0.96	0.96	0.94	1.00	
Population	0.14	0.19	-0.12	-0.09	0.03	0.24	-0.08	-0.11	0.44	0.40	0.44	0.37	1.00

Source: Cowling, IES, 2009

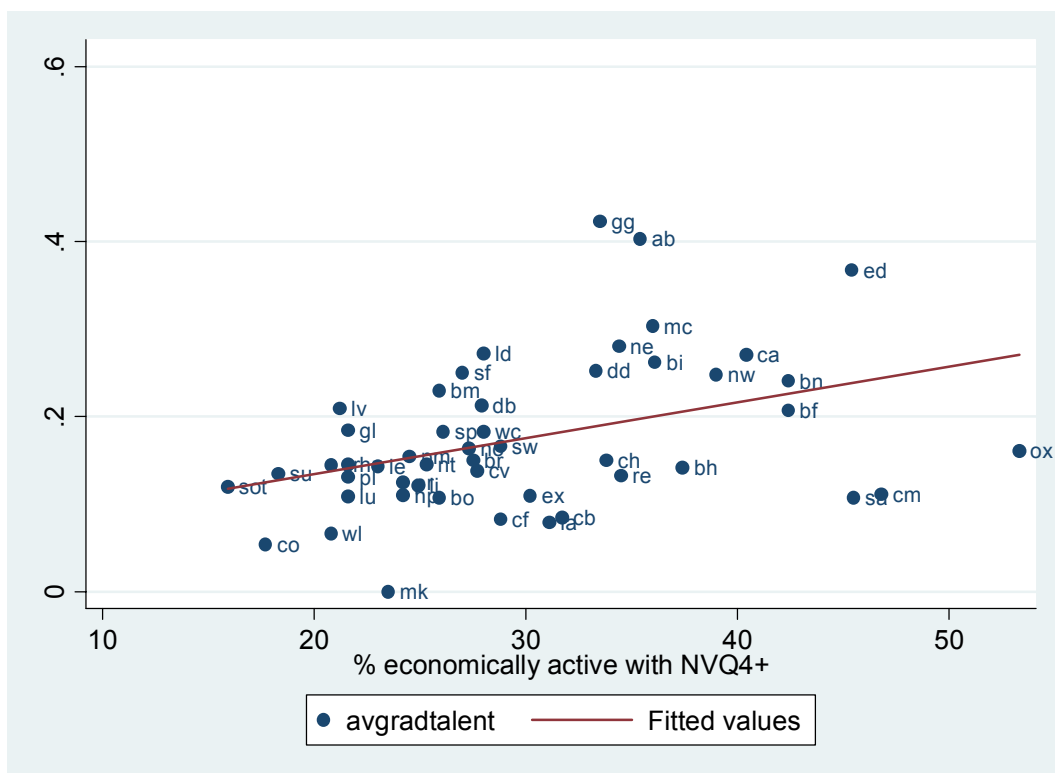
What attracts new graduates to cities?

The influence of a highly qualified population

The results of the correlation analysis indicate that talented people and the ability to retain new graduates from outside are correlated. The fact that the talent measure predates the new graduate talent measure might suggest that newly graduating talented people are attracted by higher levels of (existing) talent. The correlation coefficient for the basic talent index and new graduate talent index is positive and significant (0.395, see Table 2). Figure 1 graphically depicts this relationship and places the 100 cities in talent and entrepreneurship space¹.

The city of Brighton and Hove is labelled as 'bn' and it is positioned at the right hand end of the chart, just above the marked line. This indicates that the city rates highly on both counts and means that the existing graduate stock helps attract new graduate talent to the city.

Figure 1: Average new graduate talent and talent across UK cities



Note: The city of Brighton and Hove is labelled as 'bn'. See Appendix 3.1 for a full list of city codes used in the analysis

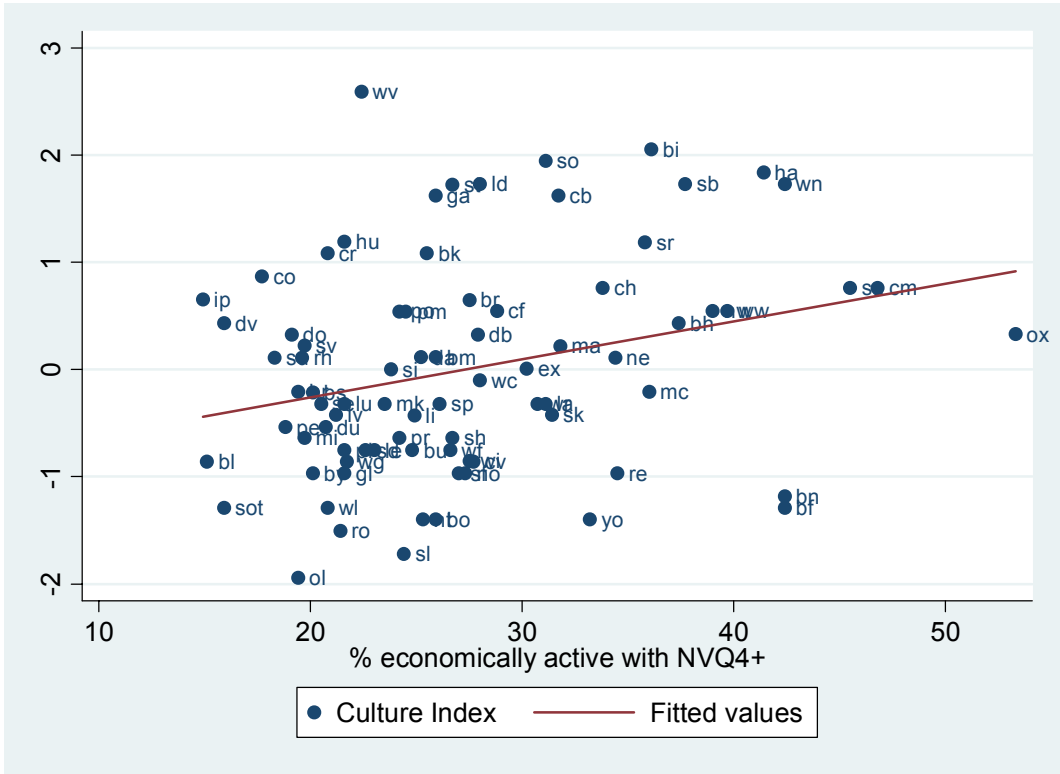
Source: Cowling, IES, 2009

¹ See Appendix 1 for a full list of city codes used in the analysis.

The influence of culture

The results of the correlation analysis indicate that talented people appear to be attracted by cultural amenities. The correlation coefficient for the basic talent index and culture index is positive and significant (0.281, see Table 2). Figure 2 graphically depicts this relationship and places the 100 cities in talent and cultural space. As noted in the first Brighton Factor report (Pollard et al., 2008) good public transport, availability of affordable housing, good restaurants etc, and high standard of public healthcare were found to be key factors in locational decisions of students about to graduate from the University of Sussex. The first study also indicated that on many of these cultural measures the city scores highly, however in this correlation analysis the city of Brighton and Hove is positioned in the bottom right hand quadrant of the chart, which indicates the city has a high graduate share but is lower than average on the cultural measure.

Figure 2: Culture and talent across UK cities



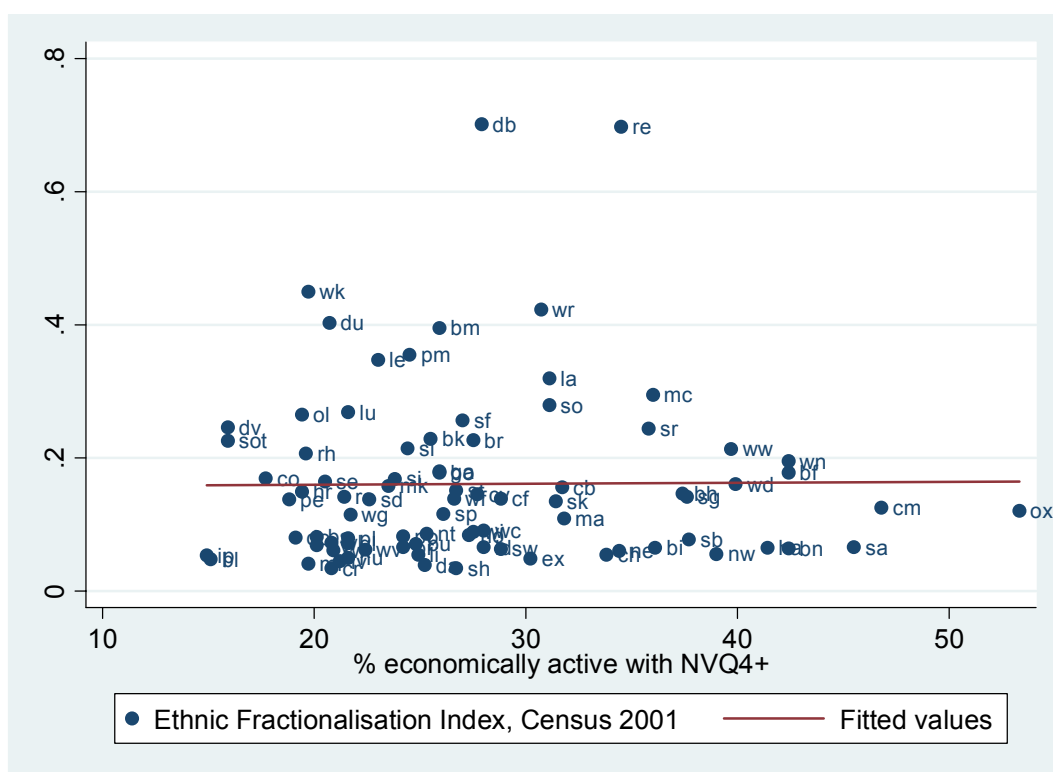
Note: The city of Brighton and Hove is labelled as 'bn'. See Appendix 3.1 for a full list of city codes used in the analysis

Source: Cowling, IES, 2009

The influence of diversity

The results of the correlation analysis indicate that talented people and diversity are not associated with one another. The correlation coefficient for the basic talent index and diversity index is positive but not significant (0.009, Table 2). Figure 3 graphically depicts this relationship and places the 100 cities in talent and diversity space. In this analysis Brighton and Hove is again positioned in the bottom right hand quadrant which indicates that it has a high graduate share but low diversity.

Figure 3: Talent and diversity across UK cities



Note: The city of Brighton and Hove is labelled as 'bn'. See Appendix 3.1 for a full list of city codes used in the analysis

Source: Cowling, IES, 2009

The influence of housing

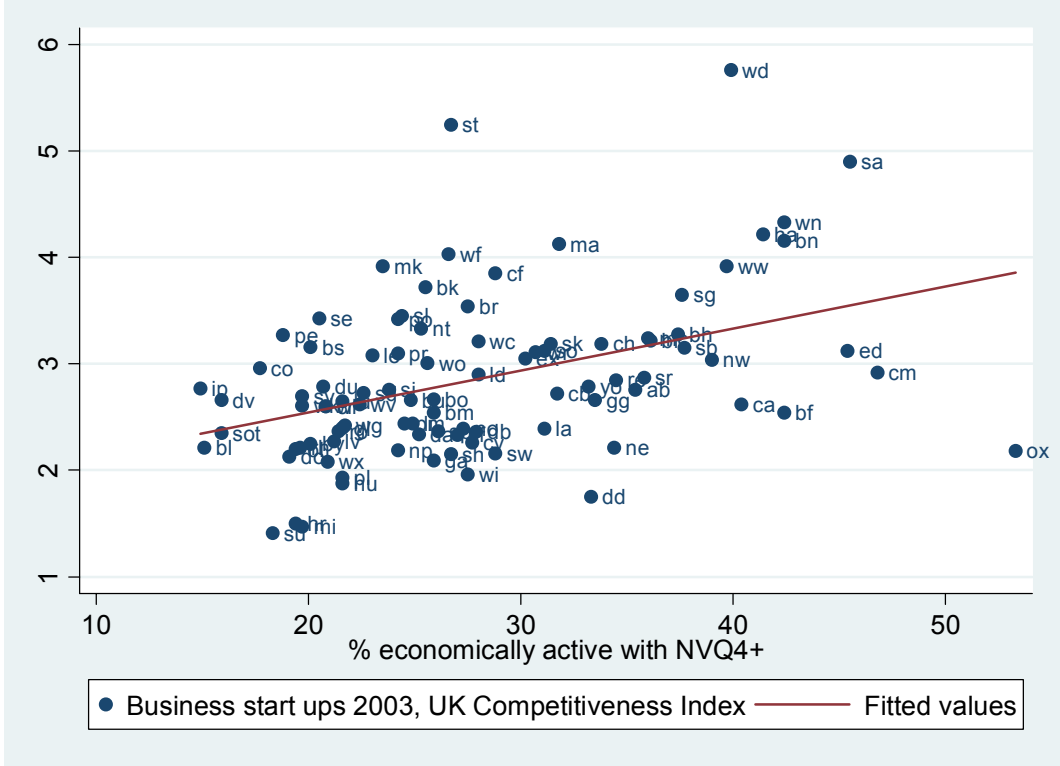
The results of the correlation analysis indicate that talented people and housing are not associated with one another. The correlation coefficient for the basic talent index and housing measure is positive but not significant (0.051, Table 2). This might bring into question the contention that talented people are willing to pay more for better public provision of goods and services at the local level. However, for new graduate talent the correlation is positive and significant (0.319, Table 2). This might suggest that housing and public provision of goods and services have become more important for attracting talent.

The influence of new businesses (entrepreneurship)

The results of the correlation analysis indicate that talented people and entrepreneurship are correlated. The fact that the entrepreneurship measure predates the talent measure might suggest that talented people are attracted by higher levels of entrepreneurial activity. The correlation coefficient for the basic talent index and entrepreneurship index is positive and significant (0.473, Table 2). Figure 4 graphically depicts this relationship and places the 100 cities in talent and entrepreneurship space.

Brighton and Hove is positioned in the top right hand quadrant of the chart indicating that it has a high graduate share and well above average entrepreneurship rates.

Figure 4: Entrepreneurship and talent across UK cities



Note: The city of Brighton and Hove is labelled as 'bn'. See Appendix 3.1 for a full list of city codes used in the analysis

Source: Cowling, IES, 2009

Which factors are most influential in attracting new graduates and in city performance?

Multivariate analysis was used to explore these issues in more detail in an attempt to isolate more robust relationships between talent and its economic geography. Three measures were modelled using the most appropriate techniques to take

account of the nature of the variables, to allow for the incorporation of exploratory variables and to allow for robust/consistent predictions:

- talent (using fractional logit)
- technology (using fractional logit)
- income (using ordinary least squares analysis).

Modelling talent and new graduate talent

The multivariate analysis to explore the direction and strength of factors associated with talent – that is the share of the population with a degree – is summarised in Table 3. This shows that:

- Entrepreneurship is significantly associated with talent (across models with a coefficient around 0.18, at the 0.0001 level of significance). This suggests that entrepreneurial activity can act as an attractor of talent at the city level.
- Culture is also significantly associated with talent (across model specifications with a coefficient around 0.09, at the 0.03 level of significance). This differs from the null result reported by Florida (2002) for the effect of culture on talent in US cities.
- In addition, the presence of a university in a city was found to have the strongest association with talent (with a coefficient around 0.20, at the 0.01 level of significance).

In these models, no significant relationships were identified between population size, housing, or diversity, and talent.

Modelling the various measures of new graduate talent, those moving to study and staying on after graduation, summarised in Table 4, finds that:

- Existing talent is strongly associated with new graduate talent – across all of the measures (new female graduate talent with a coefficient around 2.62 at the 0.003 level of significance; new male graduate talent with a coefficient 2.68 around at the 0.007 level of significance; new graduate talent with a graduate job with a coefficient around 2.46 at the 0.005 level of significance; and new super talent with a coefficient around 2.21 at the 0.008 level of significance). These findings suggest that there is a positive, and mutually reinforcing, dynamic at the city level with high, historical, stocks of graduate talent in the population acting as an attractor to new, incoming, graduates, who then add to the existing stocks, and so on. It also implies that cities who begin with low graduate stocks will find it very difficult to change their relative position and add to their smaller stocks of talent.

- Entrepreneurial activity is also associated with attracting new male graduate talent and new super graduate talent (coefficients of 0.33 and 0.37 respectively, significance of 0.04 and 0.03 respectively). This was not the case for new female graduate talent or for new graduate talent in graduate jobs.
- Housing was found to act in a positive, and significant, way on new graduate talent across all four models (with coefficients ranging from 1.59 for new super graduate talent to 1.77 for new male graduate talent, and across all four models significance levels were below one per cent).
- The population size of city is significantly associated with new graduate talent. In short, new graduate inflows of talent to a university city are attracted to larger cities. This is particularly so for graduates working in graduate level jobs (coefficient of 0.48, significance of 0.01), and for male graduates more than female graduates (coefficients of 0.41 compared to 0.35 respectively).
- Culture is positively associated with new graduate talent in three of the four models. The association was highest for graduate super talent (coefficient of 0.14, significance of 0.02), and also higher for males than females (coefficient 0.17 compared to 0.12 respectively).

These new graduate talent findings, compared to the general stock of talent findings, are more consistent with the underpinnings of the model outlined by Florida (2002) in that new inflows of graduate talent are attracted by a wider variety of economic and social (quality of life) considerations. Whilst there is commonality and consistency in the findings in respect of the positive influences of entrepreneurial activity and culture on talent, the attraction of new inflows of graduate talent are also associated with quality of housing and public provision of goods and services and a preference for larger cities. These differences are important as they will affect the relative position of cities in respect of talent accumulation in the future. As noted previously, new graduate talent also appears to gravitate towards cities that already have relatively high talent stocks, which makes it even more difficult for cities playing catch-up.

These findings highlight the importance and positive nature of Brighton and Hove's relatively large graduate population, and the perceptions of final year graduates that the city has many small companies and is a thriving area for new businesses. This is corroborated by data showing above average performance for entrepreneurship, and perceptions that the city has a vibrant arts and cultural scene (which is at odds with the cultural index measure outlined above). However, it indicates the challenges for the city in terms of its housing where it is not only perceived to have a lack of affordable housing (a top priority in locational decisions after graduating) but is found to be one of the most expensive council tax cities in the UK. However, if high council taxes can be justified by an equally high level of public service provision, then this can act to help retain new graduate talent in the city.

Table 3: Regression model findings for talent

Variables	Dependent Variable: Talent (BA and above)			
	Model 1		Model 2	
	Coefficient	P>z	Coefficient	P>z
Diversity	0.139	0.408	0.147	0.398
Entrepreneurship	0.180	0.000	0.179	0.000
Housing	0.505	0.114	0.505	0.159
Culture	0.086	0.025	0.086	0.021
University	0.202	0.008	0.204	0.008
Population			-0.002	0.983
Population squared			-0.000	0.864
Observations	77		77	
Log likelihood	-30.41		-30.41	

Source: Cowling, IES, 2009

Table 4: Regression model findings for new talent

Variables	Dependent Variables							
	New female talent		New male talent		New talent in talented jobs		New super talent	
	Coef	P>z	Coef	P>z	Coef	P>z	Coef	P>z
Existing Talent	2.618	0.003	2.681	0.007	2.459	0.005	2.205	0.008
Diversity	-0.102	0.829	0.205	0.670	0.195	0.685	0.135	0.761
Entrepreneurship	0.356	0.105	0.326	0.043	0.307	0.106	0.367	0.034
Housing	1.676	0.011	1.769	0.003	1.514	0.004	1.590	0.002
Culture	.0120	0.096	0.174	0.006	0.082	0.206	0.149	0.017
Technology	-5.340	0.187	-7.451	0.005	-5.016	0.139	-5.068	0.096
Population	0.353	0.077	0.410	0.010	0.484	0.014	0.342	0.034
Population squared	0.004	0.405	0.002	0.553	0.003	0.541	0.002	0.716
Observations	41		41		41		41	
Log likelihood	-12.52		-12.69		-11.53		-12.48	

Source: Cowling, IES, 2009

Modelling talent and technology (knowledge-based industry)

As outlined above (see also Table 2) talent and technology, as measured through knowledge-based industry activity, are highly correlated (with a coefficient of 0.420). Technology/knowledge industry activity is also correlated with entrepreneurship (coefficient of 0.797), and culture (coefficient of 0.271), but not with housing or diversity.

Multivariate analysis was again used to test and explore the direction and strength of these potential relationships. The results of the modelling are summarised in Table 5. The analysis shows that knowledge-based industry is indeed associated with talent in a positive and significant way (coefficient 0.87, significance 0.006) and with entrepreneurship (coefficient 0.23, significance 0.0001). However, when holding other factors constant technology is also associated with diversity (coefficient 0.29, significance 0.045). Again, no associations were found between knowledge-based industry and housing. Yet in this multivariate model there were found to be no associations between technology and culture or city size. These results are consistent with those reported by Florida (2002), although it should be noted that a different measure of technology is used.

These findings suggest that the availability of talent is an important factor in the locational decisions of knowledge-based industry. But this not only applies to potential talented workers, but more widely to entrepreneurs. This latter aspect is intriguing and might be explained by the desire to create clusters of knowledge-based activity and the types of social and business networks which, if successful, can promote mutually beneficial generation and exchange of new ideas and technologies. This, in the UK, was the rationale underpinning the creation of Science Parks. It also brings into question the relative importance of local taxes and physical amenities which many public sector regional development agencies consider to be crucial factors in attracting knowledge industries.

The findings again highlight the importance and positive nature of Brighton and Hove's relatively large graduate population in attracting, and contributing to knowledge-based industry and entrepreneurship. This may be something the city agencies and representatives may wish to promote more heavily and support more visibly.

Table 5: Regression model findings for knowledge based industries

Variables	Dependent Variable: Knowledge-based industry			
	Model 1		Model 2	
	Coefficient	P>z	Coefficient	P>z
Talent	0.866	0.006	0.903	0.006
Diversity	0.290	0.045	0.283	0.053
Entrepreneurship	0.234	0.000	0.235	0.000
Housing	0.089	0.695	0.081	0.735
Culture	0.029	0.244	0.030	0.230
University			-0.021	0.679
Population			0.018	0.778
Population squared			0.000	0.900
Observations	77		77	
Log likelihood	-26.03		-26.03	

Source: Cowling, IES, 2009

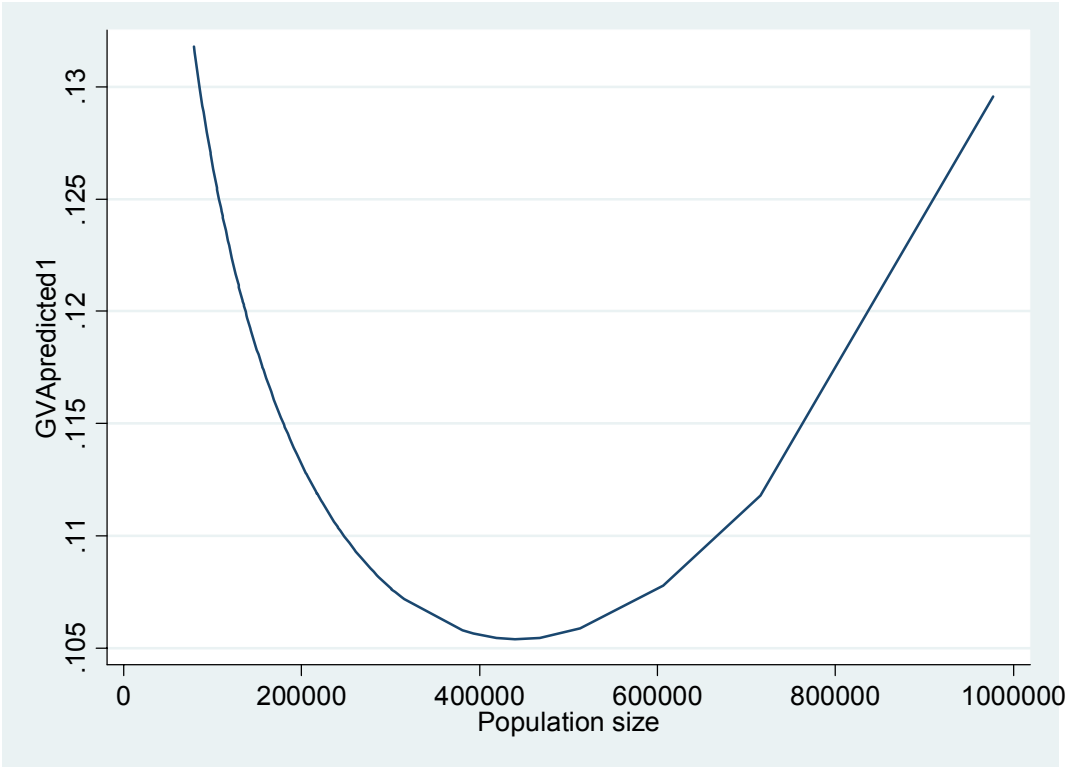
Modelling talent and income (gross value added)

In micro and macro economics researchers have hypothesised and proven a strong and significant relationship between human capital (talent) and income and human capital and productivity at all spatial levels from countries down to small localities. In addition, the role of technology in enhancing productivity and ultimately, income and wealth has also been widely investigated again at all spatial levels, including city level. Once again, multivariate analysis was used to test and explore the direction and strength of these potential relationships, and the results are summarised in Table 6.

The models generally show that there is a relationship between knowledge-based industry activity and income as measured with gross value added (GVA) (with a coefficient 2.83, and a significance level of 0.0001) which reconfirms its fundamental importance to productivity. Talent was also positively associated with gross value added (coefficient of 0.66), as was diversity (coefficient 0.32). It is also interesting to note that there was a negative relationship between city size and gross value added (coefficient of -0.18) which might suggest that, on average, larger cities are implicitly less efficient at holding talent and other factors constant. There is also some partial evidence that the relationship between city size and GVA is non-linear. Here, the city size coefficient is positive, suggesting that at some point in the city size-distribution cities begin to become more productive. Or put more simply smaller and larger cities are more productive than medium-sized cities. This predicted relationship is represented in Figure 7, and shows the predicted nadir in terms of gross value added is for cities around the 400,000 – 500,000 population level. Given that the average population size of city was 211,000, and the median city size 177,000, this could suggest that further population growth might be associated with a decline in GVA per capita, unless this was a huge population explosion taking a city up to 600,000 people. This is extremely large by UK standards. In fact at the 90th percentile in the city size distribution the average city size is only 315,000 people.

These findings suggest that the city of Brighton and Hove has all the core requirements for being a wealthy, economically dynamic city. But this potential has not been fully realised to date, and local governance may have a key role to play in creating a more vibrant future. At the moment, the city is too big to take advantage of high value-added specialisation in niche sectors, and too small to benefit from economies of scale in high volume industry clusters. If we accept that it is better for the city to seek to emulate the success of smaller cities, local governance may be too bureaucratic and unwieldy to bring together the various agencies with specialised knowledge to create integrated clusters of entrepreneurial, knowledge-based firms – in effect, creating the conditions that emulate that of smaller cities within the context of a larger city.

Figure 7: City size and predicted gross value added (GVA) per capita



Source: Cowling, IES, 2009

Table 6: Regression model findings for gross value added (GVA)

Variables	Dependent Variable: GVA			
	Model 1		Model 2	
	Coefficient	P>z	Coefficient	P>z
Talent	0.769	0.024	0.662	0.039
Technology	2.842	0.000	2.826	0.000
Diversity	0.259	0.174	0.321	0.083
Housing			0.188	0.403
Culture	-0.017	0.510		
Population	-0.175	0.020	-0.181	0.015
Population squared	0.005	0.121	0.005	0.106
Observations	77		77	
Adjusted Rsq	0.478		0.502	

Source: Cowling, IES, 2009

Conclusions

This paper considers the economic geography of talent in the 100 largest cities in the UK in an attempt to understand more about what shapes and drives this spread of talent and the economic consequences of having more (or less) talent. It also identifies where the city of Brighton and Hove is located within this framework and the implications of the city's characteristics on graduate decisions about staying on after leaving university, and on economic performance.

Drawing on a framework adopted by Florida (2002) for 50 Metropolitan Statistical Areas (MSAs) in the US, the a priori predictions were that talent – in terms of highly qualified individuals (essentially graduates) – is attracted by culture, diversity, and a new measure, the presence of an entrepreneurial culture as well as other more conventional factors such as the presence of technology and knowledge-based industry. This paper, further adds to our understanding of the economic geography of talent by incorporating four new measures which relate to new university graduates.

Our general findings are that talent is unevenly concentrated in certain cities of the UK. Our analysis shows that talent is not particularly attracted by diversity, but more generally by culture and cultural amenities, and the presence of an entrepreneurial culture captured by lots of people starting new businesses. However, new graduate talent is associated with a much broader set of city attributes, including a preference for larger cities *per se*, the presence of a large stock of existing graduate talent and high levels of provision of public services and good housing. Of course, this means that it is likely to be very difficult for cities with low existing levels of talent to 'catch up' with more 'talented' cities as a disproportionate share of new talent will be attracted to those cities already best placed in this respect.

Knowledge-based industry, however, is associated with diversity, entrepreneurial cultures, and talent, thus establishing a link between the attraction, and retention, of talent, creativity and innovation. Further, the evidence also points to the presence of more knowledge-based industry activity and higher gross value added at the city level. Holding knowledge-based industry activity constant, there is also an independent effect from having more talent available in a city. These latter findings suggest that economic based, human capital, models are important in explaining the geographic differences observed in the location of knowledge-based economic activity and economic performance. But if we take a step back from this final outcome, our findings shed more light on the key drivers relevant to attracting new talent to cities. This is what Florida (2002) refers to as 'creating an environment or habitat that can attract and retain talent, or human capital' (p754), and our findings suggest that creating an entrepreneurial culture, together with high levels of provision of public goods and services are important in this respect.

Again the findings lead to similar conclusions arrived at in the US work of Florida *op. cit.*, who argues that these types of results give local policy-makers new tools for intervention rather than relying on subsidies to attract firms and industries.

Emerging issues for the city

Our findings for Brighton and Hove are that it is highly regarded by students and graduates as a desirable place to live. Alongside the obvious benefits of its vibrancy and youthful population, young people also appear to value more traditional quality of life aspects such as the provision of high-quality public services. Whilst the cost of this provision, and of housing more generally, is a concern, it appears that young people are willing to bear this cost if the provision of public services justifies it. To this end, Brighton and Hove has an economic head start on many UK cities in the sense that it is inherently attractive to young graduate talent.

In basic economic terms, Brighton and Hove also appears to possess all the 'raw materials' necessary to create a powerful, rich and dynamic local economy. It has more knowledge-based industry than most cities, more entrepreneurial activity and a very highly educated population. Yet this superior economic endowment does not translate into the level of income and wealth that is apparent in other cities with similar resource endowments, and this is a puzzle. This is confounded further by the fact that Brighton and Hove has an apparently good institutional infrastructure with two successful universities, containing world leading departments such as the Science Policy Research Unit and a renowned medical school/ teaching and research hospital (Brighton and Sussex Medical School and the Royal Sussex Hospital). Potential contributory factors could include:

- a lack of financial capital and investment by and in local firms
- the city has the types of graduates that might not be meeting the range of local needs (a mismatch in supply and demand)
- firm level activity is too diverse to take advantage of clustering and agglomeration effects
- local economic activity is uncoordinated by local planning agencies
- Brighton and Hove is 'physically' constrained by its geography
- Brighton and Hove fails to integrate all its institutional assets into a strategic economic development and coordination framework and planning agency.

We can conclude that for the city of Brighton and Hove graduate retention is fundamental to future economic growth. However, whilst graduate retention is a necessary condition, if graduate talent is under-utilised then much of this potential advantage is lost. Brighton and Hove needs to create the framework conditions

that mimic those of smaller, more successful, cities which benefit from equally abundant resources of entrepreneurial firms in knowledge-based industry sectors but achieve superior outcomes.

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Appendix 3.1: City codes

city	code	city	code
Aberdeen	ab	Newcastle	ne
Barnsley	by	Newport	np
Basildon	bs	Northampton	nt
Bath	bh	Norwich	nw
Belfast	be	Nottingham	no
Birmingham	bm	Oldham	ol
Blackpool	bl	Oxford	ox
Bolton	bo	Peterborough	pe
Bournemouth	br	Plymouth	pl
Bracknell	bk	Poole	po
Bradford	bf	Portsmouth	pm
Brighton	bn	Preston	pr
Bristol	bi	Reading	re
Burnley	bu	Rochdale	ro
Cambridge	cm	Rotherham	rh
Canterbury	cb	Salford	sd
Cardiff	ca	Salisbury	sb
Carlisle	cr	Sheffield	sf
Chelmsford	cf	Slough	sl
Chester	ch	Solihull	so
Colchester	co	Southampton	sp
Coventry	cv	Southend-on-Sea	se
Darlington	da	St Albans	sa
Derby	db	St Helens	sh
Derry	de	Stafford	sr
Doncaster	do	Stevenage	sv
Dover	dv	Stirling	sg
Dudley	du	Stockport	sk
Dundee	dd	Stoke-on-Trent	sot
Edinburgh	ed	Stratford-on-Avon	st
Exeter	ex	Sunderland	su
Gateshead	ga	Swansea	sw
Glasgow	gg	Swindon	si
Gloucester	gl	Wakefield	wk
Harrogate	ha	Walsall	wl
Hartlepool	hr	Warrington	wr
Hull	hu	Warwick	ww
Ipswich	ip	Watford	wf
Lancaster	la	Wigan	wg
Leeds	ld	Winchester	wn
Leicester	le	Windsor	wd
Lincoln	li	Wirral	wi
Liverpool	lv	Wolverhampton	wv
Luton	lu	Worcester	wc
Maidstone	ma	Worthing	wo
Manchester	mc	Wrexham	wx
Middlesbrough	mi	York	yo
Milton Keynes	mk		