Seven Years On: Graduate Careers in a Changing Labour Market

SHORT REPORT
The Higher Education Careers Services Unit
Leading research into graduate careers

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Seven Years On: Graduate Careers in a Changing Labour Market

Introduction

Since the 1960s, successive UK government policies have facilitated the expansion of higher education and encouraged access from a wider population, so that growing proportions of labour market entrants have degrees. This growth in the graduate labour supply was particularly rapid in the last decade of the 20th century. The policy has been controversial and has led to heated debate in the media and among those concerned with graduate employment and the relationship between higher education and the labour market. Does this investment by government and individuals represent public money and individual time well spent?

There has been little hard evidence about the extent to which graduates are using the skills and knowledge acquired in higher education, how far employers require and are making use of the increasingly highly-qualified pool of labour available to them and – at a wider level – how this expansion of higher education has changed the nature of employment opportunities in the labour market. Most contributors to this debate draw on evidence from a narrow range of traditional employers of graduates, on surveys limited to accounts provided by graduates from a restricted range of universities, or cite first destination statistics, known to be a poor indicator of longer-term employment outcomes. Are recent graduates being integrated into an increasingly global economy where knowledge is the key to competitive success, or is there evidence of credential inflation and graduate under-employment?

In 2002 the Economic and Social Research Council (ESRC) and the Higher Education Careers Services Unit (HECSU) funded a major interdisciplinary investigation of graduate careers and change in the graduate labour market, a research project led jointly by Professor Peter Elias - an economist at the Institute for Employment Research at the University of Warwick and Professor Kate Purcell - a sociologist at the Employment Studies Research Unit at the University of the West of England. This short report summarises the main findings of the project. Detailed analysis of the research will be published in their forthcoming book Seven Years On: Graduate Careers in the Changing Labour Market, to be published early next year. Preliminary working papers from the project, listed in the bibliography, can be accessed on www.warwick.ac.uk/go/glmf or www.uwe.ac.uk/bbs/research/esru/7-up.shtml

The research was conducted by Kate Purcell and Peter Elias with Nick Wilton, ESRU Research Associate on the project, ably supported by Ritva Ellison, computing officer at IER. We are grateful to the ESRC and HECSU for funding the research, to Lynne Conaghan at IER and Stella Warren at ESRU for providing excellent administrative support, to the staff in higher education institutions who helped us make contact with their 1995 alumni and to members of the Graduate Labour Market Forum that we convened for the project to debate the issues and findings as we proceeded. Most of all, we are grateful to the 1995 graduates who completed our questionnaires and answered our questions.

Kate Purcell, Employment Studies Research Unit, University of the West of England
Peter Elias, Institute for Employment Research, University of Warwick
June 2004
The research undertaken was detailed, comprehensive and representative of the full range of UK undergraduate provision in 1995.

The project had three main components:
• a survey of 4,500 graduates from 38 UK higher education institutions who gained their first degrees in 1995, representing the full spectrum of UK undergraduate provision, from the most elite universities to higher education institutions awarding degrees in partnership with more established undergraduate degree-awarding institutions;
• a follow-up programme of 200 interviews with a sub-sample of respondents;
• meticulous analysis of existing data on graduate employment and occupational trends, drawing on a range of UK data sources, including analysis of national labour force survey trends, graduate educational and employment trajectories data from the British birth cohort studies, Higher Education Statistical Agency (HESA) statistics and previous surveys of UK graduates, including an earlier survey of the 1995 cohort upon which this study is focused.

The survey includes comprehensive and detailed work histories from the point of graduation in summer 1995 to the date of the survey (Winter 2002/03). Responses have been weighted to be representative of all those who completed undergraduate degrees at the institutions included in the survey. A series of tests of sample representativeness has been also undertaken, including attribute comparison with HESA population data and a telephone survey of non-respondents, all of which indicated that the educational and social characteristics of respondents are similar to those of the population from which they were drawn.

Table 1. 1995 graduate sample profile at the time of the survey in 2002/03

<table>
<thead>
<tr>
<th>Current situation*</th>
<th>Males (%)</th>
<th>Females (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time employment related to long-term career</td>
<td>78</td>
<td>68</td>
</tr>
<tr>
<td>Part-time employment related to longer-term career</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Self-employed</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Postgraduate study</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Unemployed seeking work</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Out of the labour force</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>0.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Graduates do a wider range of jobs than graduates in the past - partly as a result of economic restructuring, technological change and related change in the demand for highly-skilled labour, partly as a result of changes in the labour supply.

- A key output of this research has been the development of a new occupational classification for monitoring change in the graduate labour market and for studying the relationship between higher education and skill utilisation in the labour market. The changing distribution of graduate employment among occupations has thus been analysed.
- The majority of respondents considered that they were in appropriate employment for someone with their skills and qualifications and were using the skills developed on the course they completed in 1995.

It does not appear that the expansion of higher education has led to deterioration in opportunities for graduates. There was little evidence of over-supply of graduates or of their widespread failure to get appropriate jobs.

- Well over three quarters of the graduates were found to be in employment related to their long-term career plans, and two thirds said that a degree had been required for their current jobs.
- There was little evidence of dissatisfaction. Overall, 85 per cent of survey respondents said that they were very or reasonably satisfied with the way their career had developed.
- Short-term graduate underemployment trends bore a remarkable resemblance to those exhibited by earlier cohorts and were not a reliable indicator of the longer-term labour market outcomes.

All the evidence suggests that employers continue to pay a premium to degree-holders but graduate earnings and career development varied according to sector and region of employment, and to gender and age.

- The gender pay gap between men’s and women’s earnings was apparent, even among graduates with comparable qualifications prior to having children – and the reasons for it vary among industries and occupations.
- Spatial, gender and age-related inequalities in opportunities and outcomes of employment raise questions for policy-makers and employers.
Where did they work

Graduates in the survey were employed across the full spectrum of industry sectors and occupations. Forty per cent worked in the public sector, 54 per cent in the private sector and 6 per cent in the not-for-profit sector. The different distribution of male and female graduates is shown in Figure 1, but the pattern also varied considerably according to degree subject studied.

Classification of the current occupations reported is shown in Figure 2, which shows that the majority were in occupations where their qualifications were likely to have been required.

Table 1 showed that well over three quarters were in employment or self-employment related to their long-term career plans. The majority reported satisfaction with their current employment and their early career development.

On a scale of 1-7, where 1 = completely inappropriate and 7 = ideal, 70 per cent scored their current jobs 5 or more and less than 10 per cent scored them less than 3. On a similar scale, where 1 = 'not satisfied at all with present job' and 7 = 'completely satisfied with present job', nearly three quarters scored five or above and 5 per cent scored less than 3. Eighty-five per cent said that they were very or reasonably satisfied with the way their career had developed. This may, of course, reflect an element of post facto rationalisation – but it also reflects a wide range of expectations among those benefiting from higher education. We found that career aspirations and satisfaction with earnings were related to subject studied and prior levels of achievement as well as to current labour market and social circumstances. Not all graduates aspire to high flying careers and salaries.

'A lot of the work I do is document based, so it will be writing summaries of research and recommendations for the brand - in terms of how we market, how we commercialise the brand and the brand strategy - and a lot of the work in my history degree was based on the same way...which is: get your sources together, get your material together, pull together your conclusions, that is, your hypothesis of a situation... I think, for me, document writing is something I am therefore comfortable with and that's pretty much a fundamental means of communication, especially with the senior managers'.

Male, 29: History degree from old university, working as a brand manager for a household products manufacturer, earning £60K+, currently based on European mainland

'My degree course was obviously quite technical - it covers many aspects: pure design work... you have to look at hydrodynamics, offshore structural response, stability aspects, a lot of technical stuff and that carries through when you are doing the current job ... You are doing plan approval of ship hulls and a lot of the stuff that you were doing at university, like hydrodynamics, response of objects in water, you do as a job'.

Male, 31, Engineering degree from 1960s university, working as Naval Architect for London-based shipping organisation, earning £33-36K
Following analysis of trends in national employment statistics and from a detailed study of information describing the qualifications normally required by employers for specific occupations, a new occupational classification - SOC (HE) - was developed to enable researchers to monitor change in the graduate labour market, distinguishing between non-graduate employment and four categories of graduate employment:

- **traditional graduate occupations**, where access to the occupation has historically been via an undergraduate degree programme. These include the established professions – solicitors, medical practitioners, HE and secondary education teachers, professional scientific and technical specialist occupations;
- **modern graduate occupations**, where an undergraduate degree course became the normal route into the occupations around the last significant period of educational expansion in the 1960s. These include the newer professions, particularly in management, IT and creative vocational areas, primary school teachers, journalists and graduate-entry public and private sector administrative level posts;
- **new graduate occupations**, where the route into the professional area has recently changed and is now exclusively or mainly via an undergraduate degree programme where candidates with degrees have increasingly been recruited and sought – sometimes to new or expanding areas of employment, sometimes to established areas where the requirements have been changed by organisational restructuring or ICT, sometimes perhaps reflecting change in the graduate labour supply. These include jobs such as marketing and sales managers, physiotherapists, occupational therapists, management accountants, welfare officers, countryside rangers; and
- **niche graduate occupations** – in areas of employment in which most workers do not have degrees, but within which there are stable or growing specialist niches for which graduates are sought and in some case, where an undergraduate programme of study or graduate recruitment scheme is a route into the niche in question. Such occupations include leisure and sports managers, hotel and accommodation managers, nurses, actors, senior administrators in education establishments.

Analysis of graduate employment throughout the labour force as a whole indicated that there were other occupations that had
What is a graduate occupation?

Increasingly been recruiting graduates - jobs such as routine laboratory testers, database assistants, local government clerks, Civil Service administrative officers and assistants, library assistants and fitness instructors - but the skills and attributes required for such work and the attendant salaries signify that these are not jobs that require higher educational background - and they are clearly non-graduate occupations.

Comparing the trends revealed by the Seven Years On data with those of graduates surveyed in previous national surveys, the researchers examined movement out of non-graduate employment among 1980, 1992 and 1995 graduates and found very similar trends over the first seven years of employment after graduation, with virtually identical proportions of the samples remaining in non-graduate jobs seven years on. Figure 3 indicates that significant numbers of 1995 and 1992 graduates enter such jobs in their early careers.

The interviews revealed that while many graduates experienced initial difficulty in obtaining the kind of employment they aspired to enter, these trends also reflect the increasingly popular practice of taking time to travel or obtain further qualifications, often interspersed by periods of short-term, easily obtainable employment to fund these activities and allow time to research their longer-term career options.

In addition, many of the apparently non-graduate jobs that the 1995 graduates surveyed were doing, which were clearly not graduate jobs according to their occupational title, were actually jobs for which their degrees had been required: for example, the graduate working as personal assistant and secretary to a leading politician and the merchandiser earning £33-36,000 for working in a major retail organisation. Subjective assessments of the quality of their current jobs, taking into account salary, the work itself and opportunities for skills and career development, along with whether a degree had been required and how far their higher education skills and knowledge were used, showed a clear difference between graduate and non-graduate category occupations – but also revealed such atypical examples. Figure 4, showing the percentages of survey respondents who considered that they were using the skills developed on their undergraduate courses in their current jobs, taking into account salary, the work itself and opportunities for skills and career development, along with whether a degree had been required and how far their higher education skills and knowledge were used, showed a clear difference between graduate and non-graduate category occupations – but also revealed such atypical examples. Figure 4, showing the percentages of survey respondents who considered that they were using the skills developed on their undergraduate courses in their current jobs, taking into account salary, the work itself and opportunities for skills and career development, along with whether a degree had been required and how far their higher education skills and knowledge were used, showed a clear difference between graduate and non-graduate category occupations – but also revealed such atypical examples. Figure 4, showing the percentages of survey respondents who considered that they were using the skills developed on their undergraduate courses in their current jobs, taking into account salary, the work itself and opportunities for skills and career development, along with whether a degree had been required and how far their higher education skills and knowledge were used, showed a clear difference between graduate and non-graduate category occupations – but also revealed such atypical examples. Figure 4, showing the percentages of survey respondents who considered that they were using the skills developed on their undergraduate courses in their current jobs, taking into account salary, the work itself and opportunities for skills and career development, along with whether a degree had been required and how far their higher education skills and knowledge were used, showed a clear difference between graduate and non-graduate category occupations – but also revealed such atypical examples.

‘They wanted somebody who could understand statistics or speak to statisticians and programmers and there’s plenty of programmers about but there aren’t many who understand fundamental statistical concepts’.

**Male, Applied biology, new university, working as Statistical Programmer, for Pharmaceuticals Company**

‘Part of my degree, a lot of our final year stuff, was group work, team assignments. Here, everything is usually done within your close-knit team - but also with other teams in the organisation’.

**Female, 29: Business Studies, new university, working as conference manager for a charity in London, earning £24-27K**

‘I think my job is quite unique in the place that I’m working in that it is at quite a basic level really. I would say, and over (the) time of them getting to know me and giving me more and more responsibility, as they begin to trust me or whatever… certainly initially it didn’t really need a degree. I think now, I’m proving that my knowledge or my experience and the degree has been very useful as the role has progressed. (Interviewer: So you could say you’ve grown it into a graduate job?) Yeah. Yes, absolutely!’

**Female: 29, European Business, new university, working as Project Assistant for finance company, earning £30-33K in London**
The survey provides information about graduate careers, but also about the nature of graduate jobs. Figure 5 shows the relationship between the extent to which respondents considered that skills had been developed on their undergraduate programmes and the extent to which they were required in their current jobs. After seven years, of course, the relative importance of expertise and competence developed in higher education and subsequently changes, as graduate skills are amplified by further professional experience, postgraduate education and experience of employment.

For example, it might be expected that leadership skills become increasingly important as graduates rise within organisational and professional hierarchies, although it can be argued that it would be inappropriate for the development of such skills to constitute a significant part of most undergraduate programmes. Table 2 shows the relationship between occupation held at the time of the survey and qualifications obtained in 1995 and subsequently. It appears that for women, both their undergraduate degree and further qualifications had been more important in enabling them to obtain their current jobs.

Table 2. Relevant factors in enabling graduates* to obtain current jobs

<table>
<thead>
<tr>
<th>Factor</th>
<th>Males (%)</th>
<th>Females (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree required</td>
<td>63</td>
<td>68</td>
</tr>
<tr>
<td>Subject studied</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Class of degree</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Recognition by professional body of 1995 degree course</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td>Postgraduate degree obtained since 1995</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>A professional qualification obtained since 1995</td>
<td>21</td>
<td>24</td>
</tr>
</tbody>
</table>

* n = all in employment at time of survey (weighted sample = 30802).

But what do graduates do? Are there key skills and core outcomes from higher education that are required across the graduate occupational spectrum? We conducted 200 detailed follow-up interviews with respondents, 189 of whom were currently in employment, and these were fully transcribed and analysed using NVivo software. The main objective of the interview stage of the research was to address, in greater detail than is possible through a postal survey, a range of questions about career trajectories and current employment, including the types and intensity of the skills required and the relevance of skills and knowledge acquired on their undergraduate degree programmes to their current jobs.

Questions specifically focused on the responsibilities and range of tasks respondents were required to undertake, the nature of their relationships with colleagues, customers, managers and subordinates, the degree to which they were required to possess generic or specialist skills and knowledge. The telephone interviews enable us to probe around meanings and interpretations, following up responses given to questions asked in the survey and asking some extremely open-ended questions about work contexts and career aspirations. Perhaps the most revealing series of questions that we asked included “Why do you think you were offered [your current] job?” and “What did you do today at work?”

Analysing respondents’ accounts of the work contexts and their day-to-day activities and responsibilities, in the light of the range and intensity of use of a number of specific and general skills, knowledge and personal attributes most often associated with graduate employment, we were able to begin to ‘map’ the distribution of the graduate jobs in a way which enables us to make sense of the extent to which there is a ‘core’ of ‘graduateness’ (or a series of distinct graduate-segment cores) across the diversity of graduate jobs. In the sample as a whole, two-thirds of those surveyed said that they were required to use their subject knowledge in their current or last job, whereas 79 per cent said that the skills developed on their undergraduate course were used.

The job descriptions provided by interviewees, whether or not they considered that they were in appropriate or inappropriate jobs for people with their education, revealed that graduate employment tends to require some combination of expertise deriving from higher education, and the ability to demonstrate strategic/managerial skills or high level interactive skills. These data, related to the external occupational classification already developed - SOC (HE) – have enabled us to conduct an evidence-based analysis of graduate labour market diversity.
What is graduate work?

It is first important to define the categories we use and how we assessed the evidence provided by respondents.

**Expertise** encapsulates occupationally-specific expert or specialist knowledge, usually initially developed during higher education and/or other vocational or professional training (but also through prior employment experience and other learning). For many jobs, the possession of such knowledge and skill is a prerequisite for entry into that occupation and is required in order to do the job.

**Strategic and managerial skills** include project, process and resource management (including the deployment of staff), leadership, decision-making responsibility, risk-taking, forward planning and business/strategy development.

**Interactive skills**, at a very basic level, are required in most jobs to some extent, but are an important component of jobs with a high emotional labour component. The concept encompasses interpersonal skills, communication skills, empathic skills and manipulative skills, as will be discussed below, but its key value is in drawing attention to the fact that such apparent attributes are, in fact, skills that are developed and deployed as part of occupational performance - and as work.

On the basis of the information given by them in the survey and in their accounts of their current jobs, scores between 1-10 on each of these dimensions were allocated to each of the 189 graduates currently in employment who were interviewed. This revealed that a high level of specialist expertise was more often required in traditional and modern graduate jobs than in the more recently developing areas of graduate employment, but the area where strategic/managerial skills were most likely to be required was in niche graduate occupations, closely followed by new graduate occupations.

To an extent, this reflects the greater need for hybrid skills in such jobs – as some of the examples quoted in this report reveal very clearly. For example, alongside the growth of technical specialist skills in ICT, we find the growth of technically-competent specialists who also have excellent communication skills are employed to interpret, market and disseminate ‘hi tech’ products and services. Most management jobs, by definition, require a combination of two or more of these areas of competence. The relationship between such areas of skill is complex, but Figure 6 provides a very simple illustration, with examples, of how the SOC (HE) and intrinsic skills analyses are related and can assist in analysis of graduate labour market diversity and change.

**Figure 6. Examples of occupational positions on the intrinsic classification**

Source: Seven Years On Survey; Qualitative Interview Programme data
What is a degree worth?

A traditional indicator of the benefits of higher education is the graduate earnings premium – the additional earnings paid by employers to those who have a degree. While there are many factors which influence pay, the premium is typically regarded as a measure of the value of a degree – the employer’s valuation of the extra skills and knowledge that a graduate can bring to a job relative to an equivalent job holder who has not participated in higher education.

Figure 7 shows how the graduate earnings premium develops with age and experience. For men, the gap between the earnings of graduates and qualified non-graduates continues to grow over the fifteen years after graduation. For women the growth tails off some ten years after graduation. A sizeable gender gap in earnings is also apparent.

We undertook a detailed analysis of the growth of graduates’ earnings from their first main job after graduation to the job they held at the time of the survey (2002/03). As Figure 7 shows, this is the critical period in which the graduate earnings premium begins to develop for both men and women. To put this into a comparative perspective we made use of an earlier study, a 1986/7 survey of 1980 graduates. Covering a similar population (first degree graduates from a cross-section of UK universities and polytechnics) this survey also recorded the growth of graduate earnings in the 6-7 year period after graduation.

It was our expectation that the growth of graduate earnings for this earlier cohort, relative to the growth of earnings generally across the whole economy, would be higher than for the 1995 cohort. If expansion of higher education has led to a situation where more graduates are now employed in non-graduate jobs, this would be reflected in a lower rate of growth of relative earnings for the 1995 cohort compared with the 1980 cohort.

Surprisingly, we found no such evidence. On the contrary, we found that the growth of earnings of female graduates over this 6-7 year period was higher in the 1995 cohort than in the 1980 cohort. For men, the growth of their earnings during the first part of their careers was similar in both cohorts.

To pursue this further, we also compared the earnings reported by the 1995 cohort some 3 to 4 years after graduation with similar information reported by graduates in another study we are conducting – a national cohort of graduates who gained their first degrees in 1999. Figure 8 shows that there has been further real growth in graduate earnings in the four years separating these two cohorts.

Finally, we undertook a detailed investigation of the main factors associated with the earnings of male and female graduates seven years after graduation. In addition to clarification of the gender pay gap, discussed in the following section this study revealed a number of interesting insights into the main influences on graduate pay, particularly the size of the Inner London premium (25% addition) and Outer London (18%), the link between graduate pay and the sector in which the graduate worked (education and other public services some 20% below banking, insurance and finance). We could not detect a significant effect related directly to the social class background of the graduate some seven years after graduation, nor did we observe direct effects related to the type of university at which the graduate studied.
The gender pay gap in graduate employment

Why do female graduates earn less than male graduates?

The recent faster rate of growth of female graduate earnings in the 6-7 years after graduation may be taken by some as indicative of an improving situation for women with degrees. While this is probably the case, the fact remains that, relative to men, women graduates are paid significantly less and the gender difference in earnings for the 1995 cohort continues to widen as they gain labour market experience. Figure 9 shows how the gender difference in graduate earnings changes for the 1995 cohort, comparing gender gaps for their first main jobs (11%), in 1997/98 (15%) and most recently from the survey in 2002/03 (19%).

We have investigated the growth of the gender gap in pay and found that it relates to a number of factors, particularly the difference in weekly hours worked by these full-time employees, the sectors in which they work and the balance of men and women who do their kind of work at their workplace. Using statistical methods we can isolate the impact of these different factors. Figure 10 shows the result of this investigation, revealing that we still know little about a residual 7% difference in the pay of male and female graduates at this point seven years after graduation.

Figure 10. The combined effects of various factors on the gender difference in annual earnings

Source: 7 Years On: A survey of the careers paths of 1995 graduates

Going to work in the heritage sector, it can’t be the money that’s important and I understand that I’m going to get paid a pittance. "Going to work in the heritage sector, it can’t be the money that’s important and I understand that I’m going to get paid a pittance". (Female, 28: Full-time postgraduate student, Humanities degree from old university, now doing MA in Heritage Management. Previously worked in Public Relations for market consultancy and as an unpaid volunteer in a museum)

"...If I had not been a woman, then in (my last job) they would certainly have rewarded me more because the role I was taking was project management and (research) management. (The area) was predominately female but it was predominately junior administrative staff and the managing director was male, the finance director was male, the research manager was male, the production manager was male and there was nobody female on the board of directors. I certainly feel that for the salary I was getting, I had a lot of responsibility and I was given a lot of opportunities that I wouldn’t have expected based on the job title and the salary that I was earning"  

Female, 28: Biochemistry graduate from old university with PhD, working as scientific Civil Servant for government agency in SE, earning £24-27K

Well the City definitely is linked in with financial reward I mean that’s very clear, I mean one of the problems I face now is I could step out of the City into a corporate role but looking at the salaries that are paid, it’s horrendous, you know we’re talking a lifestyle change which I’m not entirely keen to make".  

Male, 31: Modern Languages from old university, working as Freelance finance consultant in City of London: salary undisclosed

"...probably (I got the job) because I come from a technical background but I have client facing skills... A lot of tech-y people have problems dealing with clients and face-to-face meetings and presenting and things like that, so they were looking for a mix of, if you like, business skills mixed with technical skills. It (customer contact) probably makes up about a third of my job but it’s probably the most important in the sense that if you don’t fulfil that bit they’re not going to want you to do the rest of the job".

Female, 30: Information Systems from new university, working as systems designer for ICT/Business Consultancy in London, earning £36-40K
Our work on gender differences in graduate career outcomes is continuing. Our survey findings indicated a clear and direct impact of gender segmentation at the workplace, a finding that was previously only approximated through occupational information—and this is amplified by the interview data and exemplified most clearly by contrasting the reported experiences of female graduates with different degrees and in different employment contexts. For example, women in all areas of expertise and industry sectors were more likely than men to be working in situations where the jobs they did were mainly the prerogative of women, and had lower average earnings than men in similar jobs and with similar qualifications—but the explanation for differences in career profiles and the gender pay gap between male and female engineering graduates is not the same as for male and female humanities or law graduates. Women and men appear to make, and sometimes are steered into, gendered occupational and career development choices, within the contexts that they have chosen or find themselves in.

An unanticipated finding was the extent to which, for these graduates—mainly aged 28 to 31 at the time of the interview—partnership was a very significant variable in contributing to career decisions. The achievement of an appropriate work/life balance was a primary priority for many respondents of both sexes, rather than prioritising either career development or personal relationships and family. This may be a significant generational finding, reflecting this cohort’s development in a cultural and educational climate increasingly protecting and promoting equal opportunities between the sexes, where few women (or their partners) see marriage as a career. Men were more likely than women to agree strongly with the statement ‘I am extremely ambitious’—but the similarities between the sexes outweighed the differences and 80 per cent of the women surveyed said that career development was important or very important, compared to 86 per cent of the men.

We are particularly interested in the fact that the 1995 cohort is rapidly approaching parenthood or has already commenced family building. Decisions and choices related to these developments are now shaping the career paths of both men and women. We need to discover how employers and employees are reacting to these events, specifically how they will contribute further to gendered career paths and the limitations they place upon the future development of the country’s highly qualified workforce.
Graduate diversity

One of the main characteristics of the UK graduate labour market has been the extent to which possession of a degree has been used by employers as a proxy for potential, particularly for those entering managerial, administrative and creative careers. As the graduate labour supply has become more diverse, this raises a number of issues about the value of a degree and the opportunities that it provides, particularly for ‘non traditional’ graduates. For example, are those who study as mature graduates able to access these career opportunities to the same extent as graduates who take the more direct route from their secondary education? Does their prior experience enhance or detract from their ability to obtain employment that values and makes use of their undergraduate education?

Those who studied as mature graduates are more likely to have attended a new than an old university and more likely to have entered higher education with qualifications gained other than by the standard A level route, but they generally have key attributes that graduate employers seek: experience of work, maturity, a more instrumentally-focused and informed approach to their higher education experience and often, clear evidence of their ability to manage time well and take a pro-active approach to career management. Successive research findings have indicated that mature graduates tend to have greater difficulty than their younger peers in accessing appropriate employment after completing their courses, but there is some evidence that this initial disadvantage may be eroded over a longer period.

The findings seven years on suggest that younger mature graduates - those who went to university after a few years in employment and graduated while they were still under 30, had very similar experiences to their younger peers. However, those who graduated over thirty were more likely to have experienced difficulty in accessing the kind of employment that their degrees had equipped them for: they were somewhat less likely to be in jobs for which a degree had been required, and they were less likely to be very satisfied with their current jobs or their career to date. However, both younger and older mature graduates were more likely than ‘traditional’ graduates to be in jobs where they were using their skills and knowledge, as is shown in Figure 11 and equally likely to be using the skills developed in higher education.

Unfortunately, because I was 37 at the time I was feeling very much that age was against me... When you come out with your brand new degree certificate and you go for jobs, people either assume that you should be young if you want to come in at the lower level or that your age must give you some automatic experience in the specialist field that you’re entering. They don’t know quite where to put you unless of course they are particularly far sighted and accept that you might be able to bring quite a lot more to a junior role.’

Female, 39; Social Sciences, old university, working as Senior Project Co-ordinator for a business consultancy, earning £27-30K in London

I think as a graduate from engineering, I had a very practical background prior to university, so in one sense the academic qualifications are what you need to join the profession but I probably also had some extra qualities that the other run-of-the-mill graduates didn’t have, so I was bringing extra to the equation’.

Male, 33; Civil Engineering from a 1960s university, working as forensic engineer for engineering consultancy, earning £33-36K in SE

Finally, the findings reveal a substantial net outflow of graduates from Scotland and, to a lesser extent, from Wales and Northern Ireland – which has implications for higher education policy and funding as well as for graduate opportunities in different parts of the UK.

Figure 11. Percentage of employed graduates stating that they were using the knowledge acquired on their 1995 degree course, by age at graduation

Source: 7 Years On: A survey of the careers paths of 1995 graduates:

‘I think the biggest thing for me is I was a housewife and then suddenly I was a graduate and from a personal point of view I had legitimacy. Even though I was capable of doing this job - whether I had this degree or not would make no difference to me doing this job - it suddenly gave me the right to do this job, in my mind as well as in other people’s minds.

It’s like I thought “I can do this!” It gave me confidence’

Female, 43; Business Studies, new university, working as Data Sales Specialist for Telecoms Company, earning £60K+ in SE

‘I thought that employers would look at me and think, “as old as he is… he’s been made redundant, he’s got a degree, it shows drive and enthusiasm to get on and do things”. But it didn’t work out that way: it took about four years before I got a job that I thought I should have been able to achieve two or three years beforehand. So, I was almost getting disheartened... It was rather a naive idea that I would leave university (thinking that) there would be would be jobs and opportunities out there. I didn’t expect it to be quite as difficult as it was to get this kind of job.’

Male, 48; Rural Resources Development, new university, working as Transport Planner for local authority, earning £18-21K in SE
Conclusions

Immediately after graduation in July 1995, 43 per cent of those in employment were in non-graduate jobs, whereas by December 2002, this had fallen to 11 per cent. This indicates that initial graduate under-employment is not a reliable indicator of longer-term labour market outcomes.

The evidence also suggests that the ‘graduate premium’ – the income advantage conferred by a degree in comparison to earnings achieved by similarly-qualified individuals who had gone directly into employment rather than tertiary education – has held up well and is still considerable. Thus, employers are, on average, continuing to pay higher earnings to graduates than to non-graduates – even those employed in ‘non-graduate’ jobs.

This research represents the most comprehensive investigation of graduate career paths undertaken in the UK. It reveals in detail the link between the jobs graduates move through as they travel these pathways and shows the value that graduates and their employers place upon the skills and knowledge developed at degree level in Britain’s universities. The picture is positive – we find no evidence of an oversupply of graduates, although we show clearly how the graduate labour market is changing in response to this increased supply. Seven years after graduation, there is little evidence of graduate over-supply or widespread failure of graduates to have become integrated into the labour market in appropriate occupations.

But the main message that policy makers must draw from this research is not simply that we should continue to expand higher education. The value of this research lies in the fact that it has taken a long term perspective. Graduate career paths evolve slowly, and some graduates take 5 years or longer to settle into their careers – for some it involves further study, for others the process of assimilation into the labour market involves false starts or a rethink about their early career choices. If we are to use information on career outcomes as a guide to educational planning or the provision of careers advice, this long term perspective must be borne in mind. There is no short term fix for this problem – good educational planning needs vision, not short term performance indicators based on ‘career outcomes’ measured in the first year after graduation. Good educational research requires wider and better longitudinal cohort studies similar to the research we describe in this report.

Furthermore, the rate of growth of graduate earnings in the six to seven years after graduation was higher for the 1995 cohort than it had been for a cohort graduating in 1980 – so it looks as if a degree continues to give access to careers rather than just jobs. This is reinforced by responses to questions in the survey about career prospects. Only 6.5 per cent of respondents felt that they were in ‘dead end’ jobs – and Figure 12 shows how this minority is concentrated among those in non-graduate jobs - whereas 48 per cent considered their career prospects good within their current organisation and a further 40 per cent considered that their career prospects were good, but they would need to change their organisation to develop their careers further.

Figure 12. Percentage of respondents stating that their current (2002/03) job was a ‘dead-end’ job, by SOC (HE) and gender

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1 Award reference numbers R000239589/R000239589-A
2 See Elias and Purcell (2004b) for a full account of the how this was done.
3 Most interviews were conducted in the evening. All were conducted by members of the research team.
4 See Purcell et al. (2004) for details of how this was done.
5 For more detailed account of the analysis of graduate earnings, see Elias and Purcell (2004a)
6 For a more detailed account of the analysis of the relationship between gender and career development, see Purcell and Elias (2004).
7 For a more detailed account of the analysis of the impact of age on career opportunities, see Purcell et al. (2003).
The following working papers from the project are available online at www.warwick.ac.uk/go/glmf:

Measuring change in the graduate labour market,  
Research Paper No.1

Older & Wiser? Age and experience in the graduate labour market,  
Research Paper No.2

Higher Education, Skills and Employment:  
careers and jobs in the graduate labour market,  
Research Paper No. 3

Higher education and gendered career development,  
Research Paper No.4

Elias, P. & Purcell, K. (2004a)  
The earnings of graduates in their early careers,  
Research Paper No.5

Elias, P. & Purcell, K. (2004b) SOC(HE):  
A classification for studying the graduate labour market,  
Research Paper No.6

A Fast Track to Management? Early career outcomes for  
business studies graduates in the 'knowledge' economy,  
Research Paper no.7