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# Northern Ireland's graduates: the classes of '95 and '99

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# Northern Ireland's graduates: the classes of '95 and '99

A report to the Department for  
Employment and Learning (Northern Ireland)

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**CONTENTS**

CHAPTER 1	EXECUTIVE SUMMARY	1
CHAPTER 2	HIGHER EDUCATION AND EMPLOYMENT IN NORTHERN IRELAND	11
CHAPTER 3	RESEARCH METHODOLOGY	13
	3.1 Introduction	13
	3.2 The scope of the investigation	15
CHAPTER 4	A PROFILE OF THE NI-DOMICILED 'Class of '99'	17
	4.1 A profile of the NI - domiciled class of '99	17
	4.2 Postgraduate training and education	24
	4.3 Identity as a variable that affects career orientations and outcomes	27
	4.4 Summary	31
CHAPTER 5	THE CAREER PATHS OF NORTHERN IRELAND GRADUATES	33
	5.1 Introduction	33
	5.2 Overview of early career profiles	33
	5.3 The contractual status of employment	36
	5.4 Occupational status of employment	40
	5.5 Using degree subject knowledge and skills in employment	45
	5.6 Employment outcomes by gender, degree performance, subject and religious background	47
	5.7 Summary	56
CHAPTER 6	THE CURRENT SITUATION OF NI GRADUATES	57
	6.1 Introduction	57
	6.2 Employment characteristics	61
	6.3 Alternative measures of job quality	65
	6.4 Who is in a non-graduate job four years after graduation?	70
	6.5 The significance of religious background and community of origin	74
	6.6 Summary	77
CHAPTER 7	GEOGRAPHICAL MOBILITY OF NI-DOMICILED GRADUATES AND THE SIGNIFICANCE OF REGION	81
	7.1 Introduction	81
	7.2 Who leaves Northern Ireland to attend university?	81

	7.3	Patterns of migration	83
	7.4	Industrial and occupational composition of employment among NI domiciled graduates	85
	7.5	Employment characteristics of NI domiciled graduates	88
	7.6	Overall levels of career satisfaction among NI domiciled graduates	93
	7.7	Summary	97
CHAPTER 8		THE EARNINGS OF NI GRADUATES	99
	8.1	Introduction	99
	8.2	The earnings of NI graduates in 2003/04	99
	8.3	Unravelling the effects on earnings	108
	8.4	Relative earnings of the <i>Class of '95</i> and the <i>Class of '99</i>	108
	8.5	Satisfaction with earnings	110
	8.6	Summary	110
CHAPTER 9		DEBT AND GRADUATES FROM NORTHERN IRELAND	113
	9.1	Introduction	113
	9.2	Levels, sources and repayment of student debt	114
	9.3	The impact of debts upon early careers	120
	9.4	Summary	124
References			127
<b>TABLES</b>			
Table 3.1		Area of domicile immediately before commencing undergraduate degree programme and area in which studied for undergraduate degree: achieved samples for 1995 graduates participating in Seven Years On study and 1999 graduates participating in the Class of '99 study	15
Table 3.2		Location in NI for the 1995 and 1999 graduate cohorts	16
Table 4.1		NI-domiciled 1999 graduates' paid work during undergraduate programme, by location of study	19
Table 4.2		Routes into HE, comparing NI-domiciled stayers and leavers and those of other 1999 graduates	19
Table 4.3		Undergraduate course preferences when entering HE, by domicile and location of study	20
Table 4.4		HE choices respondents would make, with hindsight, comparing NI-domiciled cohorts and others	21
Table 4.5		Class of degree achieved by NI and GB graduates	24

Table 4.6	Reasons for having undertaken postgraduate education or training	26
Table 4.7	Importance of class background as an aspect of identity	27
Table 4.8	Importance of religious background as an aspect of identity	28
Table 4.9	Importance of religious background as an aspect of identity, by community of origin	28
Table 4.10	Importance of religious/ethical/spiritual development	28
Table 4.11	Importance of national background as an aspect of identity	29
Table 4.12	Importance of national background as an aspect of identity	29
Table 4.13	Situation of 1999 graduates at time of survey (2003/04)	30
Table 5.1	SOC (HE): a classification of graduate occupations	41
Table 6.1	Broad sector of employment, comparing 1999 NI HEI and other graduates in employment at the time of survey	57
Table 6.2	Contractual status of current employment, 1999 graduates	59
Table 6.3	Comparisons of average scores of the job quality index for 1999 graduates 4 years after graduation	68
Table 6.4	Current situation by community of origin (NI graduates)	74
Table 6.5	Indicators of 'successful' employment outcomes by community of origin (NI Graduates)	75
Table 7.1	Location of study among NI domiciled graduates	82
Table 7.2	Residency of NI domiciled graduates at time of survey	83
Table 7.3	Educational attainment at A-Level of NI domiciled graduates by residency at time of survey	84
Table 7.4	Degree class of NI domiciled graduates by residency at time of survey	84
Table 7.5	Reasons for taking current job among NI domiciled graduates, by residency at time of survey	89
Table 7.6	Importance of credentials in gaining current employment among NI domiciled graduates, by residency at time of survey	89
Table 7.7	Characteristics of current job among NI domiciled graduates, by residency at time of survey	92
Table 8.1	Average annual earnings and weekly hours of 1999 graduates in full-time employment or self employment in 2003/04, by location of HEI and gender	100
Table 8.2	Average annual gross earnings: all Northern Ireland graduates in full-time employment in 2003/04, by whether or not undertook postgraduate study and by location of employment at the time of the survey	103

Table 8.3	Difference in real annual earnings of 1995 and 1999 graduates in full-time employment 3½ to 4 years after graduation, by gender and by location of HEI from which graduated	109
Table 9.1	Percentage with repayable debt	114
Table 9.2	Levels of repayable debt, 'young' graduates	115
Table 9.3	Levels of debt by location of residence and HEI	117
Table 9.4	Incidence and levels of repayable debt, 'young' graduates by gender, socio-economic background, subject and community of origin	118
Table 9.5	Repayment of debt, 'young' graduates by gender, socio-economic background, subject and community of origin	119
Table 9.6	Debts and options after graduation	120
Table 9.7	Debts and options after graduation, 'young' graduates by gender, socio-economic background, subject and community of origin	121
Table A1	Factors associated with the earnings of 1999 graduates in full-time employment, for NI HEIs and UK HEIs	129

## FIGURES

Figure 4.1	NI-domiciled graduates' reasons for embarking on higher education, comparing those who studied in NI HEIs and those who studied at GB HEIs	17
Figure 4.2	Social class background, comparing NI domiciled 1999 graduates by where studied and with GB HEI graduates	18
Figure 4.3	A level scores of NI-domiciled respondents, comparing those who studied at NI and GB universities, by HEI type	22
Figure 4.4	Subject studied, comparing NI-domiciled graduates who studied in NI HEIs and in GB HEIs with all UK 1998-9 graduates (HESA figures)	23
Figure 4.5	Type of education and training undertaken since July 1999	25
Figure 5.1	Career paths of 1999 graduates: NI compared to UK graduates	35
Figure 5.2	Career paths of 1995 graduates: NI compared to UK graduates	35
Figure 5.3	Contractual status of 1999 employed graduates: UK graduates	37
Figure 5.4	Contractual status of 1999 employed graduates: NI graduates	37
Figure 5.5	Contractual status of 1995 employed graduates: UK graduates	39
Figure 5.6	Contractual status of 1995 employed graduates: NI graduates	39
Figure 5.7	Changing occupational structure of employees in employment, 1975 to 2000 by SOC (HE)	42
Figure 5.8	The occupational evolution of employment among 1999 UK graduates	43



Figure 5.9	The occupational evolution of employment among 1999 NI graduates	43
Figure 5.10	The occupational evolution of employment among 1995 UK graduates	44
Figure 5.11	The occupational evolution of employment among 1995 NI graduates	44
Figure 5.12	Use of degree subject knowledge and skills among 1999 graduates	46
Figure 5.13	Use of degree subject knowledge and skills among 1995 graduates	47
Figure 5.14	Unemployment among the 1999 cohort, by gender	48
Figure 5.15	Employment in non-graduate occupations among the 1999 cohort by gender	49
Figure 5.16	Unemployment among the 1999 cohort, by degree class	50
Figure 5.17	Employment in non graduate occupations among the 1999 cohort, by degree class	51
Figure 5.18	Unemployment among the 1999 cohort, by subject studied	53
Figure 5.19	Employment in non graduate occupations among the 1999 cohort, by subject studied	54
Figure 5.20	Early career profiles of NI graduates, by community of origin	55
Figure 6.1	Sector of employment, 1999 graduates, comparing NI HEI graduates and others	58
Figure 6.2	Sector of current employment, NI HEI grads only, by gender	59
Figure 6.3	Current occupation (SOC 2000 Major Group), comparing NI HEI graduates with other UK HEI graduates	60
Figure 6.4	Current occupation (SOC 2000 Major Group), comparing male and female NI HEI graduates	61
Figure 6.5	Reported reasons for deciding to take current job, comparing NI and UK HEI graduates	62
Figure 6.6	Importance of credentials and experience in getting current job, comparing 1999 NI and UK graduates	62
Figure 6.7	How long did it take long to learn to do current job competently, comparing NI HEI graduates and others	63
Figure 6.8	Appropriateness of current job, comparing 1999 NI HEI and UK graduates	64
Figure 6.9	Satisfaction with promotion prospects in current job, comparing NI and UK HEI graduates	65
Figure 6.10	Characteristics of current job, comparing NI and UK HEI samples	65
Figure 6.11	Comparisons of the index of job quality	67

Figure 6.12	Overall satisfaction with current job, comparing 1999 NI HEI and UK graduates	69
Figure 6.13	SOC(HE) distributions of current occupations, comparing NI and UK HEI graduates	69
Figure 6.14	Proportion of 1999 employed graduates in SOC(HE) non-graduate occupations 4 years after graduation, by pre-entry characteristics, comparing NI and UK HEI graduates	71
Figure 6.15	Proportion of 1999 employed graduates in SOC(HE) non-graduate occupations 4 years after graduation, by subject and degree class, comparing NI and UK HEI graduates	72
Figure 6.16	Proportion of 1999 employed graduates in SOC(HE) non-graduate occupations 4 years after graduation, by labour market experiences, comparing NI and UK HEI graduates	74
Figure 6.17	Job quality by community of origin (NI graduates in employment only)	76
Figure 6.18	SOC(HE) by community of origin (NI graduates in employment only)	76
Figure 7.1	Sector of employment of NI domiciled graduates, by residency at time of survey	85
Figure 7.2	Major occupational groups (SOC2000) of employed NI domiciled graduates, by residency at time of survey	86
Figure 7.3	SOC(HE) category of employed NI domiciled graduates, by residency at time of survey	87
Figure 7.4	Contractual Status of employed NI domiciled graduates, by residency at time of survey	88
Figure 7.5	Length of time required to learn current job among NI domiciled graduates by residency at time of survey	90
Figure 7.6	Appropriateness of current job among NI domiciled graduates, by residency at time of survey	91
Figure 7.7	Index of job quality among NI domiciled graduates, by region of residency	93
Figure 7.8	Overall satisfaction with career, by residency at time of survey	94
Figure 7.9	Geographical mobility and employment within non-graduate occupations	97
Figure 8.1	Earnings of 1999 graduates in full-time employment in 2003/04 by region of employment and region of residence prior to studying for 1999 qualification	101
Figure 8.2	The distribution of annual gross earnings of 1999 graduates in full-time employment in 2003/04, graduates from NI HEIs compared with graduates from UK HEIs	102
Figure 8.3	Average annual gross earnings: all Northern Ireland graduates in full-time employment in 2003/04 by class of degree and gender	104

Figure 8.4	Average annual gross earnings: all Northern Ireland graduates in full-time employment in 2003/04 by sector of employment and gender	105
Figure 8.5	Average annual gross earnings: all Northern Ireland graduates in full-time employment in 2003/04 by age group and gender	106
Figure 8.6	Average annual gross earnings analysis – all Northern Ireland graduates in full-time employment in 2003/04 by SOC(HE) classification of current job and gender	107
Figure 8.7	Average annual gross earnings analysis – all Northern Ireland graduates in full-time employment in 2003/04 by SOC2000 classification of current job and gender	107
Figure 8.8	Satisfaction with total pay in current job comparing NI and UK HEI graduates	110
Figure 9.1	Sources of repayable debt	116
Figure 9.2	Debts and participation in further study: NI graduates	123
Figure 9.3	Debts and employment within non-graduate occupations: NI graduates	124



## CHAPTER 1

### EXECUTIVE SUMMARY

#### Introduction

This report presents results from an investigation of the early careers of graduates from Northern Ireland. It follows and describes the progress made by two groups – those who graduated with a first degree in 1995 and a similar but larger group who graduated in 1999, tracking early career experiences over a three and a half to four year period for both groups.

The information contained in this report has been developed for a wide audience. At one level, educational strategists will find much material here to assist with the planning of future provision of higher education for Northern Ireland's population. At another level, recent graduates or those planning to enter higher education can examine the career paths taken by these two groups and, from this, gain some indication of the opportunities available to them and possible short and medium-term implications of different career choices. Careers advisor and guidance specialists should also find the graduate labour market information and evidence from accounts provided by graduates of their early career development relevant to their professional activities.

The enquiry that underlies this report was conducted within a larger project - an investigation of the career paths of UK graduates. A full report on the larger study is published elsewhere (Purcell *et al.* 2005). However, that report does not provide a detailed analysis of regional similarities and differences in career options and outcomes. For this reason, the Department for Employment and Learning decided to fund research based upon the same data resources, but with Northern Ireland's graduates as its focal point.

Detailed findings are presented in the following eight chapters. The following chapter gives a brief overview of issues relating to higher education and employment in Northern Ireland. Chapter three describes the research methods employed in conducting the enquiries based upon the two cohorts of graduates. The main findings from the remainder of this report are set out below:

#### **A profile of the NI-domiciled 'Class of '99'**

- NI domiciled graduates studying in Northern Ireland appear to have had a more considered and instrumental orientation to undergraduate study than those who had left NI to undertake their degree course; they were less likely to have done so because 'it was the normal thing to do', they wanted to be a student or they had been advised to do it, and more likely to have had specific employment-related reasons.

The majority of 1999 NI-domiciled graduates had studied full-time, but 10 per cent of those studying at NI HEIs had studied part-time, compared with 5 per cent of the NI-domiciled graduates who had studied in UK HEIs.

- Graduates domiciled in NI prior to undergraduate study are drawn from a somewhat wider social spectrum than the total UK graduate sample. As previous research has indicated, the NI-domiciled graduates who studied at other UK HEIs were more likely to have come from 'traditional student' backgrounds than those who studied at the indigenous institutions.
- Perhaps reflecting this more diverse social class background, those who studied in Northern Ireland were significantly more likely to have undertaken paid work during term than those who had migrated to study. Those who studied at NI HEIs appeared more likely to have had a work placement integral to their course (17 per cent compared with 12 per cent of the migrant group), but less likely to have worked in order to gain useful career-related experience (17 per cent compared to 23 per cent).
- NI graduates who studied outside NI were significantly more likely to have gained entry to their HEI as a reserve choice, or through clearing, compared to both NI-domiciled graduates who studied at NI HEIs and all other graduates from non-NI HEIs. NI graduates who studied outside NI were also less likely to have accessed their preferred course of study and significantly more likely to have preferred to study somewhere else. However, the experience of studying away from Northern Ireland appears to have been seen as positive with hindsight by the majority of respondents and they appeared least likely to indicate that they would prefer to have done a similar course at a different place or to have said that they would choose not to enter HE.
- As a general principle, the educational migrant NI graduates tend to resemble the UK graduates more closely than those who studied in NI HEIs, in terms of perceptions of their identities and the relative importance of regional and cultural values. The subjects that NI-domiciled graduates were most likely to have studied at GB rather than NI HEIs were law, interdisciplinary and some 'other vocational' courses. NI-domiciled graduates at both the highest and lowest ends of the spectrum in terms of pre-entry qualifications were more likely than those in the middle to have opted to study at GB HEIs.
- A specific question about religious community of origin was asked of the NI HEI graduate sample. In response, 51 per cent of respondents cited their community of origin as Roman Catholic, 42 per cent Protestant, 4 per cent other. Only 3 per cent of

NI HEI respondents did not answer this question. We find that 23 per cent of Protestants reported that religious background was very important to their personal identity compared to 14 per cent of Catholics. However, if we aggregate those who considered it either important or very important we find similar distributions. Perhaps not surprisingly, regional identity was significantly more often indicated as being very important by the NI graduates who studied in their home region, and more likely to have been considered important by NI graduates as a whole than those from any other part of the United Kingdom.

- NI-domiciled NI-HEI graduates were significantly more likely than others to have taken further full or part-time work-related or career-related courses (lasting one month or more): two thirds of them reported having done so, compared to 56 per cent of UK graduates generally. Female graduates from NI HEIs reported a higher propensity than men to have undertaken further courses since graduation. NI graduates were significantly more likely to have obtained a taught Masters degree since 1999 compared to other graduates. This was most pronounced for male NI graduates, approximately 35 per cent of whom reported having done so. They were also more likely to have undertaken a Postgraduate Certificate or Postgraduate diploma in this period (women being twice as likely as men to have done so in the NI sample). There appears therefore an overall higher propensity to return to formal postgraduate education, away from the workplace, amongst graduates from NI institutions compared to those from other UK HEIs. It may be significant that a higher proportion of NI graduates had undertaken further study or training because they thought it would improve their employment prospects and a marginally higher proportion reported having been unable to find a suitable job.
- Of the 1995 sample of graduates who had studied in NI, 84 per cent had a first job in NI, but the proportion remaining there had fallen to 81 per cent over the seven year period investigated. Of those who had studied on the UK mainland, half had returned to NI for their first job and others had moved back over the subsequent seven years. 86 per cent of the members of the 1999 NI-domiciled sample who had studied in NI were still there four years on. Over a third of those who had studied elsewhere had returned immediately after graduation and a similar proportion of them were in the NI labour market at the time the sample of 1999 graduates was contacted in 2003.

### **The career paths of NI-domiciled graduates**

- Three quarters of Northern Ireland graduates from the 1999 cohort entered directly into employment immediately following the completion of their studies. Three and a half years after graduation, more than 90 per cent were in employment. The pattern

of assimilation into paid employment among NI graduates was similar to that observed among UK graduates in general. Participation in further study during the first 12 months following graduation was shown to be higher among NI graduates than among the UK graduate sample.

- Over half of NI graduates who entered directly into employment were employed on a permanent or open ended basis. This figure increased steadily over time as NI graduates were increasingly assimilated into paid employment. There was little difference observed in the contractual status of NI graduates compared to the UK graduate sample. Fewer NI graduates from the 1999 cohort were employed on a fixed term basis compared to 1995 NI graduates.
- Despite increasing trends in participation, the report finds that NI graduates were more likely than UK graduates as a whole to have indicated that their HE qualification had been required at the start of their careers and that they had been using their graduate skills and knowledge.
- Being female, having achieved a relatively low degree result and studying non-vocational subjects were associated with increased levels of non-graduate employment. These relationships held among both the overall UK graduate sample and for NI graduates. Labour market outcomes among NI graduates in terms of rates of employment, unemployment and employment within non-graduate occupations were not shown to vary by religious community of origin.

#### **The situation of 1999 graduates in 2003/04**

- NI HEI graduates reported a marginally lower likelihood than the sample as a whole of being in permanent or open-ended employment and were more likely to be in fixed term or other temporary employment. Graduates in Northern Ireland were very much more likely to work in the public sector than UK graduates as a whole and less likely to be in the higher-earning sectors of ICT, Finance and Business Services. The sectoral distribution of employment for NI and GB graduates reflected this major difference and goes some way towards providing an explanation for the average differences in earnings between the groups. NI 1999 female graduates were twice as likely as their male comparators to work in Other Public Services and this sector accounted for half of all employment for this group.
- The occupational distributions of the NI HEI graduates and other GB HEI graduates four years after graduation showed little difference, but there was a somewhat lower propensity for the NI graduates to be managers and senior officials or associate professionals. We find, however, very distinct differences in the NI HEI group by



gender, with men more concentrated in the higher-status and generally higher-level occupational areas: managers and senior officials rather than administrative and secretarial occupations; professional rather than associate professional occupations. In the UK sample as a whole, similar tendencies were found, but there was not the same degree of gender polarisation. A slightly higher proportion of NI HEI respondents had achieved exactly the kind of employment they desired compared to GB HEI graduates. However, graduates from NI HEIs were less likely to have taken jobs for positive reasons such as salary and conditions of employment or the opportunity for interesting work.

- NI HEI graduates were slightly less likely to have reported that the qualification they had obtained in 1999 had been important in enabling them to obtain their current job. They were more likely to have perceived that a higher educational qualification or a professional qualification you obtained since 1999 had been important.
- In a self-assessment of the appropriateness of their jobs at the time of the survey, NI respondents were more likely to have gravitated towards the 'ideal' or 'inappropriate' extremes. They also reported lower levels of satisfaction with promotion prospects than GB HEI graduates and, with the exception of 'long-term job security' and 'socially-useful work' (both indicative of their greater propensity to work in public sector employment) they were less likely to report positive job characteristics such as competitive salary, interesting and challenging work and continual skills development. Overall, graduates from NI HEIs reported lower average scores on the index of job quality compared to those who graduated from HEIs elsewhere in the UK.
- According to the classification of graduate occupations [SOC(HE)], NI HEI graduates were more likely to be in both traditional graduate jobs and non-graduate jobs – and also more likely to be in niche graduate jobs – a category which includes both unequivocally degree-requiring employment and jobs on the graduate/non-graduate boundaries. Approximately 17 per cent of the 1999 cohort of NI HEI graduates were employed in non-graduate occupations. For both GB and NI HEI graduates, the share of employment in non-graduate occupations was higher among females than among males. Also for both groups, graduates who regarded themselves as being 'extremely ambitious' and those who achieve higher grades at A-level were less likely to be employed in non-graduate occupations.
- Less than 5 per cent of graduates from NI HEIs who studied degrees in medicine, education and other vocational subjects were employed in non-graduate occupations but non-graduate occupations accounted for almost 25 per cent of employment among NI HEI graduates with degrees in the arts and humanities, the social sciences

and business studies. This was broadly similar to patterns exhibited by those who graduated from HEIs located elsewhere in the UK.

- One in four graduates from NI HEIs with a lower second class degree was employed in non-graduate occupations (compared to one in five amongst GB HEI graduates) more than twice the level for those who obtained first class degrees.
- Among those in full-time employment at the time of the survey, almost 30 per cent of NI HEI graduates who had experienced at least one spell of unemployment since completing their studies were employed in non-graduate occupations, twice that observed among those who had not experienced any spells of unemployment. This differential is larger than that observed between such graduates from HEIs elsewhere in the UK.
- Graduates with a Protestant background displayed a somewhat greater propensity to be in self-employment and in postgraduate study than their Roman Catholic counterparts. The only notable difference between the two groups in terms of labour market 'success' was in terms of overall career satisfaction where 84 per cent of graduates from a Protestant upbringing report being very or reasonably satisfied with their career to date compared to 77 per cent of those from Roman Catholic backgrounds. Importantly, graduates from the two groups were equally likely to perceive that they were in appropriate employment for someone with their skills and qualifications, to report being in a job where a degree was required and to be using their degree knowledge and skills. However, in terms of job quality, those from a Roman Catholic background were more likely to rate their jobs more highly compared to those from the Protestant community. Those from a Protestant background were more likely to be found in both traditional and non-graduate occupations, with the Roman Catholic group more concentrated in modern, new and *niche* graduate occupations.

### **Geographical mobility of NI-domiciled graduates**

- Approximately 15 per cent of 1999 graduates from NI HEIs left Northern Ireland immediately after graduation. At the time of the survey, 86 per cent of NI HEI graduates were employed in the region, 3.5 per cent were working in the Republic of Ireland and 2.7 per cent in London and the South East. According to subject of study, NI graduates with languages and natural science degrees were most likely to have migrated from Northern Ireland, with a third of both categories working elsewhere. Those most likely to be working in NI were those with maths and computing degrees, of which only five per cent had moved away.
- It appears that graduates at the highest and lowest ends of the ability spectrum were most likely to have migrated from NI to work in other regions. A higher proportion of NI HEI graduates with less than 10 A-level points and those with more than 30 were likely to be working outside NI after four years compared to the graduates with moderate attainment. Similarly, those graduates who attained a first class degree and those who were awarded a third were proportionally more likely to be working away from Northern Ireland.
- Graduates not currently employed in Northern Ireland were more likely to be from managerial or professional backgrounds than those currently working in the region. According to SOC(HE), NI graduates who were not living in Northern Ireland were more likely to be working in modern graduate jobs and also significantly more likely to be in non-graduate employment. At the time of the survey, NI graduates working in Northern Ireland were as likely to be in management jobs as those who had left the region, although the latter group were significantly less likely to be working in professional or administrative occupations. They were more likely, however, to be working in associate professional and technical occupations and in lower-level occupational groups.
- In line with employment patterns in Northern Ireland generally, those graduates working in the region were significantly more likely to be working in the public sector. However, those who had left NI were more likely to be working in education, banking and finance and in the hotel, catering and distribution sector.
- Graduates employed in NI from both the 1999 and 1995 cohort appear to be more likely than those from most other regions to be in appropriate employment. However, in the relative average scoring of overall satisfaction with career to date by respondents living and working in the different regions that the 1999 NI HEI cohort

were among the least satisfied, but the 1995 cohort have the highest average scores of both sexes.

### **The earnings of NI-domiciled graduates**

- Graduate earnings in Northern Ireland are lower than in the rest of the UK, by about 12-15 per cent. The lower earnings are associated with employment in Northern Ireland and do not reflect any type of institutional effect. Graduates domiciled in NI before studying at a NI HEI who were employed in Inner London 3½ to 4 years after graduation were earning approximately £8,000 a year more on average than those who were employed in Northern Ireland. More graduates from NI HEIs in full-time employment in 2003/04 were earning salaries below £18,000 per annum than was the case for all UK graduates. This was especially so for men.
- The earnings of NI graduates vary significantly by degree class, by sector of employment, by type of occupation and (for men) by age. Multivariate analysis of the earnings information confirms these variations and shows the importance of the location of the workplace (within or outwith NI) as a major factor influencing earnings.
- In common with all UK graduates, the *Class of '99* appears to be experiencing a lower rate of growth of earnings relative to the *Class of '95* measured at a similar point in their careers.

### **Debt and graduates from Northern Ireland**

- Sixty seven per cent of NI graduates reported that they had repayable debt on the completion of their studies, compared to 77 per cent of the overall UK graduate pool. For both groups, levels of repayable debt were lower among older groups of graduates. Among 'young' NI graduates who report having repayable debt, the mean total amount of repayable debt was estimated to be £4,430, with the median level of repayable debt estimated to be lower at £3,607. Both the mean and median level of debt among NI graduates was estimated to be approximately £1,500 less than that accumulated among the overall graduate pool. Among both UK graduates and NI graduates, males were more likely to indicate that they had repayable debt but no clear relationship emerges between socio-economic background and levels of repayable debt. Even within different socio-economic groups, the levels of repayable debt were lower among the NI graduates.
- The propensity of NI graduates to have repaid their debts in full was lower than for the UK sample as a whole. Seventeen per cent of all UK graduates who had

repayable debt indicated that they had repaid this debt in full compared to 11 per cent of NI graduates. Overall, levels of repayment were generally higher among respondents from higher socio-economic backgrounds. When comparing repayment within particular socio-economic groups, levels of repayment among the NI graduates were observed to be lower than that observed among the overall UK graduate pool.

- The incidence of repayable debt was estimated to be almost 20 per cent higher among Roman Catholics than among Protestant respondents. Average levels of debt were approximately £1,500 more for the former group. Among the NI graduates, levels of repayment for Protestant respondents were almost twice as high as that observed among those from the Catholic community.
- Among the overall UK graduate pool, 75 per cent of respondents with repayable debt indicated that this debt had not affected their options after completing their course compared to 79 per cent of NI graduates. For both groups, females were more likely to indicate that their debts had affected their options in some way, although there was no clear relationship according to socio-economic background. Those respondents from Catholic backgrounds were more likely than Protestant to have indicated that their debts had affected their options. Of those who had been affected by debt, approximately half of the UK respondents as a whole indicated that they would have liked to have gone on to postgraduate study but did not want to add further to their debts compared to two-thirds of similarly-affected NI graduates. For 'young' NI graduates, participation in further full time study was lower among respondents who had indicated that their debts had affected their options after graduation.
- Both immediately after graduation, after 12 months in the labour market and at the time of the survey, 'young' NI graduates with debt which they felt had affected their options were more likely to be employed in non-graduate occupations than both those without repayable debt and those with debt or those who considered that their options had not been constrained by debt.



## CHAPTER 2

### HIGHER EDUCATION AND EMPLOYMENT IN NORTHERN IRELAND

- 2.1 In Northern Ireland, as in the UK as a whole, higher education provision and participation expanded throughout the latter part of the 20th century and has continued to do so into the new millennium (DELNI 2004a, Cormack *et al.* 1997). The proportion of the working age population with degrees doubled between 1990 and 2003 and there was a three-fold increase in the number of women with degrees (DETI 2003). In Spring 2003, Northern Ireland had the second highest rate of employment among graduates of all UK regions, very low graduate unemployment, yet it has a low proportion of graduates among people of working age (DETI *ibid.*). Participation in post-secondary education has been higher in Northern Ireland than in Great Britain despite lower availability of places in higher education (PIEDA 1995), raising questions about whether further expansion in capacity is required (NICHE 1997, DELNI 2000). Between 1999 and 2003, it has been estimated that approximately 6,000 new graduates per annum have entered the NI labour market (DETI *op. cit.*: 15) and in the year that the 1999 cohort – whose early careers are investigated in this report – graduated, nearly 8,400 NI-domiciled graduates completed UK undergraduate degrees, of whom approximately 6,500 had studied in Northern Ireland's Higher Education Institutions (DHFETE 2000).
- 2.2 Graduates in Northern Ireland, in common with graduates in other parts of the UK, differ from other labour market entrants by virtue of their tertiary education and qualifications. For some, the perceived geographic boundary to this labour market is national or international. For many, family and other ties may cause them to restrict their job search in the first instance to the local area. For graduates from Northern Ireland, the performance of the NI economy relative to the rest of the UK may provide some indication of the potential of the local economy to provide suitable employment.
- 2.3 Northern Ireland's economy has experienced significant growth over the last decade, particularly during the early 1990s<sup>1</sup>. As a consequence of strong growth, unemployment in Northern Ireland has fallen to 5.4 per cent, but remains slightly above the UK. However, the different experience of joblessness between the two main religious communities in Northern Ireland remains significant, with a 4.9 per cent unemployment rate reported by Protestants compared with 7.4 per cent for Roman Catholics. Average earnings in NI remain well below the UK average, particularly for men, whose earnings lie 17 per cent below the national

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<sup>1</sup> In the period 1990 to 1995 Gross Value Added (GVA) growth was 22.5 per cent in Northern Ireland compared with 9.5 per cent in the UK. In the period 1995-2002 GVA growth in Northern Ireland and the United Kingdom was identical (22.2 per cent in Northern Ireland compared with 22.3 per cent in the UK) (Morahan, 2004). See also DETI (2004).

average. Thus, although the position of the NI economy has improved relative to the rest of the UK, the scope that exists in the NI labour market to absorb higher levels of qualified labour from higher education remains an issue.

- 2.4 The concerns relating to the graduate labour supply in NI are largely similar to those in UK generally. Graduates are entering an increasingly diverse range of occupations, significant minorities of the most recent cohorts appearing to take longer to access employment that makes use of their higher education skills and knowledge and an apparent mismatch between skills sought by employers and supplied by higher education (Leith 2000). The most recent research on employers' reported skills shortages indicated that there were shortfalls in *Associate Professional* and *Elementary Occupations* rather than the more traditional areas of graduate employment (DELNI 2002). In common with that of most developed countries (OECD 2004), UK higher education policy has been predicated upon the conviction that increased higher education participation, providing the opportunity for a wider range of citizens than in the past to obtain high level skills and realise their academic potential, will lead to a more efficient, higher-performing workforce. In common with UK education and employment policies, Northern Ireland clearly aspires to move from a relatively low-skill to a higher-skill labour force (McGuinness and Bonner 2001, Keep and Mayhew 1999). Although it is clear that the impact of technology, particularly information and communication technology, has been affecting both the ways in which organisations are structured and work is organised within and among organisations and their networks (Castells 2000, 2001; Rubery *et al.* 2002, Reich 1991), it appears that most recent unfilled vacancies reported by NI employers have been concentrated in firms which have not recruited new graduates in large numbers and the demand is for graduates with experience of employment rather than new labour market entrants (NIERC 2000).
- 2.5 It is with these background factors in mind that we undertook an analysis of the early careers of two recent cohorts of graduates – those who gained their first degree in 1995 and those graduating in 1999. Our aims are twofold; firstly to examine whether or not there is evidence to suggest that Northern Ireland's graduates face a more difficult entry into the graduate labour market than is the case for graduates from Higher Education Institutions in the rest of the UK and, secondly, to gauge whether or not graduate prospects have been deteriorating as the supply of graduates has expanded.



## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

- 3.1.1 This report draws on data from two national surveys of UK graduates, those who completed undergraduate degree programmes in 1995 (contacted twice, with first contact in what was termed the *Moving On* survey and second contact in what is referred to as the *Seven Years On* survey) and those who completed undergraduate degree programmes in 1999 (referred to as the *Class of '99* survey). Both the *Seven Years On* and *Class of '99* surveys covered graduates from across the range of Higher Education Institutions at 38 UK higher education institutions (HEIs), selected to be representative of the full range of UK undergraduate degree-holders<sup>2</sup>. Both cohorts of graduates were initially surveyed between three and a half and four years after the completion of their undergraduate degrees, with the 1995 cohort being contacted a second time seven years after graduating<sup>3</sup>.
- 3.1.2 For the 1995 cohort, a 5 per cent sample of graduates was drawn in two stages. At the first stage, 33 HEIs were selected at random from all HEIs across the UK. Within each HEI, a sample of 1 in 2 of UK-domiciled students who successfully graduated in 1999 was drawn. This sample was contacted by postal survey in 1997/8 and again in 2002/03. The sample was boosted in 2002/03 to bring in five additional HEIs. The latest sweep (*Seven Years On*) has 4,502 respondents, of whom 458 graduated from NI HEIs.
- 3.1.3 The 1999 study (*The Class of '99*) was designed in a similar manner to the 1995 study (*Moving On*), sampling one in two 1999 graduates and undergraduate diploma-holders from each of the 33 HEIs which had participated in the 1995 cohort study, plus similar proportions from each of five additional HEIs added to the sample to improve the representativeness of the range of HEIs (and to add a second institution for Northern Ireland). The achieved sample of graduates responding in the 1999 cohort was 8,571, 13 per cent of whom had studied in NI HEIs.

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<sup>2</sup> These projects – *Moving On*, *Seven Years On* and *The Class of '99* - incorporated a questionnaire survey and detailed follow-up qualitative interviews. The *Moving On* survey collected information from approximately 9,600 graduates at 33 Higher Education Institutions (HEIs). The *Class of '99* survey included responses from over 9,300 graduates at 38 HEIs (the 33 originally included in the 1995 cohort study, plus 5 additional HEIs). Of these, 8,571 respondents completed first degrees in 1999 and the others completed HND and DipHE qualifications. The *Seven Years On* survey included approximately 4,000 responses from the original *Moving On* respondents (graduates who had completed their undergraduate degree in 1995).

<sup>3</sup> Graduates in the 1995 cohort were first contacted in December 1998, with a second mailing to non-respondent in early Spring 1999. The 1999 cohort was first contacted in the late Spring and early summer of 2003. Consequently, the average length of from graduation until first contact for survey purposes was slightly longer for the latter, approximately 4 years.

- 3.1.4 In addition, 321 detailed follow-up interviews were conducted with sub-samples of the respondents, and these are also drawn upon in the report where appropriate. For the analyses, the data from both surveys have been weighted to be representative of the populations from which they were drawn. Further information about the design of the samples and methodological details are published elsewhere (Elias *et al* 1999 and Purcell *et al.* 2005). Funding for the studies has been provided by a range of sponsors, including the Department for Education and Skills, the Department for Employment and Learning (NI), the Higher Education Careers Services Unit and the Economic and Social Research Council<sup>4</sup>.
- 3.1.5 Throughout this report we draw upon information from both the 1999 cohort study and the 1995 cohort study recontacted seven years after graduation. We distinguish between those who lived in Northern Ireland immediately prior to undertaking their undergraduate degree course and those who lived elsewhere in the UK. We also distinguish between those who studied at one of the two Northern Irish HEIs in the sample and those who studied at other UK HEIs. Details of the achieved sample sizes, showing these distinctions, are given in Table 3.1. This reveals that by far the majority of people in these samples who lived in Northern Ireland prior to their higher education also went to one of the two NI HEIs included in these studies, with between 6 and 7 per cent of survey participants from NI studying elsewhere in the UK for their first degree<sup>5</sup>.
- 3.1.6 Throughout this report we make comparisons between these different groups of graduates. The main group that form the focus of this report are those graduates who lived in Northern Ireland immediately before they took their undergraduate degrees and who took their degree course at one of the two Northern Irish HEIs included in the studies. We refer to such respondents as 'NI-domiciled NI graduates'. We compare these graduates with all UK graduates. Where the sample sizes permit, we also present some information about those graduates who were domiciled in Northern Ireland prior to their undergraduate degree course, but who undertook their degree at one of the higher education institutions in the sample which was outside Northern Ireland. We refer to this group as 'NI-domiciled non NI graduates'.

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<sup>4</sup> The original *Moving On* study was funded by the (then) Department for Education and Employment (DfEE) in collaboration with the Higher Education Careers Service Unit (HECSU). The second follow-up study (Seven Years On) and the *Graduate Careers Seven Years On* study was funded by the Economic and Social Research Council (ESRC), again with additional funding from HECSU and from the Department for Employment and Learning (NI) to enhance the sample from NI HEIs. The latest study (The Class of '99) was funded by the Department for Education and Skills, again with additional funding from the Department for Employment and Learning (NI) to enhance the samples drawn from NI HEIs

<sup>5</sup> This is a significantly lower proportion than is recorded by the Higher Education Statistics Agency (DELNI, 2005), which indicates that well over one quarter of NI-domiciled students study in higher education institutions outside Northern Ireland. We suspect that this difference relates to the procedures used to contact graduates, relying upon records held by higher education institutions and a two-stage sampling procedure, with a sample of 36 GB HEIs forming the first stage. In drawing this sample of GB HEIs, no account was taken of the fact that NI-domiciled graduates in GB HEIs are not evenly distributed across all institutions. It could also reflect the fact that, by definition, NI-domiciled graduates from GB HEIs are a geographically-mobile group. This may have had a negative impact upon tracing procedures.

**Table 3.1 Area of domicile immediately before commencing undergraduate degree programme and area in which studied for undergraduate degree: achieved samples for 1995 graduates participating in *Seven Years On* study and 1999 graduates participating in the *Class of '99* study**

Area in which lived immediately prior to study	Area in which studied		Total survey respondents
	Northern Ireland	Rest of UK	
<i>Seven Years On</i> study			
Northern Ireland	388	27	415
Rest of UK	54	3,987	4,041
Total	442	4,014	4,456 <sup>1</sup>
<i>Class of '99</i> study			
Northern Ireland	1,049	67	1,116
Rest of UK	55	7,400	7,455
Total	1,104	7,467	8,571

Note: (1) 48 respondents to the *Seven Years On* study did not indicate where they had lived immediately prior to undertaking their undergraduate degree course.

### 3.2 The scope of the investigation

- 3.2.1 The surveys collected detailed information about qualifications obtained, further education and training since graduation, employment, use of skills and qualifications in jobs, measures of satisfaction with jobs and careers to date and, most importantly, a complete work history from the point of graduation until the date on which the questionnaire was completed. In addition to directly career-related data, the questionnaires sought personal details that might have some impact upon access to opportunities, such as gender, age, social class, religious and national identity, geographic mobility, debt accumulated while studying and its impact on subsequent career development. A series of detailed follow-up interviews amplified these investigations, collecting accounts of options perceived and rejected as well as those chosen, along with obstacles encountered, details of why careers had developed in the way that they had and detailed information about what respondents actually *did* in their day-to-day work. Both the surveys and interviews also investigated respondents' values, aspirations and perceptions of the graduate labour markets in which they worked.
- 3.2.2 The two groups we identify form the two main elements to this report. Its core is a detailed analysis of the early career experiences of those who lived in Northern Ireland prior to their undergraduate study and who completed undergraduate degrees in 1999 at Northern Ireland higher education institutions (hereafter referred to as NI HEIs), according to information provided when they were surveyed approximately four years after graduation. These experiences are considered in comparison with the data collected for 1999 graduates who studied at GB HEIs, and some comparison is also made with the career trajectories of the comparable 1995 cohorts. Although the numbers of survey respondents in this sub-sample are

small and under-represent the NI 'educational migrant' population<sup>6</sup>, we conduct a tentative exploration of differences and similarities in profile and outcomes between this group and those who stayed in NI.

- 3.2.3 The samples of graduates are reweighted to be representative of the populations from which they were drawn. Sampling procedures varied between the NI HEIs and the non-NI HEIs. Table 3.2 shows the distribution of the reweighted samples for those graduates who either studied at NI HEIs or who worked in NI after graduating.

**Table 3.2 Location in NI for the 1995 and 1999 graduate cohorts**

	1995 cohort – region of domicile prior to undergraduate study		1999 cohort - region of domicile prior to undergraduate study	
	NI domiciled (%)	Other UK origins (%)	NI domiciled (%)	Other UK origins (%)
Studied in NI HEIs	90	0.3	91	0.2
Worked in NI in first main job after graduating	84	0.2	81	0.4
Worked in NI 3 - 4 years after graduation <sup>7</sup>	n.k.	n.k.	82	0.2
Working in NI seven years after graduating	82	0.4	n.a.	n.a.
<b>Total samples*</b>	<b>5,965</b>	<b>74,764</b>	<b>5,989</b>	<b>71,446</b>

*Note: Data have been weighted to be representative of the graduating populations in sampled HEIs*

*n.k = not known*

*n.a. = not applicable*

- 3.2.4 Of the 1995 cohort, 90 per cent of graduates who had lived in NI prior to their undergraduate programmes studied at NI HEIs, with five per cent studying in Scotland and five per cent in England. The comparable figures for the 1999 cohort were 91 per cent at NI HEIs and 4.5 per cent respectively in the other two UK countries. The significance of location for career outcomes is raised at several points in this report and a comprehensive discussion of migration trends is provided in Chapter 7. At this juncture, in order to lay a foundation for interpreting the data and analyses that follow, it is useful to bear in mind the relative size of the sub-samples from which the data derive and the small proportion of graduates from Northern Ireland included in the survey who studied in other UK regions.

<sup>6</sup> The NI HEI sample is a one-in-two sample of all those who studied at the two HEIs, whereas the migrant graduates are part of a five per cent national sample designed to be representative of the cohort, by sampling one in two students at randomly-selected HEIs. See Elias *et al.* 1999: 118 for the original *rationale* for HEI inclusion.

<sup>7</sup> Only one of the NI universities was included in the first sweep of the 1995 cohort study. A sample from the other was added to the second (*Graduate Careers Seven Years On*) sweep and respondents' work history data was collected for the whole seven year period. We make cautious comparisons between the profiles of the two cohorts, but avoid drawing conclusions about the comparative details of career trajectories.

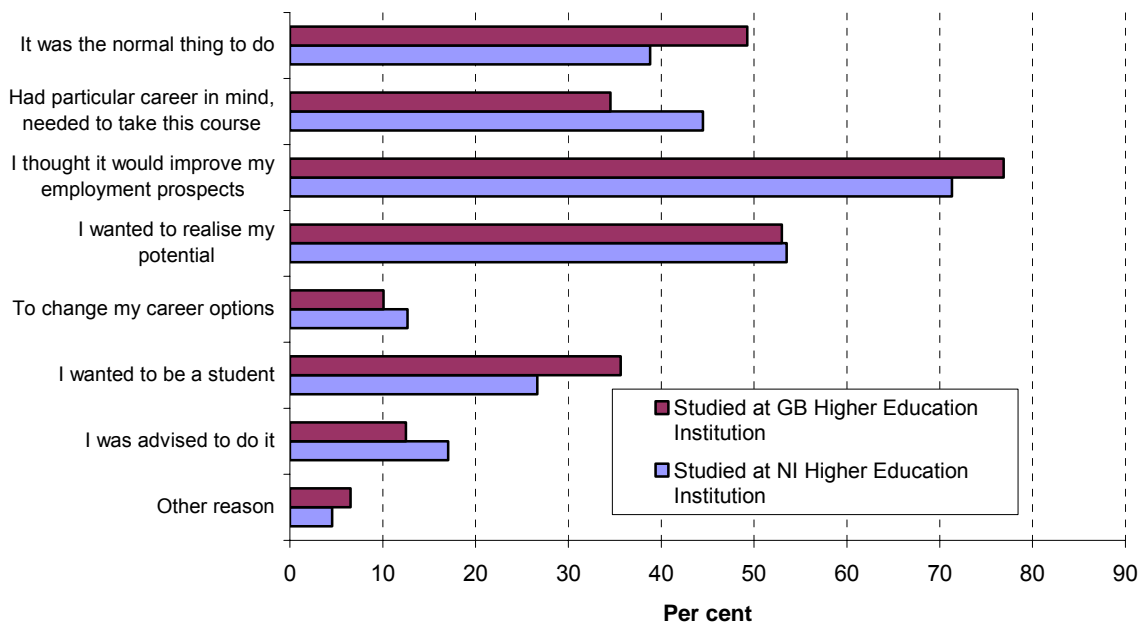
## CHAPTER 4

## A PROFILE OF THE NI - DOMICILED 'CLASS OF '99'

## 4.1 A profile of the NI - domiciled class of '99

- 4.1.1 The section that follows outlines the profile of the 1999 NI - domiciled cohort, comparing those who studied at NI HEIs with those who studied at GB HEIs. Where it is fruitful to make comparisons with the rest of the UK sample (those domiciled outside NI before starting their degree course), these are also made.
- 4.1.2 The majority of NI-domiciled graduates studied full-time, but 10 per cent of those studying at NI HEIs had studied part-time, compared with 5 per cent of the NI-domiciled graduates who studied in GB HEIs. Figure 4.1 compares 1999 NI-domiciled graduates' reasons for embarking on higher education, according to whether they studied in NI or UK HEIs.

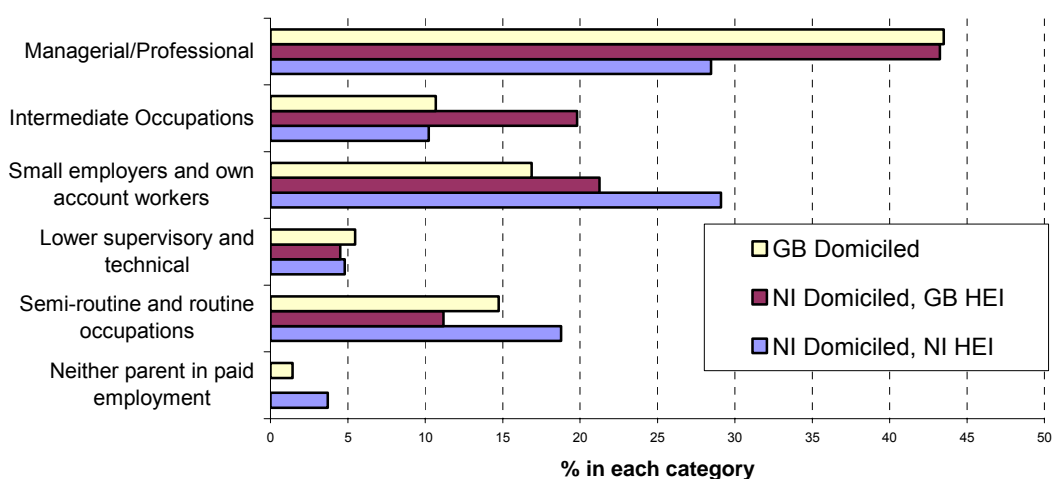
**Figure 4.1 NI-domiciled graduates' reasons for embarking on higher education, comparing those who studied in NI HEIs and those who studied at GB HEIs**



- 4.1.3 NI domiciled graduates studying in Northern Ireland appear to have had a more considered and instrumental orientation to undergraduate study than those who left NI to undertake their degree course; they were less likely to have done so because 'it was the normal thing to do', they wanted to be a student or they had been advised to do it, and more likely to have had specific employment-related reasons. There is no significant age difference between the NI and GB samples, so these differences may reflect the social class background of the two sub-groups.

4.1.4 In line with previous findings of NI graduate cohorts (McGregor *et al.* 2003, 2002), those who studied in GB HEIs were substantially more likely to have been 'traditional' students, coming from homes where one or both their parents had participated in higher education. Figure 4.2 shows the social class background of the two NI-domiciled groups and those who lived elsewhere prior to embarking on their undergraduate courses<sup>8</sup>. Graduates domiciled in NI prior to undergraduate study are drawn from a somewhat wider social spectrum than UK graduates, and 1999 NI-domiciled graduates who studied at UK HEIs were more likely to have come from 'traditional student' backgrounds than those who studied at the indigenous HEIs. It is important to bear these social class profiles in mind in considering the comparisons between NI graduates who studied in Northern Ireland and on the UK mainland, and other respondents.

**Figure 4.2 Social class background, comparing NI domiciled 1999 graduates by where studied and with GB HEI graduates**



4.1.5 Further confirmation of underlying class differences is reflected by the responses to whether graduates did paid work during their undergraduate courses. Table 4.1 shows that those who studied at NI HEIs were significantly more likely to have undertaken paid work during term than those who migrated to study, who were significantly more likely not to have done paid work at all. As well as the need to earn, this may also reflect knowledge of employment opportunity networks and the balance of subjects studied. Those who studied at NI HEIs appeared more likely to have had a work placement integral to their course (17 per cent compared with 12 per cent of the migrant group), but less likely to have worked in order to gain useful career-related experience (17 per cent compared to 23 per cent) and (looking at those that worked) somewhat more likely to have undertaken paid work only for the money (89 per cent compared to 85 per cent).

<sup>8</sup> Social class background is based on information about parents' occupations when respondents were 14: the age at which significant decisions with implications for access to HE are made in secondary education.

**Table 4.1 NI-domiciled 1999 graduates' paid work during undergraduate programme, by location of study**

	Studied at Northern Ireland Institution	Did not study at Northern Ireland Institution
During vacations	72.5	74.3
During term-time	67.0	41.4
Not at all	8.3	16.2

- 4.1.6 Table 4.2 shows how the three groups of respondents reported that they had obtained their HE places, indicating that the NI graduates who studied outside NI were significantly more likely to have gained entry to their HEI as a reserve choice, or through clearing, than the other two groups.

**Table 4.2 Routes into HE, comparing NI-domiciled stayers and leavers and those of other 1999 graduates**

	NI-domiciled graduates who studied at NI HEI	NI-domiciled graduates who studied at GB HEIs	All other graduates
Through UCAS, as my first choice course	62.9	57.3	63.0
Through UCAS, as one of my reserve choice courses	9.8	17.5	11.3
Through UCAS Clearing	4.1	10.6	8.6
Directly approaching the institution, after results known	14.2	7.5	10.6
Other	7.2	7.1	5.2

- 4.1.7 In line with recent analysis of the relationship between study, migration and career outcomes in Northern Ireland (Walker and Harmon 2000) the interview data provides more detailed evidence consistent with the finding of a shortage of places in NI on certain courses, which presents all but the highest achievers with the choice of studying the subject they prefer at a GB HEI or settling for another type of course and remaining in Northern Ireland,:

*[Interviewer: Did you have to come to the mainland in order to complete that to degree level, or was the option available to you to stay in Northern Ireland?]*

*'I would never have got in, in Northern Ireland. You would have to have gone straight into first year [of a degree], whether you did an HND or not'.*

*[Interviewer: It sounds as though the inconsistencies between the higher education system, or the differences between the higher education system in Northern Ireland and England have made it a little bit difficult, forced your hand in a sense with making decisions about studying...?]*

*'We only have two universities here in Northern Ireland, so you can imagine how competition is so high to gain entry...'*  
(106, female social science graduate, community support worker, not-for-profit, £15k-£18k)

*'I wanted to stay in Northern Ireland, but the grades were really, really high to do law here, so I was restricted to other things...With A-levels here, you need something like two As and a B to do law, but my parents didn't want me to go to England at 18. I just find that in Northern Ireland, everything is just straight down the road - it's either "THIS way... or No way!" Whereas in England, there are lots of different avenues to get to the same place and that's why you get a lot of people moving over'.*

(Female secondary school teacher with 1995 degree in geography, currently supply teaching in NI after training and teaching in England - now planning to return to England to do a law conversion course. She intends, in the longer term, to return to Northern Ireland).

- 4.1.8 These interviews also provided evidence that some saw a NI HEI as 'too local'. Faced with limited choice of universities in NI and the commonly-expressed view throughout the sample that part of going to university is often seen as making the move from the family home as a *rite de passage* on the route to adulthood, the choice was to migrate:

*'To be honest I always wanted to go away to university because, for me, university was largely about living away from home. Queen's would have been the only university I would have considered in Northern Ireland and it was so close to home that I couldn't justify living away from home and it didn't offer the independence I wanted. And then I chose Scotland because I spent a lot of time in Scotland as a child on holidays and so I knew it well and culturally it was quite similar'.*

(113, female languages graduate, volunteer manager, not-for-profit, 15k-£18k)

- 4.1.9 Table 4.3, which indicates respondents' undergraduate course preferences, reinforces this picture of 'reluctant migrants', showing that NI graduates who studied outside NI were less likely to have accessed their preferred course of study and significantly more likely to have preferred to study somewhere else.

**Table 4.3 Undergraduate course preferences when entering HE, by domicile and location of study**

	NI-domiciled graduates who studied at NI HEI	NI-domiciled graduates who studied in GB HEIs	Others
The course was preferred course at preferred place of study	78.1	75.3	76.5
I had no clear preference	10.1	10.1	9.6
Would have preferred another course at the same institution	7.9	1.5	5.2
I would have preferred to study somewhere else	3.8	13.1	7.9

- 4.1.10 However, there is some evidence that the picture may have changed in subsequent cohorts, perhaps as a result of changes in the funding of UK HE. Recent statistics (DELNI 2004) indicate that proportion of NI domiciled accepted applicants whose preferred choice of region was NI increased by 6.5 percentage points since a similar analysis of 1998/99 UCAS data, rising from 60.6 per cent to 67.1 per cent. In counterbalance, the proportion of NI domiciled accepted applicants whose preferred choice of region was GB decreased by 5.6 percentage points since a similar analysis of 1998/99 UCAS data, dropping from 34.3 per cent to 28.7 per cent. The proportion of those NI domiciled accepted applicants who left to study in GB and



whose preference was to have stayed in NI has decreased since 1998/99 from 11.5 per cent to 9.2 per cent in 2002/03.

- 4.1.11 McKearney (2004) reported that, in the 2002/03 academic year, 68 per cent of NI-domiciled applicants to higher education were accepted at NI institutions and 32 per cent at GB institutions. The HESA first destination survey for 2002/03, which looked at students six months after graduation, showed that of those NI domiciled students who graduated from full-time undergraduate courses at GB HE institutions and whose destinations were known, just over one third returned to NI after graduation. This is in contrast to those who graduated from a NI HE institution where over ninety percent remained in NI.
- 4.1.12 However, Table 4.4 reveals that the experience of studying away from Northern Ireland appears to have been seen as positive with hindsight by the majority of 1999 NI-domiciled respondents and they appeared least likely to opt for a similar course at a different place or to have said that they would choose not to enter HE. A significantly higher proportion of all NI graduates, wherever they studied, reported that they would do a different course and the fact that over a quarter of both stayers and leavers did so highlights the need for effective prior careers guidance and, possibly, raises issues about opportunities in the NI graduate labour market subsequently encountered.

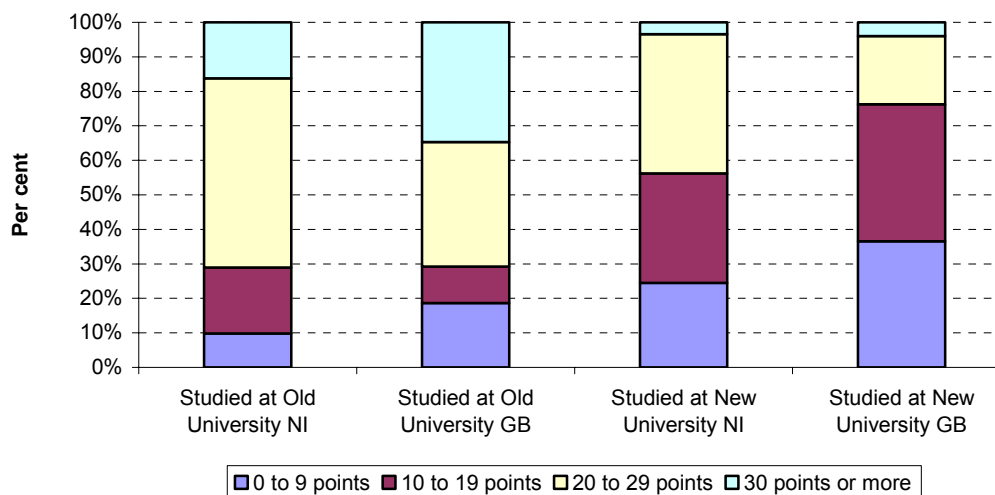
**Table 4.4 HE choices respondents would make, with hindsight, comparing NI-domiciled cohorts and others**

	NI-domiciled graduates who studied at NI HEI	NI-domiciled graduates who studied in GB HEIs	Others
Do the same course at the same place	61.0	67.0	65.5
Do a similar course at a different place	7.4	6.0	9.1
Do a different course	26.1	25.6	20.8
Choose not to enter higher education	4.3	-	3.3

- 4.1.13 Members of the NI-domiciled graduate sample had higher average A-level scores than those from other regions, with average scores of 17<sup>9</sup> gained by those who studied at NI HEIs and 19.7 by those who studied at UK HEIs. The overall average of all UK-domiciled respondents was 15.9. The impact of selection into the old universities is clearly apparent in Figure 4.3.

<sup>9</sup> 'A' level scores are computed according to the old system, which counts an 'A' grade as 10 points, 'B' as 8 points, 'C' as 6 points, 'D' as 4 points, 'E' as 2 points. Scottish qualifications and AS level qualifications were equivalenced using information provided by the Universities and Colleges Admissions Service.

**Figure 4.3 A level scores of NI-domiciled respondents, comparing those who studied at NI and GB universities, by HEI type<sup>10</sup>**



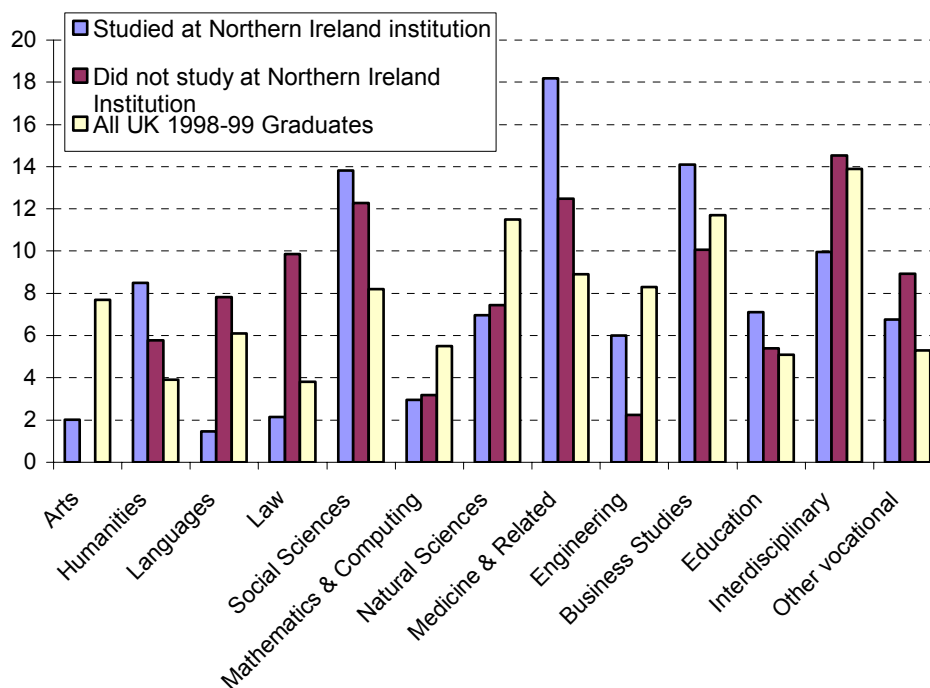
4.1.14 Figure 4.3 shows that 70 per cent of the survey respondents in both NI and UK pre-1970s HEIs had 20 points or more, which may to some extent indicate a relative shortfall in availability of undergraduate opportunities relative to the demand for higher education places in NI. However, the relatively high average points achieved by those who studied at the University of Ulster compared to those of successful applicants for the majority of other late 20<sup>th</sup> century UK institutions is perhaps indicative of its historical development, created as a university in 1984 by the amalgamation of the former University of Coleraine and Ulster Polytechnic, considerably earlier than the GB new universities which were awarded university status in the early 1990s.

4.1.15 Figure 4.4 shows the comparative distributions, by subject, of the NI-domiciled graduates who studied in NI HEIs and those who migrated to study in GB HEIs, compared to the UK 1999 graduate cohort population as a whole. These distributions should be treated as indicative rather than a robust indicator of differences. They may provide some indication of the subjects where there may be a shortfall in provision in the NI HEIs relative to applicant study preferences, although, of course, graduates throughout the British isles have a tradition of moving away from their region of domicile to study, as the inflow to NI HEIs and much of the outflow from NI to other locations illustrates. However, the interview evidence, along with these findings, suggest that law, and possibly interdisciplinary and some 'other vocational' courses may be in greater demand in NI than the two institutions can satisfy. Conversely, we found no evidence of NI-domiciled graduates having migrated to GB HEIs to study Arts subjects – although this may reflect the composition of the GB HEI sample, as discussed

<sup>10</sup> This figure excludes those who graduated over the age of 25. 'Old universities' are those established before 1992. 'New universities' include former polytechnics and (in the UK sample) HE degree-awarding colleges.

above. Most of the other apparent differences, particularly between the population and samples, are likely to reflect the far larger and more complex provision of the 36 UK institutions included in this study – along with the greater likelihood of classification errors in the self-classified or coder-allocated subjects in comparison to HESA-allocated codes for the population. For example, graduates classified as interdisciplinary by HESA may regard themselves as majoring in one part of their course and identify with that subject. The small numbers in the ‘migrant’ group are also likely to provide an exaggerated impression of discrepancy – for example, in the case of languages.

**Figure 4.4 Subject studied, comparing NI-domiciled graduates who studied in NI HEIs and in GB HEIs with all UK 1998-9 graduates (HESA figures)**



4.1.16 As a general principle, the educational migrant NI graduates tend to resemble the UK graduates more closely than those who studied in NI HEIs, in terms of perceptions of their identities. We asked respondents to indicate how important they rated a series of key variables, on a five-point scale from ‘very important’ to ‘unimportant’ and these illustrate the well-established Northern Irish regional and cultural values, particularly in the case of those who studied at NI HEIs. We saw the objective differences in the social class backgrounds of NI-domiciled sub-groups who studied in NI and GB in Figure 4.2, and the extent to which subjective identities reflected these is provided by Table 4.7. Those from relatively disadvantaged backgrounds were more likely to see their social class background as important to their sense of self.

4.1.17 Finally, the degree outcomes of NI-domiciled graduates for those who studied in NI HEIs differ somewhat from those who studied at GB HEIs, as Table 4.5 reveals:

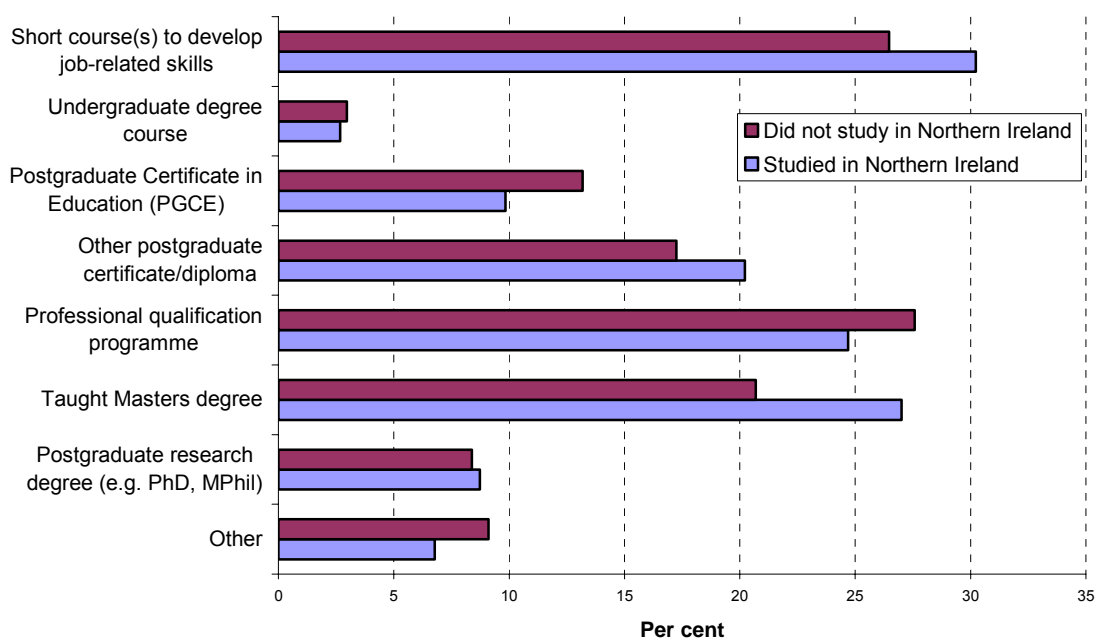
**Table 4.5 Class of degree achieved by NI and GB graduates**

	<b>NI HEI graduates</b>	<b>GB HEI graduates</b>
1	8.7	10.7
2(i)	55.6	50.7
2(ii)	27.2	30.0
3	1.8	3.1
Pass/Diploma	6.4	5.1
Ordinary degree	0.1	0.2

This is more likely to reflect the different HEI profiles of the two sub-samples rather than differences in degree standards or sub-sample ability ranges.

## **4.2 Postgraduate training and education**

- 4.2.1 The following section compares NI-domiciled graduates who studied at Northern Ireland's HEIs compared to graduates from GB HEIs in terms of their propensity to have undertaken further postgraduate education and training since graduating in July 1999. It also examines the motivation behind this return to education. Overall, 66 per cent of NI-domiciled NI-HEI graduates reported having taken further full or part-time work-related or career-related courses (lasting one month or more). This is notably higher than further participation reported by graduates from UK HEIs, where 56 per cent reported having done so. In terms of gender, female graduates from NI HEIs reported a higher propensity than men to have undertaken further courses since graduation (69 per cent).
- 4.2.2 Figure 4.5 shows the type of postgraduate education or training undertaken amongst those who had reported having done so in the four years since graduation, again comparing graduates from NI HEIs and those from GB institutions. Most notably, NI graduates are significantly more likely to have obtained a taught Masters degree since 1999 compared to other graduates. This was most pronounced for male NI graduates, approximately 35 per cent of whom reported having done so. They were also more likely to have undertaken a Postgraduate Certificate or Postgraduate diploma in this period (women being twice as likely as men to have done so in the NI sample). There appears therefore an overall higher propensity to return to formal postgraduate education, away from the workplace, amongst graduates from NI institutions. In contrast, graduates from GB institutions are more likely to undertake professional qualification programmes and PGCEs (although this is likely to reflect differences in the traditional routes into teaching between Northern Ireland and GB).

**Figure 4.5 Type of education and training undertaken since July 1999**

4.2.3 The differences evident in the patterns of postgraduate education and training may reflect different pressures on graduates in the province and in other UK regions. Elsewhere in this report, a point clarified in the qualitative data, analysis indicates a significantly looser labour market for graduates in Northern Ireland than in GB, particularly for certain professional occupations (e.g. teachers). This may act as an incentive to undertake postgraduate education in the first few years after graduation in order to differentiate themselves from labour market rivals. It may also reflect lack of alternative career-development opportunities. Comparing the experience of those who graduated in 1995 with the 1999 cohort, we find similar or slightly higher proportions having completed taught masters' and research degrees and completed professional qualification courses – but we find a very substantially larger proportion having completed postgraduate certificates or diplomas (including PGCEs) in the more recent cohort. One interviewee, about to embark on a postgraduate course in social work, reported how strong competition for jobs had led her to return to study in order to achieve career advancement:

[Interviewer: Was the decision to go back to studying difficult to make?]

*'Yes, because obviously I am quite happy in the post that I am in, going back to study, being a student and poverty stricken again, was quite difficult. But by the same token, if I wanted to advance in a career in Derry here in Northern Ireland, I would have to gain more qualifications because the competition is very great'.*

[Interviewer: Would you say that characterises Northern Ireland as a whole, that there is considerable competition for jobs...for graduates?]

*'Yes. It wouldn't be as bad in Belfast, although it still is difficult, but especially where I am in Derry, the north west, it's the unemployment black spot of Europe so it said in today's paper'.*

(106, female social science graduate, community support worker, not-for-profit, £15k-£18k)

- 4.2.4 As the same respondent went on to say, this subsequently creates significant competition for the limited places on particular programmes:

[Interviewer: Would you say there were particularly competitive courses to get on, if as you say it's relatively high unemployment in that area?]

*'Yes. The year I graduated in 1999, I had an interview for the University of Ulster and there were 2,000 applicants for the postgrad [course] in social work. They interviewed 250 people and there were 35 places'.*

(106, female social science graduate, community support worker, not-for-profit, £15k-£18k)

- 4.2.5 To further explore the motives behind a decision to undertake further education and training Table 4.6 outlines the reasons for doing so, given by those who reported having returned to study in some way. Again, we can compare NI HEI graduates and GB graduates. Importantly, given the above discussion, although the differences are not vast, a higher proportion of NI graduates indicated having done so because they thought it would improve their employment prospects and a marginally higher proportion reported having been unable to find a suitable job. They were also more likely to indicate the desire to develop broader skills, linked to a greater propensity to undertake professional qualifications. GB graduates were more likely to indicate having a particular course in mind and responding to employers requirements for specific qualifications.

Overall, there was little to indicate significant difference between male and female NI graduates in terms of the motives they indicated for having undertaken further study.

**Table 4.6 Reasons for having undertaken postgraduate education or training**

	NI HEI	GB HEI
To develop broader range of skills/knowledge	47.8	40.5
To develop more specialist skills/knowledge	59.2	57.7
To change my career options	21.8	21.3
I thought it would improve my employment prospects	52.2	46.8
I had a particular career in mind and needed this course	37.8	44.0
My employer requested/required me to do so	16.8	23.1
I had been unable to find a suitable job	9.0	7.7

### 4.3 Identity as a variable that affects career orientations and outcomes

4.3.1 Northern Ireland graduates are more likely than those from other parts of Britain to have studied in their region of origin and exhibit both different demographic profiles, as has been discussed - and subsequent chapters will reveal that they are less likely to leave Northern Ireland after graduating to seek employment or develop their careers. We included questions in the survey to explore the extent to which their perceptions of the importance - in terms of their own identity of social class, region and nation - might be related to labour market perceptions and choices. Table 4.7 suggests that the objective class differences revealed by Figure 2.2 do impact on self-perceptions, with those from relatively socially-disadvantaged backgrounds - by definition upwardly mobile as a result of the high probability of them being first generation graduates - likely to be conscious of the importance of cultural capital in accessing opportunities and not surprisingly more likely to consider class as an important dimension of their identity.

**Table 4.7 Importance of class background as an aspect of identity**

	NI-domiciled graduates who studied at NI HEI	NI-domiciled graduates who studied at GB HEIs	Others
Very important	8.3	6.0	5.6
Important	30.2	26.4	28.8
Neutral	38.4	33.5	38.8
Not very important	14.5	29.1	14.2
Unimportant	6.6	3.5	9.3

4.3.2 Religion is a strong source of community membership, political culture and identity in Northern Ireland, reflecting historical divisions between Roman Catholics and Protestants that varied by social class. The responses' to the question '*What is your community of origin?*' in the questionnaires distributed to NI HEI *alumni*, providing the optional responses of Roman Catholic, Protestant and Other revealed that 51 per cent considered themselves to be Roman Catholic, 42 per cent Protestant, 4 per cent other and only 3 per cent of NI HEI respondents did not provide an answer (some of them because they had completed the online version of the questionnaire, which did not include the extra question). We therefore do not have comparable data for GB HEI respondents. However, we have data on the extent to which all respondents regarded their religious background as a significant aspect of the responses and demonstrate the greater significance of religion for NI respondents – especially those who studied in NI HEIs - and this is presented in Table 4.8.

**Table 4.8 Importance of religious background as an aspect of identity**

	NI-domiciled graduates who studied at NI HEI	NI-domiciled graduates who studied at GB HEIs	UK-domiciled graduates
Very important	19.4	11.2	8.1
Important	30.3	18.3	13.1
Neutral	27.2	26.9	23.9
Not very important	11.4	14.2	19.4
Unimportant	11.0	29.3	33.6

4.3.3 Table 4.9 compares responses to the same question according to the respondents stated community of origin. We find that 23 per cent of Protestants reported religious background as being very important to their personal identity compared to 14 per cent of Catholics. However, if we aggregate those who reported either important or very important we find a similar distribution.

**Table 4.9 Importance of religious background as an aspect of identity, by community of origin**

	Roman Catholic	Protestant
Very important	14.3	23.1
Important	36.4	25.0
Neutral	27.2	28.8
Not very important	11.3	11.1
Unimportant	9.8	10.7

4.3.4 We also asked respondents about how important religious/ethical/spiritual development was to them, in terms of long-term values, and again we get a strong NI-specific response that differs significantly from the responses of those from other parts of the UK, as Table 4.10 shows.

**Table 4.10 Importance of religious/ethical/spiritual development**

	Studied at NI HEI	Studied at GB HEI
Very important	19.7	11.6
Important	28.6	17.7
Not sure	18.7	20.2
Not very important	19.4	25.5
Unimportant	11.3	23

4.3.4 Finally, we compare the importance of regional and national identity according to where graduates lived prior to becoming undergraduates and the results are provided in Table 4.11 – distinguishing between NI-domiciled graduates who studied in NI and those who studied in GB.



**Table 4.11 Importance of regional background as an aspect of identity**

	NI-domiciled and studied at NI HEIs	NI-domiciled studied at GB HEIs	Scottish- domiciled	English- domiciled	Welsh- domiciled
Very important	12.3	6.2	7.3	4.4	6.8
Important	33.3	40.2	35.6	20.3	27.5
Neutral	33.6	29.0	26.5	32.6	31.4
Not very important	12.2	13.1	14.9	18.5	16.8
Unimportant	8.2	10.1	14.3	22.2	15.1

- 4.3.5 Table 4.11 shows how regional identity is significantly more often indicated as being very important by the NI graduates who studied in their home region, and more likely to have been considered important by NI graduates as a whole than those from any other part of the UK. Scottish respondents were next most likely and the English respondents least likely to have seen region as important to their identity. In the interviews, several NI graduates spoke about their preference to remain in NI or described how, even when they had made the decision to move to other parts of the UK, they had chosen universities in locations that they felt might be similar, as in the example cited earlier in this chapter. A clear example of strength of attachment to community and reluctance to consider moving away is provided by the following quote, which also illustrates the importance of partnership and encompasses a strong financial disincentive to move related to community ties:

*'I suppose the first step would be moving to somewhere within Northern Ireland but I think it would be a big culture shock to move over to England because it is very different. I think I would think of a career change before I did that to be honest, it would be a big move and decision and [my partner's] job here, his ability to move up the ranks is based on his experience and time because he doesn't have higher level qualifications'.*

[Interviewer: So his career is specific to his organisation...?]

*'He has been there since he was sixteen and has twelve years experience so if you take him out of that he has to start again'.*

(077, female education graduate working as substitute teacher, £21k-£24k)

- 4.3.6 Table 4.12, conversely, shows the Scots as more likely to see national background as important, with the Northern Irish who studied in NI most likely to have said 'very important' and the NI migrants following behind – which illustrates the extent to which 'regional' and 'national' identity means very different things in Northern Ireland.

**Table 4.12 Importance of national background as an aspect of identity**

	NI-domiciled and studied at NI HEIs	NI-domiciled studied at GB HEIs	Scottish- domiciled	English- domiciled	Welsh- domiciled
Very important	17.3	13.5	12.9	8.7	11.1
Important	38.0	36.1	44.7	33.4	38
Neutral	28.2	32.0	25.4	31.6	29.2
Not very important	9.6	10.7	10.4	12.5	10
Unimportant	6.3	7.9	5.7	11.5	9.6

4.3.7 Table 4.13 completes this exploration of the characteristics of the NI-domiciled sample, providing a snapshot of their status at the time of the survey, four years after graduation. Our analysis of the career trajectories of 1995 graduates indicated that NI *alumni* were somewhat less likely to be in employment in the first two years after completing their degrees, but also less likely to be unemployed, than those who studied in other UK regions. They were however, significantly more likely to have gone on to further full-time study. The distribution in the table below shows remarkably little difference between the NI domiciled NI HEI sample, NI domiciled educational migrants and the UK-domiciled sub-sample - but does indicate that those who lived in NI before embarking on UK HEI undergraduate programmes were significantly more likely to be in employment related to their long-term career plans and less likely to be in postgraduate study. Does this simply reflect their higher educational achievement prior to HE, their social class advantage, their lower likelihood of being employed in the NI labour market, their different qualification and occupational profiles, or less tangible factors reflected in their willingness to migrate or greater enterprise, initiative and willingness to take risks? We will attempt to reach a clearer understanding of the interplay of factors that determine career outcomes in the chapters that follow.

**Table 4.13 Situation of 1999 graduates at time of survey (2003/04)**

	NI domiciled who studied at NI HEI	NI domiciled who did not study at NI HEI	Full sample who studied outside NI
Full-time related to long-term career plans	65.9	72.0	67.6
Part-time related to long-term career plans	4.2	1.9	3.1
In full-time employment (other)	17.5	14.6	17.2
In part-time employment (other)	2.8	2.2	2.4
Self-employed	3.9	2.8	3.5
Postgraduate study	8.0	5.6	7.4
Unemployed and seeking work	2.1	2.2	2.5
Out of the labour force/not seeking work	1.1		1.3
Other	2.2	1.9	2.8

4.3.8 Of the 1995 sample of graduates who had studied in NI, 84 per cent had a first job in NI, but the proportion remaining there had fallen to 81 per cent over the seven year period investigated. Of those who had studied in GB, half had returned to NI for their first job and others had moved back over the subsequent seven years. In addition, several of those interviewed who were currently working in other UK countries talked about how they aspired to return at some stage. We cannot be confident that these respondents are representative of educational migrants from NI, but we note that survey respondents resident in NI prior to their undergraduate studies that had gone to other UK HEIs, over half were working in the NI labour market seven years on.

4.3.9 In the same way, 86 per cent of the members of the 1999 NI-domiciled sample who had studied in NI were still there four years on, over a third of those who had studied elsewhere had returned immediately after graduation and a similar proportion of them were in the NI labour market at the time of the sample of 1999 graduates was contacted in 2003.

#### 4.4 Summary

- NI domiciled graduates studying in Northern Ireland appear to have had a more considered and instrumental orientation to undergraduate study than those who had left NI to undertake their degree course; they were less likely to have done so because 'it was the normal thing to do', they wanted to be a student or they had been advised to do it, and more likely to have had specific employment-related reasons. The majority of 1999 NI-domiciled graduates had studied full-time, but 10 per cent of those studying at NI HEIs had studied part-time, compared with 5 per cent of the NI-domiciled graduates who had studied in GB HEIs.
- Graduates domiciled in NI prior to undergraduate study are drawn from a somewhat wider social spectrum than the total UK graduate sample. As previous research has indicated, the NI-domiciled graduates who studied at other UK HEIs were more likely to have come from 'traditional student' backgrounds than those who studied at the indigenous institutions.
- Perhaps reflecting this more diverse social class background, those who studied in Northern Ireland were significantly more likely to have undertaken paid work during term than those who had migrated to study. Those who studied at NI HEIs appeared more likely to have had a work placement integral to their course (17 per cent compared with 12 per cent of the migrant group), but less likely to have worked in order to gain useful career-related experience (17 per cent compared to 23 per cent).
- NI graduates who studied outside NI were significantly more likely to have gained entry to their HEI as a reserve choice, or through clearing, compared to both NI-domiciled graduates who studied at NI HEIs and all other graduates from non-NI HEIs. NI graduates who studied outside NI were also less likely to have accessed their preferred course of study and significantly more likely to have preferred to study somewhere else. However, the experience of studying away from Northern Ireland appears to have been seen as positive with hindsight by the majority of respondents and they appeared least likely to indicate that they would have preferred to do a similar course at a different place or to have said that they would choose not to enter HE.
- As a general principle, the educational migrant NI graduates tend to resemble the GB graduates more closely than those who studied in NI HEIs, in terms of perceptions of

their identities and the relative importance of regional and cultural values. According to degree subject, higher proportions of NI-domiciled graduates who studied elsewhere studied law, interdisciplinary and some 'other vocational' courses than who studied these subjects at NI HEIs.

- A specific question about religious community of origin was asked of the NI HEI graduate sample. In response, 51 per cent of respondents cited their community of origin as Roman Catholic, 42 per cent Protestant, 4 per cent other. Only 3 per cent of NI HEI respondents did not answer this question. We find that 23 per cent of Protestants reported religious background as being very important to their personal identity compared to 14 per cent of Catholics. However, if we aggregate those who reported either important or very important we find similar distributions. Perhaps not surprisingly, regional identity was significantly more often indicated as being very important by the NI graduates who studied in their home region, and more likely to have been considered important by NI graduates as a whole than those from any other part of the United Kingdom.
- NI-domiciled NI graduates were significantly more likely than others to have taken further full or part-time work-related or career-related courses (lasting one month or more): two thirds of them reported having done so, compared to 56 per cent of UK graduates generally. Female graduates from NI HEIs reported a higher propensity than men to have undertaken further courses since graduation. NI graduates were significantly more likely to have obtained a taught Masters degree since 1999 compared to other graduates. This was most pronounced for male NI graduates, approximately 35 per cent of whom reported having done so. They were also more likely to have undertaken a Postgraduate Certificate or Postgraduate diploma in this period (women being twice as likely as men to have done so in the NI sample). There appears therefore an overall higher propensity to return to formal postgraduate education, away from the workplace, amongst graduates from NI institutions compared to those from other UK HEIs. It may be significant that a higher proportion of NI graduates indicated having undertaken further study or training because they thought it would improve their employment prospects and a marginally higher proportion reported having been unable to find a suitable job.
- Of the 1995 sample of graduates who had studied in NI, 84 per cent had a first job in NI, but the proportion remaining there had fallen to 81 per cent over the seven year period investigated. Of those who had studied in GB, half had returned to NI for their first job and others had moved back over the subsequent seven years. 86 per cent of the members of the 1999 NI-domiciled sample who had studied in NI were still there four years on. Over a third of those who had studied elsewhere had returned immediately after graduation and a similar proportion of them were in the NI labour market at the time of the sample of 1999 graduates was contacted in 2003.

## CHAPTER 5

### THE CAREER PATHS OF NORTHERN IRELAND GRADUATES

#### 5.1 Introduction

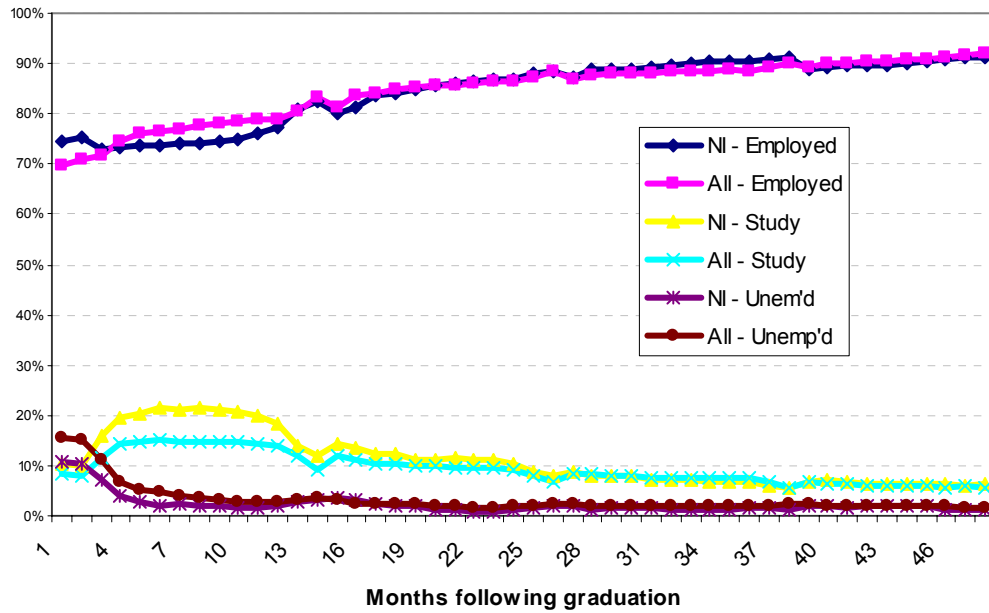
- 5.1.1 In this chapter we explore the issue of graduate employability by looking at the unemployment and career profiles of graduates from the time they completed their degrees to the dates upon which they were surveyed. Both of the surveys of 1995 and 1999 graduates asked respondents to provide a dated month-by-month account of their work histories since graduation. For the 1995 cohort we have detailed work histories from the time they left university in July 1995 up until December 2003, some seven and a half years later. The survey of the 1999 cohort collected similar information from July 1999 to December/January 2003/04.
- 5.1.2 The chapter is set out as follows. Section 5.2 provides a general characterisation of the career profiles of graduates from these two cohorts, with comparisons being made between NI domiciled graduates who studied at NI HEIs (subsequently referred to as 'NI graduates') with all graduates in the survey (referred to as 'UK graduates'). These profiles reveal the movement into unemployment, employment and further full time study. The remainder of the chapter then considers the different dimensions of these career profiles in further detail. Section 5.3 shows the evolution of employment by contractual status. Section 5.4 assesses the quality of employment outcomes in terms of occupation, assessing the employment profiles of HE leavers in different jobs and illustrating their career progression. Section 5.5 demonstrates how this evolution of employment is associated with the utilisation of skills and knowledge gained whilst studying. Finally, Section 5.6 considers the extent to which unemployment and employment trajectories vary according to gender, degree class, subject studied and religious denomination 'community of origin'.

#### 5.2 Overview of early career profiles

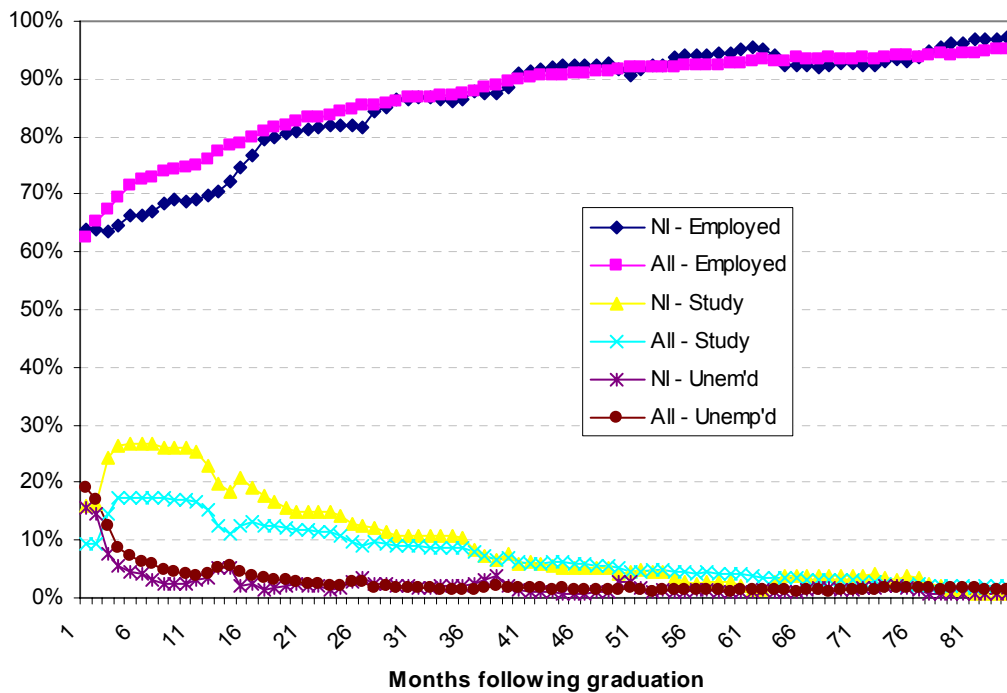
- 5.2.1 Figure 5.1 compares the career profiles of 1999 NI domiciled graduates from NI HEIs with UK graduates. More than two thirds of UK graduates entered employment straight after graduating. The rate of employment immediately after graduation is slightly higher among the NI graduates, with 74 per cent entering directly into employment compared to 69 per cent of UK graduates. The rate of assimilation into employment was subsequently lower among the NI graduates for most of the first year after graduation. However, some 12 months after graduation, these employment profiles had converged. The trajectories of these profiles indicate that the pattern of assimilation into employment was almost identical beyond this point. Three and half years after graduation (42 months), the rate of employment among the NI graduates was 91 per cent, compared to 92 per cent among UK graduates.

- 5.2.2 Reflecting this assimilation into employment, the experience of unemployment is shown to have declined rapidly after graduation. For the NI graduates, 11 per cent indicated that they were unemployed immediately after graduating. By 18 months after graduation the rate of unemployment had declined to approximately 2 per cent, with the proportion of the cohort unemployed remaining relatively stable after this time. There is some indication that the experience of unemployment among the NI graduates during the 12 months after graduation was slightly lower than that observed among all UK graduates. However, this difference was not large and the unemployment rates of NI graduates converged to those of UK graduates beyond the 12 month period following graduation.
- 5.2.3 Elsewhere in this report we note that there was a greater propensity of NI graduates than those from other UK regions to have undertaken further courses and obtain postgraduate qualifications. This is confirmed in the analyses of the work histories. Participation in further full time study as the main activity after graduating was shown to peak between the October after graduation through to the following summer, as one-year Masters' degree and postgraduate certificate/diploma courses drew to a close. Among the NI graduates, participation in further full time study as the main activity exceeded 20 per cent during the first 12 months following graduation, compared to 14 per cent among UK graduates. Participation in further study converges beyond 12 months after graduation. Among all graduates, participation in further study as the main activity gradually declined as the length of time since graduation increased, as survey respondents gradually entered employment. Small step shifts at 12-month intervals during the summer months reflects the completion of further studies on an annual basis.
- 5.2.4 Figure 5.2 compares the career profiles of 1995 NI graduates with UK graduates over a period of seven years following graduation. In comparison with the 1999 graduates, the experience of unemployment immediately following graduation was higher among this cohort. However, this must be considered within the context of improved labour market conditions with the period between 1995 and 1999, characterised by falling levels of unemployment generally. Participation in employment among the NI graduates is shown to have been lower during the first two years following graduation and the difference can be accounted for by the higher rate of participation in full time study. More than a quarter of NI HEI graduates participated in further full time study as the main activity during the first 12 months following graduation, compared to just 17 per cent among UK graduates. In contrast to the 1999 cohort, this higher rate of participation in full time study was shown to continue into the second and third years following graduation.

**Figure 5.1 Career paths of 1999 graduates: NI graduates compared to UK graduates**



**Figure 5.2 Career paths of 1995 graduates: NI graduates compared to UK graduates**

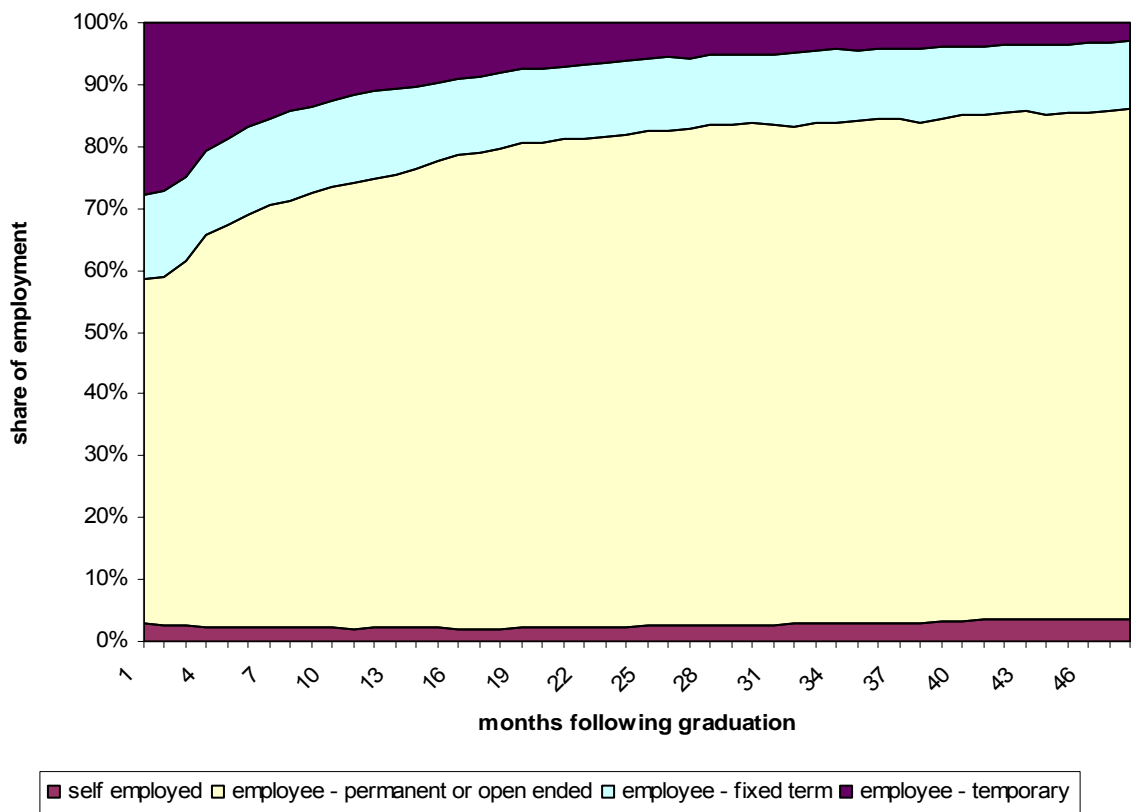


### **5.3 The contractual status of employment**

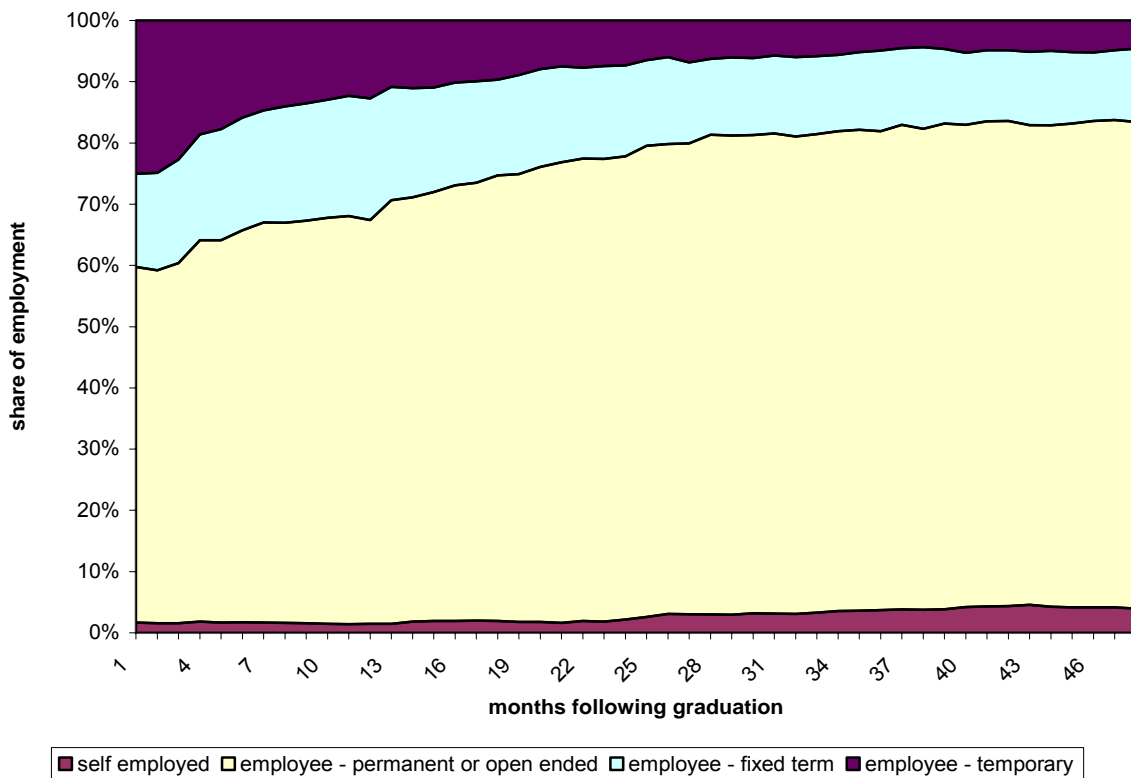
- 5.3.1 Entry into the labour market for many graduates is often via some form of temporary employment, frequently in non-graduate occupations, immediately after graduation. As time passes however, most graduates find permanent work which, as we show later in this chapter, is more likely to be of a graduate-appropriate level. For most graduates, temporary employment appears to be transitory phase, but for some it can take a significant period of time to 'settle down' into more stable work. In this section we consider the changing contractual status of graduates over the four years following graduation, comparing the contractual status of NI graduates with UK graduates. We also consider whether temporary employment may have been becoming an increasingly frequent early career experience for graduates by comparing the experiences of the 1999 cohort with that of the 1995 cohort.
- 5.3.2 Figures 5.3 and 5.4 compare the contractual status of employed graduates from the 1999 cohort over the three and a half years after graduation. Relatively little difference is observed when comparing the contractual status in employment of NI graduates with UK graduates. Approximately 55 per cent of employed NI graduates entered into permanent employment. This figure increased steadily as graduates became increasingly assimilated into the labour market. Three and a half years after graduation, 78 per cent of in-work NI graduates were employed on a permanent or open ended basis. The share of employment accounted for by those on permanent or pen-ended contracts was slightly higher among UK graduates, at 83 per cent. This increasing share of graduates employed in permanent positions coincides with a declining share of those who were in temporary forms of employment. Approximately one in four of employed UK graduate respondents were employed on a temporary basis immediately following graduation, but three and a half years after graduation, such contractual arrangements accounted for less than 5 per cent of respondents' employment. There is some indication that employment on the basis of fixed term contracts was slightly higher among the NI graduates, particularly during the first two years following graduation, but the difference is no more than 3-4 percentage points. The incidence of self-employment was observed to be relatively low among all the recent graduates, with no significant difference between Graduates of NI HEIs and those who had studied in other UK locations.



**Figure 5.3 Contractual status of 1999 employed graduates: UK graduates**

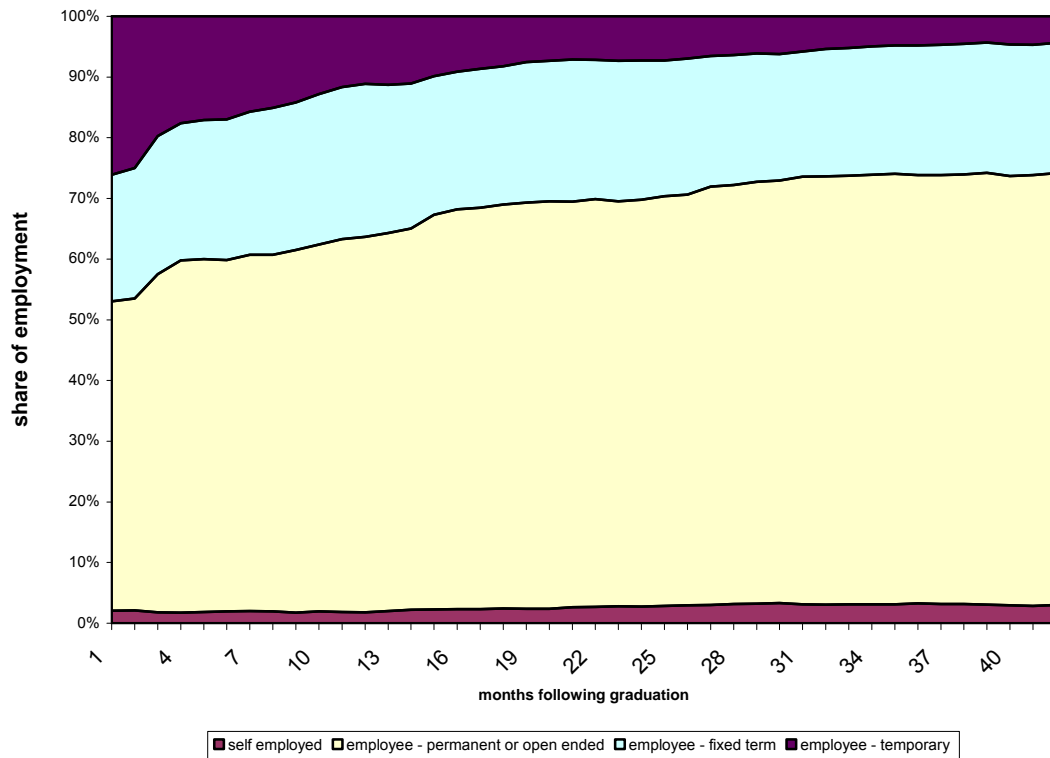


**Figure 5.4 Contractual status of 1999 employed graduates: NI graduates**

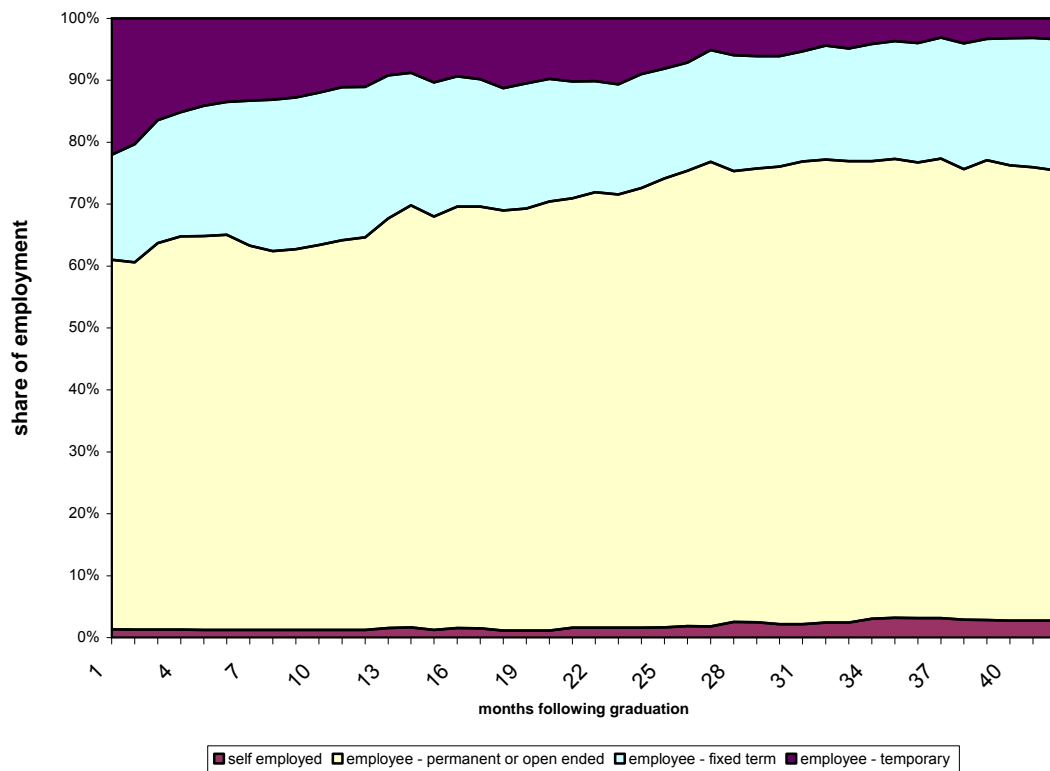


- 5.3.3 In Figures 5.5 and 5.6 we compare the contractual arrangements of graduates in the 1995 cohort. Once again, there is no difference observed when we compare the situation of NI graduates with UK graduates. However, more interesting differences emerge when making comparisons between the two cohorts of graduates, with a higher proportion of the 1995 cohort employed on the basis of fixed term contracts. Considering NI graduates, the proportion employed on fixed term contracts was generally between 20 and 25 per cent during the three and a half years following graduation. This is approximately 5 percentage points higher than among the 1999 NI graduate cohort. However, the inter-cohort differential is actually higher for the sample as a whole. Almost twice the proportion of 1995 graduates entered fixed-term employment directly after graduation than was the case in 1999 and this higher incidence of fixed-term employment was broadly maintained throughout the period.
- 5.3.4 These differences may be accounted for by different economic conditions in the wider economy during these particular periods, which may have led to more permanent employment opportunities – or a different range of employment options - for graduates in the latter period. The following discussion shows that different types of contract appear to be associated with different types of employment. What both figures highlight, however, is the continued integration of graduates, even after several years, into more secure and more appropriate forms of employment; a process that appears to be continuing. It also illustrates the importance of different forms of temporary employment in early careers for many graduates and the relatively small, although constant, proportions in self-employment.

**Figure 5.5 Contractual status of 1995 employed graduates: UK graduates**



**Figure 5.6 Contractual status of 1995 employed graduates: NI graduates**



## 5.4 Occupational status of employment

- 5.4.1 In this section we employ an occupational classification, SOC (HE), designed to facilitate the analysis of change in the graduate labour market, classifying occupations according to generational change in the proportion of degree holders within them, the qualifications required to enter them and the levels of skills and knowledge required in order to perform the job competently<sup>11</sup>. The growing complexity of the labour market requires a means of segmenting jobs and occupations beyond a straight graduate/non-graduate binary classification. Changes in occupational structures and the expansion of higher education have meant that graduates are entering the workforce by different routes than in the past and are becoming integrated into the occupational structure in a wider variety of organisational and occupational roles than hitherto. Along with survey questions about the skills used, responsibilities exercised and career prospects perceived by respondents, and subjective assessments of the extent to which their jobs were appropriate for people with their skills and qualifications, we have been able to outline and draw conclusions about the patterned differences between jobs classified under each SOC (HE) heading and to evaluate the extent to which they were likely to be in suitable jobs for graduates<sup>12</sup>.
- 5.4.2 The classification distinguishes five categories of jobs in which graduates are employed. It identifies the *traditional* occupations for which a degree is an essential prerequisite. It distinguishes two separate groups of occupations where the proportion of graduates has risen rapidly over the past twenty-five years, *modern graduate* occupations and *new graduate* occupations. In *niche graduate* occupations, the majority of incumbents are not graduates, but the heterogeneity of the group masks the fact that a *niche* exists which contains jobs which explicitly require an undergraduate qualification or to which graduates are routinely recruited and required to utilise the skills and knowledge gained from their higher education. Finally, *non-graduate* occupations refer to those jobs in which it is unlikely that graduates will be making full and good use of their higher education in the course of their employment. Table 5.1 presents the SOC (HE) classification and provides some examples of jobs that are allocated to these groups. The breakdown of employment into the five different occupation types provides a way of comparing the differences in the types of jobs held by graduates and shows how graduates move between occupation types.

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<sup>11</sup> Full details of this classification are given in Elias and Purcell (2004a).

<sup>12</sup> See Elias and Purcell (2004a, 2004b) for an example of the use of SOC (HE) to analyse the *Seven Years On* 1995 UK cohort.

**Table 5.1 SOC (HE): a classification of graduate occupations**

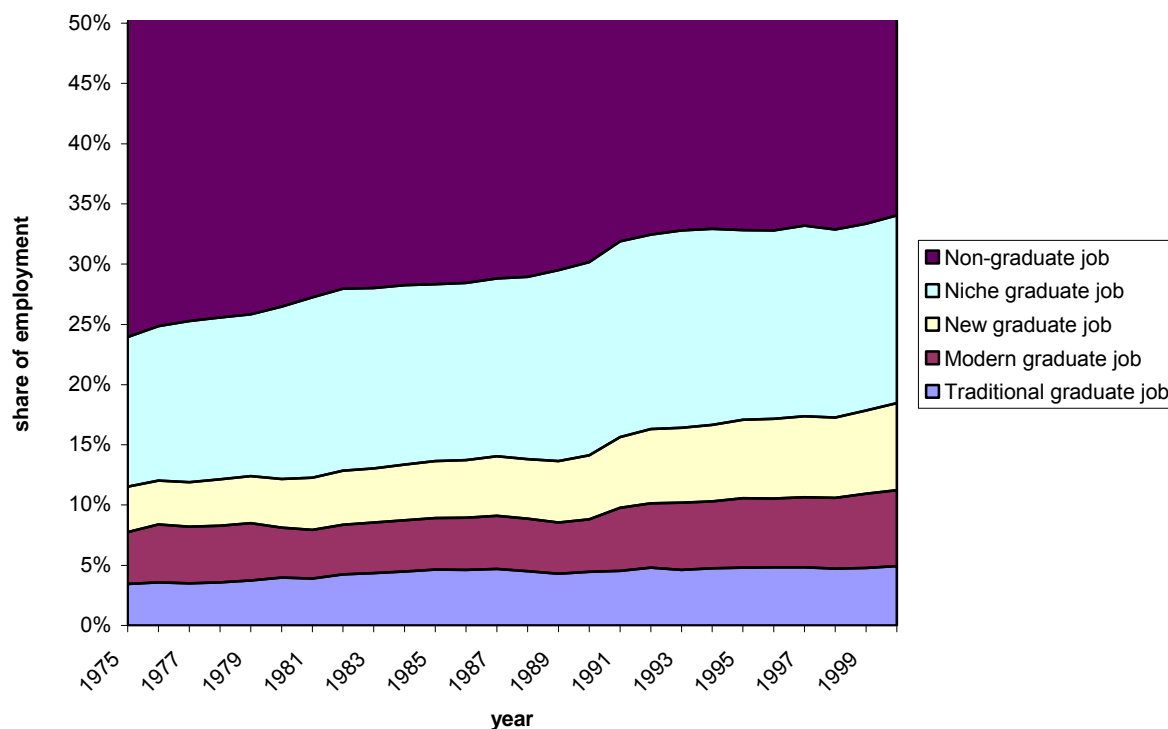
SOC (HE) category		Description	Examples
1.	Traditional graduate occupations	The established professions, for which, historically, the normal route has been via an undergraduate degree programme.	Solicitors Medical practitioners HE and secondary education teachers Biological scientists/biochemists
2.	Modern graduate occupations	The newer professions, particularly in management, IT and creative vocational areas, which graduates have been entering since educational expansion in the 1960s.	Directors, chief executives (major organisations) Software professionals, computer programmers Primary school and nursery teachers Authors/writers/journalists
3.	New graduate occupations	Areas of employment, many in new or expanding occupations, where the route into the professional area has recently changed such that it is now via an undergraduate degree programme.	Marketing & sales managers Physiotherapists, occupational therapists Management accountants Welfare, housing, probation officers, Countryside/park rangers
4.	Niche graduate occupations	Occupations where the majority of incumbents are not graduates, but within which there are stable or growing specialist <i>niches</i> which require higher education skills and knowledge.	Leisure and sports managers Hotel, accommodation managers Nurses, midwives Retail managers

Source: Elias and Purcell (2004a)

5.4.3 To contextualise the present discussion, in Figure 5.7 we make use of the New Earnings Survey to provide a long run view of occupational change. This survey has remained relatively unchanged since 1975 and is therefore able to show how the occupational structure of employment (specifically, employees in employment) has changed over a 25 year period. The trends revealed in this graph are reasonably continuous. Both new graduate and modern graduate categories have shown significant growth over this period, as indicated by the rising proportion of employment classified to these categories. The

proportion of employment in the traditional graduate categories has remained virtually constant throughout this period. The proportion employed in non-graduate occupations has fallen from approximately three quarters in 1975 to two thirds by 2000.

**Figure 5.7 Changing occupational structure of employees in employment, 1975 to 2000 by SOC (HE)**

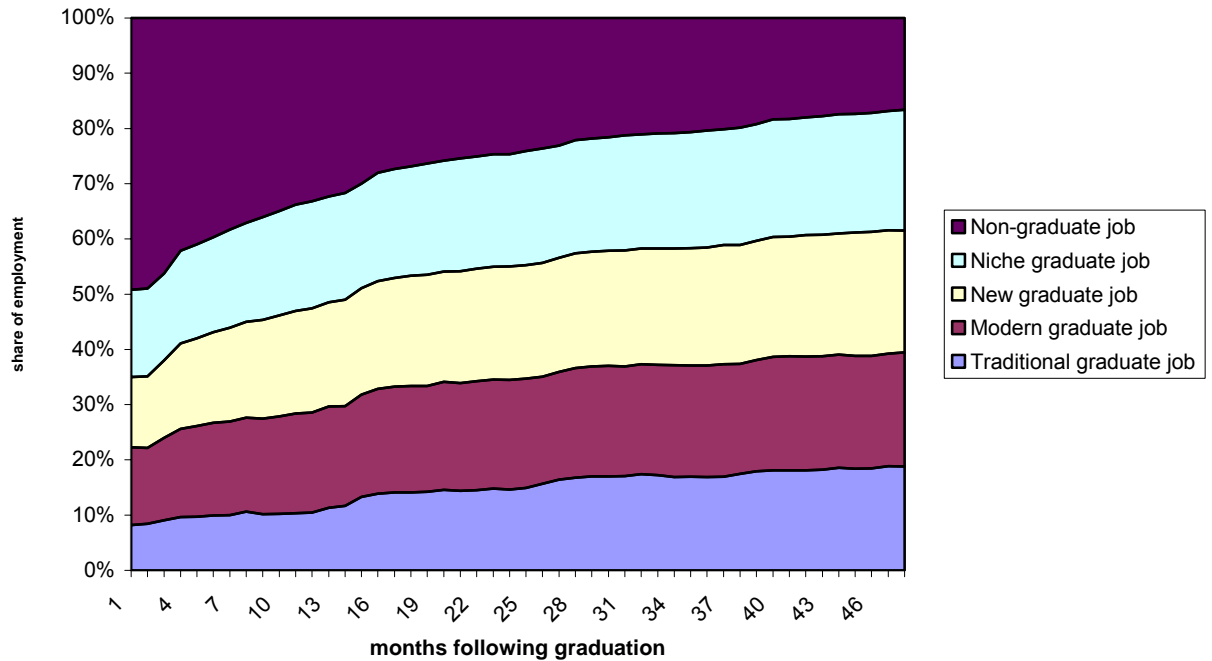


5.4.4 Figure 5.8 shows the types of jobs held by 1999 UK graduates during the first 48 months following the completion of their studies. Almost half of all those in employment immediately following the completion of their course in 1999 were employed in non-graduate occupations. However, employment in non-graduate occupations fell rapidly following graduation. Four years after graduation only 15 per cent of employed respondents worked in non-graduate occupations. Figure 5.9 shows the types of jobs held by NI graduates during the 48 months following their graduation. Immediately following graduation, 44 per cent of employed graduates worked in non-graduate occupations. The pattern of declining employment in non-graduate occupations is clearly observable among the NI graduates and by four years after graduation, the figure had fallen to 17 per cent.

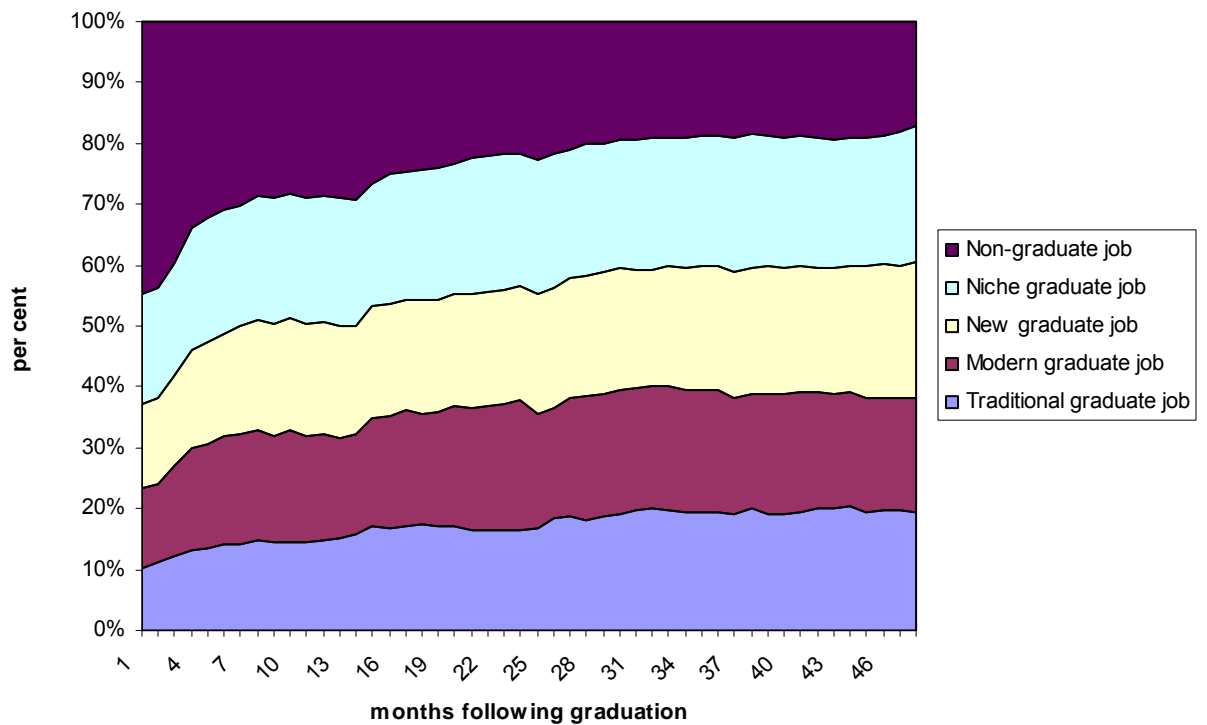
5.4.5 This decline in non-graduate occupational employment among the 1999 cohort was related to an increase in the proportions employed in *each* of the four remaining categories of SOC (HE). Among NI graduates, the proportion of employed respondents in *traditional graduate* occupations increased from 11 per cent to 20 per cent, in *modern graduate* occupations from 13 per cent to 19 per cent, in *new graduate* occupations from 14 per to 22 per cent and in *niche graduate* occupations from 18 per to 21 per cent. Relatively little difference is observed

in the assimilation of 1999 graduates into these four occupational categories when comparing NI graduates with UK graduates.

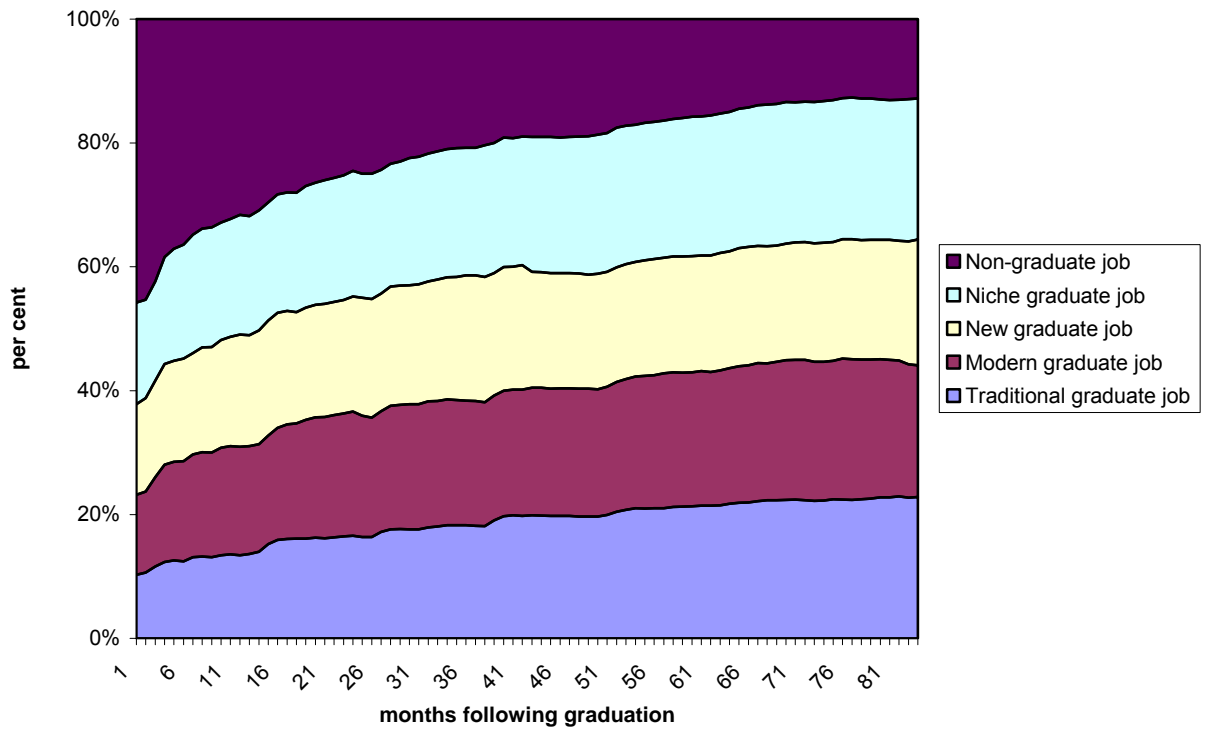
**Figure 5.8 The occupational evolution of employment among 1999 UK graduates**



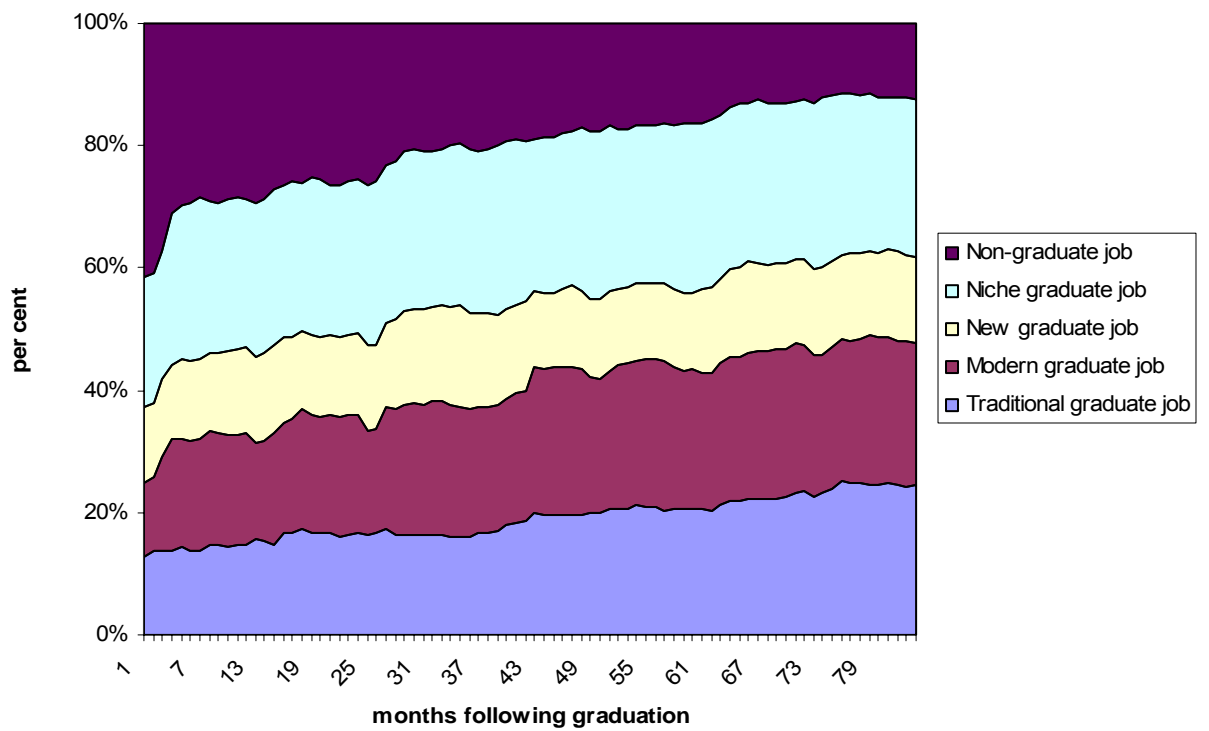
**Figure 5.9 The occupational evolution of employment among 1999 NI graduates**



**Figure 5.10 The occupational evolution of employment among 1995 UK graduates**



**Figure 5.11 The occupational evolution of employment among 1995 NI graduates**





5.4.6 Figures 5.10 and 5.11 show the types of jobs held by the 1995 cohort during the seven year period following their graduation in July 1995. These figures demonstrate the continued movement away from employment in non-graduate occupations, continuing beyond the four year point at which the 1999 cohort were observed. Figure 5.10 reveals that 17 per cent of NI graduates were employed in non-graduate occupations four years after graduation; identical to that observed among the 1999 cohort. Despite increasing trends in participation that saw the number of full time HE enrolments at NI HEIs increase by 28 per cent between 1995/6 and 2002/3 (see DELNI, 2004b), these results do not appear to indicate that graduates from the 1999 cohort are more likely to be employed in *non-graduate* occupations. Seven years after graduation, 13 per cent of the 1995 NI graduates were employed in non-graduate occupations, identical to the proportion observed for UK graduates.

## 5.5 Using degree subject knowledge and skills in employment

5.5.1 In this section we explore evidence about the relationship between higher education and the extent to which the early career trajectories of NI graduates are indicative of an appropriate integration into the labour market or of graduate under-employment. We do this by examining the extent to which graduates reported that a degree had been required for the jobs they obtained and their assessment of whether they used their degree subject knowledge or skills developed on their undergraduate programmes. The analysis will again focus on comparisons between NI graduates and those from UK graduates. Comparisons will also be made between the 1999 cohort and the 1995 cohort to consider whether we can identify any recent trends in how graduates perceive their integration into the labour market.

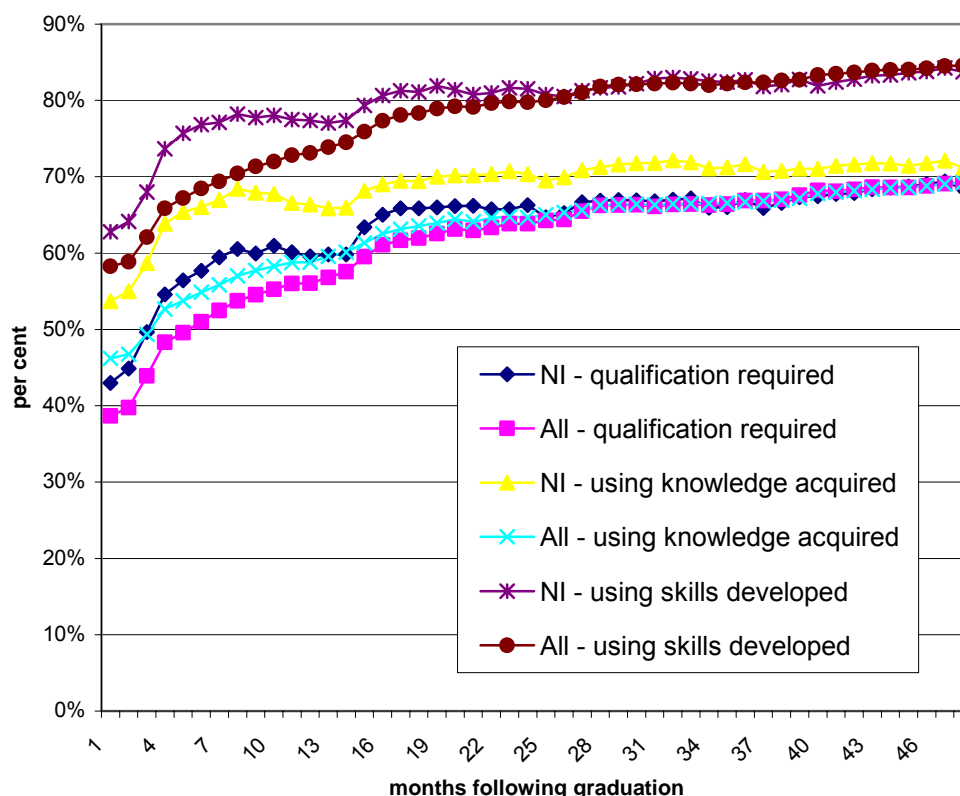
5.5.2 Figure 5.12 shows the employment trajectory profiles of the 1999 cohort. Among those NI graduates who were employed immediately following the completion of their studies, 63 per cent indicated that they used the skills that they developed on their course, 54 per cent that they used the subject knowledge they acquired on their course and 43 per cent claimed that their qualification was required for their job. Although the importance of employment experience relative to formal qualifications grows as graduate careers develop, we would expect graduates increasingly to indicate that their qualification was required and that they were using the skills and knowledge that they had developed on their course as they move away from employment in non-graduate occupations. The shapes of these profiles confirm that this is indeed the case. Four years after graduation, 84 per cent of NI graduates indicated that they used the skills that they developed on their course, 71 per cent indicated that they used the subject knowledge they acquired on their course and 68 per cent claimed that their qualification was required for their job.

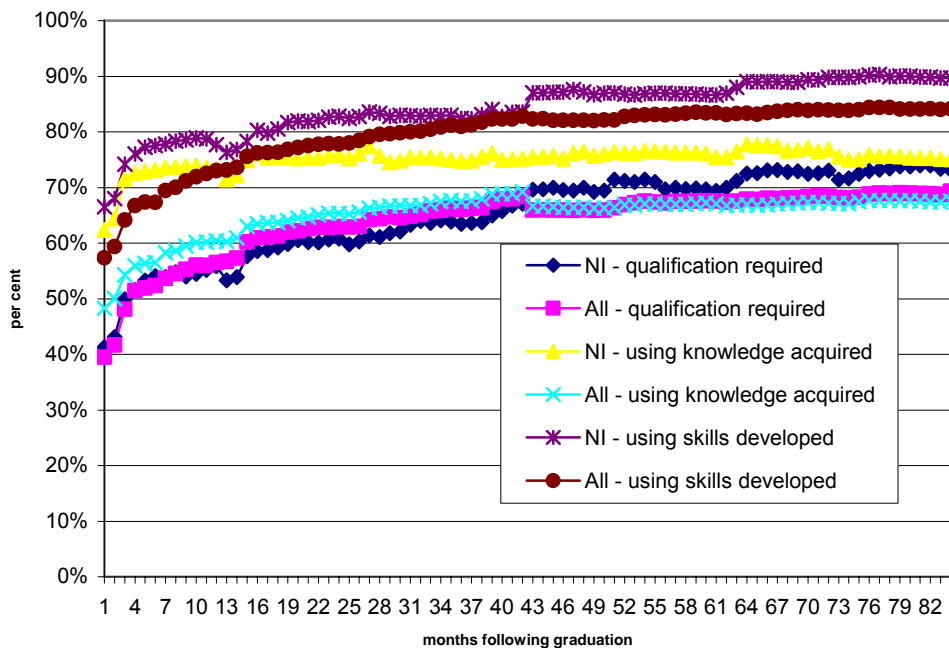
5.5.3 In terms of comparisons with the overall UK graduate pool, NI graduates appear more likely to have indicated that their qualification was required or that they were using the skills and knowledge that they had developed on their course. This difference was particularly evident

during the first 12 months following graduation. We suspect that this finding can be linked at least in part to the smaller proportion of NI graduates who initially gained employment in non-graduate occupations. Beyond 12 months after graduation, the scale of these differences diminishes, with no apparent difference four years after graduation.

5.5.4 Comparisons of such subjective assessments between the two cohorts are problematic due to differences in the time periods covered by the two surveys, with the 1995 cohort having had longer to reflect upon their early careers. It can also be seen that there is a small discontinuity in the NI series where responses to the *Class of '99* survey have been spliced together in information collected from the earlier *Moving On* enquiry. However, a consistent theme emerges among the 1995 graduates. Figure 5.13 again reveals that NI graduates were more likely to indicate that their qualification was required for their jobs or that they were using the skills and knowledge that they had developed on their courses. While this differential was only observed during the first two years following graduation among the 1999 cohort, it is shown to have persisted throughout the seven year period for which we have data.

**Figure 5.12 Use of degree subject knowledge and skills among 1999 graduates**



**Figure 5.13 Use of degree subject knowledge and skills among 1995 graduates**

## 5.6 Employment outcomes by gender, degree performance, subject and religious background

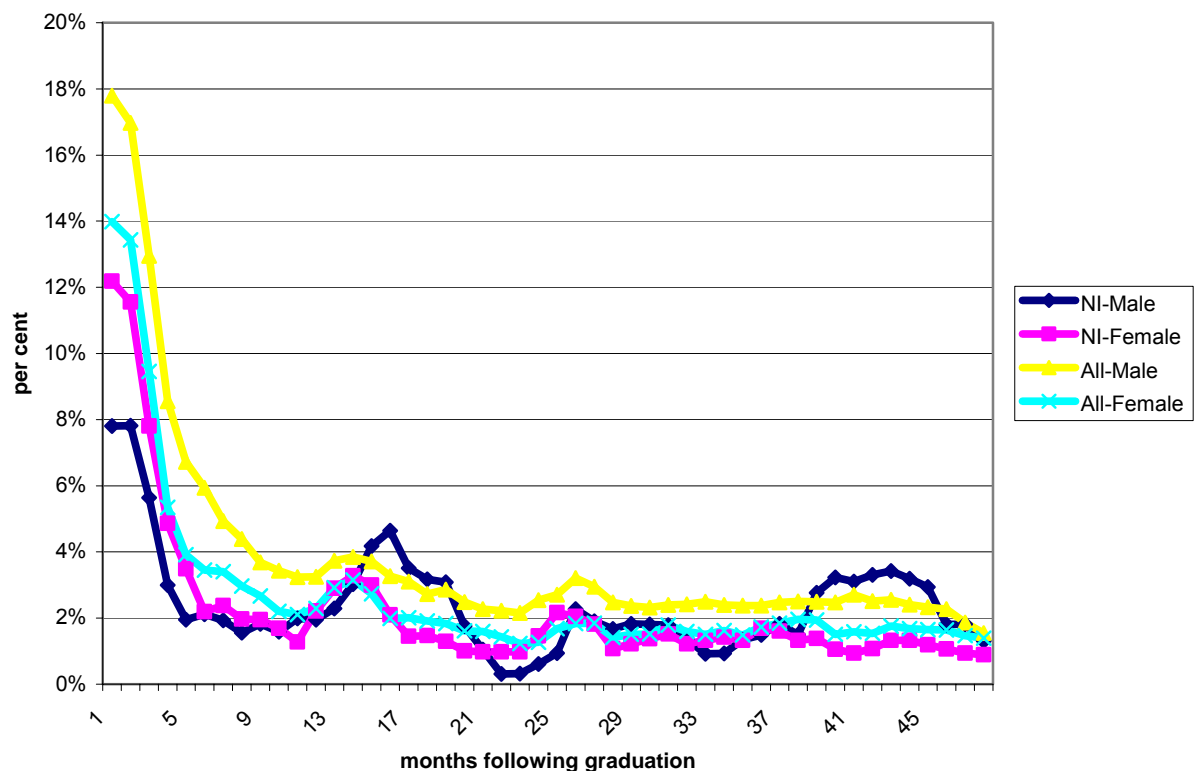
5.6.1 In this section we consider the career profiles of different groups of graduates, with comparisons being based upon gender, performance at degree level, subject studied and religious background. For each group of respondents we initially focus upon the incidence of unemployment among the entire graduate population. We then consider the share of employment in *non-graduate occupations* among those graduates who are in work during the completion of their studies. We focus upon this category of the SOC (HE) classification as it is in such jobs that it is least likely that graduates will be making full and good use of their higher education qualification.

### Gender

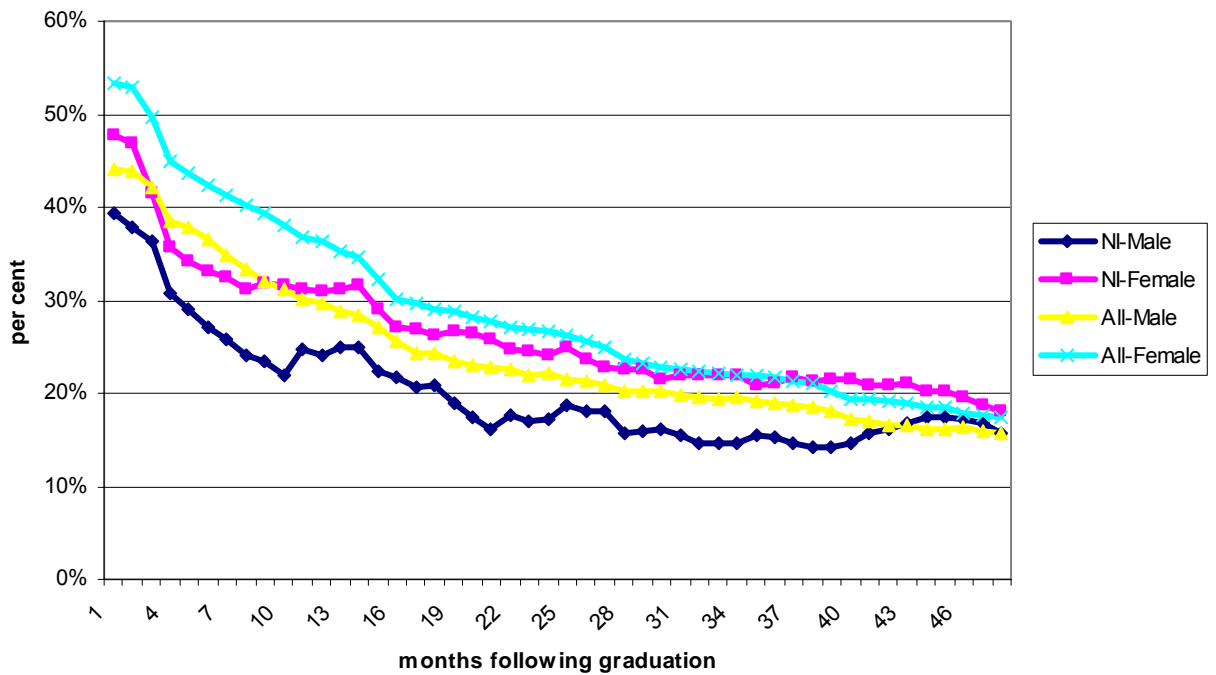
5.6.2 Figure 5.14 shows the incidence of unemployment among male and female graduates from the 1999 cohort. We find that the incidence of unemployment fell rapidly during the first twelve months following graduation. Among the overall UK graduate pool, approximately 18 per cent of males and 14 per cent of females were unemployed after completing their studies. By 12 months following graduation, the incidence of unemployment had fallen to 3 per cent among males and 2 per cent among females. This gender differential in the rate of unemployment in the 1999 cohort was observed to persist over the remaining period covered by the analysis. The smaller sample sizes available for NI graduates result in more 'erratic' unemployment profiles. During the period immediately following graduation, the incidence of unemployment is actually higher among female NI graduates. However, after six months beyond graduation, the unemployment profiles for male and female NI graduates converge.

5.6.3 Figure 5.15 shows incidence of employment in *non-graduate* occupations by gender among the 1999 cohort, with comparisons being made between NI graduates and UK graduates. In the period immediately following graduation, female non-graduate employment was approximately 10 per cent higher than that of males, both NI graduates and in the UK sample as a whole, although among both males and females, the share of employment in non-graduate occupations had been initially lower among NI graduates. Again, the smaller sample sizes available for NI graduates result in more 'erratic' profiles of employment in non-graduate occupations. However, the higher incidence of employment in non-graduate occupations among females persisted throughout the first three years after graduation. The size of this gender differential remains consistent, at approximately 8 percentage points, in contrast to the gradual narrowing of the differential observed between males and females in the overall graduate pool. Lower proportions of NI graduates (both males and females) are observed in non-graduate occupations throughout the first three years after graduating in 1999, although four years after graduation the proportions have converged to the UK average.

**Figure 5.14 Unemployment among the 1999 cohort, by gender**



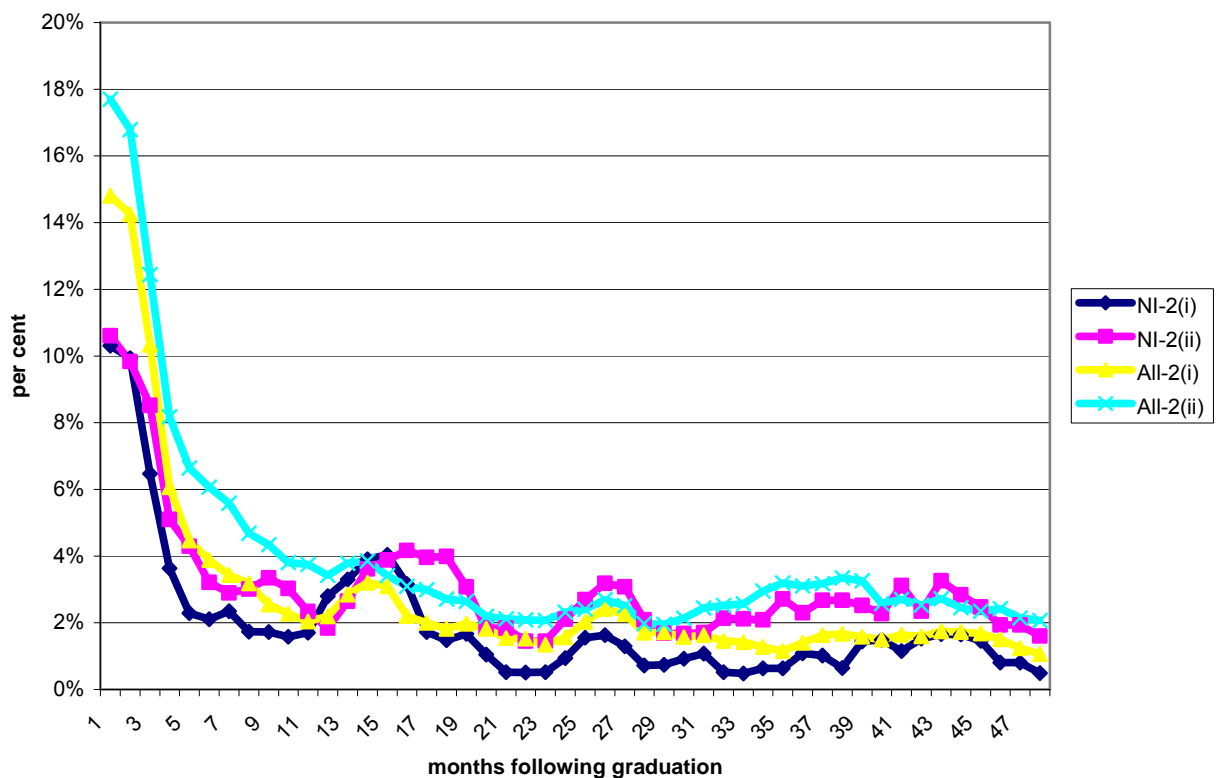
**Figure 5.15** Employment in non-graduate occupations among the 1999 cohort by gender



### ***Degree Result***

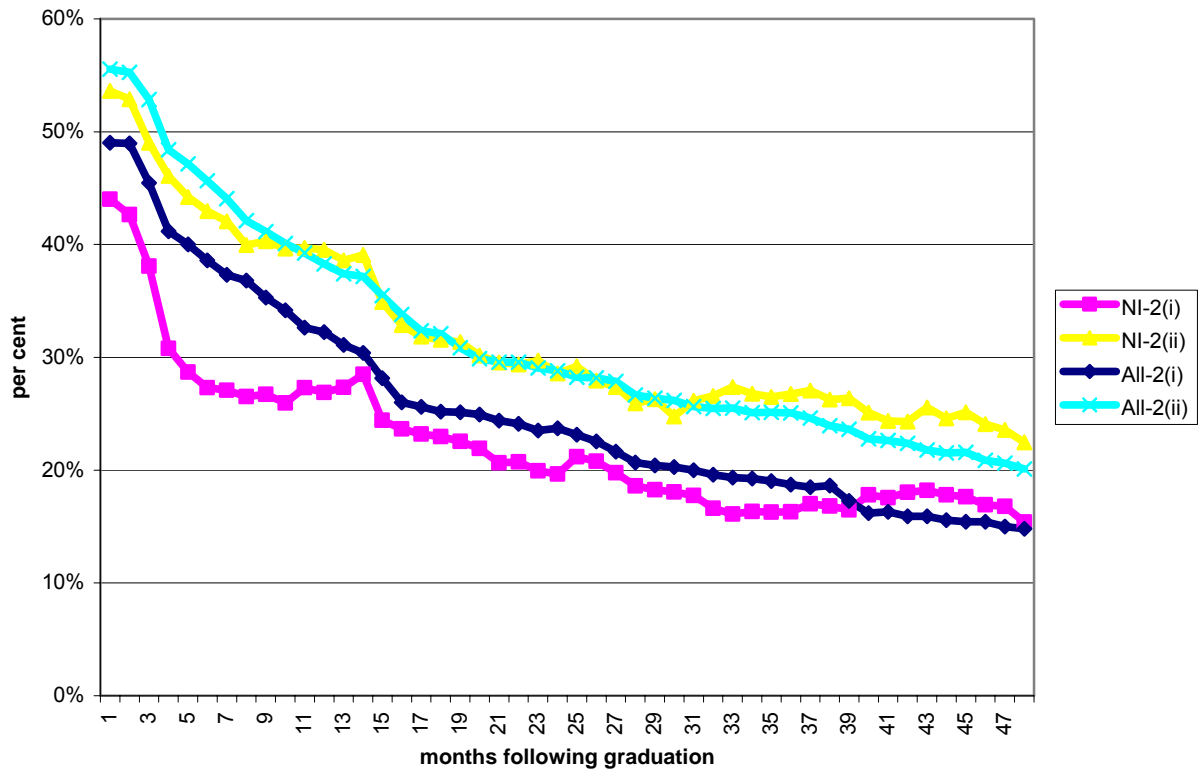
5.6.4 We next consider the career profiles of different groups of graduates based upon their degree result. Due to the relatively small sample sizes available for NI graduates, we present unemployment profiles and the incidence of employment in *non-graduate* occupations among those who gained upper second and lower second class degrees. Figure 5.16 shows the incidence of unemployment among these two groups for both NI graduates and the overall UK graduate pool. Among UK graduates, the rate of unemployment was approximately 1 to 2 per cent higher among those who graduated with a lower second class degree. This general pattern is repeated among the NI graduates.

**Figure 5.16 Unemployment among the 1999 cohort, by degree class**



5.6.5 Figure 5.17 presents profiles depicting the percentage of employed graduates who are working in *non-graduate* occupations. In addition to the relationship between degree class and unemployment observed in Figure 5.16, we observe a clear relationship where poorer performance in terms of degree class is associated with higher levels of employment in *non-graduate* occupations. Among NI graduates, 54 per cent of employed graduates who possess a lower second class degree are initially employed in non-graduate occupations. This is compared to 45 per cent of NI graduates who possess an upper second class degree. At 42 months following graduation (the end of the career history information collected from the 1999 cohort of graduates), the share of upper second class graduates in *non-graduate* occupations is observed to be 8 percentage points lower than those with lower second class degrees. This pattern is repeated among UK graduates. The effect of degree class upon employment in *non-graduate* occupations is therefore not shown to differ substantially between NI graduates and those from other locations.

**Figure 5.17** Employment in non graduate occupations among the 1999 cohort, by degree class



5.6.6 Additional statistical analyses were undertaken to consider what factors influenced academic performance at degree level. Degree performance was measured by distinguishing between those respondents who gained a first or an upper second class degree (or 'good' degree) and those who gained lower classifications of degree. The full results of this analysis are presented in Purcell *et al.* (2005). A strong relationship was estimated to exist between educational attainment at A-level and degree performance. Compared to those respondents with fewer than 10 A-level points, those with 20-29 A-level points were estimated to be more than twice as likely to have gained a 'good' degree. Those with more than 30 A-level points were estimated to be more than three times as likely to have gained a 'good' degree than the reference category. Among other results that were estimated to be statistically significant, we observed being female, regarding oneself as being extremely ambitious and having a father with a degree were positively associated with degree performance. As far as having undertaken paid work while studying, those who had worked during term time were estimated to have been three times less likely to gain a 'good' degree compared to those who undertook no paid work during the course of their studies.

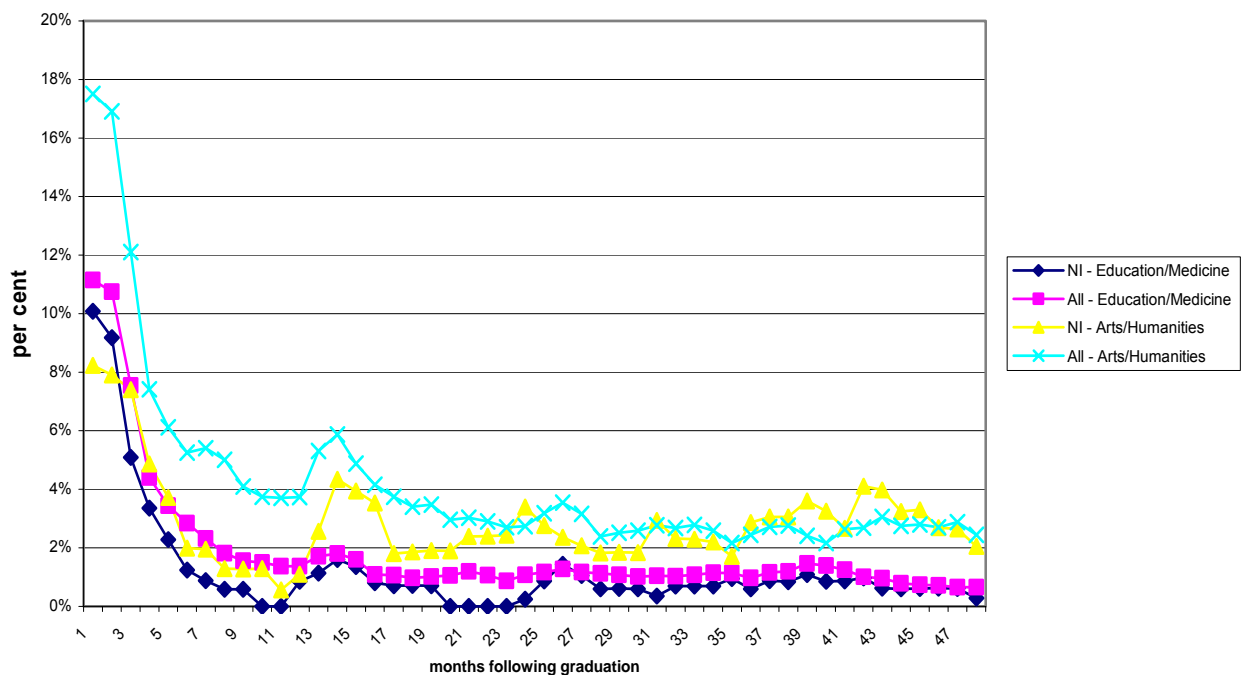
### **Subject Studied**

5.6.7 We now present information on the early career paths for different groups of graduates from the 1999 cohort based upon the subject area of the courses they completed. Respondents

were asked to record their main broad disciplinary/subject area to one of 12 categories, including a category for interdisciplinary degrees. Due to the relatively small sample sizes of NI graduates and for the purpose of making comparisons both across subject areas and between NI graduates and the overall UK graduate pool, these subject areas have been grouped into four broader categories; education, medicine and other vocational; science based; arts and humanities; and social sciences and business studies. Due to the wide diversity of courses that could form an interdisciplinary degree, we exclude this heterogeneous category from subsequent analyses.

5.6.8 Observed variations in unemployment rates across different subject areas were relatively small. For ease of exposition, Figure 5.18 shows the incidence of unemployment among NI graduates and the overall UK graduate pool for graduates from the two grouped subject areas generally regarded as representing the 'vocational' and 'non-vocational' extremes of undergraduate provision; education, medicine and other vocational, and arts and humanities. Among the overall UK sample, the rate of unemployment among arts and humanities graduates was found to be approximately 3 to 4 percentage points higher during the first 12 months following graduation than that observed among graduates from education, medicine and other vocational subject areas. The unemployment differential between these groups declined to approximately 1 to 2 per cent over the remainder of the sample period. In terms of making comparisons between NI graduates and the UK sample as a whole, it is important to note that the smaller disaggregated sample sizes of NI graduates result in more 'erratic' unemployment profiles. Furthermore, due to the more limited range of courses available from NI HEIs, we cannot be sure that the courses represented in the respondent samples are representative of courses undertaken throughout the larger and more diverse UK HEI sample. However, the general pattern of vocationally orientated degrees being associated with lower rates of unemployment is repeated among the NI graduates.



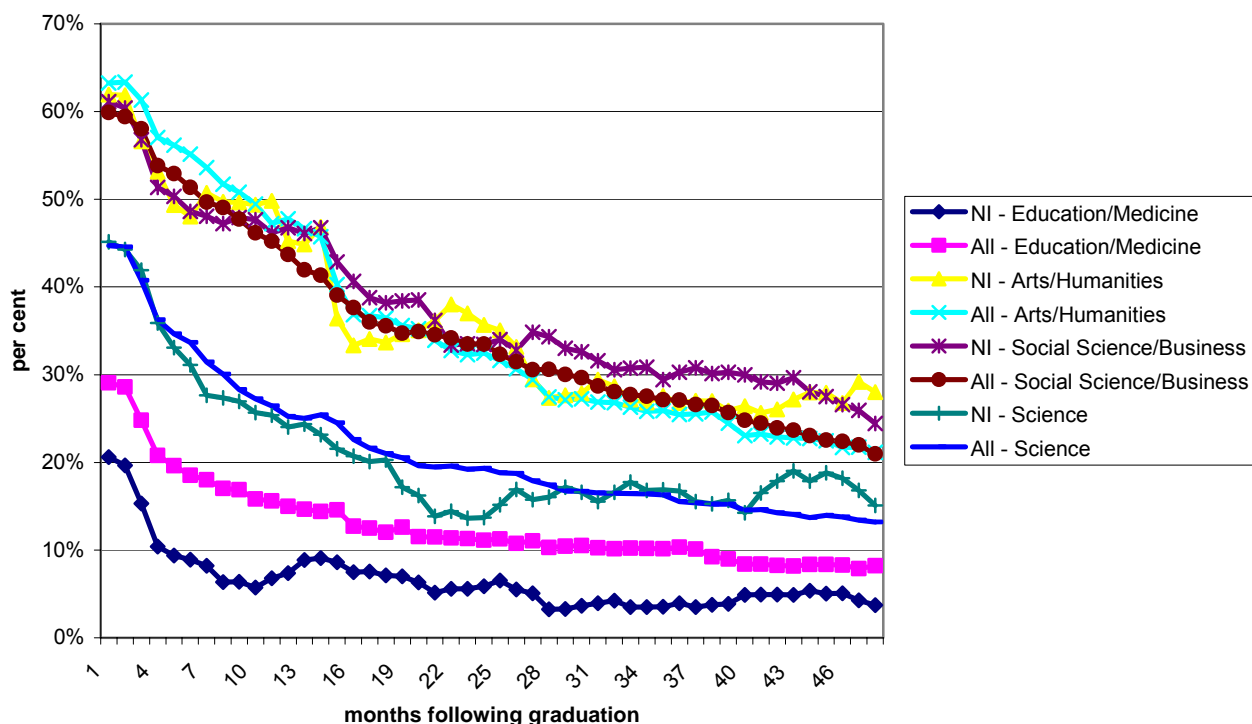
**Figure 5.18 Unemployment among the 1999 cohort, by subject studied**

5.6.9 Figure 5.19 presents information on employed graduates working in *non-graduate* occupations, according to subject studied; *non-graduate* occupations being those jobs in which it was unlikely that graduates would be required to make use of their higher education in the course of their employment. Two broad groups of subject areas can be identified in terms of the proportion of employed graduates working in *non-graduate* occupations. First, those graduates who studied vocationally orientated degrees were less likely to have been working in *non-graduate occupations*. For example, among those NI graduates with degrees in education, medicine and other vocational subjects and who were in employment, approximately 20 per cent initially worked in *non-graduate occupations* after completing their studies, but this figure had declined to approximately 5-6 per cent within two years of graduation.

5.6.10 In contrast, graduates from less vocationally-oriented subject areas tended to exhibit relatively high levels of employment in *non-graduate* occupations, particularly in the first three years following graduation. For example, approximately 60 per cent of employed NI graduates with degrees in *arts and humanities* and in the *social sciences and business studies* worked in *non-graduate* occupations following the completion of their studies: more than three times the rate of such employment among graduates from *education, medicine and other vocational disciplines*. At four years after graduation, employment in *non-graduate* occupations remains in excess of 25 per cent among these less vocational' groups of NI graduates'- once again, more than four times the rate exhibited by graduates from *education, medicine and other vocational disciplines*. For NI graduates in other subject areas, those with degrees in science and related disciplines initially exhibited rates of employment in *non-graduate* occupations of

47 per cent. Beyond two years after graduation, rates of employment in non-graduate occupations among such NI graduates generally remained between 10-15 per cent.

**Figure 5.19** Employment in non graduate occupations among the 1999 cohort, by subject studied

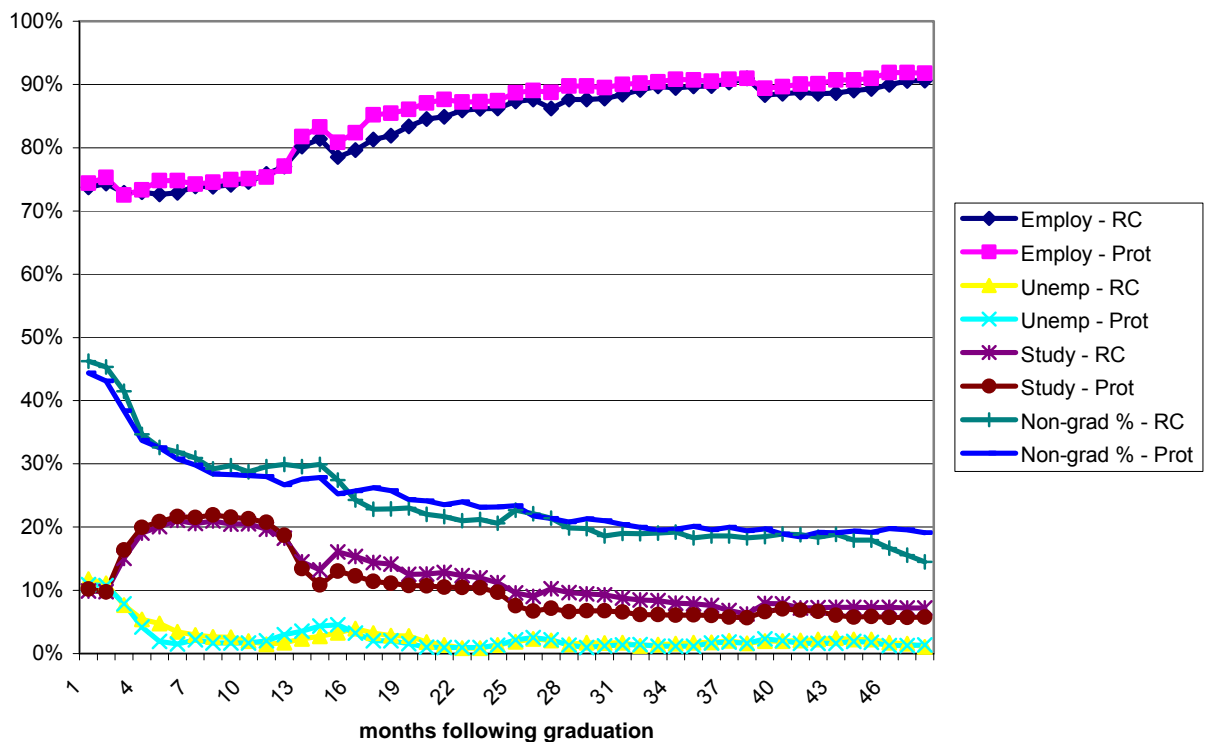


5.6.11 In terms of comparisons between NI graduates and the overall UK graduate pool, there is a high degree of uniformity in the proportion graduates from non-vocational disciplines working in non-graduate occupations. In Figure 5.19 we observe that the shape of the employment profiles relating to graduates from the *arts and humanities*, *social science and business studies* and *science and related* disciplines show little difference between the profiles of NI graduates and the overall UK graduate pool. Larger differences are observed for those graduates with degrees in *education, medicine and other vocational* disciplines, with NI graduates exhibiting a consistently lower rate of employment in non-graduate occupations than similarly classified graduates from the overall UK pool. However, it is important to emphasise both the relatively small sample sizes upon which the NI profiles are based and the disciplinary mix that can exist in these broadly defined subject areas.

### Community of Origin

5.6.12 Finally, we assess the employment outcomes of the NI graduates according to their responses to the supplementary question about community of origin. The analysis that follows is therefore able to make comparisons between NI HEI graduates who identified their religious community background as Roman Catholic or Protestant. Figure 5.20 shows both the profiles of total employment, studying and unemployment among Roman Catholic and Protestant NI graduates. Figure 5.20 also presents the share of employment within non-graduate occupations among employed NI graduates by community of origin.

**Figure 5.20 Early career profiles of NI graduates, by community of origin**



5.6.13 Little difference is revealed in the shape of these profiles between the two main communities in Northern Ireland. After 12 months beyond graduation, it could be seen that rates of employment among Protestant graduates were generally 1-2 per cent higher than those among Catholic graduates. These slightly lower rates of employment among Catholic graduates could be accounted for by the higher proportion of such graduates undertaking further study. However, it is emphasised that these differences are small and could be attributed to sampling variability. No differences could be observed in the unemployment profiles of these groups, with the experience of unemployment declining rapidly during the months immediately following graduation. Finally, among those graduates in employment, propensity to be employed in a *non-graduate* occupation was not observed to vary by community of origin.

## 5.7 Summary

- Three quarters of Northern Ireland graduates from the 1999 cohort entered directly into employment immediately following the completion of their studies. Three and a half years after graduation, more than 90 per cent were in employment. The pattern of assimilation into paid employment among NI graduates was similar to that observed among UK graduates in general. Participation in further study during the first 12 months following graduation was shown to be higher among NI graduates than among the UK graduate sample.
- Over half of NI graduates who entered directly into employment were employed on a permanent or open ended basis. This figure increased steadily over time as NI graduates were increasingly assimilated into paid employment. There was little difference observed in the contractual status of NI graduates compared to the UK graduate sample. Fewer NI graduates from the 1999 cohort were employed on a fixed term basis compared to 1995 NI graduates.
- Despite increasing trends in participation, the findings do not appear to indicate that 1999 NI graduates were more likely to have indicated that their qualification had been required at the start of their careers and that they had been using their graduate skills and knowledge, but by around two years after graduation, the UK and NI trends had converged, although NI graduates remained more likely to be using their subject knowledge. The 1995 graduate sample, conversely, remained more likely than the UK sample as a whole to be in jobs that required their degree and used their skills and knowledge.
- Being female, having achieved a relatively low degree result and studying non-vocational subjects were associated with increased levels of non-graduate employment. These relationships held among both the overall UK graduate sample and for NI graduates. Labour market outcomes among NI graduates in terms of rates of employment, unemployment and employment within non-graduate occupations were not shown to vary by religious community of origin.

## CHAPTER 6

### THE SITUATION OF 1999 NI GRADUATES IN 2003/04

#### 6.1 Introduction

- 6.1.1 This chapter focuses predominantly on the situation of the 1999 graduates at the time of the survey in 2003/04, comparing the occupational profiles and outcomes of those who graduated from NI and UK HEIs. We examine the types of jobs they had, distribution of employment by sector and occupation, and the characteristics of jobs, in terms of earnings and other aspects. In this chapter, we are particularly concerned with the quality of jobs and career opportunities available to graduates in Northern Ireland. We investigate the characteristics associated with being in a non-graduate job, according to the SOC(HE) classification. Finally, we look at the extent to which the 1999 NI graduates perceived themselves as being in appropriate employment for people with their skills and qualifications and compare their responses to those of the 1995 graduate cohort. We saw in Table 4.12 that NI HEI graduates were somewhat less likely than those who had studied in UK to be in employment related to their longer-term career plans at the time of the survey and to be somewhat more likely to be in postgraduate study, but otherwise there were no major differences. We also saw in Figure 4.6 that NI HEI graduates were more likely to have required a degree for their jobs and more likely than UK graduates to be required to use both their graduate skills and knowledge. This suggests that they have been more able to use their higher education to gain employment advantage. How far do their reports of their employment experiences bear this out?
- 6.1.2 Graduates in Northern Ireland were very much more likely to work in the public sector than UK graduates as a whole, as Table 6.1 illustrates. This reflects the fact that the NI labour market is much more dominated by public sector employment than the UK labour market as a whole, with 32 per cent of employee jobs in the public sector compared with 19 per cent.

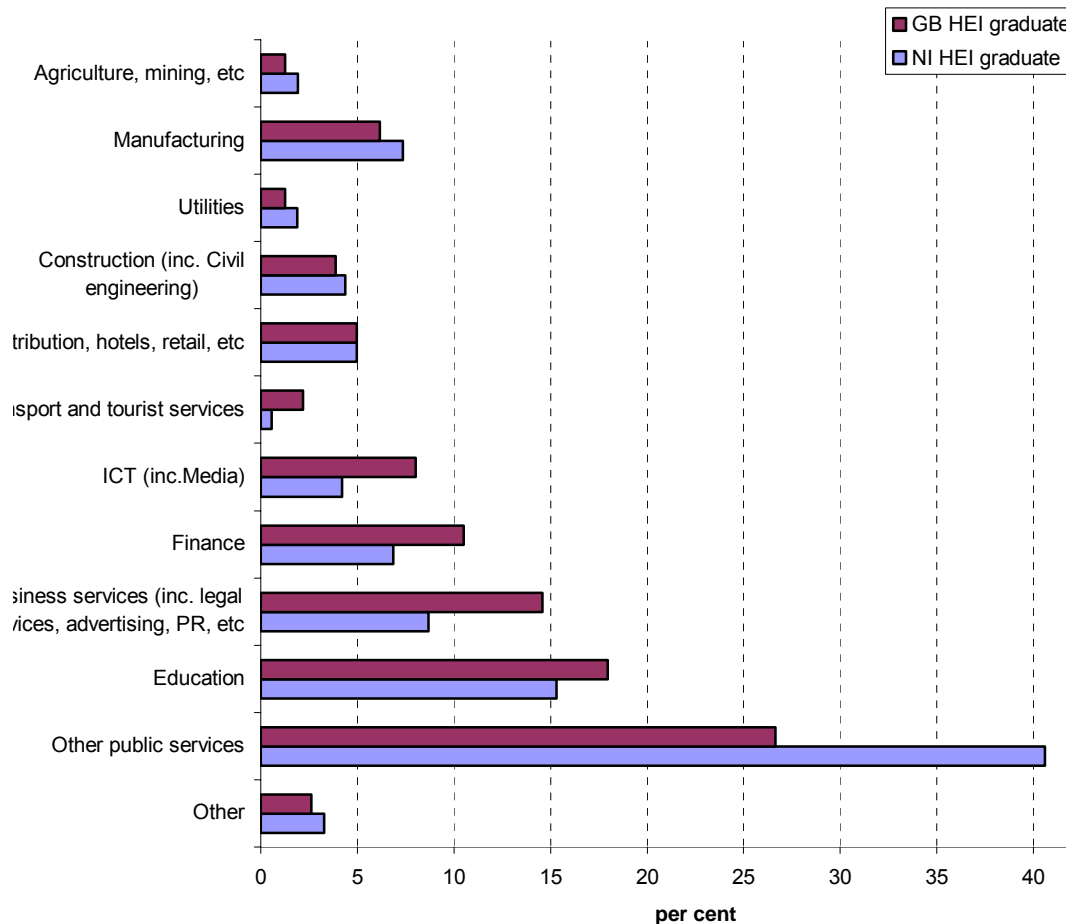
**Table 6.1 Broad sector of employment, comparing 1999 NI HEI and other graduates in employment at the time of survey**

	NI HEI graduates	UK HEI graduates
Public sector	51.6	38.5
Private sector	40.6	54.5
Not-for-profit sector	5.4	5.6

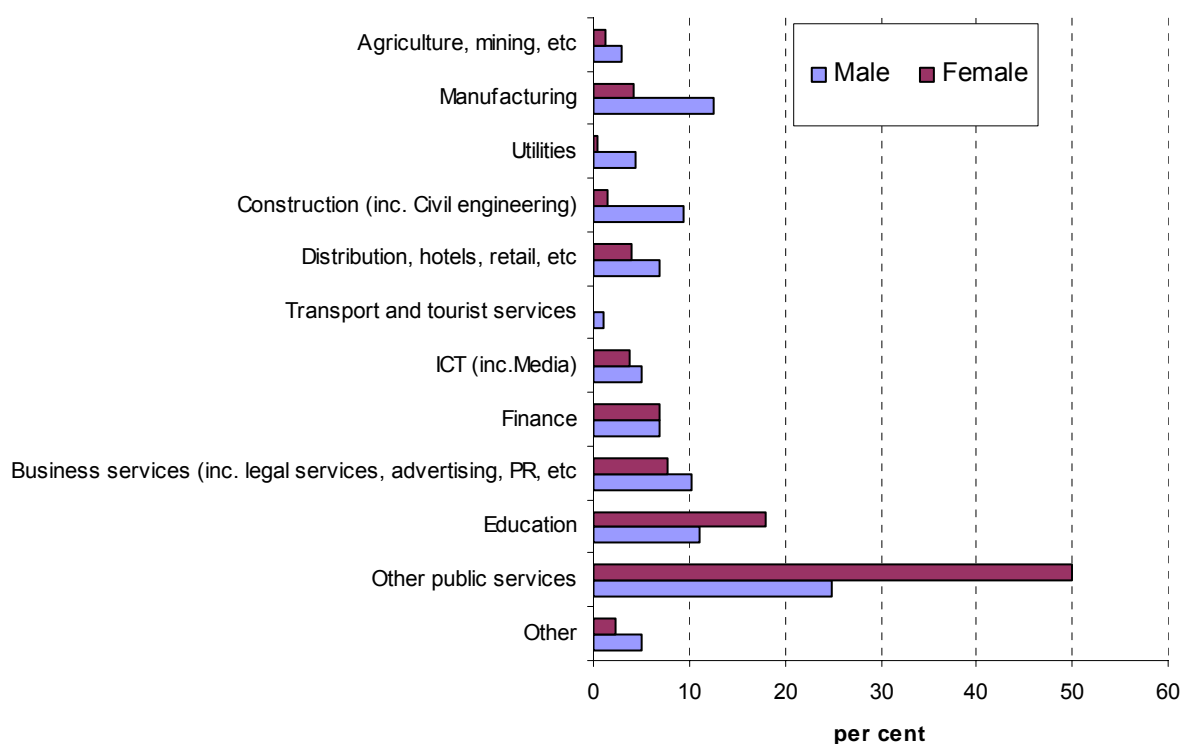
- 6.1.3 A more detailed examination of the sectoral distribution of the two sub-samples illustrates this major difference, as Figure 6.1 shows, and goes some way towards providing an explanation for the average differences in earnings between NI and UK

graduates explored later in this chapter. NI graduates, in addition to being more likely to be employed in Other Public Services, are less likely to be in the higher-earning sectors of ICT, Finance and Business Services.

**Figure 6.1 Sector of employment, 1999 graduates, comparing NI HEI graduates and others**



6.1.4 Comparing male and female NI HEI graduates, we find similar differences in the sectoral gender distribution to those of the sample as a whole, with women particularly likely to work in the public sector services and men more likely to work in manufacturing and construction, as Figure 6.2 shows – but NI 1999 female graduates were twice as likely as their male comparators to work in Other Public Services and, in fact, half of all the female sample were concentrated in this area of employment. Women in NI were less likely to be employed in teaching than the UK female sample as a whole (18 per cent as opposed to 24 per cent), and very considerably more likely to be employed in Other Public Services (50 per cent as opposed to 32 per cent). The question is, were they working in occupations that used and built upon their higher education and had their degrees provided access to ‘good jobs’?

**Figure 6.2 Sector of current employment, NI HEI grads only, by gender**

6.1.5 A traditional measure of job quality has been security of employment and although the pursuit of workforce flexibility and the increasing complexity of transactional relationships among organisations has led to a proliferation of contractual relationships at all levels of skill and status, temporary employment is generally less well-rewarded, responsible and intrinsically satisfying, as well as less secure, than open-ended employment. Table 6.2 compares the contractual status of the NI and UK HEI 1999 *alumni* in full-time employment at the time of the survey. There is no necessary relationship between contractual status and whether graduates were in employment that they regarded as related to their longer term career plans.

**Table 6.2 Contractual status of current employment, 1999 graduates**

	NI HEI graduates	UK HEI graduates
Permanent or open-ended contract	77.5	81.4
Fixed-term contract	12.6	11.1
Probationary period prior to confirmation	3.1	3.3
Self-employed*	0.8	0.5
Temporary, through an agency	1.4	1.5
Other temporary or casual	1.6	0.8
Data not available	2.0	1.4
N (Weighted)	4725	60110

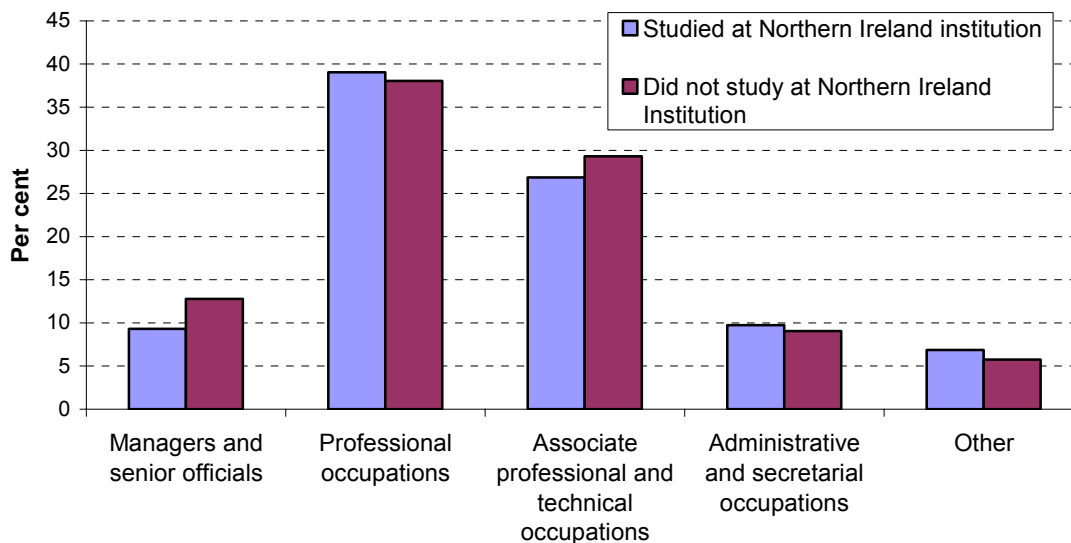
\*Those who had described themselves as self-employed were not included in this analysis, so that these are respondents who classified themselves as full-time employees who stated that their contractual status was self-employed: what is sometimes referred to as 'dependent self-employment' where the self-employed person works full time for a particular client organisation.

6.1.6 The lower likelihood of being in permanent or open-ended employment and greater propensity of NI HEI graduates to be in fixed term or other temporary employment may reflect the higher proportions in public sector employment and the greater stability of the NI labour market. For example, one graduate working as a supply teacher commented on the low turnover of staff in such posts and the reluctance of the employer to commit to the employment of new staff:

*'...particularly in Catholic areas, you stay near your family and people don't move around as much. The school I'm in there are teachers coming to the end of their careers in their fifties and they're looking for early retirement packages and the education board are not prepared to offer them so what they do is not relinquish their post but go on long term sick leave, like stress, and then people like me are taking on those vacancies but we're not being made permanent because the job still belongs to the person who's off.'*  
(077, female education graduate, substitute teacher, £21k-£24k)

6.1.7 A comparison of the occupations held by NI HEI and other UK HEI graduates four years after graduation shows little difference between the two groups, but there was a somewhat lower propensity for the NI graduates to be managers and senior officials or associate professionals, indicative of the concentration in service and public sector jobs.

**Figure 6.3 Current occupation (SOC 2000 Major Group), comparing NI HEI graduates with other UK HEI graduates**

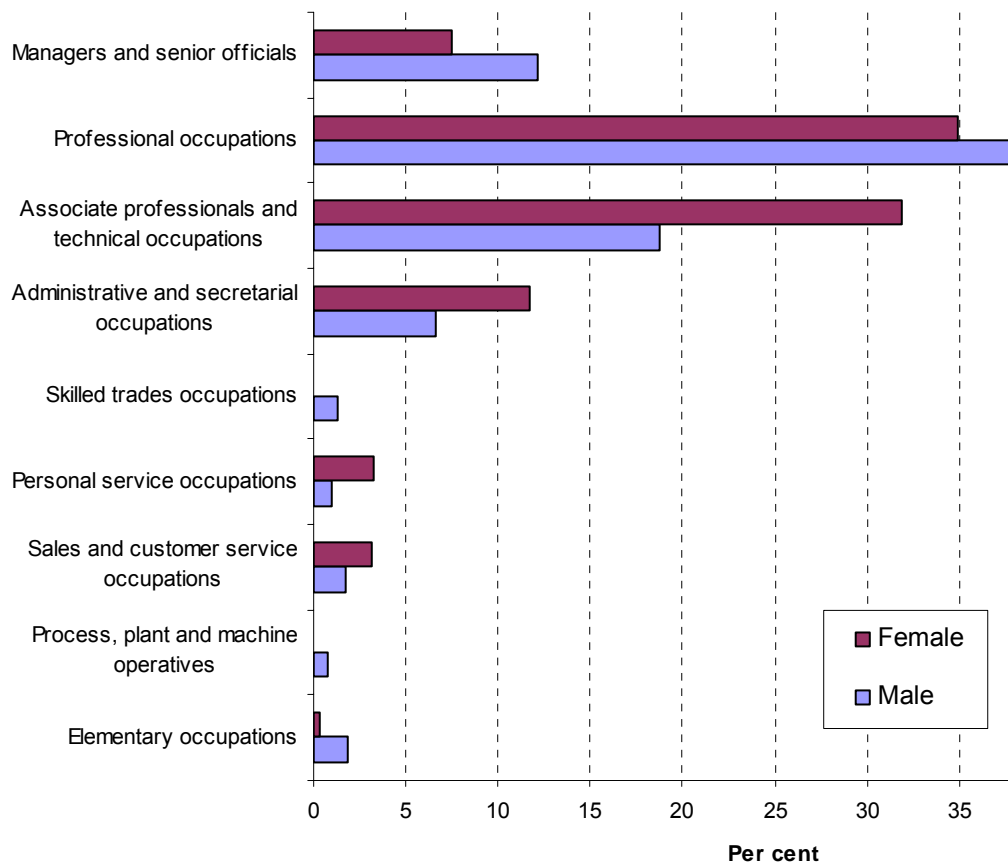


6.1.8 If we compare the occupational distribution of NI HEI graduates by gender, however, we find very distinct differences, with men more concentrated in the higher-status and generally higher-level occupational areas: managers and senior officials rather than administrative and secretarial occupations; professional rather than associate professional occupations. In the UK sample as a whole, we find similar tendencies but not the same degree of gender polarisation. For example, 40 per cent of males and 34 per cent of females in the UK sample as a whole were in professional occupations and 25 per cent of males and 34 per cent of females in associate professional occupations – whereas in the NI HEI sample, the relative professional proportions were 45 per cent and 35 per cent,



and the relative associate professional proportions were 18 per cent and 32 per cent, as Figure 6.4 shows.

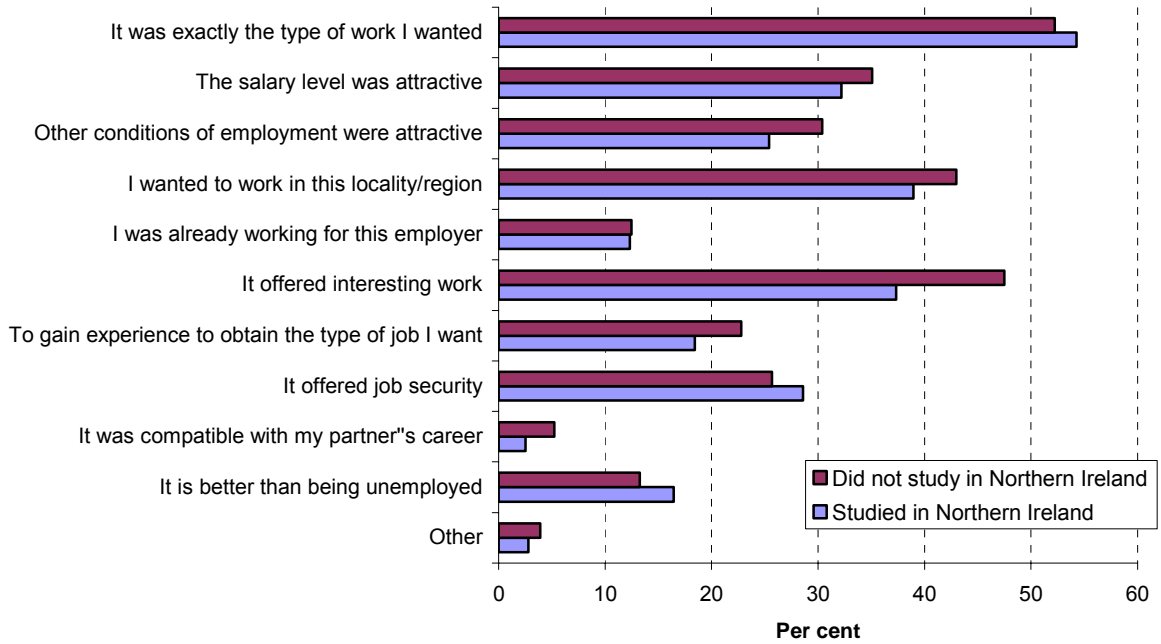
**Figure 6.4** Current occupation (SOC 2000 Major Group), comparing male and female NI HEI graduates



## 6.2 Employment characteristics

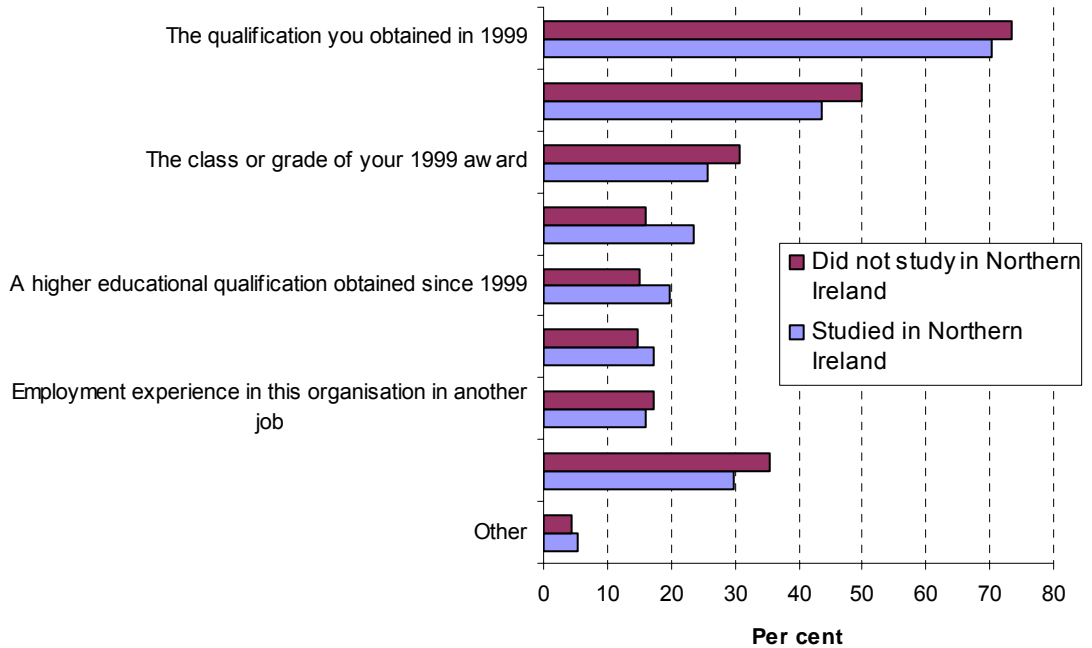
6.2.1 In the section which follows, we assess the extent to which the job characteristics reported by NI HEI graduates indicate that they are likely to have been in appropriate employment for people with their skills and qualifications, comparing them with graduates from other UK HEIs. We asked survey respondents why they had taken their current jobs, and compare the reasons given by NI and UK HEI graduates in Figure 6.5. This suggests that at one extreme, a slightly higher proportion of NI HEI respondents had achieved exactly the kind of employment they desired, but at the other end, lower proportions had taken jobs for positive reasons.

**Figure 6.5** Reported reasons for deciding to take current job, comparing NI and UK HEI graduates



6.2.2 Respondents were asked a series of questions, the answers to which indicated how various aspects of their qualifications and experience had been important in enabling them to access their current occupations. The variation in response between those who studied at NI HEIs and those who studied at GB HEIs is shown in Figure 6.6.

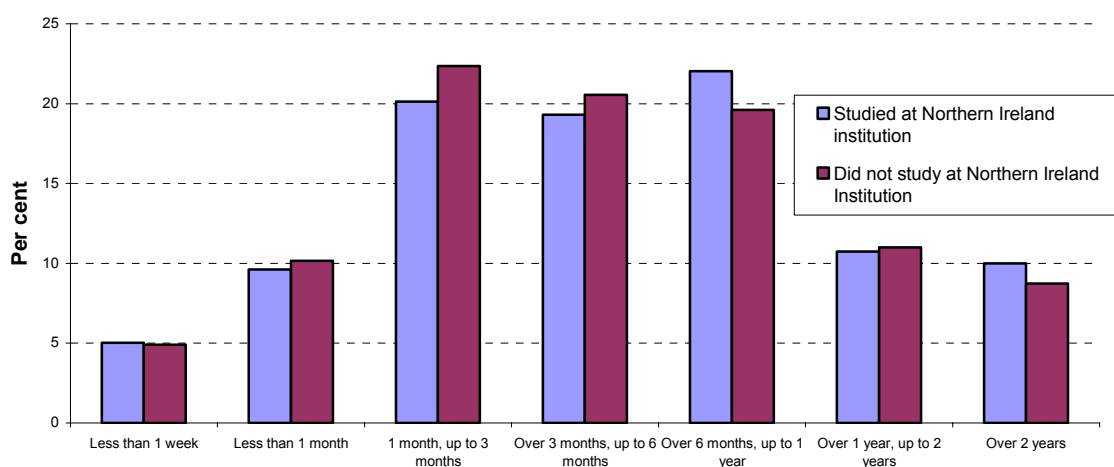
**Figure 6.6** Importance of credentials and experience in getting current job, comparing 1999 NI and UK graduates



6.2.3 The core reason for undertaking the investigation was to assess the extent to which the graduates were in jobs that required and used their higher education. The relative distributions show clearly that members of the NI HEI cohort were less likely to have required their qualifications than their GB comparators. This supports the picture provided earlier (Figure 5.12) of the lower likelihood throughout the period between graduation and the point at which they were surveyed that they were using their degree subject knowledge and skills than members of the sample as a whole. The exceptions were those who had accessed jobs as a result of acquiring postgraduate qualifications or professional recognition of their courses; a clear reference to those who had gone into public sector services such as teaching and healthcare. When asked directly about their current job at the time of the survey, NI HEI graduates were slightly less likely to have reported that a degree had been required for their current job (61 per cent compared to 64 per cent of those in employment), and somewhat less likely to have said that the skills acquired on their 1999 course were used (74 per cent compared to 78 per cent), although their propensity to report use of degree knowledge was identical (two thirds) to the GB sample.

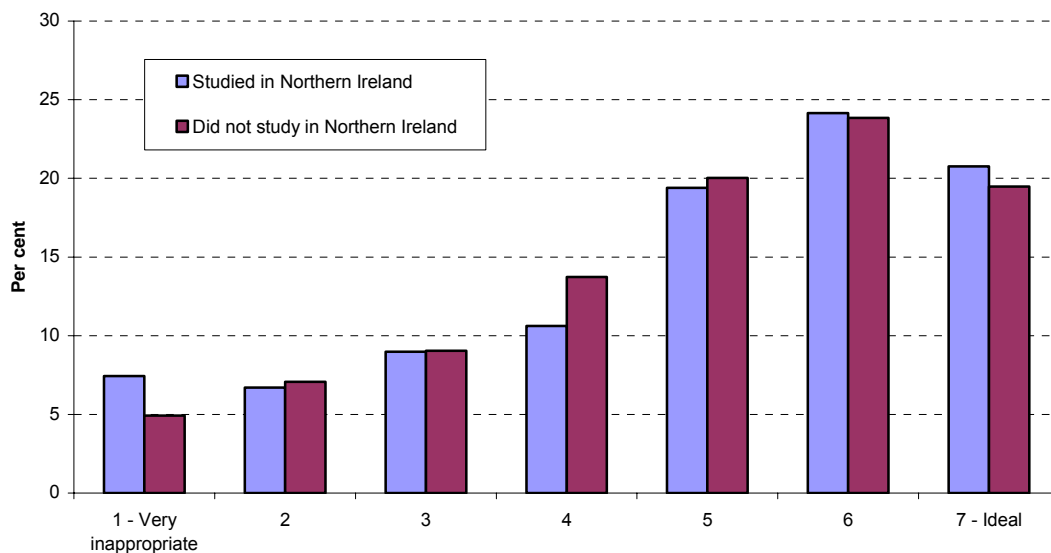
6.2.4 A key measure of occupational and social status used by labour market statisticians is the response to the question “How long did it take you to learn to do your current job competently?” and although this is flawed by the likelihood that graduates will respond at different levels (-do they count the five years of architecture training or only the three months to become accustomed to the specific practices of the new organisation and environment?) the problem is the same for both sub-samples, so allows for comparison of similarly-qualified sub-samples such as these. Figure 6.7 shows that NI HEI graduates, on average, reported a longer learning curve; although almost identical proportions were at the ‘walk in and do it’ end of the spectrum.

**Figure 6.7** How long did it take to learn to do current job competently, comparing NI HEI graduates and others



6.2.5 In Chapter 5 we explored the extent to which 1999 NI graduates were required to have a degree and use the skills and knowledge they had acquired on their undergraduate degree programmes, compared to the GB graduates who completed similar courses. In this chapter we go on to look in a little more detail at their current jobs at the point at which the survey was undertaken, four years after they had graduated. We asked graduates to rate their perception of the extent to which their current job was an appropriate job for someone with their qualifications, on a scale of 1-7 where 1 equated with 'very inappropriate' and 7 with 'ideal'. Figure 6.8, showing the distributions of the NI and GB HEI scores, suggests (as other comparative data has done) a tendency for NI respondents to be more likely to respond at the positive or negative extremes. Does this mean that they are more likely to be both highly successful and unsuccessful in the labour market? We will look at indicators of relative reward and satisfaction, moving on in the next section to assess the earnings evidence.

**Figure 6.8 Appropriateness of current job, comparing 1999 NI HEI and GB graduates**

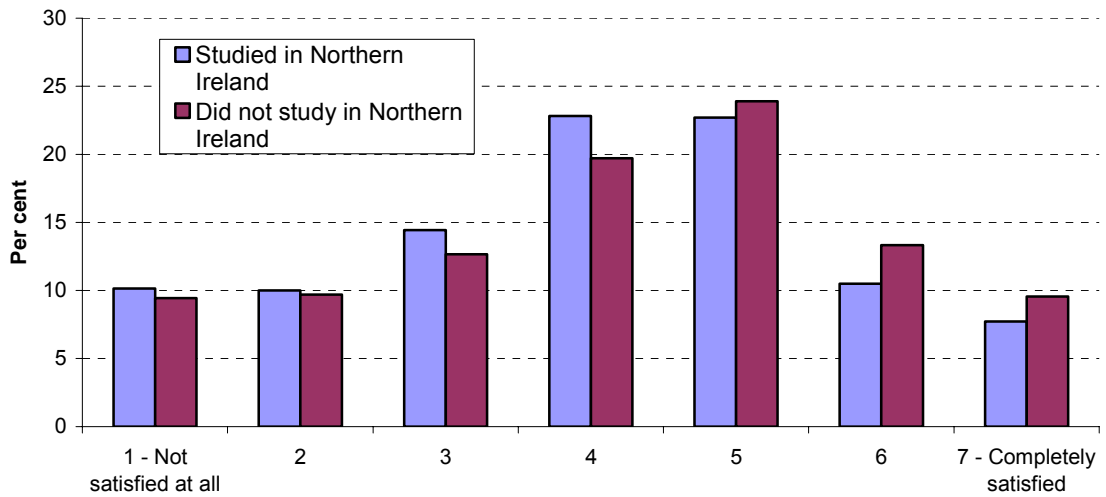


6.2.6 Further exploration of these responses by subject reveals that for both NI and GB HEIs, graduates who had completed courses at the 'vocational' end of the spectrum – education, medicine or maths and computing - were most likely to report that they were in very appropriate jobs. Those at the less vocational extremes of humanities, languages and social sciences were most likely to have reported that their current job was inappropriate.

### 6.3 Alternative measures of job quality

6.3.1 Figure 6.9 shows the same difference in satisfaction between NI and GB HEI graduates with reference to perceptions of promotion prospects, with NI graduates less likely to be sanguine about the possibility of promotion.

**Figure 6.9 Satisfaction with promotion prospects in current job, comparing NI and GB HEI graduates**



6.3.2 We also asked respondents to consider the extent to which they enjoyed and accessed work characteristics normally considered as benefits and Figure 6.10 shows the relative achievement of these for survey respondents who studied at NI and GB HEIs.

**Figure 6.10 Characteristics of current job, comparing NI and GB HEI samples**

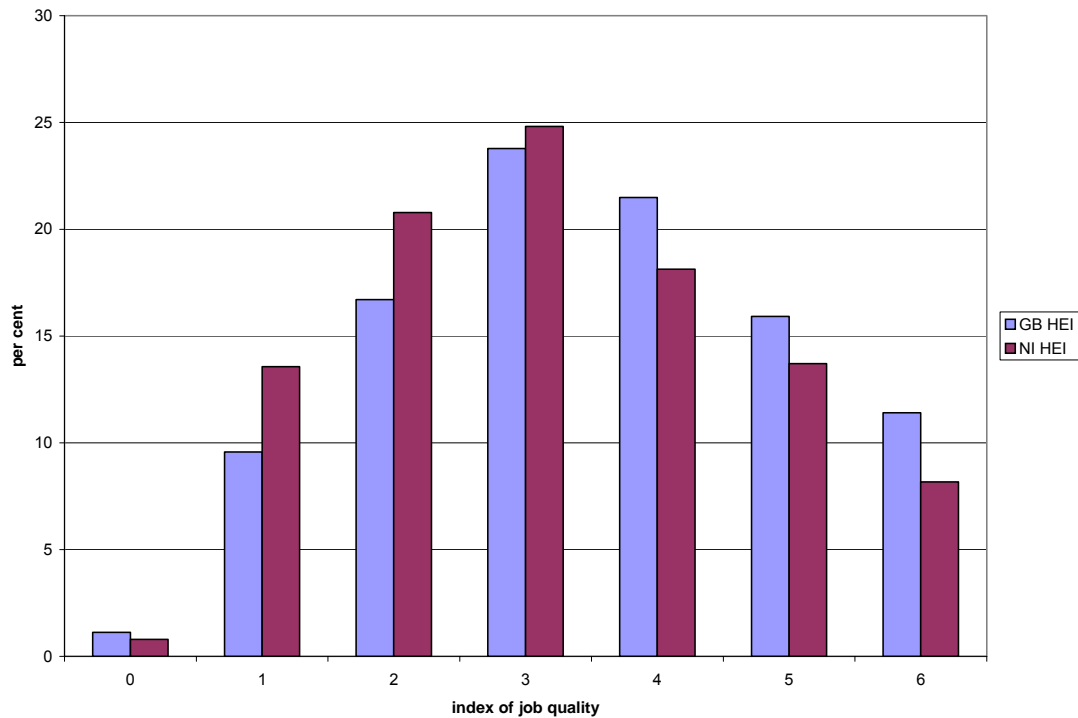


The reported incidence by the 1999 graduates of having these characteristics in their current jobs suggests that the Northern Ireland graduates were somewhat less likely to have them than those from other UK HEIs, apart, marginally, for the likelihood of reporting long-term security and socially-useful work – both attributes related to public sector employment.

6.3.3 We now examine the cumulative impact of these characteristics in more detail, using an index of positive job characteristics based on selected items from among the characteristics assessed in Figure 6.10, deemed to be applicable across the occupational spectrum and indicative of job quality:

- competitive salary
- continual skills development
- interesting and challenging work
- long term security
- progressive and dynamic organisations
- working with people you enjoy socialising with

An index was constructed from these six factors by assigning one point to each factor they indicated for their job at the time of the survey and summing across all six factors. Figure 6.11 shows the distribution of this derived index constructed from responses to these questions in the current enquiry, contrasting responses for those graduates from NI HEIs with those who graduated from HEIs elsewhere in the UK. It can be seen that the overall shapes of these two distributions were fairly similar, with the modal response suggesting that about one quarter of the graduates from each group are able to identify three positive features about their current job that contribute to the index of job quality. However, there is some indication that those who graduated from GB HEIs were more likely to report that their job provided positive features as recognised by this index of job quality. Among those who graduated from NI HEIs, 40 per cent indicated that their job provided four or more positive features as identified by the index of job quality, compared to approximately half of graduates from GB HEIs. Reinforcing this disparity, 36 per cent of graduates from NI HEIs indicated that their jobs provided less than three positive attributes compared with only 28 per cent of graduates from GB HEIs.

**Figure 6.11 Comparisons of the index of job quality**

6.3.4 Table 6.3 presents the average values of the index of job quality for different groups of survey respondents in our sample. The lower scores for the job quality index among graduates from NI HEIs is also shown at the base of Table 6.3, with the average job quality score among graduates from NI HEIs being 3.2 compared to 3.5 among those in employment who graduated from HEIs elsewhere in the UK. Compared to the objective classification by SOC (HE) into graduate and non-graduate occupations, an individual's subjective assessment of the positive attributes provided by their employment showed less variation according to the various characteristics considered in the Table 6.3. The analysis reveals that factors such as gender, disability, ambition, spells of unemployment and migration were associated with variations in the size of the index of job quality. These patterns were found among graduates from both NI HEIs and those who graduate from elsewhere in the UK. However, in contrast to the earlier analysis of the characteristics associated with employment in non-graduate occupations, we observe that average values of the job quality index showed little variation by degree subject or by degree class.

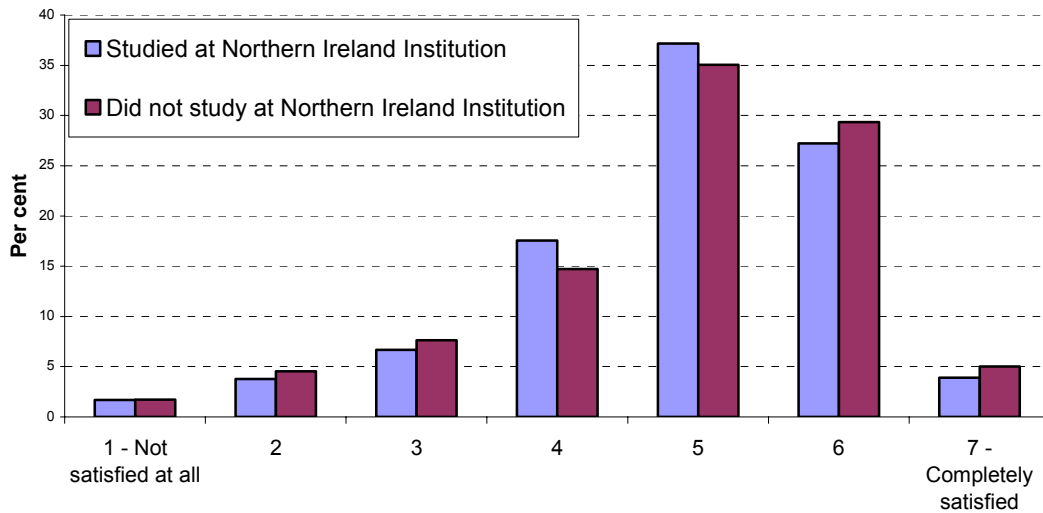
**Table 6.3 Comparisons of average scores of the job quality index for 1999 graduates 4 years after graduation**

	Graduated from GB HEI	Graduated from NI HEI
Male	3.6	3.3
Female	3.4	3.2
No long term illness or disability	3.5	3.2
Long term illness or disability	3.0	2.6
Classified self as 'Not ambitious'	3.4	3.1
Classified self as 'Extremely ambitious'	3.8	3.5
A levels - 0 to 9 points	3.3	3.2
A levels - 10 to 19 points	3.5	3.1
A levels - 20 to 29 points	3.6	3.2
A levels - 30 points or more	3.7	3.6
Education, medicine and other vocational	3.5	3.3
Arts and humanities	3.4	3.1
Social sciences and business studies	3.4	3.2
Science and related	3.6	3.3
First class	3.5	3.3
Upper second class	3.5	3.2
Lower second class	3.4	3.2
No spells of unemployment since graduation	3.5	3.3
At least one spell of unemployment since graduation	3.3	2.9
Moved from pre-university region	3.6	3.4
Stayed in pre-university region	3.4	3.1
No work placement	3.4	3.2
Work placement	3.7	3.2
Average score	3.5	3.2
Population	61,935	4,984
Unweighted sample	6,397	961

6.3.5 In Chapter 5, we discussed, with reference to differences in outcomes according to religious denominational community background, our use of several of these job attributes as an index of job quality. Figure 6.12 shows the distribution, by job quality score, of the NI and GB HEI samples, which shows very clearly the composite impact of assessments about job characteristics by the NI HEI graduates.

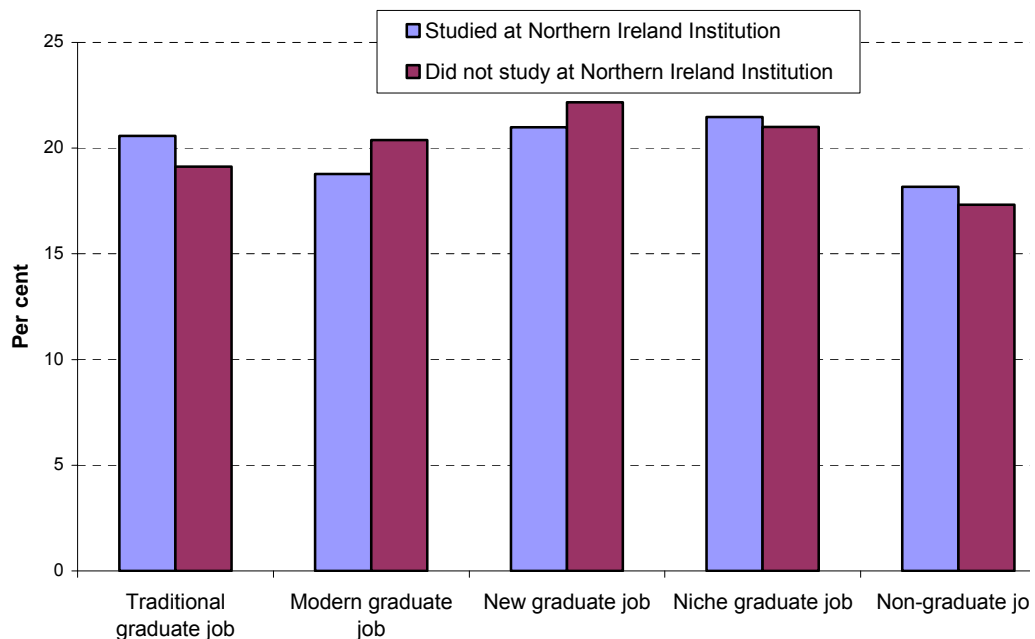


**Figure 6.12 Overall satisfaction with current job, comparing 1999 NI HEI and GB HEI graduates**



6.3.6 To complete this section on job quality and appropriateness of employment for graduates, we compare the SOC (HE) distribution of the two HEI groupings. Figure 6.13 again shows that NI HEI graduates were more likely to be in both traditional graduate jobs and non-graduate jobs – and also more likely to be in *niche* graduate jobs – a category which includes both unequivocally degree-requiring employment and jobs on the graduate/non-graduate boundaries – reflecting change in the supply more than in the demand for graduate skills and knowledge (Elias and Purcell 2004a).

**Figure 6.13 SOC (HE) distributions of current occupations, comparing NI and GB HEI graduates**



6.3.7 If we focus in to the *niche* graduate jobs in Other Public Services among the NI HEI respondents, we find that 52 per cent were nurses, midwives and health visitors and very few of the remainder appear to fit into the latter 'ambiguous' category (although they are certainly recently-developed areas of graduate employment, as their job titles indicate:

- Area Youth Worker,
- Audiologist,
- Community Development Officer,
- Consumer Affairs Officer,
- Executive Officer,
- Practice Manager,
- Police Officer.

On the other hand, the evidence revealed in earlier sections about the higher levels of dissatisfaction, lower average earnings and lower job quality among NI HEI graduates – and this higher incidence of being in a SOC (HE) non-graduate job, suggests that it is worth exploring the factors associated with this outcome, and we do this in the next section.

#### **6.4 Who is in a non-graduate job four years after graduation?**

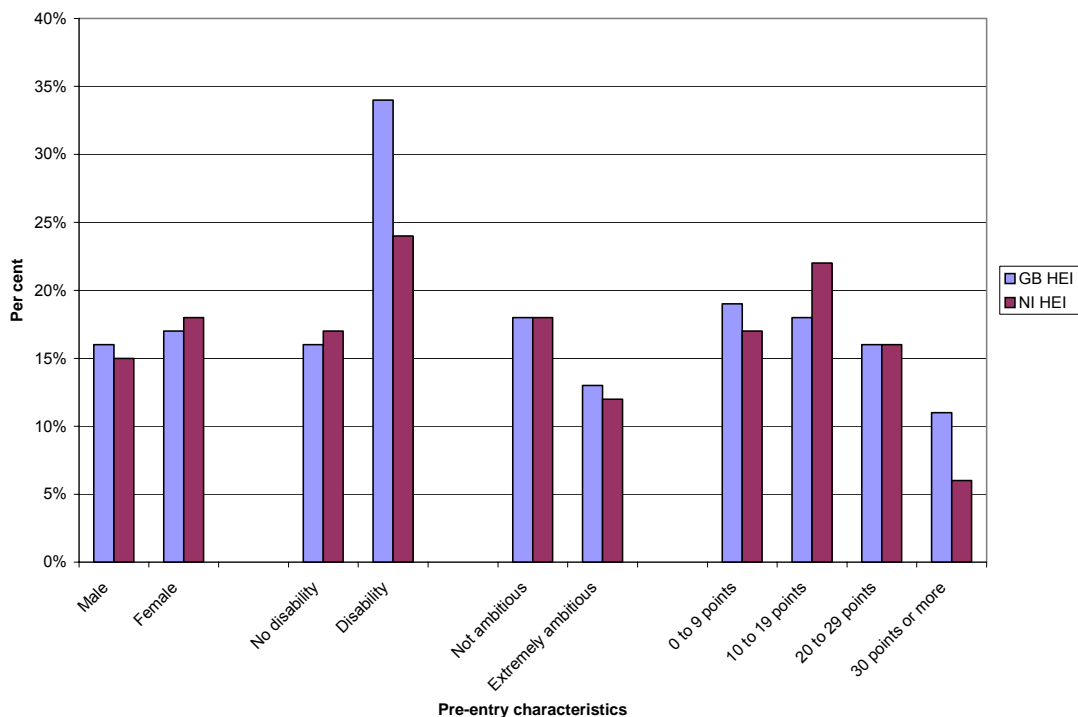
6.4.1 In Chapter 5 we considered various dimensions of the assimilation of graduates into the labour market during the early stages of their careers; including their participation in further study, their movement from unemployment into work and the evolution of the types of occupations they undertake. In this chapter, we first consider what factors are important in determining whether a graduate is employed in a non-graduate occupation four years after completion of their undergraduate studies. We have observed that for many graduates, employment in such occupations has been demonstrated to be a short-term phenomenon on the way to obtaining employment in occupations that more fully utilise their skills. However, we observed that some four years after graduation, approximately 17 per cent of the 1999 cohort of NI HEI graduates were employed in non-graduate occupations. It is therefore important to understand the factors associated with employment in such occupations.

6.4.2 In Figures 6.14 and 6.15 we present information showing the proportion of employed graduates working in non-graduate occupations at the time of the survey according to pre-entry characteristics (Figure 6.14), subject studied and classification of degree (Figure 6.15). To aid comparisons between the present analysis and that based upon the analysis of career histories which focussed upon the main activities of survey respondents, we present information on the proportion of graduates working in non-

graduate occupations, for all graduates in full time employment or who are self-employed. In each of these figures, we compare the share of SOC (HE) non-graduate employment among graduates from NI HEIs with that of graduates from HEIs located elsewhere in the UK.

6.4.3 Among both groups of graduates, we observe that the proportion of females in non-graduate occupations was higher than among males. Among female graduates from NI HEIs, 18 per cent were employed in non-graduate occupations approximately four years after graduation compared to 15 per cent of male graduates from these institutions. A wider variation in the propensity to be in non-graduate employment is observed when we consider those graduates who reported having a long-term illness or disability, with such graduates reporting a higher incidence of non-graduate occupation employment. Graduates who regarded themselves as being 'extremely ambitious' were less likely to be employed in non-graduate occupations, with the scale of this differential being similar among both groups of graduates. Finally, a clear gradient emerges in terms of the proportion of graduates employed in non-graduate occupations according to academic performance at sixth form, with those graduates who achieve higher grades at A-level exhibiting a lower employment share in non-graduate occupations.

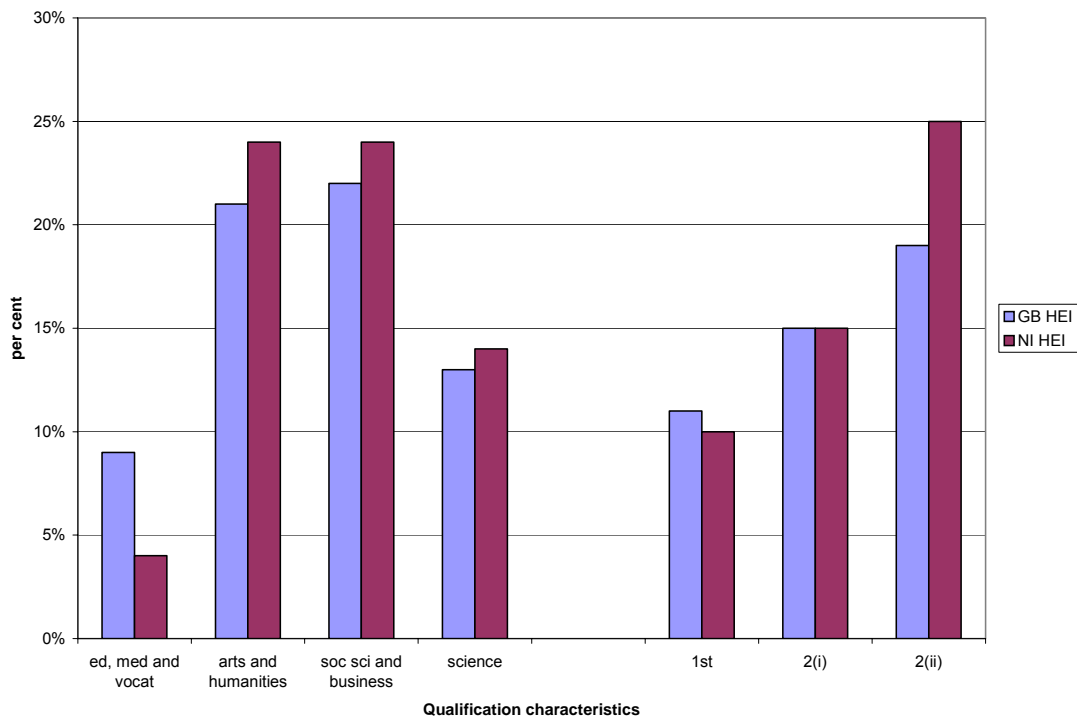
**Figure 6.14** Proportion of 1999 employed graduates in SOC (HE) non-graduate occupations 4 years after graduation, by pre-entry characteristics, comparing NI and GB HEI graduates



6.4.4 In terms of subject studied (Figure 6.15), it can be seen that less than 5 per cent of graduates from NI HEIs who studied degrees in medicine, education and other vocational subjects were employed in non-graduate occupations at the time of the survey. In contrast, among those in full time employment and the self-employed, non-graduate occupations accounted for almost 25 per cent of employment among NI HEI graduates with degrees in the arts and humanities, and in the social sciences and business studies. We observe that the employment shares in non-graduate occupations by subject studied among graduates from NI HEIs were broadly similar to those exhibited by those who graduated from HEIs located elsewhere in the UK.

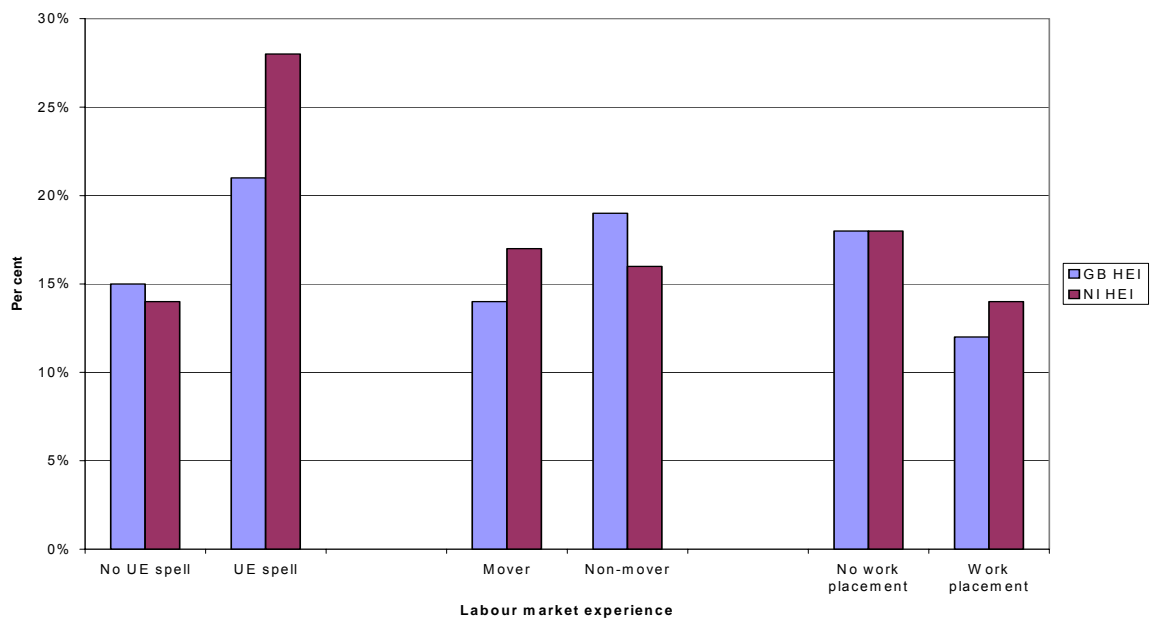
6.4.5 It can be also be seen from Figure 6.15 that a clear gradient emerges in terms of the proportion of graduates employed in non-graduate occupations according to academic performance at degree level. At the time of the survey, one in four graduates from NI HEIs with a lower second class degree was employed in non-graduate occupations. This incidence of employment in non-graduate occupations among NI graduates was more than twice the level of graduates who obtained first class degrees. It is interesting to note that, among those graduates from GB HEIs with such degrees; only one in five was employed in non-graduate occupations.

**Figure 6.15 Proportion of 1999 employed graduates in SOC (HE) non-graduate occupations 4 years after graduation, by subject and degree class, comparing NI and GB HEI graduates**



- 6.4.6 A clear relationship emerges in terms of the share of graduates employed in non-graduate occupations according to whether respondents had experienced a spell of unemployment during the four year period since completing their studies in 1999 (Figure 6.16). Among those in full-time employment at the time of the survey, almost 30 per cent of NI HEI graduates who had experienced at least one spell of unemployment since completing their studies were employed in non-graduate occupations. This proportion of employment in non-graduate occupations was twice that observed among graduates from NI HEIs who had not experienced any spells of unemployment since completing their studies. This differential is larger than that observed between such graduates from HEIs elsewhere in the UK.
- 6.4.7 Figure 6.16 also distinguishes between those graduates who were currently employed in the same region as they had lived before attending university and those graduates who currently worked in a different region to the one they had lived in immediately before attending university. Among graduates from GB HEIs, we observe that the proportion of graduates employed in non-graduate occupations was approximately five percentage points higher for those graduates who had remained in or returned to the region where they had lived immediately before studying for their 1999 qualification. Such a differential is not observed among those graduates who attended NI HEIs. This would imply that migration has less of an influence on the share of employment in non-graduate occupations among graduates from NI HEIs than it does for those who graduated from HEIs elsewhere in the UK. NI graduates are less likely to migrate after graduation than those from other UK locations and consequently are less likely to have moved to London and the South East of England, where graduate opportunities are greatest, than those from other parts of the UK.
- 6.4.8 Finally, Figure 6.16 considers the importance of work placements on propensity to be employed in non-graduate occupations. Graduates from the 1999 cohort were asked whether, while they were studying, they had undertaken a work placement integral to their course or undertaken work to gain useful career related experience. Having completed a work placement appears to have lowered the likelihood of being in a non-graduate job. Among those graduates from NI HEIs who did not undertake a work placement, 18 per cent were employed in non-graduate occupations approximately four years after graduation. Among those NI HEI graduates who had undertaken such a placement, the share of employment in non-graduate occupations was 14 per cent.

**Figure 6.16** Proportion of 1999 employed graduates in SOC (HE) non-graduate occupations 4 years after graduation, by labour market experiences, comparing NI and GB HEI graduates



## 6.5 The significance of religious background and community of origin

6.5.1 To complete this chapter, rather than provide a more detailed analysis of the career trajectories of the two communities' graduate cohorts, we provide an account of the current employment outcomes of 1999 cohort NI HEI respondents from the Roman Catholic and Protestant communities at the time of the survey.

6.5.2 There was little difference between the Roman Catholics and Protestants in terms of their broad categories of activity four years after graduation, as Table 4.7 shows. The Protestant background graduates display a somewhat greater propensity to be in self-employment and in postgraduate study and their Roman Catholic counterparts, whereas Catholics had a higher propensity to be unemployed and seeking work or non-employed. These differences may be attributable, to some extent, by social class differences in the overall profiles of the two populations.

**Table 6.4** Current situation by community of origin (NI graduates)

	Roman Catholic	Protestant
Full-time related to long-term career plans	65.8	66.9
Part-time related to long-term career plans	5.3	3.0
In full-time employment (other)	16.0	17.8
In part-time employment (other)	3.1	2.9
Self-employed	3.0	4.6
Postgraduate study	7.3	9.6
Unemployed and seeking work	2.5	1.6
Out of the labour force/not seeking work	1.6	0.7
Other	3.0	1.7

6.5.3 Table 6.5 compares a number of indicators of 'successful' career outcomes according to whether the respondent was Roman Catholic or Protestant in origin. The only notable difference between the two groups is in terms of overall career satisfaction where 84 per cent of graduates from a Protestant upbringing report being very or reasonably satisfied with their career to date compared to 77 per cent of those from Roman Catholic backgrounds. Importantly, graduates from the two groups were equally likely to be in employment appropriate for someone with their skills and qualifications, to report being in a job where a degree was required and to be using their degree knowledge and skills.

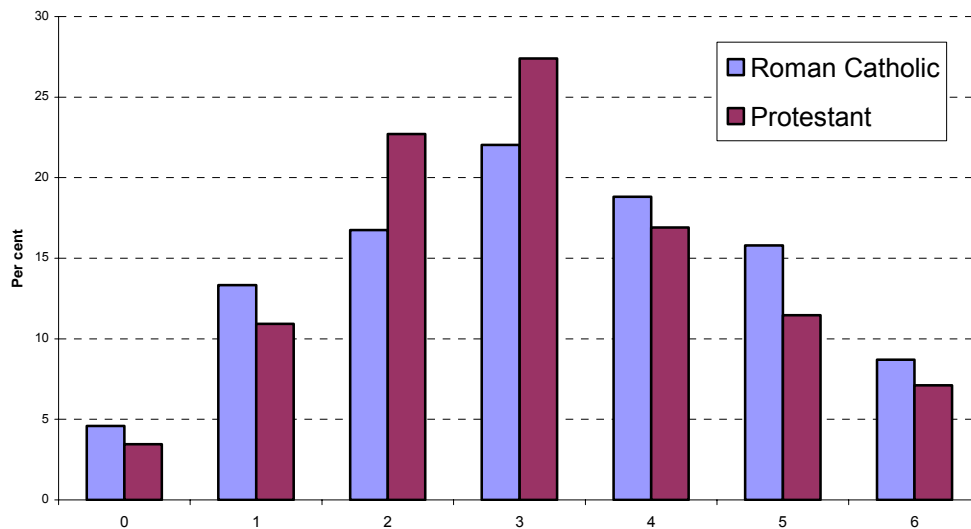
**Table 6.5 Indicators of 'successful' employment outcomes by community of origin (NI graduates)**

	Roman Catholic	Protestant
Very or Reasonably Satisfied with Career to Date	76.6	84
Satisfied with Current job *	68.7	69.9
In appropriate employment for someone with their skills and qualifications*	66.4	63.9
In Employment for which a degree had been required	58.8	59.5
Using degree subject knowledge acquired on 1999 course in current/last job	62	62.7
Using skills acquired in 1999 course in current/last job	71.7	74.4

\*Proportion of respondents who scored 5 or more on a scale of 1 to 7, where 1= 'unsuccessful' option and 7 = 'most successful' extreme

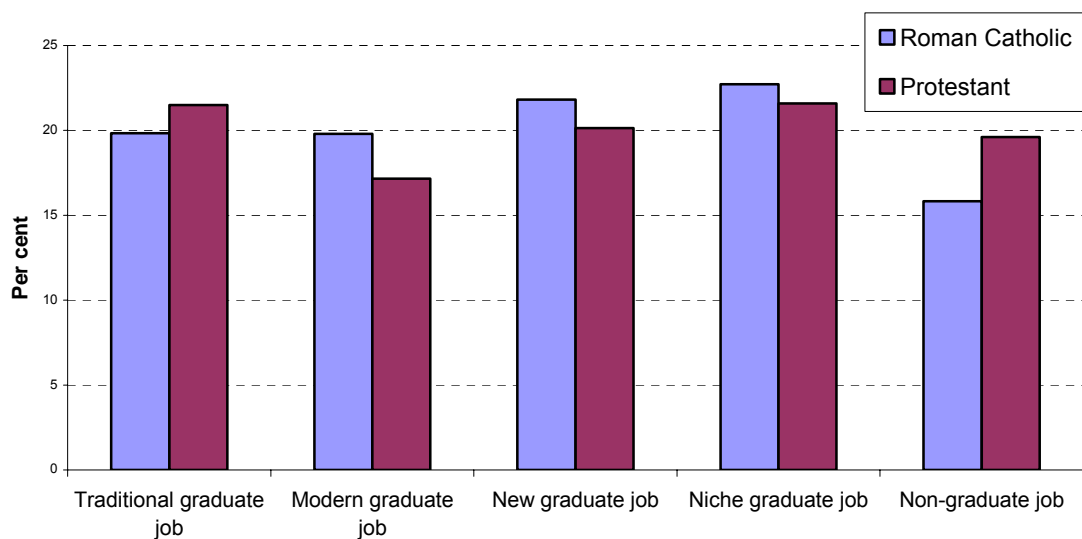
6.5.4 In contrast however, Figure 6.17 compares the reported 'quality' of the current employment of graduates from each group according to the job quality index discussed in Section 6.3.3. The figure shows that despite reporting being in similarly satisfactory and appropriate work the patterns for each group were notably different. In particular, those from Roman Catholic background appear to have more polarised outcomes in terms of the quality of their jobs. This group was both more likely to rate their jobs more highly compared to those from the Protestant community and also lower.

**Figure 6.17 Job quality by community of origin (NI graduates in employment only)**



6.5.5 Figure 6.18 shows the distribution by SOC (HE) types of jobs in which graduates from each of these backgrounds currently work, which might explain the apparent polarisation in job quality amongst Catholics. According to the SOC (HE) classification of current jobs, those from a Protestant background were more likely to be found both traditional and non-graduate occupations, with the Roman Catholic group more concentrated in the middle three categories. This suggests that a possible explanation for the polarisation of job quality amongst the Roman Catholic respondents is that those in modern graduate jobs tend to allocate relatively high scores in terms of job quality (jobs in the ICT sector, some engineering jobs) whereas jobs in new and *niche* areas tend to reflect greater variability in quality.

**Figure 6.18 SOC (HE) by community of origin (NI graduates in employment only)**





## 6.6 Summary

- NI HEI graduates reported a marginally lower likelihood than the sample as a whole of being in permanent or open-ended employment and were more likely to be in fixed term or other temporary employment. Graduates in Northern Ireland were very much more likely to work in the public sector than UK graduates as a whole and less likely to be in the higher-earning sectors of ICT, Finance and Business Services. The sectoral distribution of employment for NI and GB graduates reflected this major difference and goes some way towards providing an explanation for the average differences in earnings between the groups. NI 1999 female graduates were twice as likely as their male comparators to work in Other Public Services and this sector accounted for half of all employment for this group.
- The occupational distributions of the NI HEI graduates and other GB HEI graduates four years after graduation showed little difference, but there was a somewhat lower propensity for the NI graduates to be managers and senior officials or associate professionals. We find, however, very distinct differences in the NI HEI group by gender, with men more concentrated in the higher-status and generally higher-level occupational areas: managers and senior officials rather than administrative and secretarial occupations; professional rather than associate professional occupations. In the UK sample as a whole, similar tendencies were found, but there was not the same degree of gender polarisation. A slightly higher proportion of NI HEI respondents had achieved exactly the kind of employment they desired compared to GB HEI graduates. However, graduates from NI HEIs were less likely to have taken jobs for positive reasons such as salary and conditions of employment or the opportunity for interesting work.
- NI HEI graduates were slightly less likely to have reported that the qualification they had obtained in 1999 had been important in enabling them to obtain their current job. They were more likely to have perceived that a higher educational qualification or a professional qualification you obtained since 1999 had been important.
- In a self-assessment of the appropriateness of their jobs at the time of the survey, NI respondents were more likely to have gravitated towards the 'ideal' or 'inappropriate' extremes. They also reported lower levels of satisfaction with promotion prospects than GB HEI graduates and, with the exception of 'long-term job security' and 'socially-useful work' (both indicative of their greater propensity to work in public sector employment) they were less likely to report positive job characteristics such as competitive salary, interesting and challenging work and continual skills development. Overall, graduates from NI HEIs reported lower

average scores on the index of job quality compared to those who graduated from HEIs elsewhere in the UK.

- According to the classification of graduate occupations [SOC (HE)], NI HEI graduates were more likely to be in both traditional graduate jobs and non-graduate jobs – and also more likely to be in niche graduate jobs – a category which includes both unequivocally degree-requiring employment and jobs on the graduate/non-graduate boundaries. Approximately 17 per cent of the 1999 cohort of NI HEI graduates were employed in non-graduate occupations. For both GB and NI HEI graduates, the share of employment in non-graduate occupations was higher among females than among males. Also for both groups, graduates who regarded themselves as being 'extremely ambitious' and those who achieve higher grades at A-level were less likely to be employed in non-graduate occupations.
- Less than 5 per cent of graduates from NI HEIs who studied degrees in medicine, education and other vocational subjects were employed in non-graduate occupations but non-graduate occupations accounted for almost 25 per cent of employment among NI HEI graduates with degrees in the arts and humanities, the social sciences and business studies. This was broadly similar to patterns exhibited by those who graduated from HEIs located elsewhere in the UK.
- One in four graduates from NI HEIs with a lower second class degree was employed in non-graduate occupations (compared to one in five amongst GB HEI graduates) more than twice the level for those who obtained first class degrees.
- Among those in full-time employment at the time of the survey, almost 30 per cent of NI HEI graduates who had experienced at least one spell of unemployment since completing their studies were employed in non-graduate occupations, twice that observed among those who had not experienced any spells of unemployment. This differential is larger than that observed between such graduates from HEIs elsewhere in the UK.
- Graduates with a Protestant background displayed a somewhat greater propensity to be in self-employment and in postgraduate study than their Roman Catholic counterparts. The only notable difference between the two groups in terms of labour market 'success' was in terms of overall career satisfaction where 84 per cent of graduates from a Protestant upbringing report being very or reasonably satisfied with their career to date compared to 77 per cent of those from Roman Catholics backgrounds. Importantly, graduates from the two groups were equally likely to perceive that they were in appropriate employment for someone with their skills and qualifications, to report being in a job where a degree was required and to be using their degree knowledge and skills.

However, in terms of job quality, those from a Roman Catholic background were more likely to rate their jobs more highly compared to those from the Protestant community. Those from a Protestant background were more likely to be found both traditional and non-graduate occupations, with the Roman Catholic group more concentrated in modern, new and *niche* graduate occupations.



## CHAPTER 7

### GEOGRAPHICAL MOBILITY AMONG NI DOMICILED GRADUATES AND THE SIGNIFICANCE OF REGION

#### 7.1 Introduction

7.1.1 Geographical mobility and regional opportunities and constraints have been discussed within earlier chapters in relation to decisions about choice of course, and have been alluded to throughout the discussion about trajectories and outcomes. Northern Ireland, in common with other non-metropolitan UK regions, experiences a net loss of graduates. Those that attend its higher education institutions are predominantly young Northern Ireland residents. On qualification many of them will search for and gain employment in the South and east of England, an area in which they may subsequently settle. The scale of the 'brain drain' and its impact upon Northern Ireland's economy is an under-researched yet important topic. In this chapter, we explore the migration patterns exhibited by NI domiciled graduates and their subsequent labour market outcomes and ask what these patterns tell us about the fit between the supply of and demand for graduate labour, and opportunities for graduates at the start of their careers, in Northern Ireland.

#### 7.2 Who leaves Northern Ireland to attend university?

- 7.2.1 The first choice facing NI domiciled university applicants is whether to continue their studies within Northern Ireland or to attend a HEI located elsewhere within the United Kingdom. Table 7.1 compares the characteristics of NI domiciled graduates who chose to study within Northern Ireland and contrasts these with the characteristics of those who attended university elsewhere in the United Kingdom. It can be seen that approximately 1 in 11 NI domiciled graduates within our sample attended university outside of Northern Ireland. The analysis that follows only presents a partial picture of the process of migration of highly qualified labour from Northern Ireland, a process that starts with the decision about where to study for a first degree. National statistics (DELNI 2005) indicate that well over a quarter of full-time undergraduates from Northern Ireland go to study elsewhere in the UK. Thus, graduates who were domiciled in NI prior to taking their degree course at a GB HEI are significantly under represented in this study<sup>13</sup>.
- 7.2.2 We must be cautious in making comparisons between these two groups due to the relatively small number of NI domiciled graduates who attended university located elsewhere in the United Kingdom within our sample and the potentially biased structure of

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<sup>13</sup> A likely explanation for this under-representation is that this group, having exhibited regional mobility at the time they under took their degree have subsequently been more geographically mobile, hence more difficult to contact.

this sample. However, some clear differences do emerge when comparing these two groups of NI domiciled graduates. In terms of age we observe that the distribution of graduates who chose to remain within Northern Ireland was older than that of those who chose to leave Northern Ireland to continue their studies. In terms of social class background, among those who chose to continue their studies elsewhere in the United Kingdom, we observed a higher proportion of graduates from Managerial and Professional social class backgrounds. In terms of subject studied, there appears to be some evidence to suggest that those wishing to study for vocationally orientated degrees were more likely to remain within Northern Ireland while those who wished to study for degrees in the Arts or Humanities were more likely to attend a university located elsewhere in the United Kingdom. Finally, in terms of educational attainment at A-level, we observe that those graduates who left Northern Ireland to continue their studies were more likely to have achieved the highest grades at A-level.

**Table 7.1 Location of study among NI domiciled graduates**

	NI domiciled at NI HEIs	NI domiciled at GB HEIs
Gender		
Male	38.4	31.0
Female	61.6	69.0
Age group		
Standard	73.0	83.3
Young mature	13.5	12.2
Older mature	13.4	4.4
Social class background:		
Managerial and professional occupations	28.6	44.1
Intermediate occupations	10.4	20.9
Small employers and own account workers	29.7	20.3
Lower supervisory and technical occupations	4.8	3.9
Semi-routine and routine occupations	17.9	10.8
Neither parent in paid employment	3.5	0
Subject Studied:		
Education, medicine and other vocational	31.4	25.1
Arts and humanities	14.0	24.0
Social sciences and business studies	28.3	22.8
Science based	16.2	13.2
Interdisciplinary	10.1	14.9
A-Level points:		
0 to 9 points	24.1	23.7
10 to 19 points	24.2	21.8
20 to 29 points	42.7	31.9
30 plus points	8.9	22.6
Population	5,366	524
Unweighted cases	1,033	58

### 7.3 Patterns of migration

- 7.3.1 Patterns of migration among 'NI domiciled NI graduates'<sup>14</sup> immediately following the completion of their studies are likely to be complex and varied. Those who studied outside of Northern Ireland may return home for a short period while they search for employment elsewhere in the United Kingdom. Alternatively, those NI domiciled graduates who studied in Northern Ireland may go travelling before returning to Northern Ireland to embark upon their careers. For those who decide initially to take employment elsewhere in the United Kingdom, this may only be for a relatively short period in order to gain the experience necessary to embark upon a chosen career before returning to Northern Ireland. Others may decide to leave Northern Ireland in order to undertake further study.
- 7.3.2 A net loss of highly skilled graduates in the months immediately following graduation may therefore not be problematic if such graduates eventually return to Northern Ireland, having either gained further qualifications or useful work experience. However, a significant loss of highly skilled citizens over the longer term may be cause for concern. To consider these issues, this section compares the characteristics of those NI graduates who reside outside of Northern Ireland at a point 4 years after graduation. In particular, we consider whether these migrants are more highly qualified than those NI domiciled graduates who reside in Northern Ireland at this time.
- 7.3.3 Table 7.2 considers the residency patterns of NI domiciled graduates 4 years after graduation. Among all NI domiciled NI graduates, 83 per cent were found to be living within Northern Ireland some 4 years after graduation. Of the 91 per cent of NI domiciled graduates who attended university within Northern Ireland, approximately 12 per cent were found not to be living in Northern Ireland at the time of the survey. Of the 9 per cent of NI domiciled graduates who studied elsewhere in the United Kingdom, almost 40 percent resided in Northern Ireland at the time of the survey.

**Table 7.2 Residency of NI domiciled graduates at time of survey**

Where attended university	Residency at time of survey		Total
	Northern Ireland	Elsewhere	
Northern Ireland	79.7	11.3	91.0
Elsewhere in the UK	3.5	5.5	9.0
			100
Total	83.3	16.7	(Weighted n=5,809)

- 7.3.4 We have therefore observed that less than 1 in 5 NI domiciled graduates reside outside of Northern Ireland approximately 4 years after graduation. We now consider whether these

<sup>14</sup> We use the term 'NI-domiciled NI graduates' to refer to graduates who attended a NI HEI and who stated that they were living in NI immediately prior to commencing their 1999 degree course.

graduates were more highly qualified than those graduates who resided within Northern Ireland at this time. Table 7.3 shows levels of educational attainment in terms of A-level points. It was observed that those graduates who lived in Northern Ireland at the time of the survey had gained, on average, approximately 17 A-level points prior to attending university. This figure was 2 points less than that achieved by those who resided outside of Northern Ireland at the time of the survey. The most highly qualified group of NI domiciled graduates were those who attended university outside of Northern Ireland and who were also not resident in Northern Ireland at the time of the survey; this group having had achieved 21 points at A-level, approximately 3 points more than the average achieved by all NI domiciled graduates.

**Table 7.3 Educational attainment at A-Level of NI domiciled graduates by residency at time of survey**

Where attended university	Residency at time of survey		Total
	Northern Ireland	Elsewhere	
Northern Ireland	17.0	18.3	17.2
Elsewhere in the UK	17.7	20.7	19.5
Total	17.1	19.1	17.4

7.3.5 Table 7.4 shows levels of educational attainment in terms of the percentage of graduates obtaining a 'good' degree; 'good' being defined as either a first or upper second class degree. It was observed that 66 per cent of NI domiciled graduates who lived in Northern Ireland at the time of the survey had achieved a first or an upper second class degree. This figure is approximately 4 percentage points lower than that achieved by those who resided outside of Northern Ireland at the time of the survey. Once again, the most highly qualified group of NI domiciled graduates were those who attended university outside of Northern Ireland and who were not resident in Northern Ireland at the time of the survey. Approximately 78 per cent of this group had achieved a 'good' degree, 10 percentage points higher than that exhibited by all NI domiciled graduates. Conversely, the poorest levels of performance at degree level were exhibited by those NI domiciled graduates who had attended university outside of Northern Ireland, but who were living in Northern Ireland at the time of the survey. Only half of graduates in this group had achieved either a first class or an upper second class degree.

**Table 7.4 Degree class of NI domiciled graduates by residency at time of survey**

Where attended university	Residency at time of survey		Total
	Northern Ireland	Elsewhere	
Northern Ireland	67.0%	66.0%	66.8%
Elsewhere in the UK	52.6%	77.5%	68.8%
Total	66.3%	69.9%	67.0%

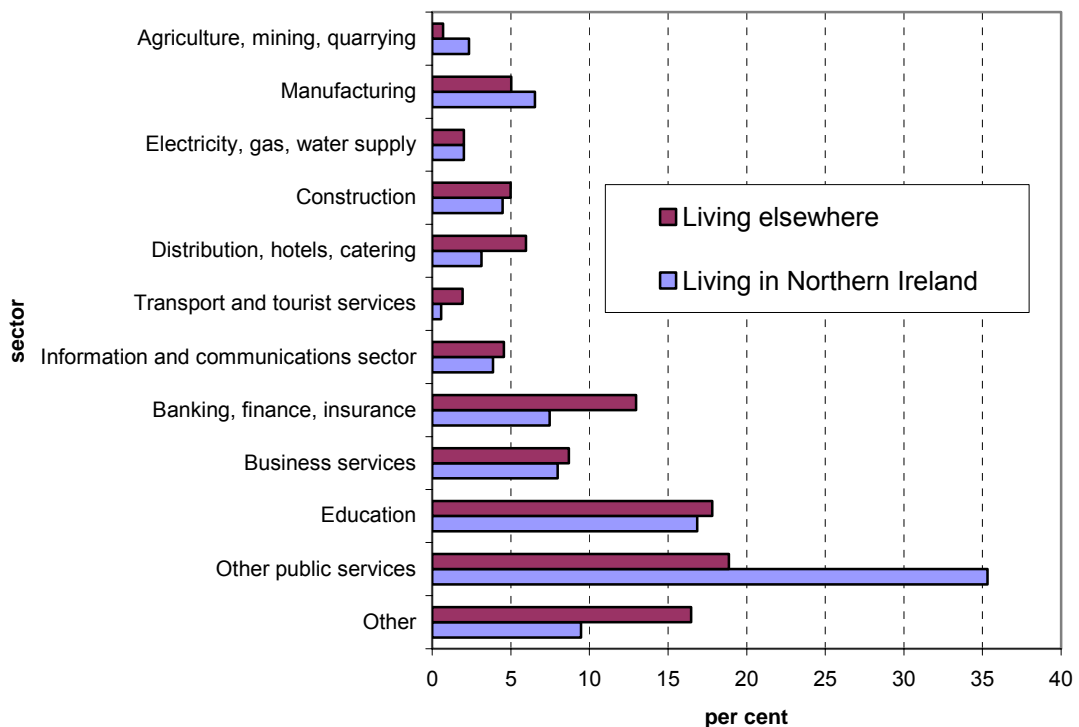


7.3.6 Based upon two separate measures of educational attainment, we have shown that those NI domiciled graduates residing outside of Northern Ireland at the time of the survey were more highly qualified than those who resided within Northern Ireland. For the remainder of this chapter, we compare the characteristics of these two groups of NI domiciled graduates; those who live in Northern Ireland at the time of the survey and those who live elsewhere. As indicated within Table 7.2, those residing outside of Northern Ireland at four years after graduation accounted for approximately 13 per cent of NI domiciled graduates. In the context of their higher levels of educational attainment, we compare the industrial and occupational composition of employment between these groups, contractual arrangements and a variety of measures relating to job satisfaction, appropriateness of employment and whether these graduates are making full use of their skills.

#### 7.4 Industrial and occupational composition of employment among NI domiciled graduates

7.4.1 The distribution of the industrial composition of employment within the two groups of NI domiciled graduates shows distinct differences in employment outcomes. In line with employment patterns in Northern Ireland generally, those NI domiciled graduates working in the region were more likely to be working in the public sector than those who resided elsewhere. Those that had left NI were more likely to be working within the financial services sector.

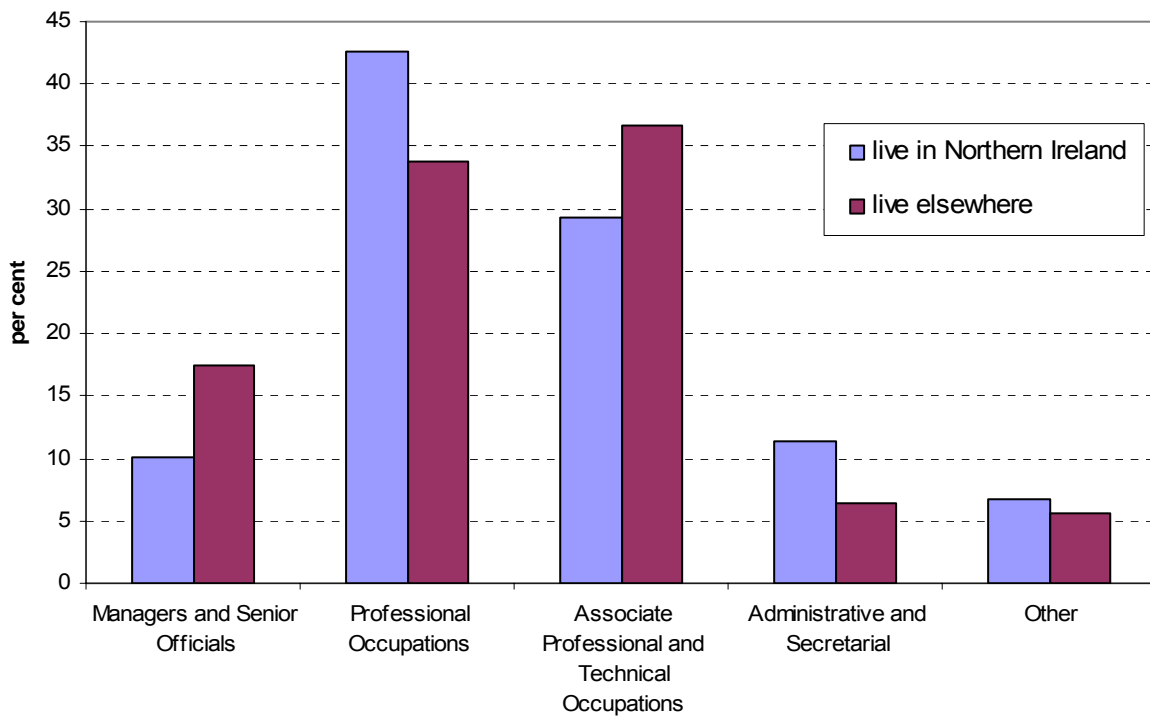
**Figure 7.1 Sector of employment of NI domiciled graduates, by residency at time of survey**



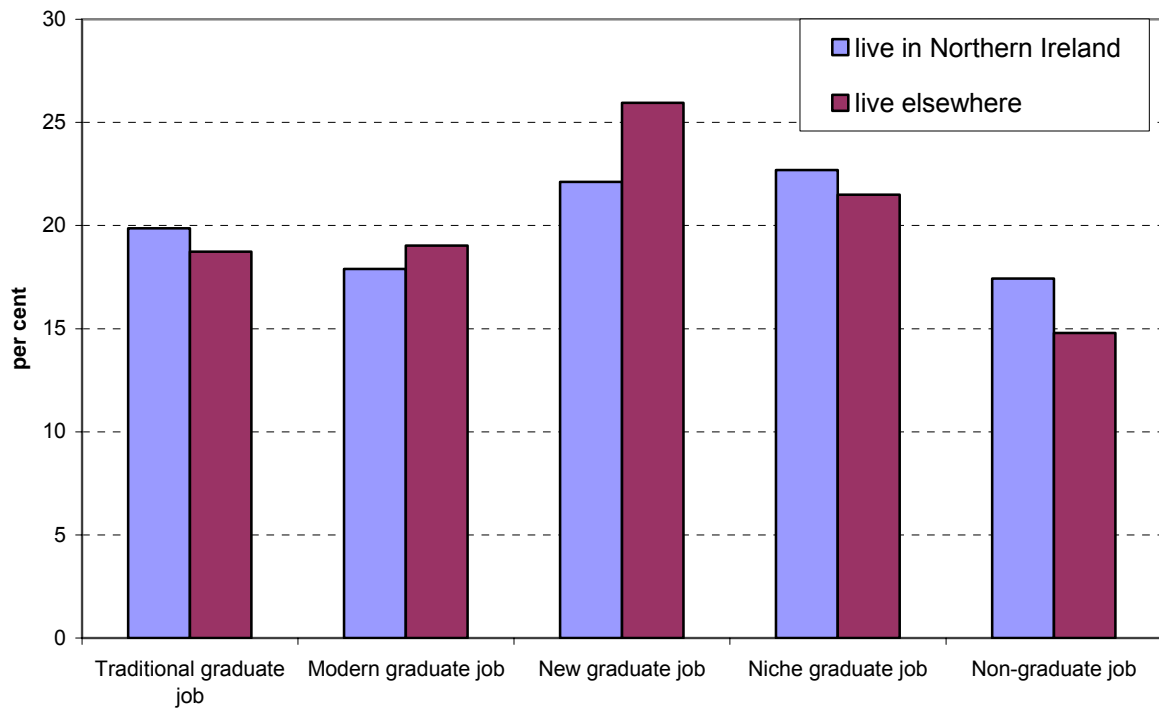
7.4.2 In Figure 7.2, we show current occupational status at the time of the survey according to the broad major group structure (1 digit level) of the Standard Occupational Classification. In terms of the type of work undertaken at the time of the survey, it can be seen that those who were residing within Northern Ireland at the time of the survey were less likely to be working in managerial and associate professional/technical occupations. They were more likely, however, to be working in professional occupations and in administrative and secretarial occupational groups.

7.4.2 Figure 7.3 shows the distribution of occupations according to the SOC (HE) classification as introduced in Chapter 5. Those graduates who were not living in Northern Ireland were less likely to be working in non-graduate jobs. This last category is of the SOC (HE) classification is of particular importance as it is in such jobs that it is least likely that graduates will be making full and good use of their higher education qualification.

**Figure 7.2 Major occupational groups (SOC2000) of employed NI domiciled graduates, by residency at time of survey**

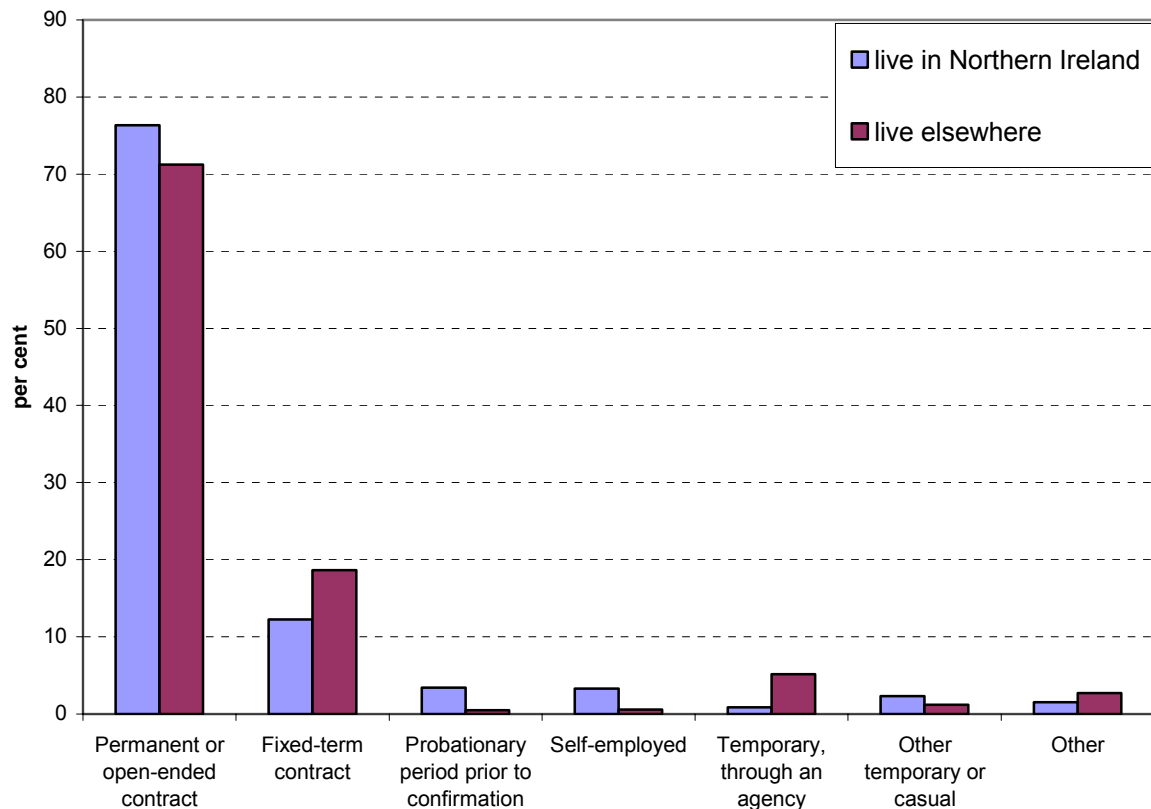


**Figure 7.3 SOC (HE) category of employed NI domiciled graduates, by residency at time of survey**



7.4.3 Finally, in terms of contractual status, Figure 7.4 shows that those NI domiciled graduates residing within Northern Ireland at the time of the survey were more likely to report being employed on a permanent or open ended contract, with more than three quarters of those residing within Northern Ireland being employed on such a basis. Those residing outside of Northern Ireland were more likely to indicate that they were employed on fixed term contracts or employed on a temporary basis through an agency.

**Figure 7.4 Contractual status of employed NI domiciled graduates, by residency at time of survey**



## 7.5 Employment characteristics of NI domiciled graduates

7.5.1 In this section, we assess the extent to which the job characteristics reported by NI domiciled graduates working within Northern Ireland at the time of the survey indicate that they are likely to have been in appropriate employment for people with their skills and qualifications, comparing them with NI domiciled graduates working elsewhere in the United Kingdom. We asked survey respondents why they had taken their current jobs, and compare the reasons given by the two groups of NI domiciled graduates in Table 7.5. It can be seen that those NI domiciled graduates working outside of Northern Ireland at the time of the survey were more likely to indicate that they had taken their current job due to it offering an attractive salary and interesting work. Those graduates living within Northern Ireland at the time of the survey were more likely to indicate that they has taken their current job because they were already working for this employer. This would suggest that lower proportions of those graduates living within Northern Ireland had taken jobs for positive reasons.

**Table 7.5 Reasons for taking current job among NI domiciled graduates, by residency at time of survey**

	Northern Ireland	Elsewhere	%
It was exactly the type of work I wanted	55.4	54.1	
The salary level was attractive	30.3	43.0	
Other conditions of employment were attractive	24.7	29.0	
I wanted to work in this locality/region	39.4	42.5	
I was already working for this employer	13.4	6.8	
It offered interesting work	36.7	45.6	
To gain experience to obtain the type of job I want	17.8	19.8	
It offered job security	28.9	24.4	
It was compatible with my partners career	2.5	2.4	
It suits me in the short term	13.9	19.8	
It is better than being unemployed	15.7	15.7	

7.5.2 Table 7.6 shows how far the qualifications of NI domiciled graduates had been important in enabling them to access their current occupations. The reason for undertaking such an analysis is to determine the extent to which the NI domiciled graduates were in jobs that required and used their higher education qualification and whether those graduates who had left Northern Ireland were more or less likely to report that their qualifications were important to them getting their current jobs.

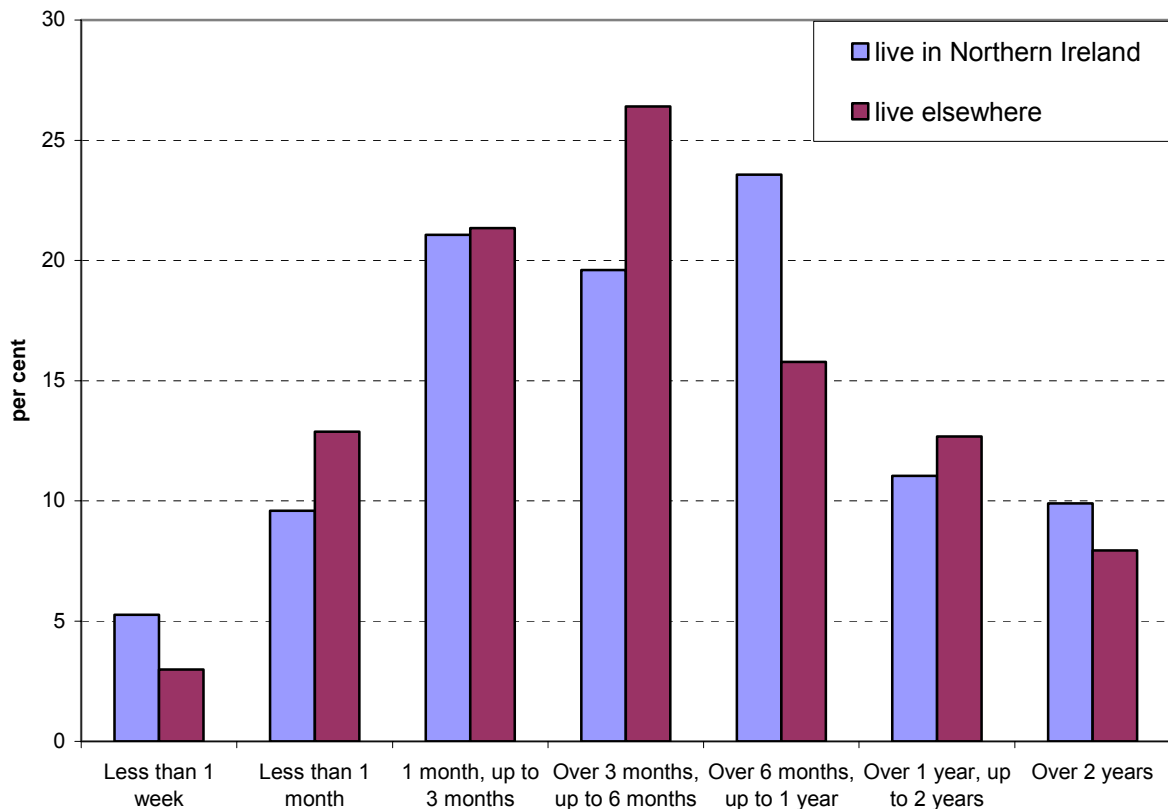
7.5.3 The relative distributions show that members of the NI domiciled cohort who were resident in Northern Ireland at the time of the survey were generally less likely to report that their qualifications were required for their current jobs compared to those who were residing elsewhere in the United Kingdom. This is generally consistent with the higher proportion of such graduates being employed within non-graduate occupations. However, those residing in Northern Ireland were more likely to indicate that they had accessed their jobs as a result of the professional recognition of their courses. Again, this observation is consistent with the higher proportion of NI domiciled graduates living within Northern Ireland at the time of the survey who had gone into public sector services.

**Table 7.6 Importance of credentials in gaining current employment among NI domiciled graduates, by residency at time of survey**

	Northern Ireland	Elsewhere	%
The qualification you obtained in 1999	69.8	72.0	
The subject you studied in 1999	42.3	54.5	
The class or grade of your 1999 award	25.5	30.3	
Recognition by a Professional Body of your 1999 course	24.7	15.7	
A higher educational qualification obtained since 1999	19.1	26.9	
A professional qualification you have obtained since 1999	17.3	15.8	
Employment experience in this organisation in another job	17.4	17.5	
Employment experience/training in another organisation	28.3	42.5	

7.5.4 We next consider the responses provided to the question “How long did it take you to learn to do your current job competently?” Again, it is important to remember the limitations of such questions, which can be interpreted with reference to entire professional training and experiential learning or simply considering induction to the current organisational role. However, while the interpretation of information generated by this question is complicated by the possibility that graduates will respond at different levels, the problem is the same for both groups of NI domiciled graduates and so therefore should allow for comparisons to be made between these two groups. Figure 7.5 shows that there are no large differences in the average length of time required reported by respondents to learn their current jobs between the two groups of NI domiciled graduates. The modal response among NI graduates living within Northern Ireland at the time of the survey was 6 months to 1 year, compared to a modal response of between 3 and 6 months among NI graduates living outside of Northern Ireland. Otherwise, the shapes of these two distributions were found to be similar.

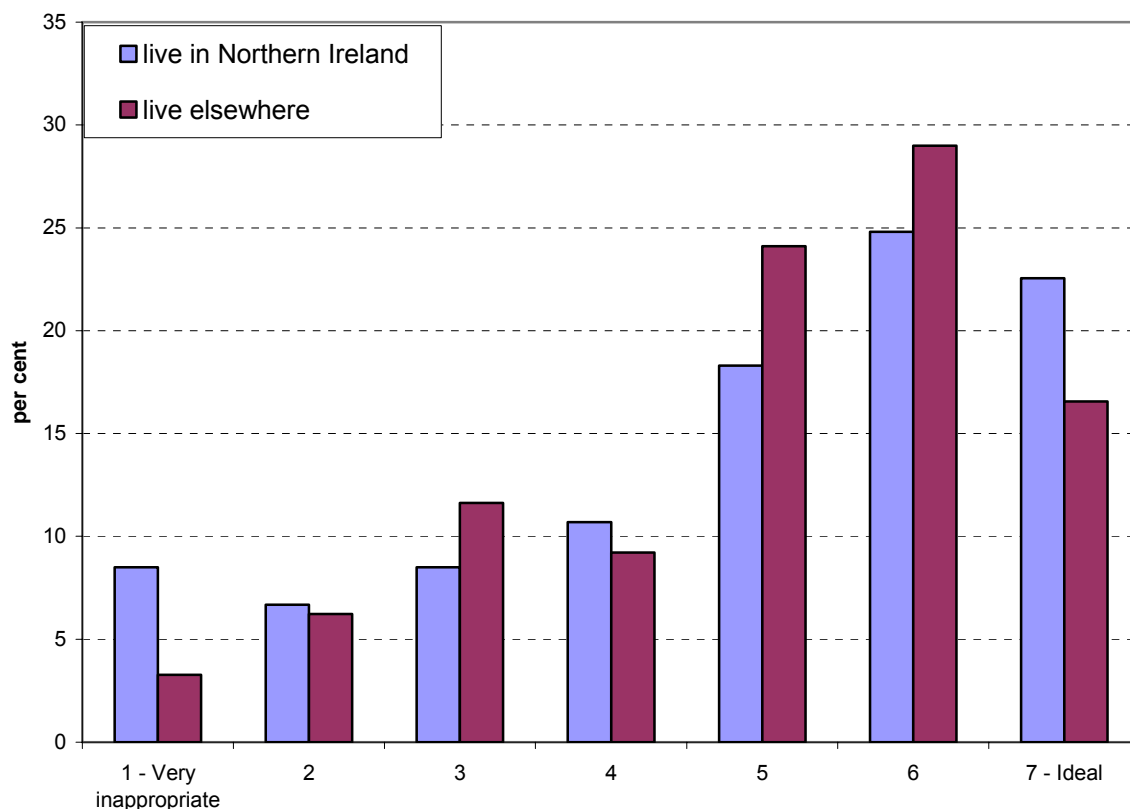
**Figure 7.5 Length of time required to learn current job among NI domiciled graduates by residency at time of survey**



7.5.5 Respondents to the survey were asked to rate their perception of the extent to which their current job was an appropriate job for someone with their qualifications, on a scale of 1-7 where 1 equated with ‘very inappropriate’ and 7 with ‘ideal’. Figure 7.6, showing the distributions of scores for the two groups of NI domiciled graduates, suggests (as other

comparative data has done) a tendency for NI respondents to be more likely to respond at the positive or negative extremes. At the bottom end of this distribution, it can be seen that those NI domiciled graduates residing in Northern Ireland at the time of the survey were more than twice as likely to report that their jobs were very inappropriate for someone with their qualifications. Moving up the distribution, we observed that those residing outside Northern Ireland were generally more likely to rate their jobs as being appropriate. These observations are again consistent with the higher proportion of NI domiciled graduates who live within Northern Ireland being employed in non-graduate occupations. However, at the top end of the distribution, we observe that those residing in Northern Ireland were more likely to rate their current job as being ideal.

**Figure 7.6** Appropriateness of current job among NI domiciled graduates, by residency at time of survey



7.5.6 We asked respondents to consider the extent to which they enjoyed and accessed work characteristics normally considered as benefits. Table 7.7 shows the relative achievement of these for NI domiciled graduates, comparing those who were residing within Northern Ireland at the time of the survey with those who were residing elsewhere. It can be seen that across a range of positive job characteristics, NI domiciled graduates living within Northern Ireland were less likely to report positive attributes associated with their current jobs. In particular, NI domiciled graduates living within Northern Ireland were less likely to report that their jobs provided a competitive salary, opportunities for an

international career and the possibility of working within a progressive and dynamic organisation. Once again, these findings are consistent with the higher proportion of NI domiciled graduates within Northern Ireland who are employed within non-graduate occupations compared to those residing elsewhere at the time of the survey. The only job characteristic to be cited more often by those NI domiciled graduates living within Northern Ireland was long-term security. We suspect that this last finding again relates to the higher incidence of public sector employment among NI domiciled graduates within Northern Ireland.

**Table 7.7 Characteristics of current job among NI domiciled graduates, by residency at time of survey**

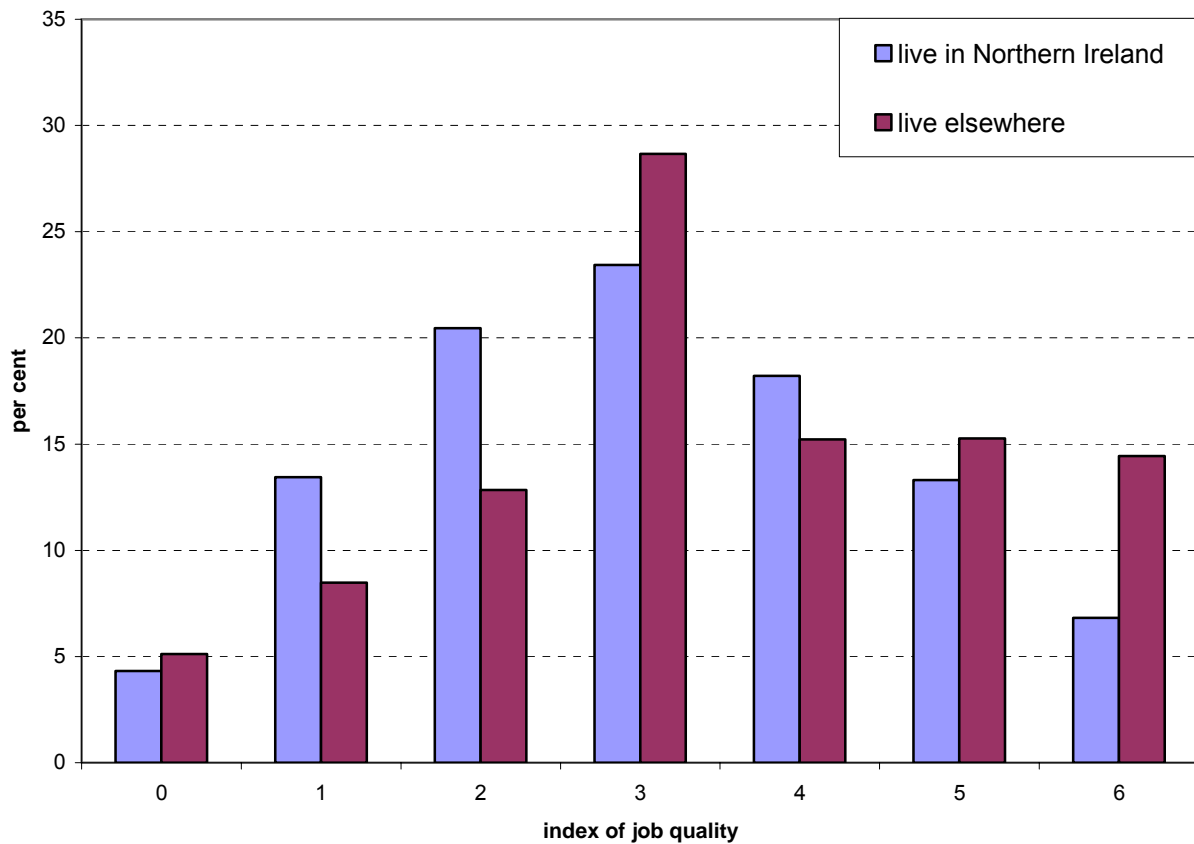
	Northern Ireland	Elsewhere	%
Competitive salary	44.2	55.9	
Continual skills development	66.2	71.6	
Interesting and challenging work	73.4	80.1	
Socially useful work	39.0	41.6	
Long-term security	52.8	46.9	
Opportunities for an international career	18.5	38.0	
Opportunities to reach managerial levels	47.4	51.5	
Progressive and dynamic organisation	27.4	38.8	
Working with people you enjoy socialising with	41.0	50.6	

7.5.7 We now examine the cumulative impact of these characteristics in more detail, using the index of positive job characteristics based on selected items from among the characteristics assessed in Table 7.7 deemed to be applicable across the occupational spectrum and indicative of job quality. The derivation of this index was discussed earlier within Chapter 6. Comparisons of the job quality index for the two groups of NI domiciled graduates are presented in Figure 7.7.

7.5.8 Comparing these distributions, it can be seen that the modal score among both groups of NI domiciled graduates is 3, indicating that respondents from both groups most frequently identify 3 positive job characteristics associated with their current jobs. However, those residing within Northern Ireland at the time of the survey are more likely to report only 1 or 2 positive job characteristics. Once again, this observation is consistent with the higher proportion of NI domiciled graduates who live in Northern Ireland being employed in non-graduate occupations. Similarly, those residing outside of Northern Ireland are more likely to identify 6 positive characteristics associated with their current jobs.



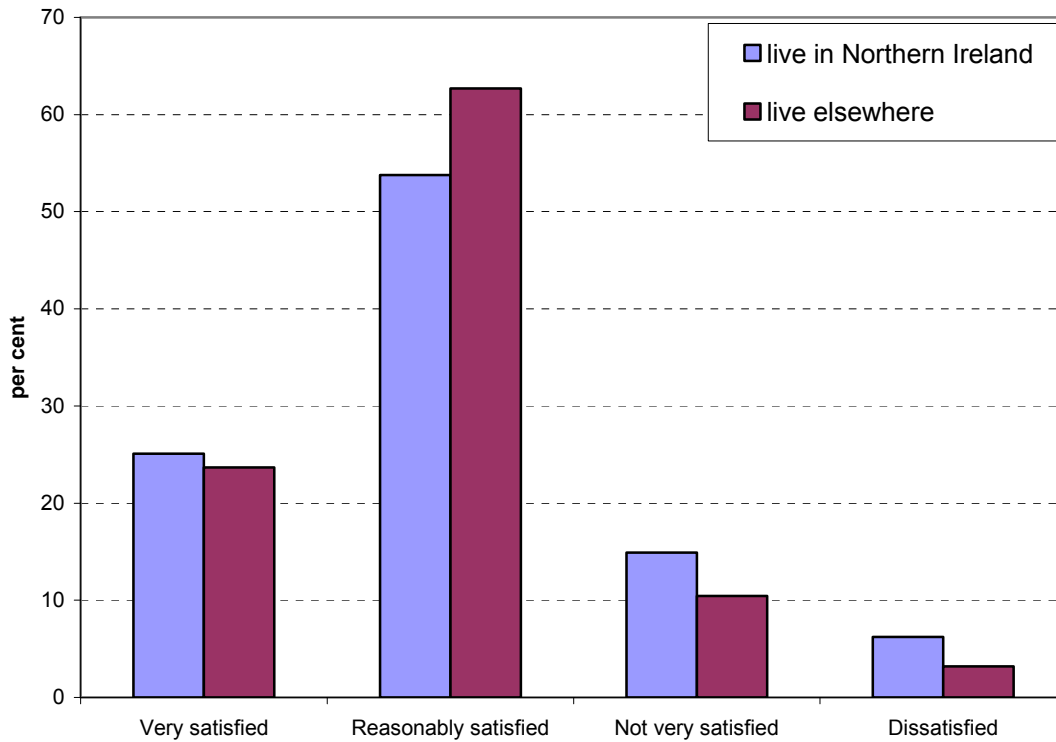
**Figure 7.7 Index of job quality among NI domiciled graduates, by region of residency**



## 7.6 Overall levels of career satisfaction among NI domiciled graduates

7.6.1 Finally, respondents to the survey were asked 'Overall, are you satisfied with the way your career has developed so far?' Figure 7.8 shows the level of satisfaction with career to date comparing NI HEI graduates who were employed in Northern Ireland at the time of the survey with those who were residing elsewhere. While, a slightly higher proportion of NI-resident graduates indicated that they were 'very satisfied' with their careers than those who no longer live in the region at the time of the survey, this is offset by a lower proportion who indicated that they were reasonably satisfied with their careers to date. Slightly higher proportions of NI domiciled graduates living within Northern Ireland report being either 'not very satisfied' or 'dissatisfied' with their careers to date.

**Figure 7.8 Overall satisfaction with career, by residency at time of survey**



7.6.2 The qualitative data provide further insight into the decisions that graduates from Northern Ireland made about whether to stay in or leave Northern Ireland in order to pursue their careers. The following account reiterates a point made elsewhere in the report that 1999 NI graduates seeking employment in Northern Ireland appear to have entered a labour market where competition for jobs was high, especially in certain occupational areas:

[Interviewer: Do you know how many other people applied for the job at the time?]

*'I know there was quite a lot, but I don't know exact figures.'*

[Interviewer: You've had a number of roles in a similar field in the past. Are these quite competitive posts to get?]

*'Yes, but, as well, I had returned home after studying in England and where I live unemployment is very high, so no matter what job is advertised, competition is very big for posts.'*

(106, female social science graduate, community support worker, not-for-profit, £15k-£18k)

7.6.3 Labour market conditions in Northern Ireland have implications for the choices available to graduates and the pressures on them to be mobile in order to seek appropriate employment. This is illustrated by the following comments from a graduate who had obtained employment as a teacher in Northern Ireland:

[Interviewer: You mentioned that you could get a better job with the skills and qualifications you have, but not necessarily in NI]

*'It wouldn't be in NI'*

[Interviewer: Did that, in any way, influence your decision to go into teaching?]

*'Probably yes, it probably has a small thing to do with it'.*

(081, female natural science graduate, secondary teacher, education, £18k-£21k)

- 7.6.4 Conversely, another graduate who studied at a GB HEI indicated that despite a desire to return to Northern Ireland after graduation the opportunities in her field that were available in the rest of the UK were perceived to be greater than in NI. Her subsequent mobility, working in a number of roles and locations, had been informed by the desire to achieve certain career ambitions before returning to Northern Ireland:

*[Interviewer: Was it your intention before [your first job] was arranged to move back to Northern Ireland and work there?]*

I wasn't ruling anything out, I think I would have preferred at that time to work in Northern Ireland, but then realised I had a very good opportunity open to me through *[a previous employer]* that wouldn't have necessarily have come about in Northern Ireland with it being a much smaller place.

*[Interviewer: You seem to have been very mobile in the first few years of your career where you studied and worked. Is it something you've seen as being necessary in the first few years in order to go back to Northern Ireland (as she had discussed planning to do earlier in the interview) to settle...?]*

I don't think it was necessary but I feel I was able to go for the best opportunity much faster by being flexible in location.

(107, female natural science graduate, quality assurance manager, manufacturing, £24k-£27k)

- 7.6.5 Another graduate who had studied in Northern Ireland but subsequently moved to South East England raised the issue that, in her experience, certain employers in Northern Ireland, more than for the rest of the UK, were slow to recognise newer vocational qualifications, making her desire to obtain suitable employment back in NI more difficult:

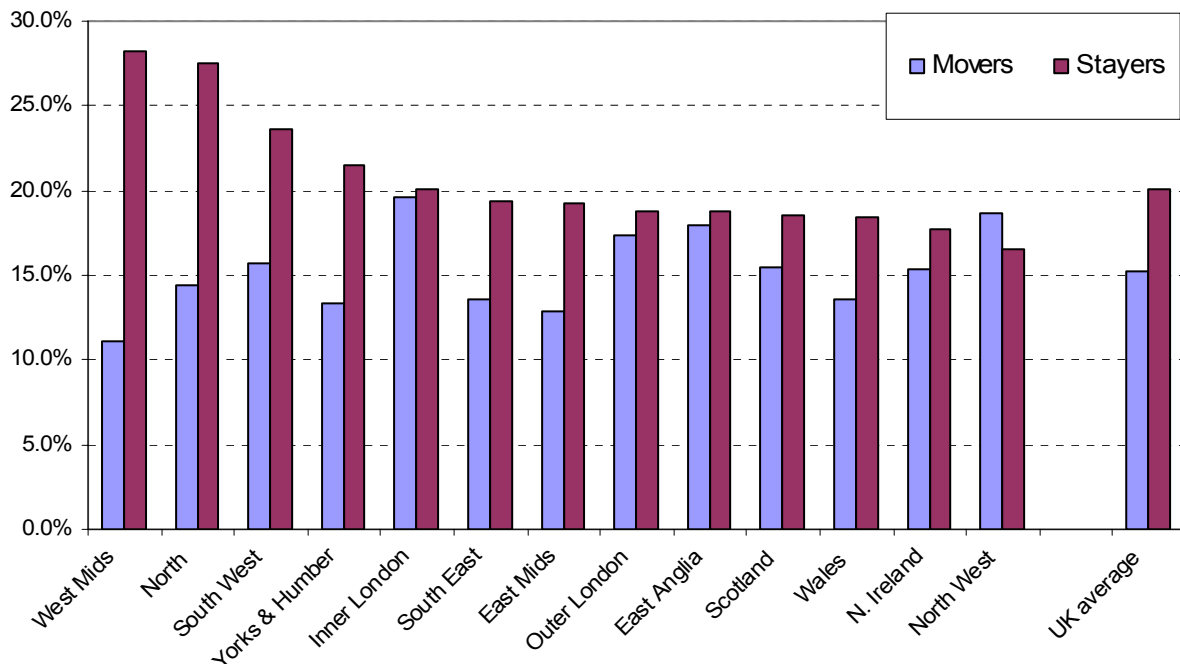
[Interviewer: You say that eventually you hope to go back to Northern Ireland. Is it difficult to get the kind of work that you want in NI?]

*'Yes it is. What I found a lot when I went for interviews in Northern Ireland is that the higher leisure management positions tend to be male and they tend to be people who have been in jobs for quite a long time. There hasn't been a lot of change. There is change coming in and there is a lot more people coming in with new qualifications and that has helped the change in the NI system. But what I find with a business studies degree in Northern Ireland, it was a hindrance because people didn't accept that therefore you were qualified to work in leisure, so in Northern Ireland, my qualification wasn't as useful to me as it was in England'.*

(071, female business studies graduate, sports facilities manager, education, £18k-£21k)

- 7.6.6 The analysis in this chapter has revealed that, among the NI domiciled graduates within our sample, those graduates who have moved away from Northern Ireland on average exhibit higher levels of educational attainment. Furthermore, these graduates are slightly less likely to be employed within non-graduate occupations; i.e. occupations that we would not expect to be commensurate with the skills possessed by recent graduates. We also observed that those NI domiciled graduates who had remained in Northern Ireland were less likely to report having taken their current job for positive reasons, were less likely to indicate that their 1999 qualification was required for their current job, and were less likely to identify positive attributes associated with their current employment.
- 7.6.7 On face value, these observations may point towards a failure of the Northern Ireland economy to fully utilise the skills of NI domiciled graduates, culminating in a lack of opportunities for graduates at the start of their careers in Northern Ireland. However, Figure 7.9 reveals that across all regions in the UK, those graduates who are living in the same region at the time of the survey as that in which they lived before entering university are more likely to be employed within non-graduate occupations. Across all regions of the United Kingdom, those graduates who have moved away from their region of residence prior to entering university are less likely to be employed within non-graduate jobs. Indeed, the relative disadvantage faced by 'stayers' is lower within Northern Ireland compared to other areas of the United Kingdom.

**Figure 7.9 Geographical mobility and employment within non-graduate occupations**



## 7.7 Summary

- Approximately 15 per cent of 1999 graduates from NI HEIs left Northern Ireland immediately after graduation. At the time of the survey, 86 per cent of NI HEI graduates were employed in the region, 3.5 per cent were working in the Republic of Ireland and 2.7 per cent in London and the South East. According to subject of study, NI graduates with languages and natural sciences degrees were most likely to have migrated from Northern Ireland, with a third of both categories working elsewhere. Those most likely to be working in NI were those with maths and computing degrees, of which only five per cent had moved away.
- It appears that graduates at the highest and lowest ends of the ability spectrum were most likely to have migrated from NI to work in other regions. A higher proportion of NI HEI graduates with less than 10 A-level points and those with more than 30 were likely to be working outside NI after four years compared to the graduates with moderate attainment. Similarly, those graduates who attained a first class degree and those who were awarded a third were proportionally more likely to be working away from Northern Ireland.
- Graduates not currently employed in Northern Ireland were more likely to be from managerial or professional backgrounds than those currently working in the region. According to SOC(HE), NI graduates who were not living in Northern Ireland were more likely to be working in modern graduate jobs and also

significantly more likely to be in non-graduate employment. At the time of the survey, NI graduates working in Northern Ireland were as likely to be in management jobs as those who had left the region, although the latter group were significantly less likely to be working in professional or administrative occupations. They were more likely, however, to be working in associate professional and technical occupations and in lower-level occupational groups.

- In line with employment patterns in Northern Ireland generally, those graduates working in the region were significantly more likely to be working in the public sector. However, those who had left NI were more likely to be working in education, banking and finance and in the hotel, catering and distribution sector.
- Graduates employed in NI in both the 1999 and 1995 cohort appear to be more likely than those from most other regions to be in appropriate employment. However, in the relative average scoring of overall satisfaction with career to date by respondents living and working in the different regions that the 1999 NI HEI cohort were among the least satisfied, but the 1995 cohort have the highest average scores of both sexes.

## CHAPTER 8

### THE EARNINGS OF NI GRADUATES

#### 8.1 Introduction

8.1.1 This chapter presents evidence on the earnings of graduates who gained their first degrees from Northern Ireland's higher education institutions in 1999, focussing in particular upon those in full-time employment in 2003/04, comparing this group with the full UK sample of graduates. The evidence is presented in two parts. First, a descriptive section reveals that a number of important factors influence the earnings of graduates, showing also how some of these factors vary in their influence in Northern Ireland compared with the all UK graduates. The next section describes results from a detailed multivariate analysis of earnings – a technique employed to examine the separate influences of a wide variety of factors on earnings. The final section draws on information from a smaller sample of NI graduates, contrasting the earnings of graduates from the 1995 cohort with those from the 1999 cohort to determine whether or not graduates' earnings are keeping pace with earnings growth in the wider economy.

#### 8.2 The earnings of NI graduates in 2003/04

8.2.1 Information on the earnings of graduates was obtained from the following question included in the postal questionnaire:

**What was your gross annual pay in your first job after completing your course in 1999 and what is it now in your current or most recent job** (gross pay before deductions for tax, national insurance and including any overtime, bonuses, commission, tips)?

Graduates were asked to tick a salary range in one of thirteen boxes, ranging from 'Less than £9,999' to '£60,000 and over'. In the following analyses we have substituted the mid-point of the range as an estimate of the actual annual salary. The end-points corresponding to the two intervals described were arbitrarily replaced by the values £9,000 annum £65,000 per annum respectively, these values being selected as an approximation to the mean value in the open-ended range of the distribution of earnings<sup>15</sup>.

8.2.2 Of the 1,104 respondents who gained their first degree at one of Northern Ireland's higher education institutions in 1999, 85 per cent reported that they held full-time or part-time jobs as employees at the time of the survey in 2003/04. This compares with 90 per cent for the whole UK sample of respondents. Self employment rates among these graduates four years after gaining their first degrees were similar (3.5 per cent for NI students

<sup>15</sup> Labour Force Survey data on graduates' earnings were used to provide guidance on these end-point values.

compared with 3.9 per cent for the UK sample). Those not in employment were likely to be engaged in postgraduate study (53 per cent of those not in employment for NI-domiciled NI students compared with 45 per cent for all respondents not in employment), unemployed (25 per cent of the non-employed for NI-domiciled NI students compared with 26 per cent for all respondents) or were out of the labour force (22 per cent for NI students compared with 33 per cent for all non employed).

- 8.2.3 Table 8.1 shows information given by survey respondents about the job they held at the time they completed the postal questionnaire (2003/04). It contrasts the mean annual earnings and average weekly hours for male and female graduates who reported earnings, by whether or not they had studied at a Northern Ireland university.

**Table 8.1 Average annual earnings and weekly hours of 1999 graduates in full-time employment or self employment in 2003/04, by location of HEI and gender**

Location of HEI at which studied for 1999 degree	Male graduates		Female graduates	
	Average annual earnings	Average weekly hours	Average annual earnings	Average weekly hours
Northern Ireland	£22,700	42.7	£20,100	39.7
Elsewhere in UK	£26,700	43.2	£22,900	41.7

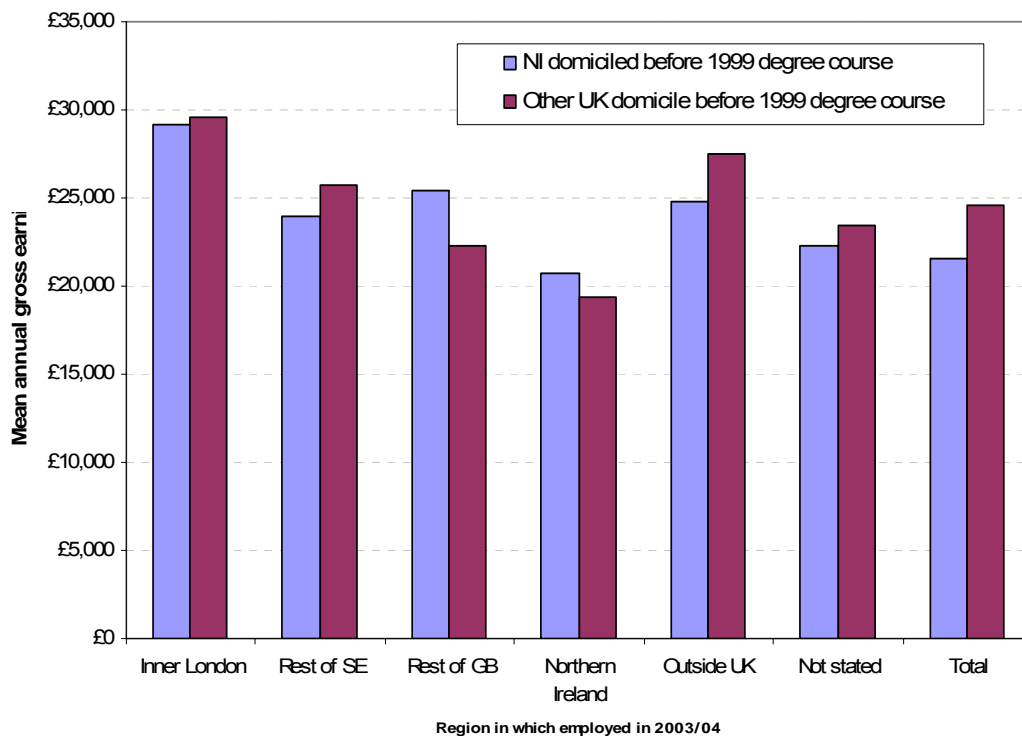
Source: Survey of the Career Paths of 1999 Graduates and Diplomates

- 8.2.4 A wide variety of factors may be responsible for these observed differences in earnings. In particular, NI graduates are much more likely to be working in Northern Ireland four years after gaining their first degrees than is the situation for graduates from other UK HEIs. It is well established that average earnings are lower in NI than elsewhere in the UK, so part of the difference may simply reflect the location of employment. In the rest of this section we explore the nature of these differences in earnings in more detail. Graduates working in Inner London in 2003/04 reported earnings almost £10,000 per year higher on average than graduates from Northern Ireland, whether or not they lived in Northern Ireland prior to commencing their 1999 degree course.



8.2.5 Figure 8.1 shows the influence of location of employment on earnings. In this figure, graduates are distinguished according to their region of domicile prior to studying for their 1999 degree and by the region in which they were employed in 2003/04. This shows the impact of the location of place of work on earnings. The lowest average earnings in the sample of 1999 graduates are recorded in Northern Ireland, regardless of whether or not the graduate had his or her origins in Northern Ireland.

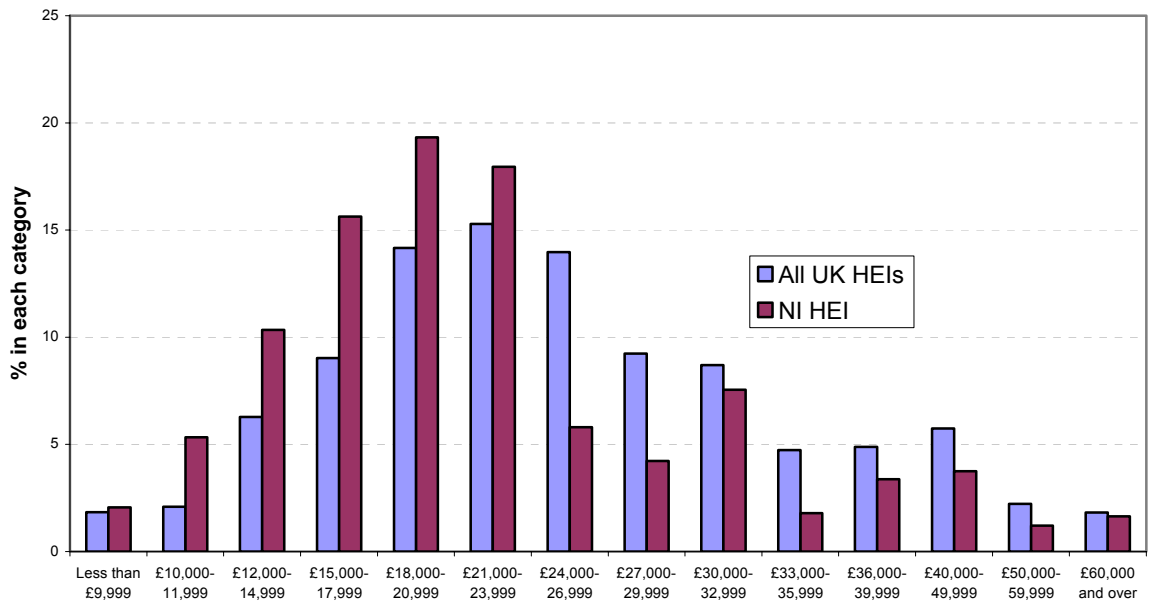
**Figure 8.1: Earnings of 1999 graduates in full-time employment in 2003/04 by region of employment and region of residence prior to studying for 1999 qualification**



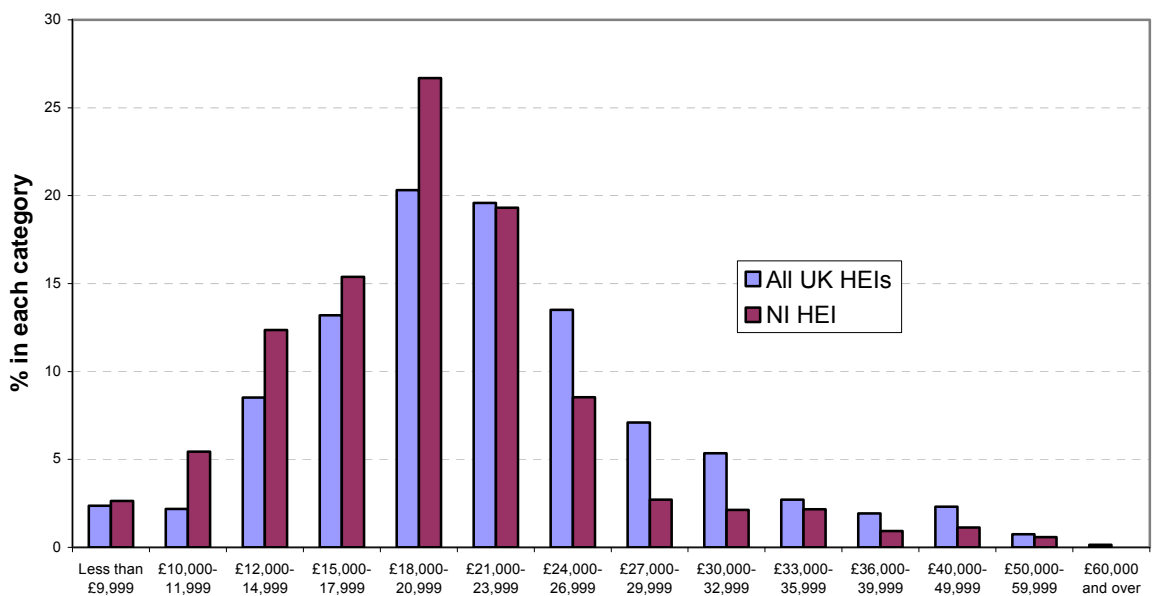
8.2.5 The distributions of annual gross earnings of men and women who gained a first degree in 1999 and reported that they were in full-time employment or self employment at the time of the survey is shown in figure 8.2.

**Figure 8.2** The distribution of annual gross earnings of 1999 graduates in full-time employment in 2003/04, graduates from NI HEIs compared with graduates from UK HEIs

**Men in full-time jobs**



**Women in full-time jobs**



Source: Survey of the Career Paths of 1999 Graduates and Diplomates

- 8.2.6 These distributions indicate that the earnings of women graduates lie mainly in the range of £16,000 to £24,000 per annum, with a much higher percentage earning in the £18,000 to £20,999 range than is the case for women graduates in the rest of the UK. Male graduates have a wider dispersion of earnings at the upper end of the distribution, with significantly more men than women earning more than £30,000 per annum some four years after gaining their first degree. Comparing the earnings reported by those graduating from a NI HEI with those graduating from a university elsewhere in the UK, it can be seen that the earnings distribution is shifted leftwards for both men and women graduates from a NI HEI. In other words, the lower mean earnings for NI graduates reflect higher proportions of graduates with salaries in all of the lower earnings bands.
- 8.2.7 Table 8.2 shows the mean earnings for graduates from NI HEIs, distinguishing between those who engaged in postgraduate study after gaining their first degrees. A major difference is revealed here, with NI postgraduates earning significantly less than those who did not undertake postgraduate study. The most likely reason for this difference is the fact that postgraduates have had less full-time employment experience than those who did not engage in postgraduate study. Their later earnings may well rise above those for non-postgraduates.
- 8.2.8 The final two columns of Table 8.2 show that NI graduates who had left Northern Ireland were earning higher salaries than those who had found employment in Northern Ireland. As was indicated in figure 8.1, this is a consequence of the higher salaries earned by those living in London and the South East.

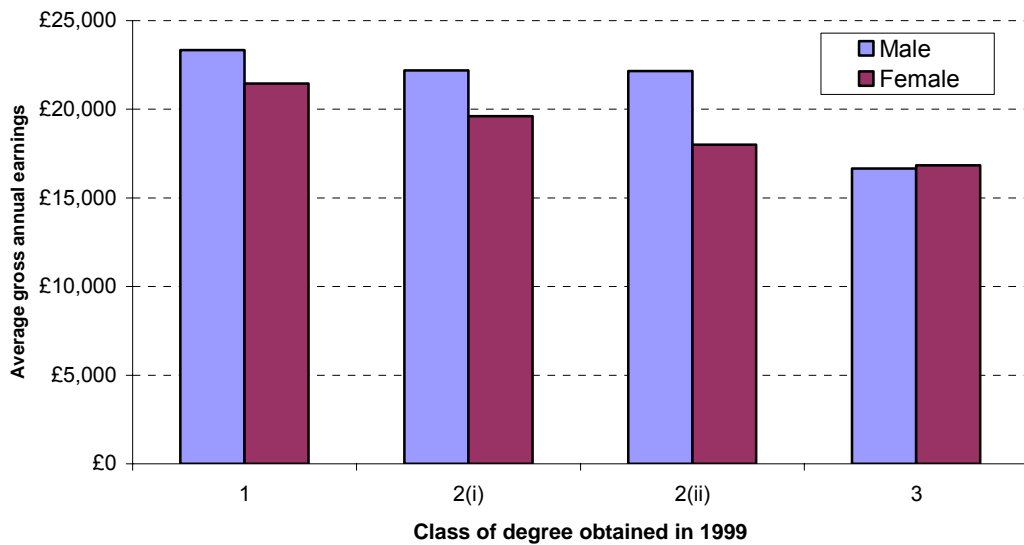
**Table 8.2** Average annual gross earnings: all Northern Ireland graduates in full-time employment in 2003/04, by whether or not undertook postgraduate study and by location of employment at the time of the survey

	Undertook postgraduate study	Did not undertake postgraduate study	Living in Northern Ireland at time of survey	Not living in Northern Ireland at time of survey
<b>Male</b>	£22,100	£24,400	£22,200	£27,300
<b>Female</b>	£19,600	£21,100	£19,700	£22,200

Source: Survey of the Career Paths of 1999 Graduates and Diplomates

- 8.2.9 Figure 8.3 shows the variation in mean earnings by class of degree. For women there is a clear gradient evident here, with a first class degree associated with earnings some £5,000 per annum higher than for a third class degree. For men the gradient is less evident, except for men who gained a third class degree who reported earnings significantly lower than other degree classes. With the exception of those who had a third class degree, the mean earnings of male graduates in other degree classes are higher than for women.

**Figure 8.3** Average annual gross earnings: all Northern Ireland graduates in full-time employment in 2003/04 by class of degree and gender



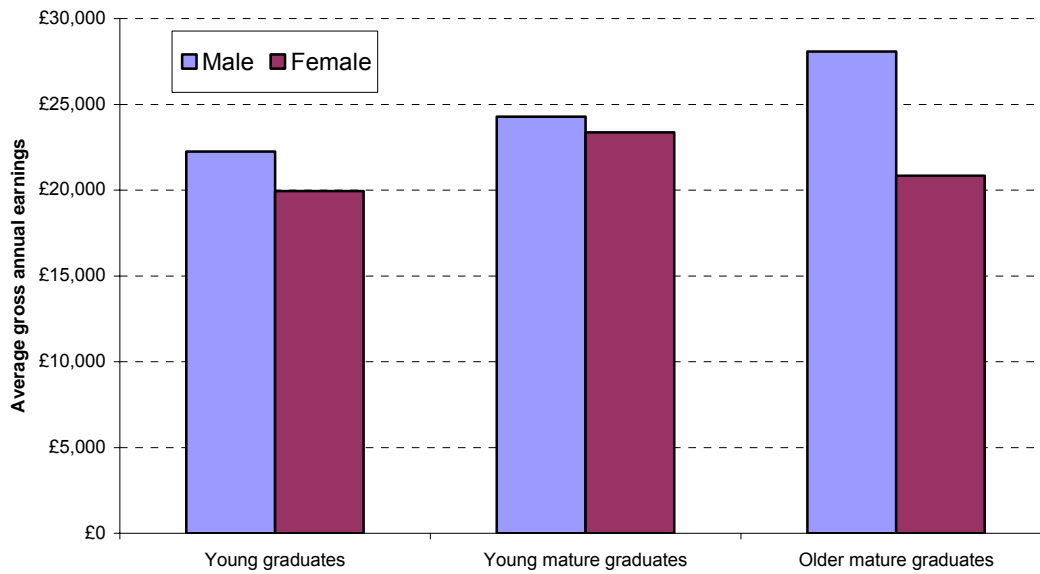
8.2.10 The variation in earnings by sector of employment is shown in figure 8.4. For men, three sectors stand out as above average. In the information and communications sector, business services and other public services, male graduates from Northern Ireland's HEIs who graduated in 1999 earned over £25,000 per annum on average at the time of the survey. Again, we note lower average earnings for women in full-time employment in all sectors, with the exception of distribution, hotels and catering where both male and female graduates report lower than average earnings. The low average earnings for women in full-time employment in the transport and tourist services sector is statistically unreliable due to the small numbers of women graduates recorded in the sample.

**Figure 8.4** Average annual gross earnings: all Northern Ireland graduates in full-time employment in 2003/04 by sector of employment and gender



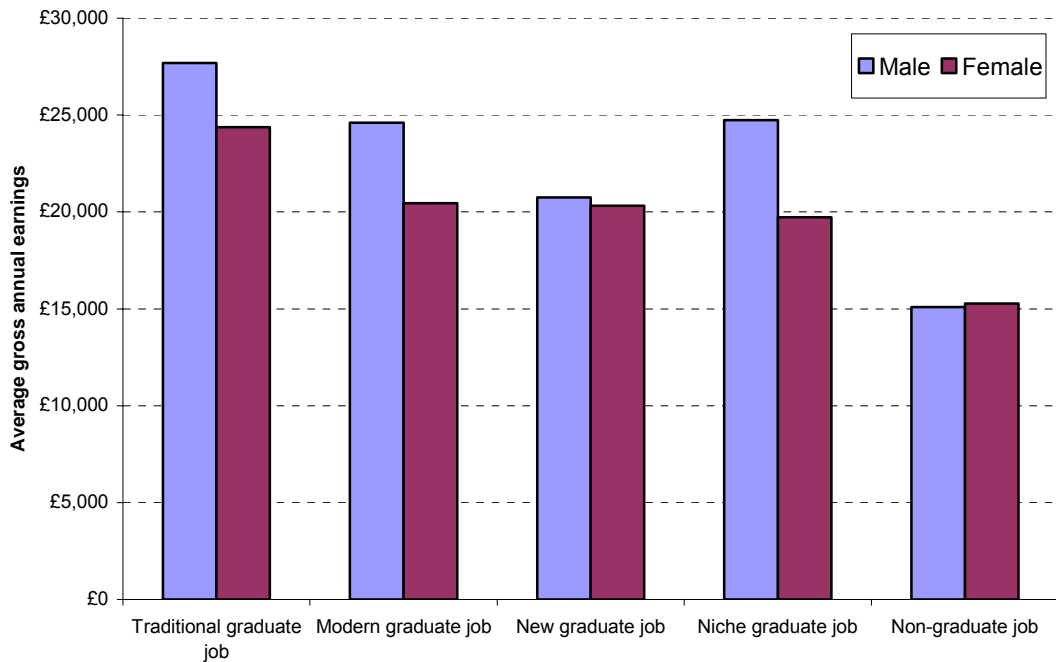
8.2.11 For men, age appears as a significant factor in understanding earnings differences. Figure 8.5 reveals that, for the youngest age group (those who gained their first degree before the age of 26 years), average earnings were as much as £5,000 per annum lower than for those who were aged over 30 at the time they graduated. For women, age does not appear as an important influence on earnings.

**Figure 8.5** Average annual gross earnings: all Northern Ireland graduates in full-time employment in 2003/04 by age group and gender

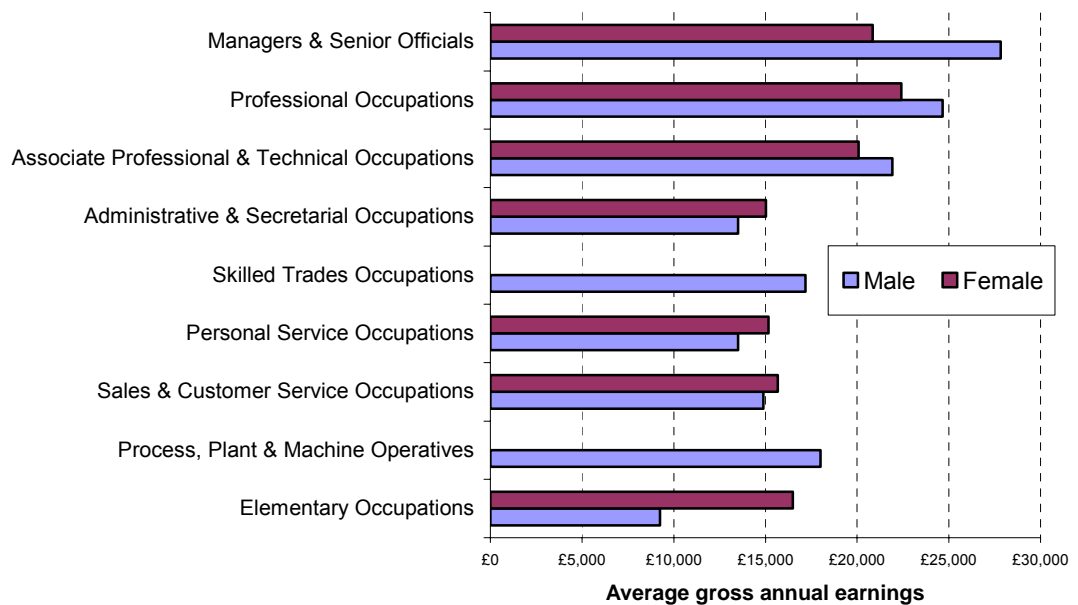


8.2.12 Figures 8.6 and 8.7 indicate the variation in earnings by occupation. In figure 4.13 we use SOC (HE) to show the difference in earnings between those in graduate and non-graduate jobs – a difference which can be as much as £10,000 per annum between those employed in traditional graduate jobs compared with those in non-graduate jobs. Interestingly, male graduate in niche graduate jobs have earnings which, on average, equal those employed in modern graduate jobs.

**Figure 8.6** Average annual gross earnings analysis – all Northern Ireland graduates in full-time employment in 2003/04 by SOC (HE) classification of current job and gender



**Figure 8.7** Average annual gross earnings analysis – all Northern Ireland graduates in full-time employment in 2003/04 by SOC2000 classification of current job and gender



8.2.13 Figure 8.7 details these occupational differences in earnings by major groups of SOC 2000. These differences must be treated with some caution, particularly for those reported as working in process, plant and machine operative occupations and elementary occupations, due to the low number of graduates in these jobs.

### **8.3 Unravelling the effects on earnings**

8.3.1 To unravel the differing impact of these factors on pay, we undertook a multivariate analysis of gross annual earnings, contrasting results for NI-domiciled graduates from the two NI HEIs included in this study with those from HEIs across the UK. Detailed results are shown at Appendix 1, Table A1. Given the smaller numbers in the former group, it is not surprising to note that many of the variables which correlate significantly with earnings in the UK HEIs sample are not significant in the NI HEIs sample. Nonetheless, significant findings are as follows:

8.3.2 A number of factors appear positively correlated with earnings of graduates from NI HEIs. These are:

- working in workplaces where 'my type of work' is done predominantly by men;
- working in Inner London;
- having studied medicine and related subjects.

Conversely a number of factors which are statistically significant are negatively correlated with earnings of graduates from NI HEIs. These are:

- having a temporary contract;
- working in the 'not-for-profit' sector;
- working in Northern Ireland;
- having studied for an arts degree;

Again, we note the importance of location of employment as a factor influencing earnings. While subjects studied do appear to have some impact on later earnings for graduates from Northern Ireland HEIs, it is the location of employment at the time of the survey which has the most significant effect.

### **8.4 Relative earnings of the *Class of '95* and the *Class of '99*.**

8.4.1 To gain a more precise indication of the earnings position of the 1999 graduates compared with the 1995 graduates, we have to take account of a number of additional factors to measure the difference in earnings with more precision. As was shown in the



preceding section, earnings vary markedly with a wide variety of influences, including the sectors in which graduates work, the class of degree they obtained and their ages. Differences in the earnings of the two graduating cohorts could simply reflect changing composition rather than any real decline in earnings. Another important factor which needs to be taken into account in this comparison is the variable period of time which has elapsed since the cohorts graduated. Although four years separates these two cohorts in terms of when they obtained their degrees, the dates upon which they recorded their current earnings differ by between four and five years depending upon when the survey questionnaires were completed<sup>16</sup>. For this reason we deflated the earnings of each member of the 1999 cohort using a deflator calculated from the relevant monthly index of average earnings (the month the survey questionnaire was returned). These deflators ranged from 19 to 23 per cent, depending upon the date the 1999 graduate made their survey response.

- 8.4.2 For the UK sample, we then investigated the change in real earnings between the two cohorts, measuring their earnings at a point some 3½ to 4 years after graduation. The results of this investigation showed that there has been a decline in the earnings of these samples of graduates in their early careers, relative to the growth of earnings in the rest of the economy (Purcell, *et al.* 2005). This result may be particular to these two cohorts, or it could indicate that the increased numbers of graduates in the labour market may be having a depressing effect on graduate earnings more generally. It is of interest to see whether or not a similar result holds for graduates from NI HEIs.
- 8.4.3 For one of the two NI higher education institutions which participated in this study we have information on the earnings of their graduates 3½ to 4 years after graduation for both the 1995 and the 1999 cohort. While this makes for a more limited comparison, we examined these data in some detail, to see if we could observe a real decline in earnings between the two cohorts of graduates. Table 8.3 displays the results for both UK graduates and those from the NI HEI for whom we have earnings information at the 3½ to 4 year point after graduation<sup>17</sup>. For all UK graduates, we observe an 8 per cent decline in real earnings over this period. For graduates from the NI HEI included in the study, the results are less well-defined given the smaller numbers upon which the analysis is based, but indicate a decline in real earnings which is marginally less strong than that recorded for students from all HEIs in the UK.

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<sup>16</sup> The 1995 cohort from the original 33 HEIs completed survey questionnaires within a narrow time period, from December 1998 to January 1999. For reasons associated with data protection, the responses from the 1999 cohort spanned a period from February 2003 to April 2004, although three quarters of responses were received during April to June 2003.

<sup>17</sup> It is important to compare graduates' earnings at a similar point in time after graduation, given the strong growth that is evidenced by graduates' earnings in the first few years after graduation. Although we have earnings information for 2003/04 for graduates from both NI HEIs, we only had one of these institutions in the earlier study of the 1995 cohort. While we were able to collect much data retrospectively from graduates of the second HEI when it was included in the *Seven Years On* study, we could not collect earnings information retrospectively due to the severe measurement error this would introduce.

**Table 8.3** Difference in real annual earnings of 1995 and 1999 graduates in full-time employment 3½ to 4 years after graduation, by gender and by location of HEI from which graduated

	Relative difference in real earnings 3-4 years after graduation	Standard error	Significance
All UK HEIs			
1995 graduate	Ref.		
1999 graduate	-8.2%	0.6%	0.000
NI HEI			
1995 graduate, male	Ref.		
1999 graduate, female	-7.8%	3.0%	0.029

Notes: 'Ref.' denotes the reference category.

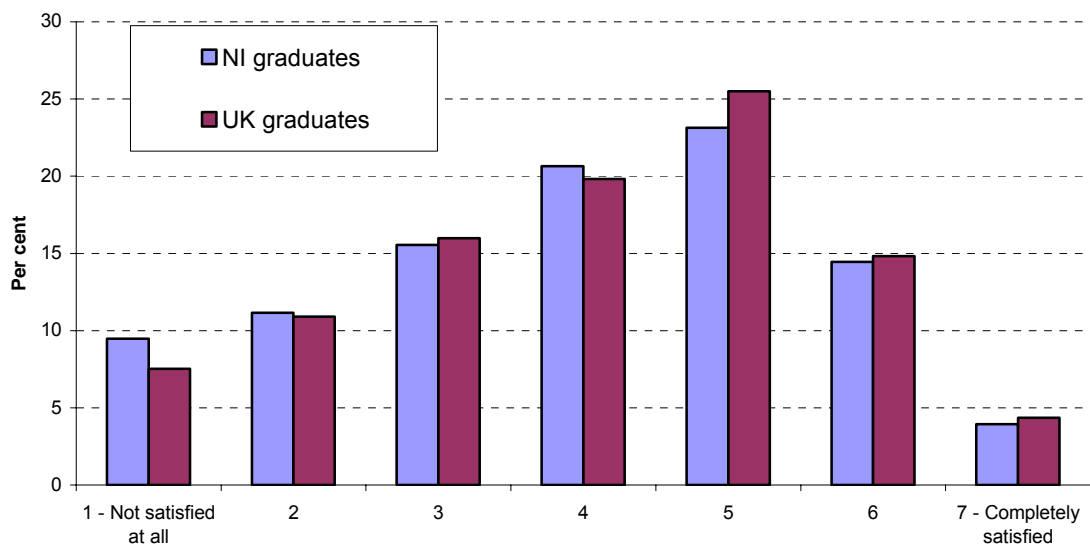
Other variables included in the model are: type of higher education institution attended (relevant only for the UK sample), subject studied, method of study, further qualifications obtained, entry qualifications, age, class of degree obtained, work limiting disability, measures of work motivation, whether or not a degree was required for current job, size of organisation, whether current job is in private, public or voluntary sector, ethnic background, sector of current job and the cumulative number of months employed between gaining first degree and the time of the interview

Sources: Survey of the Career Paths of 1999 Graduates and Diplomates  
Survey of the Career Paths of 1995 Graduates and Diplomates

## 8.5 Satisfaction with earnings

8.5.1 Finally, we compare NI graduates with all UK graduates, to investigate the extent to which graduates express satisfaction with their total pay. Not surprisingly, given the lower levels of graduate earnings prevailing generally within Northern Ireland, we find that levels of satisfaction with total pay are slightly lower than for the UK sample, as Figure 8.8 indicates.

**Figure 8.8** Satisfaction with total pay in current job comparing NI and UK HEI graduates



## 8.6 Summary

- graduate earnings in Northern Ireland are lower than in the rest of the UK, by about 12-15 per cent;
- the lower earnings are associated with employment in Northern Ireland and do not reflect any type of institutional effect. Graduates domiciled in NI before studying at a NI HEI who were employed in Inner London 3½ to 4 years after graduation were earning approximately £8,000 a year more on average than those who were employed in Northern Ireland;
- more graduates from NI HEIs in full-time employment in 2003/04 were earning salaries below £18,000 per annum than was the case for all UK graduates. This was especially so for men;
- the earnings of NI graduates vary significantly by degree class, by sector of employment, by type of occupation and (for men) by age. Multivariate analysis of the earnings information confirms these variations and shows the importance of the location of the workplace (within or outwith NI) as a major factor influencing earnings;
- in common with all UK graduates, the *Class of '99* appears to be experiencing a lower rate of growth of earnings relative to the *Class of '95* measured at a similar point in their careers.



## CHAPTER 9

### DEBT AND GRADUATES FROM NORTHERN IRELAND

#### 9.1 Introduction

9.1.1 This chapter considers levels of student indebtedness among Northern Ireland graduates from the 1999 cohort and considers how this debt is related to labour market outcomes subsequent to graduation. Since the introduction of student loans in 1990 following the 1990 Education (Student Loans) (Northern Ireland) Order, there have been significant changes to the ways in which students receive financial support while undertaking a course of Higher Education. The Education (Student Support) (Northern Ireland) Order introduced further changes to student financial support. The main provisions of the Order were as follows:

- the introduction of means-tested contributions towards tuition fees;
- the phasing out of means-tested mandatory awards (grants for living costs);
- support for living costs solely via loans which were partly income assessed; and
- a different method of repaying loans.

From 1998/9, new entrants had to contribute towards the costs of their tuition, which were initially set a maximum of £1,000 and these fees were to be means tested. Students entering higher education in 1999/2000 (together with those who started the previous year) were to receive support for living costs solely through student loans that had been introduced in 1990. The repayments on these loans were linked more directly to student's income once they graduated, with students having to start repayment of their loans when their income reached £10,000.

9.1.2 The academic year 1998/9 was therefore the beginning of the transitional period in which mandatory grants were replaced completely by means tested student loans. The present enquiry collects information from the 1999 cohort on student indebtedness at the time of graduation. The information collected from the present enquiry relates to graduates who were subject to different mechanisms of student support arrangements. Caution should, therefore, be taken in terms of the applicability of these findings to present and future cohorts of graduates. It is not clear how the level and composition of debt will change among future cohorts of graduates, particularly in light of the reintroduction of grants for lower income students from September 2002 and variable tuition fees up to a cap of £3,000 per year from 2006.

9.1.3 The remainder of this Chapter is structured as follows. Section 9.2 provides an overview of the levels of student debt derived from the present survey of 1999 graduates, the sources from which this debt was accumulated and the repayment of this debt.

Comparisons are made primarily between NI domiciled graduates attending NI HEIs (subsequently referred to as NI graduates) and UK graduates. Section 9.3 shows how debt influences the early careers of graduates, both in terms of employment outcomes and further participation in full time education.

## 9.2 Levels, sources and repayment of student debt

- 9.2.1 Respondents to the survey were asked '*at the point when you completed your studies in 1999, how much repayable debt (in total) did you owe?*'. Table 9.1 presents information on the percentage of graduates who reported that they had some repayable debt, with comparisons being made between NI graduates and all UK graduates. We utilise the three-fold classification of age group as defined by the age of the respondent at the time of the survey. The 'young' age group refers to those respondents who were less than 25 years old at the time of graduation. The young mature age group refers to those respondents who were between 25 and 29 years old at the time of graduation. The older mature age group refers to those respondents who were 30 years or older upon graduation.
- 9.2.2 Table 9.1 shows that the percentage of graduates with repayable debt upon the completion of their studies was lower among NI graduates than across the whole UK sample. Sixty seven per cent of NI graduates reported that they had some kind of repayable debt upon the completion of their studies. This is compared to 77 per cent of the UK sample. Levels of repayable debt were lower among older groups of graduates. Among NI graduates, 34 per cent of the older mature respondents reported having some form of repayable debt after completing their studies. This is almost half the rate observed among the 'young' graduates alongside whom they had studied.

**Table 9.1 Percentage with repayable debt**

	UK graduates	NI-domiciled NI graduates
Age group:		
Young	81.1 (6,317)	72.7 (763)
Young mature	76.8 (739)	67.6 (133)
Older mature	54.6 (1,059)	34.3 (135)
All	77.0 (8,129)	66.8 (1,033)

9.2.3 There is significant variation in the financial circumstances of graduates from these three age groups. However, the question only asked respondents to indicate how much repayable debt they had at the time they had completed their studies and not whether this debt was actually incurred during the course of their studies. It is likely that the older groups of respondents were a more heterogeneous group of respondents in terms of their reasons for entering higher education and their subsequent labour market outcomes. We may consequently expect such respondents to have accumulated repayable debt for reasons other than pursuing a course of higher education, reflecting their later stages in the life course. To abstract from these difficulties and to avoid problems associated with small sample sizes associated with graduates from NI, in the remainder of this chapter our analysis focuses upon the 'young' age group of respondents.

9.2.4 Table 9.2 shows the estimated levels of repayable debt. Among 'young' NI graduates who report having repayable debt, the mean total amount of repayable debt is estimated to be £4,430, with the median level of repayable debt estimated to be lower at £3,607. The mean level of debt among NI graduates is therefore estimated to be approximately £1,500 less than that accumulated among all UK graduates. A similar differential is shown to exist when considering median levels of student debt.

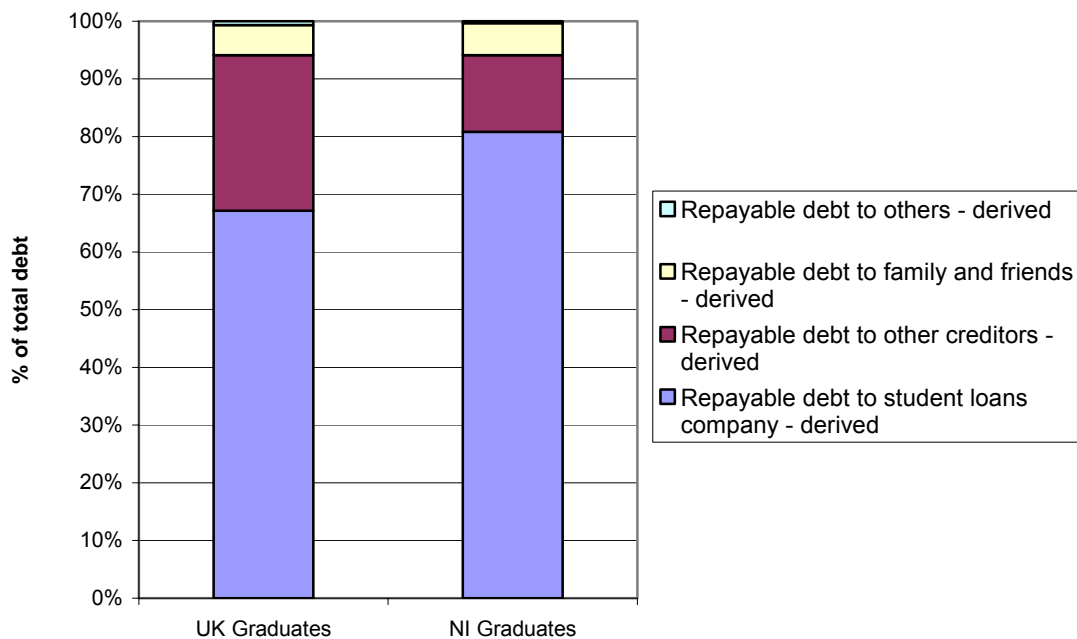
**Table 9.2 Levels of repayable debt, 'young' graduates**

	UK graduates	NI-domiciled NI graduates
All graduates	£	£
Repayable debt to Student Loans Company – derived	3,220	2,603
Repayable debt to other creditors - derived	1,292	427
Repayable debt to family and friends - derived	249	179
Repayable debt to others – derived	32	10
Mean	4,793	3,219
Median	4,200	3,000
Sample	6,317	763
Those with debt		
Repayable debt to Student Loans Company – derived	3,970	3,582
Repayable debt to other creditors - derived	1,593	587
Repayable debt to family and friends - derived	308	247
Repayable debt to others – derived	39	14
Mean	5,910	4,430
Median	5,000	3,607
Sample numbers	5,102	532

9.2.5 The analysis has therefore revealed that both the incidence and levels of repayable debt are lower among NI graduates. The relative contribution of these different sources to the total level of repayable debt is presented in Figure 9.1. Among NI-domiciled NI graduates

with debts, debts from the Student Loans Company accounted for 81 per cent of all repayable debts, debts from other creditors accounted for 13 per cent of all repayable debts and debts from family and friends accounted for 6 per cent of repayable debts. Among the sample UK graduate, debts from the Student Loans Company accounted for 67 per cent of all repayable debts, debts from other creditors accounted for 27 per cent of all repayable debts and debts from family and friends accounted for 5 per cent of repayable debts. NI graduates are therefore relatively more reliant upon student loans as a source of income.

**Figure 9.1 Sources of repayable debt**



9.2.6 The focus of the analysis in this report has generally been upon making comparisons between respondents from the 1999 cohort who were NI domiciled and graduated from NI HEIs compared to the overall pool of UK graduates. However, in considering levels of indebtedness, it is of interest to consider the experiences of those respondents who lived in Northern Ireland before entering higher education who migrated to GB HEIs in order to study for their 1999 qualification. Table 9.3 shows how levels of student indebtedness among 'young' graduates vary by both area of domiciliary before entering higher education and by the location of HEI. Sample size considerations limit the extent to which such an analysis can be undertaken. For example, within our sample of graduates who had accumulated repayable debt, only 49 can be identified as leaving Northern Ireland to commence studying for their 1999 qualification. With this *caveat* in mind, such graduates are estimated to incur levels of debt that are identical to those accumulated by others attending HEIs located outside of Northern Ireland.



**Table 9.3** Levels of debt by location of residence and HEI

		Location of HEI attended for 1999 degree		
		Other UK	NI	All
UK-domiciled	% with debt	81.8%	60.2%	81.7%
	Level of debt	£4,913 (5,580)	£2,210 (34)	£4,904 (5,614)
NI-domiciled	% with debt	81.0%	72.7%	73.5%
	Level of debt	£4,921 (49)	£3,219 (763)	£3,390 (812)
All	% with debt	81.8%	72.1%	81.1%
	Level of debt	£4,913 (5,629)	£3,175 (797)	£4,790 (6,426)

9.2.7 Table 9.4 shows how the incidence and levels of repayable debt varied among different groups of survey respondents. In both the UK sample as a whole and among NI-domiciled NI graduates, males were more likely to indicate that they had repayable debt. Among NI graduates, approximately 76 per cent of males indicated that they had repayable debts compared to 71 per cent of females. No clear relationship emerges between socio-economic background and levels of repayable debt. As in the sample as a whole and among NI graduates, those graduates whose parents were small employers or own account workers were generally least likely to report having repayable debt. Making comparisons between NI graduates and the UK graduate sample, it was observed that even within socio-economic groups, the levels of repayable debt were lower among the NI graduates. This may reflect the fact that graduates from 1999 were still entitled to means-tested maintenance grants, the availability of which could have had a disproportionate impact upon student finances between those living in NI and those living in other parts of the UK.

**Table 9.4 Incidence and levels of repayable debt, 'young' graduates by gender, socio-economic background, subject and community of origin**

	UK graduates		NI graduates	
	% with debt	average debt	% with debt	average debt
Male	82.5	4,970	75.5	3,320
Female	79.9	4,641	71.0	3,159
Managerial and professional occupations	82.7	4,799	75.2	3,472
Intermediate occupations	82.2	4,857	69.5	2,797
Small employers and own account workers	79.3	4,808	70.7	3,107
Lower supervisory and technical occupations	81.7	4,937	78.3	3,126
Semi-routine and routine occupations	82.2	4,922	75.9	3,170
Neither parent in paid employment	80.3	4,871	83.1	4,116
Education, medicine and other vocational	81.2	5,016	70.5	3,732
Arts and humanities	82.5	4,930	75.5	3,192
Social sciences and business studies	79.4	4,793	75.0	3,046
Science based	80.0	4,401	66.3	2,644
Interdisciplinary	83.2	4,951	78.6	3,228
Roman Catholic			81.5	3,960
Protestant			63.0	2,452
All	81.1	4,793	72.7	3,219
Total sample		6,317		763

9.2.8 Within both the overall graduate pool and among NI graduates, those respondents who studied degrees within the humanities were most likely to report as having had accumulated repayable debt during the course of their studies. In terms of the average levels of repayable debt, debts were highest among those respondents who studied vocationally orientated degrees. Finally, those respondents of Roman Catholic origin were more likely to report having had accumulated repayable debt compared to those from a Protestant background. The incidence of repayable debt was estimated to be almost 20 percentage points higher among Roman Catholic respondents compared to Protestant respondents. In terms of average levels of debt, Roman Catholic respondents reported having had accumulated approximately £1,500 more repayable debt than Protestant respondents.

9.2.9 Survey respondents were asked about the repayment of their debts, encompassing both the level of repayment and whether the respondents had received any help with the repayment of their debts. Responses to these questions are presented in Table 9.5. Among the overall graduate pool, 17 per cent of respondents who had repayable debt indicated that they had repaid this debt in full. This is compared to 11 per cent of NI graduates. Little difference was observed in the repayments of debt between males and females. There was some evidence to suggest that levels of repayment were generally

higher among respondents from higher socio-economic backgrounds. Comparisons across some groups are difficult due to the relatively small sample sizes. However, when comparing repayment within particular socio-economic groups, levels of repayment among the NI graduates were observed to be lower than that observed among the overall UK graduate pool. Among the NI graduates, levels of repayment were observed to be higher among those who had studied vocationally orientated degrees or science based subjects. Finally, among the NI graduates it was observed that levels of repayment were higher among respondents from Protestant backgrounds, with levels of repayment among this group being almost twice as high as that observed among those from the Catholic community.

- 9.2.10 In terms of help received with the repayment of their debt, we observed that NI graduates were less likely to indicate that they had received assistance from a partner or family member with the repayment of their debt (10 per cent) compared to those from the overall graduate pool (16 per cent). Again, these differences were observed to occur within socio-economic groups. Differences between NI graduates and the overall UK graduate pool can therefore not be explained by different socio-economic backgrounds. Corresponding to levels of repayment, respondents from Protestant backgrounds were almost twice as likely to indicate that they had received help from their families regarding the repayment of their debt compared to those graduates from the Catholic community.

**Table 9.5 Repayment of debt, 'young' graduates by gender, socio-economic background, subject and community of origin**

	UK graduates		NI graduates	
	Repaid in full?	Help from family?	Repaid in full?	Help from family?
Male	15.9	15.7	11.8	7.9
Female	17.8	16.9	11.0	10.7
Managerial and professional occupations	16.8	17.8	10.9	10.4
Intermediate occupations	16.5	15.2	16.6	18.1
Small employers and own account workers	20.8	15.7	11.7	9.7
Lower supervisory and technical occupations	14.7	16.8	(28.9)	(3.1)
Semi-routine and routine occupations	14.5	11.9	7.1	6.7
Neither parent in paid employment	10.4	10.6	(4.1)	(0)
Education, medicine and other vocational	17.7	14.6	14.1	8.2
Arts and humanities	16.6	20.6	9.5	16.6
Social sciences and business studies	17.3	16.5	10.6	8.8
Science based	16.9	11.9	14.3	7.4
Interdisciplinary	15.8	18.8	4.4	9.2
Roman Catholic			8.0	7.4
Protestant			14.9	13.9
All	16.9	16.3	11.3	9.6
	5,102		532	

Parentheses indicate estimates based on less than 30 un-weighted observations

### 9.3 The impact of debts upon early careers

9.3.1 Respondents to the questionnaire who indicated that they had repayable debt were subsequently asked whether these debts had affected their options since completing their studies. For those respondents who indicated that their options had been limited in some way, they could indicate either that;

- they had wished to go on to postgraduate study but they did not want to add to their debts;
- they had to turn down an attractive, but low paid job because they wanted to repay their debts;
- they had to accept a well paid job that they did not really want in order to repay their debts; or
- they had been affected in some other way.

9.3.2 The responses to these questions are presented in Table 9.6. Among the UK sample 75 per cent of respondents with repayable debt indicated that this debt did not affect their options after completing their course. The corresponding figure for NI graduates is estimated to be slightly higher at 79 per cent. This result is consistent with the lower levels of debt observed among NI graduates generally. Of those 25 per cent of respondents from the UK graduate sample with repayable debt and who indicated that their options were affected by their debt, approximately half indicate that they would have liked to have gone on to postgraduate study but did not want to add further to their debts. Among those NI graduates who indicated that their options were affected by their debt, almost two thirds indicate that they would have liked to have gone on to postgraduate study. The deterrent effect of debts upon post-graduate study therefore appears to be of relative more importance among NI graduates.

**Table 9.6 Debts and options after graduation**

	UK graduates	NI graduates
No, my options were not limited by my debts	74.9	79.3
Yes, wanted postgraduate study, didn't want to add to debts	12.1	13.8
Yes, turned down low paid job, wanted to repay debts	3.3	0.6
Yes, had to accept job didn't want in order to repay debts	3.9	2.1
Yes, in some other way	9.1	4.7
Sample	5,102	532

9.3.3 Table 9.7 shows which groups of respondents were more likely to report that their options had been affected by their debts. It was observed that both among NI graduates and the

overall UK graduate pool, females were more likely to indicate that their debts had affected their options in some way. Once again, no clear relationship emerges by socio-economic background. Among both NI graduates and the overall UK graduate pool, those graduating from the Arts and Humanities were most likely to indicate that their debts had limited their options in some way. This finding is almost certainly related to the poorer labour market outcomes of these graduates in terms of both earnings and employment within non-graduate occupations. Similarly, those respondents from Catholic backgrounds were more likely to indicate that their debts had affected their options compared to those from Protestant backgrounds. Again, this finding is likely to reflect the generally higher levels of debts accumulated by those respondents of Catholic origin.

**Table 9.7** Debts and options after graduation, 'young' graduates by gender, socio-economic background, subject and community of origin

	UK graduates	NI graduates
Male	22.9	17.3
Female	27.1	22.7
Managerial and professional occupations	25.0	21.4
Intermediate occupations	25.5	21.4
Small employers and own account workers	22.5	17.1
Lower supervisory and technical occupations	30.3	(20.0)
Semi-routine and routine occupations	26.7	25.3
Neither parent in paid employment	33.1	(29.2)
Education, medicine and other vocational	24.8	20.4
Arts and humanities	30.1	27.4
Social sciences and business studies	26.8	22.2
Science based	20.2	13.2
Interdisciplinary	23.9	20.6
Roman Catholic		22.4
Protestant		18.9
All	25.1	21.0
Sample	5,102	532

9.3.4 In Figures 9.2 and 9.3 we examine the effects of debt upon early career choices by utilising the career history information collected by the survey. As above, the analyses of career profiles are restricted to the 'young' age group of graduates, i.e. those respondents who were less than 25 years old at the time of graduation. For the purpose of these charts, we divide respondents into three groups. The first group refers to those respondents who graduated without incurring any repayable debt and accounts for approximately 18 per cent of 'young' graduates from the overall UK graduate pool and 27 per cent of 'young' NI graduates. The second group refers to those respondents who graduated with debt, but indicate that this debt did not affect their options. This group

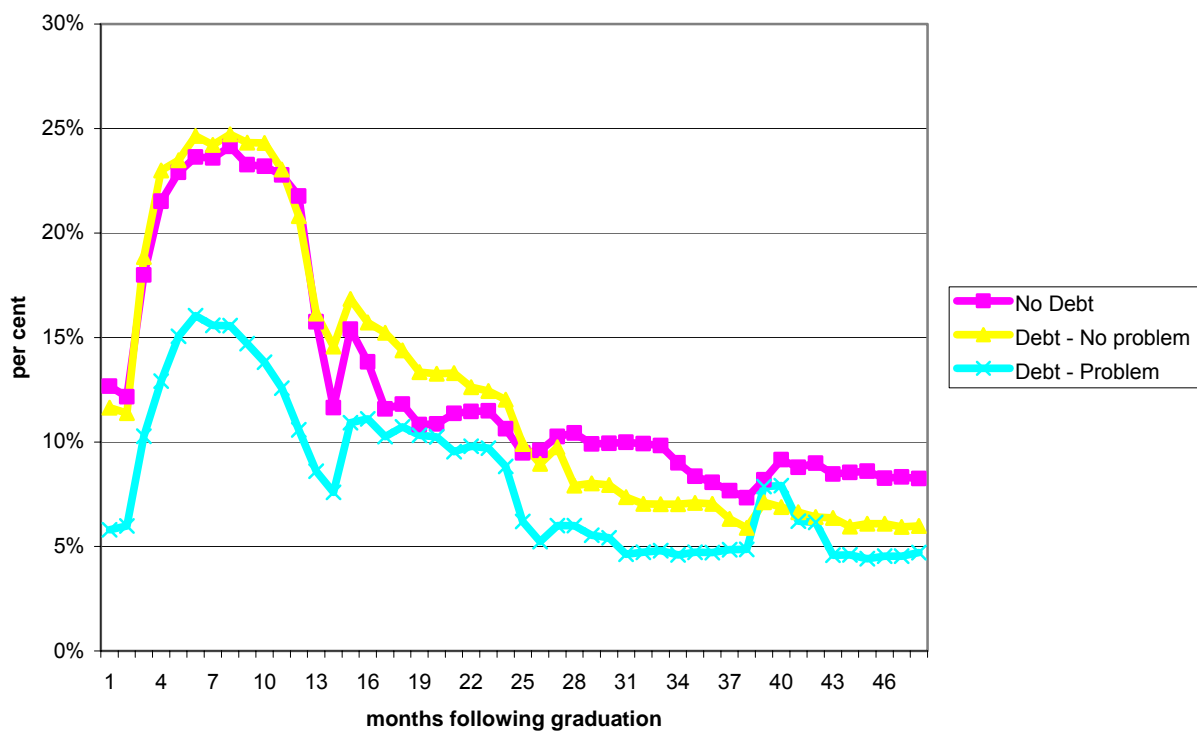
accounts for 62 per cent of 'young' graduates from the UK graduate pool and 57 per cent of 'young' NI graduates. Finally, we distinguish a third group who graduate with repayable debt and who indicate that this debt affected their options in some respect. This last group accounts for 21 per cent of 'young' graduates within the UK sample and 16 per cent of similarly aged NI graduates.

- 9.3.5 In Figure 9.2 we consider the profile of NI HEI graduates who go on to further full time education during the four years following the completion of their studies. It can clearly be seen that participation in further full time study was lower among those respondents who indicated that their debts had affected their options after graduation. During the 12 months following graduation, participation in full time study was approximately 8 percentage points lower among this group than those respondents who reported having no repayable debt. Among those with debt who did not consider that this has affected their options, it was approximately 1-2 per cent lower. The analysis of career histories therefore supports the analysis presented in Table 9.6 where 14 per cent of NI graduates with repayable debt indicated that they would have liked to have undertaken postgraduate study but chose not to because they did not wish to add to their debts.
- 9.3.6 In Figure 9.3 the occupational composition of employment of these three groups of graduates are compared. Specifically, we examine whether those respondents who indicated that their career options had been affected by their debt were actually more likely to have been employed in occupations that were not commensurate with their level of education. To consider this issue, we explore the profile of employment in non-graduate occupations as derived from the SOC(HE) classification of occupations, focussing on the proportion of employed graduates who were working in non-graduate occupations over the period between completing their degrees and the date of the survey (2003/04).
- 9.3.7 Figure 9.3 illustrates how, immediately following graduation, almost half of employed NI graduates without repayable debt worked within non-graduate occupations. This share of employment within non-graduate occupations was almost identical to that observed among NI graduates with debt who felt that this debt had not affected their options. However, immediately following graduation, approximately 60 per cent of those graduates with debt who felt that this debt had affected their options were employed in non-graduate occupations.
- 9.3.8 By 12 months after graduation, the proportion of NI graduates employed in non-graduate occupations had declined to approximately 30 per cent for those both without debt and for those with debt who felt that this debt had not affected their options. Among those NI graduates who felt that their options had been affected by their debt, approximately 40 per

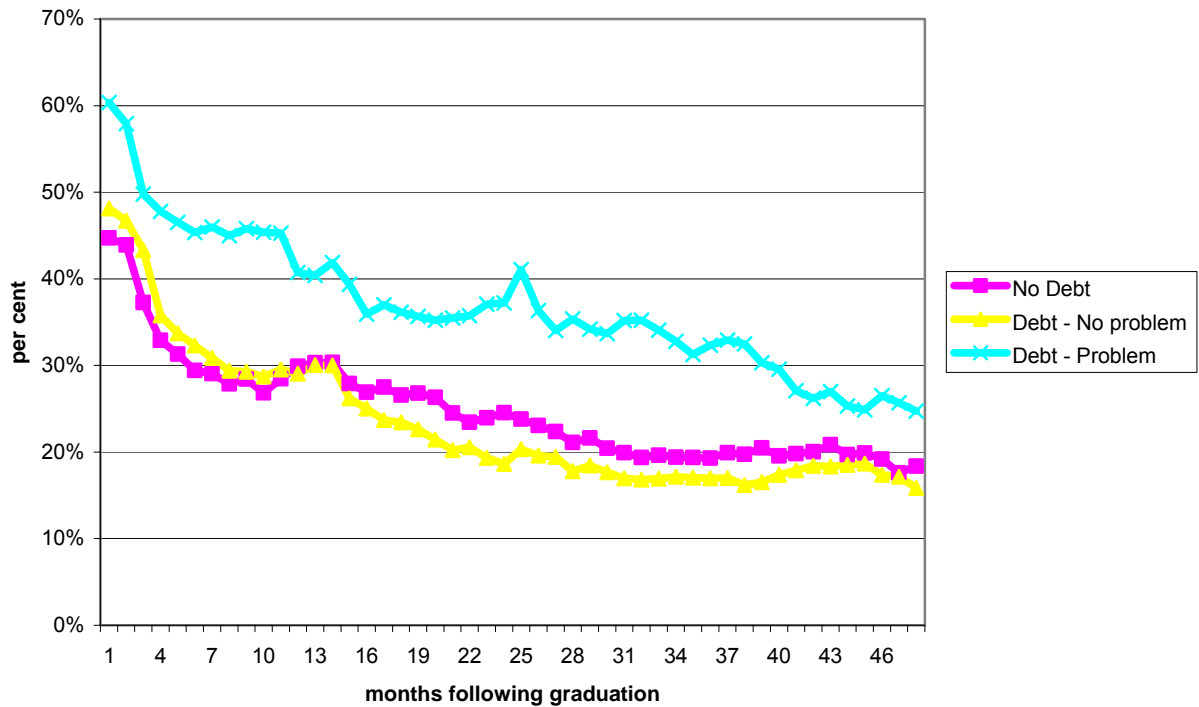
cent were employed within non-graduate occupations. At the end of the period covered by the career histories, the share of employment in non-graduate occupations declined to 15-20 per cent for both those without debt and those with debt but who felt that this debt had not affected their options. However, among those NI graduates who felt that their options had been affected by their debt, almost 30 per cent were employed within non-graduate occupations.

9.3.9 To conclude, among those 'young' NI graduates who indicated that their options following graduation had been in some way affected by their debts, we observe both a lower rate of participation in further full time education and a persistently higher share of employment within non-graduate occupations. Although not presented here, these findings are similar to those observed among 'young' graduates from the UK sample. Therefore, perceptions that debt had limited choice are shown to be correlated with participation in further study and labour market outcomes following graduation.

**Figure 9.2 Debts and participation in further study: NI graduates**



**Figure 9.3 Debts and employment within non-graduate occupations: NI graduates**



#### 9.4 Summary

- Sixty seven per cent of NI graduates reported that they had repayable debt on the completion of their studies, compared to 77 per cent of all graduates in the survey. For both groups, levels of repayable debt were lower among older groups of graduates. Among 'young' NI graduates who report having repayable debt, the mean total amount of repayable debt was estimated to be £4,430, with the median level of repayable debt estimated to be lower at £3,607. Both the mean and median level of debt among NI graduates was estimated to be approximately £1,500 less than that accumulated among the UK cohort. Among both UK graduates and NI graduates, males were more likely to indicate that they had repayable debt but no clear relationship emerges between socio-economic background and levels of repayable debt. Even within different socio-economic groups, the levels of repayable debt were lower among the NI graduates.
- The propensity of NI graduates to have repaid their debts in full was lower than for the UK sample as a whole. Seventeen per cent of all UK graduates who had repayable debt indicated that they had repaid this debt in full compared to 11 per cent of NI graduates. Overall, levels of repayment were generally higher among respondents from higher socio-economic backgrounds. When comparing repayment within particular socio-economic groups, levels of repayment among



the NI graduates were observed to be lower than that observed among the overall UK sample.

- The incidence of repayable debt was estimated to be almost 20 per cent higher among Roman Catholics than among Protestant respondents. Average levels of debt were approximately £1,500 more for the former group. Among the NI graduates, levels of repayment were almost twice as high as that observed among those from the Catholic community.
- Among all UK graduates in the survey, 75 per cent of respondents with repayable debt indicated that this debt had not affected their options after completing their course compared to 79 per cent of NI graduates. For both groups, females were more likely to indicate that their debts had affected their options in some way, although there was no clear relationship according to socio-economic background. Those respondents from Catholic backgrounds were more likely than Protestant to have indicated that their debts had affected their options. Of those who had been affected by debt, approximately half of the UK respondents as a whole indicated that they would have liked to have gone on to postgraduate study but did not want to add further to their debts compared to two-thirds of similarly-affected NI graduates. For 'young' NI graduates, participation in further full time study was lower among respondents who had indicated that their debts had affected their options after graduation.
- Both immediately after graduation, after 12 months in the labour market and at the time of the survey, 'young' NI graduates with debt which they felt had affected their options were more likely to be employed in non-graduate occupations than both those without repayable debt and those with debt or those who considered that their options had not been constrained by debt.



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## Appendix

**Table A1 Factors associated with the gross annual earnings of 1999 graduates in full-time employment: Northern Ireland and UK Higher Education Institutions**

	Northern Ireland HEIs			UK HEIs		
	Coefficient	Standard error	Signif.	Coefficient	Standard error	Signif.
(Constant)	8.304	0.254	0.000	9.427	0.088	0.000
<i>Contractual basis of current job:</i>						
Permanent/open-ended	ref.			ref.		
Fixed term contract	-0.033	0.032	0.313	<b>-0.062</b>	0.013	0.000
Probationary	-0.047	0.056	0.402	<b>-0.165</b>	0.022	0.000
Self-employed	-0.081	0.062	0.191	<b>-0.131</b>	0.025	0.000
Temp (agency)	<b>-0.354</b>	0.082	0.000	<b>-0.233</b>	0.032	0.000
Other temporary or casual	-0.169	0.078	0.032	<b>-0.177</b>	0.041	0.000
Other (not permanent)	-0.029	0.094	0.757	<b>-0.195</b>	0.047	0.000
Degree was required to obtain current job	0.109	0.022	0.000	<b>0.117</b>	0.008	0.000
<i>Sector of current job:</i>						
Agriculture, mining	-0.019	0.082	0.815	-0.064	0.039	0.102
Manufacturing	0.009	0.052	0.868	<b>-0.089</b>	0.022	0.000
Electricity, gas, water	0.026	0.089	0.774	<b>-0.155</b>	0.036	0.000
Construction	-0.065	0.065	0.314	<b>-0.103</b>	0.024	0.000
Distribution	-0.097	0.062	0.116	<b>-0.191</b>	0.024	0.000
Transport	-0.097	0.144	0.498	<b>-0.192</b>	0.028	0.000
Information and communications	0.027	0.060	0.649	<b>-0.072</b>	0.018	0.000
Banking, finance and insurance	ref.			ref.		
Business services	0.032	0.048	0.502	-0.023	0.016	0.152
Education	0.092	0.055	0.093	<b>-0.105</b>	0.021	0.000
Other public services	0.077	0.050	0.127	<b>-0.116</b>	0.020	0.000
Other	0.022	0.047	0.645	<b>-0.107</b>	0.016	0.000
Public sector	-0.071	0.038	0.061	-0.021	0.015	0.151
Private sector	ref.			ref.		
Not for profit sector	<b>-0.153</b>	0.050	0.002	<b>-0.081</b>	0.018	0.000
<i>In my workplace, my type of work is done:</i>						
exclusively by men	0.067	0.055	0.224	<b>0.090</b>	0.016	0.000
mainly by men	<b>0.128</b>	0.036	0.000	<b>0.109</b>	0.011	0.000
by equal mixture of men and women	0.038	0.026	0.147	<b>-0.062</b>	0.011	0.000
mainly by women	ref.			<b>ref.</b>		
exclusively by women	-0.030	0.036	0.411	<b>-0.118</b>	0.017	0.000
only by me	-0.065	0.053	0.221	-0.026	0.021	0.208

Northern Ireland's graduates: the classes of '95 and '99

	Northern Ireland HEIs			UK HEIs		
	Coefficient	Standard error	Signif.	Coefficient	Standard error	Signif.
<i>No employed by the organisation works for:</i>						
< 25 employees	ref.			ref.		
25 - 249 employees	-0.034	0.030	0.050	-0.016	0.012	0.165
250 - 999 employees	-0.059	0.030	0.178	0.002	0.013	0.876
1000+ employees	-0.040	0.060	0.774	<b>0.065</b>	0.011	0.000
<i>Location of employment in 2003/04</i>						
Inner London	<b>0.415</b>	0.093	0.000	<b>0.260</b>	0.011	0.000
Outer London	-0.009	0.149	0.951	<b>0.186</b>	0.014	0.000
South East	0.117	0.084	0.166	<b>0.083</b>	0.011	0.000
Scotland	-0.081	0.079	0.304	-0.021	0.014	0.143
Northern Ireland	<b>-0.115</b>	0.044	0.009	-0.016	0.056	0.775
Republic of Ireland	0.058	0.063	0.360	0.173	0.084	0.039
Male	0.043	0.023	0.061	<b>0.063</b>	0.009	0.000
<i>Class of degree obtained in 1995:</i>						
First class degree	ref.			Ref.		
Upper second	-0.065	0.061	0.288	<b>-0.070</b>	0.023	0.002
Lower second	-0.088	0.063	0.160	<b>-0.124</b>	0.023	0.000
Third	<b>-0.300</b>	0.091	0.001	<b>-0.180</b>	0.031	0.000
<i>Subject area of 1999 degree</i>						
Arts	<b>-0.085</b>	0.040	0.035	<b>-0.057</b>	0.015	0.000
Humanities	-0.054	0.042	0.206	<b>-0.034</b>	0.016	0.033
Languages	-0.063	0.075	0.403	0.027	0.022	0.209
Law	0.049	0.057	0.384	<b>0.104</b>	0.022	0.000
Social sciences	ref.			ref.		
Maths and computing	-0.082	0.059	0.160	<b>0.071</b>	0.018	0.000
Natural sciences	0.061	0.043	0.156	-0.005	0.015	0.759
Medicine and related	<b>0.307</b>	0.037	0.000	<b>0.232</b>	0.019	0.000
Engineering	0.111	0.053	0.037	0.035	0.019	0.070
Business studies	-0.014	0.036	0.696	<b>0.060</b>	0.016	0.000
Education	0.082	0.052	0.118	<b>0.126</b>	0.021	0.000
Other vocational	-0.033	0.078	0.672	0.019	0.033	0.572
Interdisciplinary	0.015	0.043	0.722	0.027	0.016	0.089
<i>Parental socio-economic class:</i>						
Managerial and professional occupations	ref.			ref.		
Intermediate occupations	-0.007	0.025	0.766	-0.019	0.013	0.149
Small employers and own account workers	-0.026	0.034	0.438	0.012	0.011	0.248
Lower supervisory and technical occupations	<b>0.105</b>	0.048	0.030	-0.017	0.017	0.310
Semi-routine and routine occupations	-0.005	0.029	0.860	<b>-0.024</b>	0.012	0.041
Neither parent in paid employment	0.067	0.055	0.220	-0.025	0.036	0.485
Not determined	0.010	0.046	0.829	<b>0.040</b>	0.015	0.007
Age	<b>0.089</b>	0.014	0.000	<b>0.031</b>	0.005	0.000
Age squared	<b>-0.001</b>	0.000	0.000	<b>0.000</b>	0.000	0.000
R <sup>2</sup>	0.428			0.349		
N (unweighted)	875			6,475		

Note: Coefficients which are statistically significantly different from zero are shown in bold.



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