Labour Market Bulletin







Contents

		Page
	EDITORIAL	1
1	Labour Market 'At a Glance'	3
2	Labour Market Statistics	7
3	The Labour Force Survey Annual Local Area Database	23
4	Graduate Employment in NI	31
5	Progress in the NI Economy - a UK Regional Comparison	39
6	Why is our Employment Rate the lowest in the UK? Does it matter?	47
7	The 2002 NI Social Omnibus Survey	55
8	The Work of the NI Skills Task Force - An Update	61
9	The PA / NI Skills Task Force Executive Skills Recruitment Watch	67
10	The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry	73
11	Labour Recruitment Issues in the NI Tourism and Hospitality Industry	83
12	Skill Shortages – The Effect of Subject Choice at Secondary School?	89
13	How did XEROX (Dundalk) Recruitment Impact on the NI Labour Market?	95
14	Commuting - NI and UK Experiences Compared	101
15	"How far will IT Employees Commute to Work"? - Some Case Studies	103
16	The Halifax Call Centre: Employer Recruitment Practices and Employability	109
17	"What Happened to the Former Harland and Wolff Workers"? - A Further Follow Up	p 117
18	Employability Taskforce - An Update	123
19	Farmers - How can Training help them take up Off-Farm Opportunities?	125
20	Adult Literacy Strategy - Essential Skills	129
21	New Deal Evaluations	133
22	Evaluation of Worktrack - Some Findings and Conclusions	139
23	"Does Fear of Violence Influence Where People are Prepared to Work in Belfast"?	147
24	Programme for International Student Assessment -	
	NI & International Results Compared	155
25	The Economics of Education: Some Recent Research	167
26	At Which Universities do NI Students Study?	173
27	Secondary Impacts on Unemployment of Government Assistance	
	to NI Companies	177
28	Equality Monitoring Update in DEL	183
29	The Demand for, and Supply of, Childcare in NI	187
30	Characteristics of the Disabled in the NI Labour Market	195
31	Some Popular Labour Market Fallacies	201
	Book Reviews	209
	Index of Previous Articles (LMB NOS 10-15)	213



Editorial

"The Executive states its commitment to develop a more joined up and strategic approach to policy making than NI has had in the past, with poor communications between Departments. We are determined to provide services in a way that addresses public need, not the needs of our Departments and Agencies" NI Programme for Government (underlining added).

This has been the focus of the Bulletin - to be subjectorientated not Department orientated. While most of the articles are written by DEL (and fellow government) researchers or are commissioned by DEL from the research/ consultancy communities, there have always been a substantial number of 'outside' contributors - and the only criterion for choosing them has been -"Would their article enhance our understanding of the NI Labour Market?" And this focus on issues is all the more necessary as we have now eleven Departments rather than six as in the past. So these centrifugal forces require strong centripital opposing forces!

Internationally one of the most discussed topics in Europe is labour mobility – moves within and moves to the EU - particularly in the light of the expansion of the EU. And most of our

overseas investment is from large, international firms who frame their human resource development policies from the viewpoint of a global internal labour market. Matching labour demand and supply thus has spatial, organisational, and skill dimensions - which are the subjects of articles in this bulletin.

Local employers are facing a 'tight' labour market, and for the first time on record the NI level of unemployment is now almost the same as the UK average – although our "hidden unemployment" is somewhat greater (see Chapter 6). Accordingly employers have to make their "offers" more attractive and the education and training system has to be more responsive to the needs of the economy.

Is it not remarkable that in West Belfast, where unemployment is still a substantial problem, the largest local employer (the Royal Group of Hospitals) has a recruitment problem so severe (cancelled operations etc) that it has to import many of its nursing staff from the Philippines, South Africa, etc!? This is a prime example of a skills mis-match and where space i.e. travel distance-to-work is not the barrier.

Trying to replace anecdotes with evidence (see Chapter 31) – is a difficult task, but

there have been big advances – both in the quantity and quality of work (when this Bulletin was initiated it was just four Chapters, (now it's 31), and in its impact – for example the International Adult Literacy Survey has had a major impact on Departmental priorities, (see Chapter 20), as have had the skill monitoring, forecasting, and related research.

Anyhow, to quote Jonathan Swift "man is not rational – merely capable of it". His epitaph (by WB Yeats) reads – "Savage indignation there cannot lacerate his breast" – this Editor is leaving the Northern Ireland Civil Service and this is his last Bulletin!

So Farewell Dear Reader and I hope you find this Bulletin of value.

T. Morahan
Editor
Labour Market Bulletin
Head Research and
Evaluation Branch



Statistics Research Branch, Department of Enterprise, Trade and Investment

The Labour Force Survey (LFS) is a quarterly sample survey whereby some 3,900 individuals aged 16 and over are asked about their personal circumstances and work. It is the largest regular household survey in NI providing a rich source of information about the labour force using internationally agreed concepts and definitions. Similar surveys are conducted throughout the **EU** allowing cross-country and cross-regional comparisons to be made.

Results obtained from the sample are 'grossed-up' to provide an estimate of the levels within the population as a whole. Each individual participating in the survey is given a weight or 'grossing factor' which is related to that person's age and sex. In this way the final grossed results reflect the distribution by age and sex of the population.

Individuals are classified into one of the following categories: in employment, unemployed or economically inactive.

The Chart shows how each of these three major categories may be further sub-divided to produce LFS estimates for an entire spectrum of non-overlapping labour market groups ranging from full-time employee to economically inactive people who do not want a job. The results are for Spring 2002.

LABOUR FORCE SURVEY DEFINITIONS

The Labour Force Survey (LFS)

The LFS has been designed to provide robust estimates of the economic activity

status of the NI population as a whole. The precision of the estimates generated by the LFS is determined in large part by the number of people interviewed in the survey. In general, the larger the number of people interviewed, the greater the accuracy of the survey estimates. Therefore, it is important to remember that figures taken from the LFS are subject to an associated sampling error that decreases as the sample size increases.

Working Age

Working age is defined as ages 16 to 59 for females and 16 to 64 for males.

16+

16+ is defined as those aged16 or more years old.

In Employment

Those aged 16 and over who did at least one hour's paid work in the reference week (either as an employee or self-employed); those who had a job which they were temporarily away from (on holiday for example); those participating in government training and employment programmes; and those doing unpaid family work.



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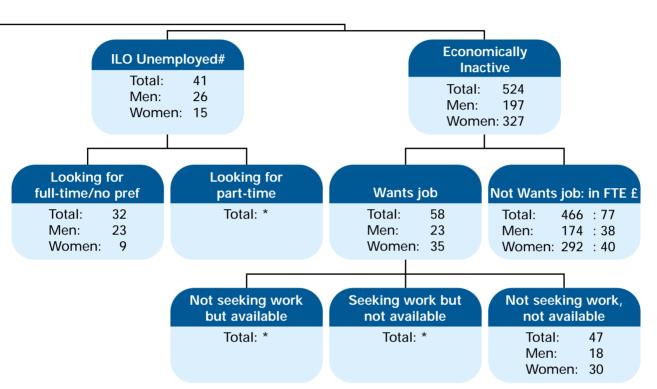
Labour Market position of people aged 16 and over (000's), Spring 2002 **Population** aged 16+ Total: 1,286 Men: 622 Women: 664 In Employment\$ Total: 721 Men: 399 Women: 322 **Full-time** Govt. supported Part-time Self-Employed **Employment^** training employment programmes Total: 74 Total: 157 Men: 65 Total: Men: 26 Women: 10 Women: 131 **Full-time** Could not find Didn't want/ **Employees** full-time job not available Total: 479 Total: 16 Total: 141 Men: 302 Men: Men: 20 Women: 177 Women: 10 Women: 120 Of which in full-time education Total: 22 Men: 10 Women: 13

Figures are in thousands and may, therefore, not sum due to rounding.

- \$ Includes a small number of unpaid family workers.
- Too small for a reliable estimate.
- £ Full-time education.
- # This includes a small number of persons who are waiting to take up a job already obtained and are, therefore, not included in the subsequent breakdown of type of work being looked for.
- ^ Comprises part-time employees and part-time self-employed.
- 1 The International Labour Office (ILO) measure of unemployment refers to people without a job who were available to start work in the two weeks following their LFS interview and had either looked for work in the four weeks prior to interview or were waiting to start a job they had already obtained.

Estimates of less than 8,000 are considered too unreliable to be published. This explains why a gender split for some categories is omitted.

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Each person aged 16 and over in the LFS sample is classified, using the standard ILO¹ guidelines, into one of the following categories: employed, unemployed or economically inactive. The chart above shows how

these three major categories may be further sub-divided to produce LFS estimates for an entire spectrum of labour market groups ranging from full-time employees to economically inactive people who do not want a job.

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Employees

The division between employees and selfemployed is based on survey respondents' own assessment of their employment status.

Unpaid Family Workers

Persons doing unpaid work for a business they own or a business that a relative owns.

Economically Active

People aged 16 and over who are either in employment or ILO unemployed.

Economic Activity Rate

The percentage of people aged 16 and over who are economically active.

Economically Inactive

People who are neither in employment nor unemployed. This group includes, for example, all those who were looking after a home or retired.

Employment Rate

The percentage of people aged 16 and over who are in employment.

ILO Unemployment

The International Labour Office (ILO) measure of unemployment used throughout this statistics notice refers to people without a job who were available to start work in the two weeks following their LFS interview and had either looked for work in the four weeks prior to interview or were waiting to start a job they had already obtained. This definition of unemployment is in accordance with that adopted by the 14th International Conference of Labour Statisticians and promulgated by the ILO in 1987.

ILO Unemployment Rate

The percentage of economically active people who are unemployed on the ILO measure.

Duration of ILO Unemployment

Duration of ILO unemployment is defined as the shorter of the following two periods:
(a) duration of active search for work; and (b) length of time since employment.
The short-term unemployed are those people who have been unemployed for under 1 year, while the long-term unemployed are defined as those who have been unemployed for 1 year or more.

FURTHER INFORMATION

More detailed labour market analysis is published in the Quarterly LFS Supplement. This can be obtained (free of charge) by;

Contacting: Statistics Research Branch, DETI, Room 110, Netherleigh, Massey Avenue, BELFAST BT4 2JP

Telephone: (028) 9052 9585 Fax: (028) 9052 9459] Textphone: (028) 9052 9304

Email: owen.johnston@detini.gov.uk

Visiting the web site www.economicstatisticsni.gov.uk

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This article outlines current trends in the NI labour market using data from the Labour Force Survey (LFS). A major strength of the LFS is that it is a self-contained integrated source of information on employment, unemployment, economic activity and many other labour market topics. It is the largest regular household survey carried out in NI and it uses concepts and definitions which are consistent with International Labour Organisation (ILO) guidelines. For consistency with previously published articles, LFS estimates for Spring 2002 have been used, that is, the 3 month period March to May 2002.

Table 1 provides a seasonally adjusted summary of the NI labour market position at March-May 2002 and an indication of change over the previous quarter. The figures show that there has been an increase in seasonally adjusted employment of 20,000 and a decrease in seasonally adjusted ILO unemployment of 4,000, while the numbers of seasonally adjusted economically inactive decreased by 14,000.

UNADJUSTED EMPLOYMENT

The total number of persons in employment at March-May 2002 was 721,000. Of these 479,000 (66%) were full-time employees, 146,000 (20%) were part-time employees, 85,000 (12%) were self-employed and 10,000 (1%) were on

government employment and training programmes or unpaid family workers.

Figure 1 shows how the relative size of these categories differs for men and women. While selfemployment accounts for 18% of the total number of male jobs, it makes up just 4% of female employment. Another feature of the NI labour market is the significant contribution which part-time jobs make to female employment. 39% of all females in employment are part-time employees compared with just 5% of males.



Table 1: Summary of Labour Market Statistics March to May 2002 (seasonally adjusted)

	Level	Sampling Variability of level +/-#	Change over Quarter	Sampling Variability of change +/-#
ILO* employment	727,000	24,000	20,000	30,000
ILO* unemployment	42,000	7,000	-4,000	10,000
Economically active	769,000	23,000	17,000	29,000
Economically inactive	517,000	23,000	-14,000	29,000
ILO* unemployment rate	5.4%	1.0%	-0.7pp ¹	1.2%
Economic activity rate working age	72.1%	1.8%	1.0pp ¹	1.4%
Economic inactivity rate working age	27.9%	1.8%	-1.0pp ¹	1.5%

^{*} Definition agreed by the International Labour Organisation (ILO) - taken from the Labour Force Survey (LFS),



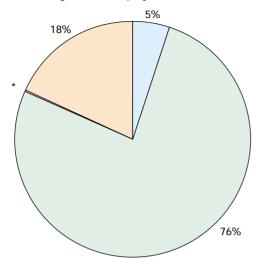
^{# 95%} confidence interval,

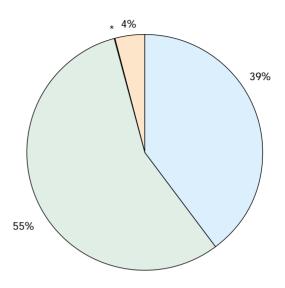
¹pp percentage points

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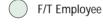


Males

REASONS FOR PART-TIME WORK

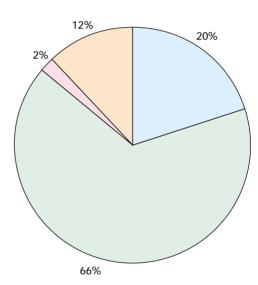
Figure 2 shows that the reasons for part-time working also differ for men and women. While the majority of males (71%) worked part-time because they were students or were unable to find full-time work, the main reason given by females was that they did not want a full-time job (80%).

P/T Employee



Others

Self-Employ



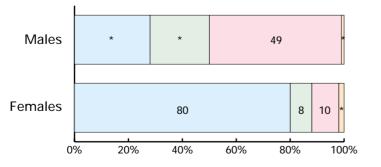
Females

All Persons

Figure 2: Reasons for Employees Working Part-time

 $\label{prop:comprise} \begin{tabular}{ll} "Others" comprise those on government training and employment schemes and unpaid family workers. \end{tabular}$

* Too small for a reliable estimate



Did not want F/T Work

Could not find F/T Work

Student

Other reasons

Other reasons comprise being a student, ill or disabled or not known

* Too small for a reliable estimate.

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EMPLOYEE JOBS

The other major source of employment information is the Quarterly Employment Survey (QES) which measures the number of employee jobs in NI.

Table 2 shows the

breakdown of NI employee jobs at June 2002. Substantially more male employees are working full-time (265,040) compared to part-time (57,280), whereas the female split in employee jobs is more evenly spread (171,030 working full-time compared to 162,420 working part-time). In June 2002 the total number of Female Employee Jobs accounted for over half of the NI total.

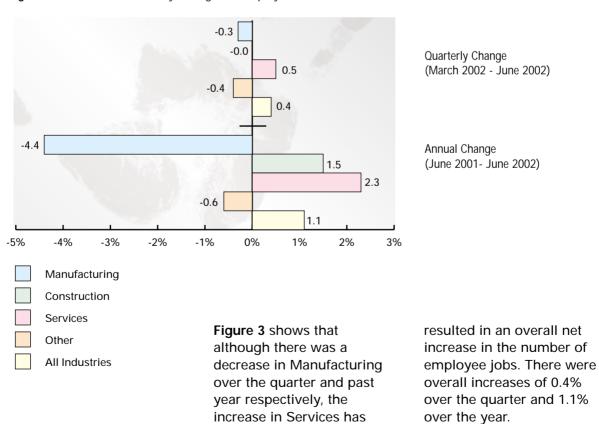


Table 2: Employee Jobs, Full-time/Part-time split, June 2002

	Male		Female		Total	% change in total	
	Full Time	Part Time	Full Time	Part Time		since last quarter	since last year
Manufacturing	69,160	2,120	21,250	4,690	97,210	-0.3%	-4.4%
Construction	30,560	1,300	2,360	1,240	35,460	-0.0%	1.5%
Services	157,910	44,030	146,550	155,010	503,500	0.5%	2.3%
Other ¹	7,420	9,830	870	1,480	19,600	-0.4%	-0.6%
Total	265,040	57,280	171,030	162,420	655,770	0.4%	1.1%

¹ Covers Industry Sections A,B,C and E

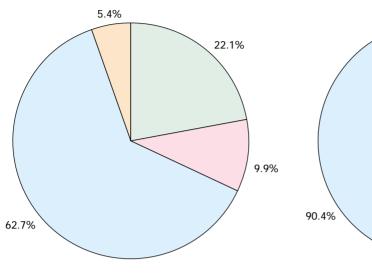
Figure 3: Annual and Quarterly Changes in Employee Jobs

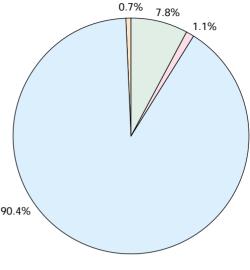


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Figure 4: NI Employee Jobs by Broad Industry Sector







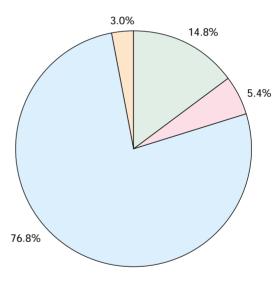
Males

Figure 4 above shows the breakdown of Male and Female Employee Jobs by Broad Industry Sector as at June 2002. There are notable differences in the distribution of male and female employees across the broad sectors. Whilst over 60% of male employee jobs are in the service sector, males are still well represented in Manufacturing (22.1%) and Construction (9.9%). Female employee jobs however are more concentrated in the Service Sector (90.4%), with only 7.8% involved in Manufacturing and 1.1% in Construction.



Services

Other*



Females

All Persons

^{*} Other industries includes Agriculture, Hunting, Forestry & Fishing, Mining & Quarrying and Electricity, Gas and Water Supply.

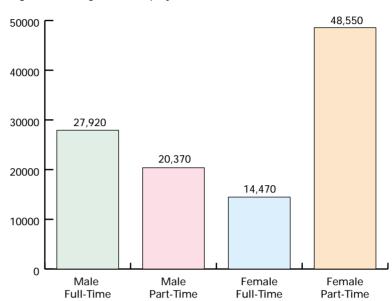
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Figure 5 shows the rise in employee jobs between June 1993 and June 2002 for Males/Females, Full-time and Part-time. By far the largest increase occurred in Female Part-time jobs, with an increase of (+48,550). The second largest rise occurred in Male Full-time jobs (+27,920).

UNEMPLOYMENT

The unemployed, as defined by the International Labour Organisation (ILO), are those who are without a job, available to start work within the next fortnight and have actively looked for work at some time in the previous four weeks. In the period March-May 2002 there were 41,000 persons unemployed in NI, 5.4% of the total workforce. Figure 6 shows that the ILO unemployment rates have been on a downward trend for a

Figure 5: Change in NI Employee Jobs, June 1993 – June 2002

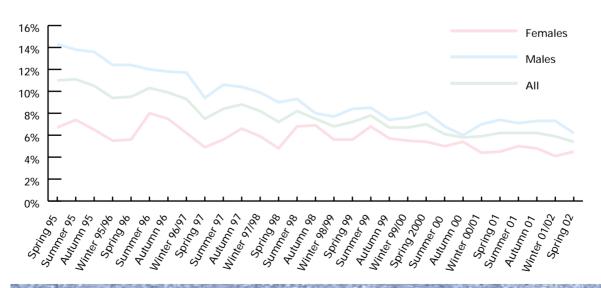


number of years. The unemployment rate for males is considerably higher than that for females and this differential has remained relatively constant over time.

Over the period Spring 1984 to Spring 2002 the UK ILO unemployment rate has fallen from 11.8% to 5.1%,

the corresponding NI figure has decreased from 16.8% to 5.4%. In the period March – May 2002, the UK/NI unemployment differential stood at 0.3 percentage points, this represented the smallest difference between the UK and NI unemployment rate since the current measure began (Figure 7).

Figure 6 ILO Unemployment Rates

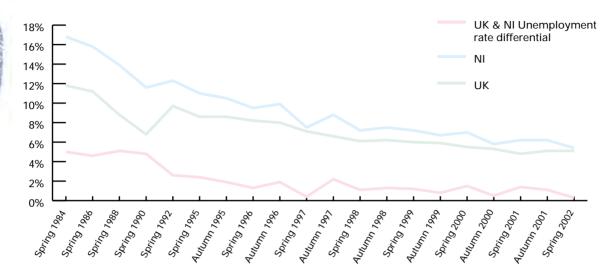




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Figure 7: UK & NI Unemployment rates Spring 1984 - Spring 2002





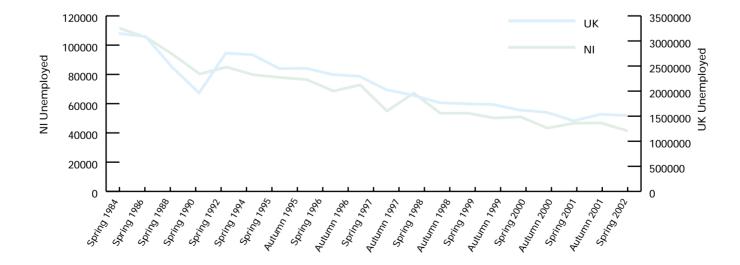
The UK ILO unemployment level has decreased by 53% over the period Spring 1984 to Spring 2002, from 3,216,000 to 1,519,000. The corresponding NI total number of ILO unemployed has fallen by nearly two thirds from 112,000 to 41,000 over the same period, this represents the lowest

number of unemployed since the current measure was adopted (Figure 8).

DURATION OF UNEMPLOYMENT (ILO)

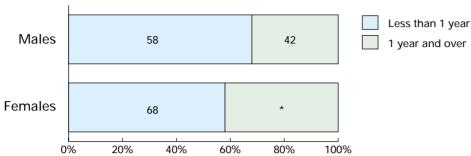
In the period March-May 2002, 16,000 (38%) of the ILO unemployed had been out of work and seeking employment for one year or more. Nearly half (42%) of unemployed males had been unemployed for one year or more. In contrast, the majority (68%) of unemployed females have been unemployed for less than 1 year, with relatively few unemployed for one year or more – see Figure 9.

Figure 8: UK & NI Unemployment levels Spring 1984 - Spring 2002



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Figure 9: Duration of Unemployment (ILO)





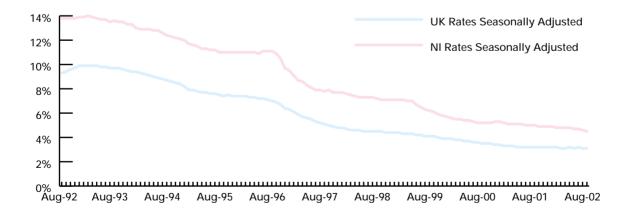
CLAIMANT UNEMPLOYMENT

The seasonally adjusted claimant count unemployment rate for NI in August 2002, 4.5%, was the lowest seen since January 1975. The claimant count rate for NI has been consistently higher than the UK rate throughout the past ten years while maintaining

a similar pattern to that of the UK. However the gap between the UK rate and the NI rate has narrowed considerably in the last ten years. The greatest differential between NI and the UK in this period was seen in August 1992 when the difference was 4.5 percentage points. The lowest differential was seen

in August 2002 when the difference was 1.4 percentage points. The claimant count rate of 3.1% for the UK in August 2002 is also the joint lowest in the past ten years (Figure 10).

Figure 10: Seasonally adjusted claimant count rates for NI and the UK, August 1992 to August 2002.



^{*} Too small for a reliable estimate.

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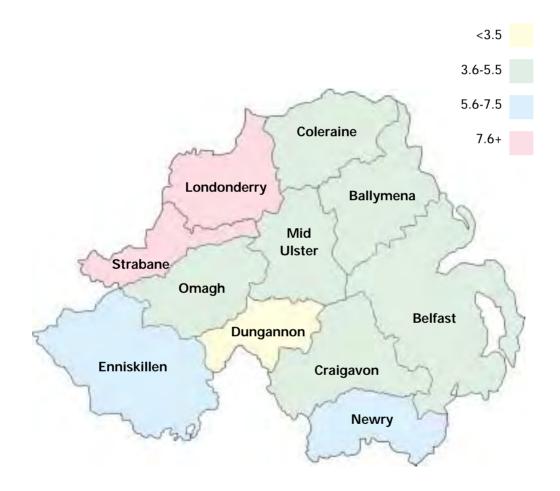


SUBREGIONAL ANALYSIS

An analysis at Travel-to-work area (TTWA) level shows

that claimant count rates were generally highest in the west of the region and lower in the east. The highest rate was 9.4% in Strabane, and the lowest in Dungannon at 3.4% (Figure 11).

Figure 11: NI claimant count Travel-To-Work area rates - August 2002.



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ANALYSIS BY DURATION

In August 2002, the structure of long-term claimants in NI was slightly different from that of the UK. There were two marked differences. In NI 76.7% of claimants were short-term unemployed (claiming unemployment-related benefits for less than one year) compared to 84.1% in the UK. NI had a greater proportion of claimants who had been claiming for over five years (1.3 percentage points higher than the UK) (Figure 12).

In general, districts in the west of NI showed the highest concentrations of long-term claimants (those individuals who had been claiming unemployment-related benefits for over a year), with those in the east of the region tending to be lower. The exceptions to this are Belfast and Lisburn where approximately one quarter of all claimants have been claiming unemployment related benefit for over a year at August 2002. Several other districts had proportions of more than 25% long-term unemployed: Derry with 26.6%, Newry & Mourne with 27.1%, Omagh with 27.2%, Strabane with 29.3% and Fermanagh with 32.3%. The two districts with the lowest proportions were

Figure 12: Proportion of claimants by duration; August 2002

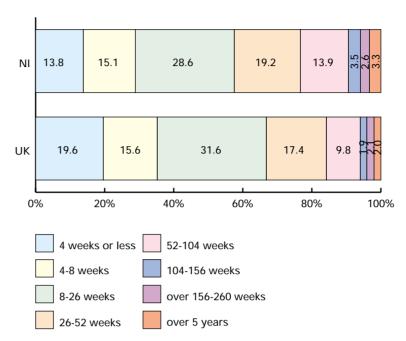


Figure 13: Concentration of long-term claimants by District Council Area; August 2002





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Larne with 14.0% and Cookstown with 14.6% (Figure 13).

ECONOMIC ACTIVITY

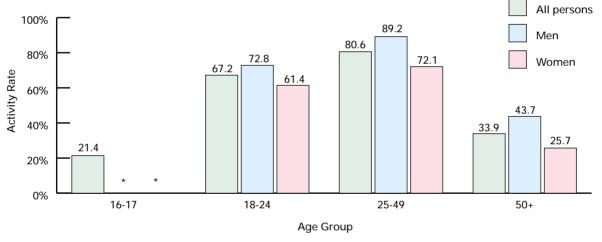
The economically active (ILO employed + ILO unemployed) are those participating in the labour market either by working or looking for work. Economic activity rates express the number economically active

as a percentage of the population aged 16 and over. In the period March-May 2002, there were 762,000 economically active people in NI – an overall activity rate of 59.3%.

ACTIVITY RATES

Figure 14 shows how economic activity rates are relatively low during the ages associated with fulltime education, rise during the 'prime' working years (18-49 years of age) and begin to drop again near retirement age. For women this trend is slightly more mute, largely because many females of working age have domestic commitments which make it difficult for them to actively participate in the labour market.

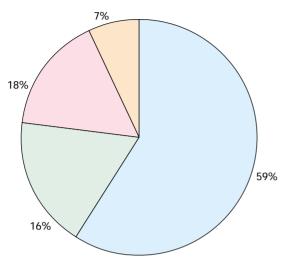
Figure 14: Economic Activity Rates by Age

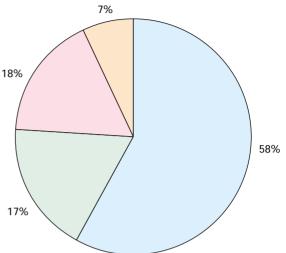


^{*} Estimated numbers too small for a reliable estimate of activity rates

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Figure 15: Qualification Levels of the Economically Active





2

Employed

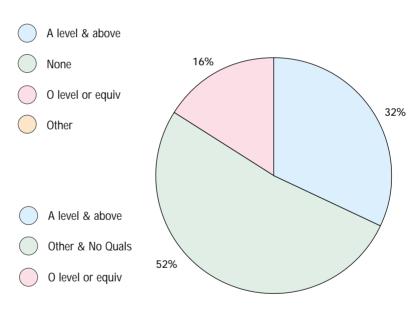
Economically Active

QUALIFICATION LEVELS

Figure 15 shows the qualification levels of the workforce at March-May 2002, with separate estimates for the employed and the unemployed. Overall 58% of the economically active were qualified to GCE'A' level or above, while 17% had no formal qualifications. Comparing the position of the employed and unemployed - 59% of those in employment were qualified to GCE'A' level or above compared with 32% of those unemployed.

ECONOMIC INACTIVITY

People aged 16 and over who are not in employment and are not unemployed according to the ILO definition are classified as economically inactive. In the



period March-May 2002 there were 524,000 economically inactive persons in NI – an increase of 4,000 from one year earlier.

The economically inactive can be divided into two main groups; those who do not want a job (89%) and

Unemployed

those who do want a job but fail to satisfy the ILO unemployment requirement for active job-search (11%). A breakdown of the former category is shown at **Figure 16**. Overall, the main reason for not wanting work was retirement; 49% of men and 48% of women who did not want a job were retired. The

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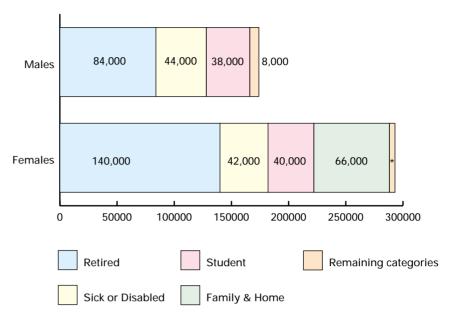
other reasons for not wanting work varied according to the gender of the respondent, with men more likely to cite sickness/disability (25%) as their reason and women domestic commitments. Indeed, 23% of women gave 'looking after family home' as their reason.

At March-May 2002 there were 58,000 economically inactive who did want a job, but for a variety of reasons were not actively seeking work. The majority (60%) of this group are women and the main reason given for their inactivity was family commitments (64%). In contrast, for males the main reason for economic inactivity was sickness or disability (60%) (see Figure 17).

HOUSEHOLDS

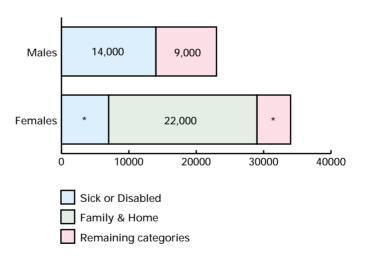
Separate datasets specifically designed for analyses at the household level are also available from the Labour Force Survey (LFS). At Spring 2002 there were 648,000 private households in NI. There were 1,685,000 persons living in these households, giving an average of 2.60 persons per household. This compared with a UK average of 2.37. Indeed, NI was the region with the highest number of persons per household.

Figure 16: Reason for not Wanting Work



^{*} Remaining categories too small for a reliable estimate.

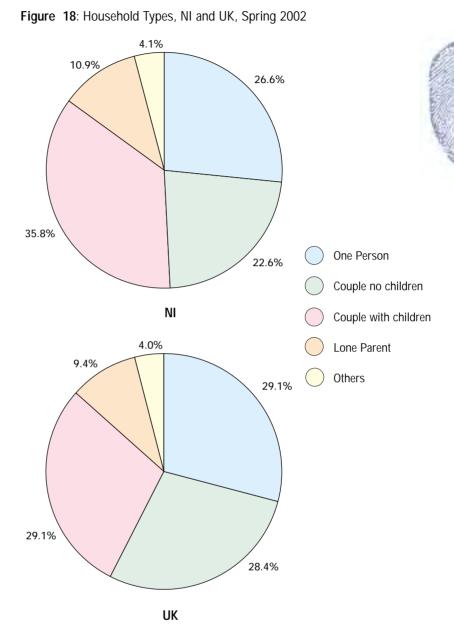
Figure 17: Wanting a Job, reason for not looking for work



^{*} Remaining categories too small for a reliable estimate.

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Figure 18 looks at household types according to the relationships between the persons living in them, for both NI and the UK. The most common type of household in NI consisted of a couple with children, which accounted for 35.8% of all households. The other two main household types were one person households (26.6%), followed by couples with no children (22.6%). Lone parents with children amounted to 10.9% (71,000) households. The main difference between the distribution of household types in NI and the UK is the higher proportion of households in NI composed of couples with children than in the UK (35.8% compared with 29.1%). This is balanced by a lower proportion of households composed of couples with no children in NI (22.6% compared with 28.4%). There were proportionally more lone parent households in NI than in the UK (10.9% compared with 9.4%).



[&]quot;Others" comprise households with two or more people in all different family units, two or more family units and same sex couples.

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Table 3 shows the proportions of working age households according to the economic activity of their members. (A working age household is defined as a household with at least one person of working age in it). The most common type of household in NI was one where all persons were employed (referred to as a workrich household), accounting for 46% of all working age households. Note these households may contain only one person who is employed, or several persons, all of whom are employed. There is a 9 percentage point difference between the proportion of workrich working age

households in NI and the UK. In fact, NI has the lowest proportion of working age households of all UK regions in this category. The other two main categories of households were those containing employed and economically inactive persons (28%) and those where all persons were economically inactive (17%). A workless household is defined as a household where no one is in employment and comprises types 3, 4 and 5 from Table 3. In Spring 2002, there were 107,000 workless working age households, or 21.2% of all working age households, in NI.This

compared with 15.8% in the UK as a whole and was the third highest proportion among the UK regions, lower than the North East (21.4%) and Wales (21.3%).

Note that the proportions in these household categories are affected by the number of persons in a household. Consequently the fact that NI has a larger average number of persons per household and a smaller proportion of one person households than the UK, means that there is more likely to be a combination of economic activity states within households than all persons of one activity state.

 Table 3: Working age Households by Combined Economic Activity, Spring 2002

Type of Economic Activity	NI	UK
1) All Employed	46%	55%
2) Employed and Economically Inactive	28%	21%
3) All Economically Inactive	17%	13%
4) Unemployed and Economically Inactive	2%	1%
5) All Unemployed	2%	2%
6) Employed and Unemployed	2%	3%
7) Employed, Unemployed and Econ. Inactive	2%	1%
Not known	1%	5%
All households (100%)	504,000	19,107,000

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REGIONAL AND INTERNATIONAL COMPARISONS

One of the strengths of the Labour Force Survey is the availability of comparable socio-economic data for other UK regions and European Union (EU) member states. **Table 4** provides a labour market profile of each region of the UK at March-May 2002. This shows that the NI economic activity rate for those of working age

(72.1%) is lower than any of the other UK regions. The ILO unemployment rate in NI (5.4%) is lower than six other of the UK regions, with the highest rate (6.9%) occurring in London, Scotland and the North East. It is perhaps more significant to note that long-term unemployment (lasting 1 year or more) is much worse in NI than in any other region of the UK.

Figure 19 shows how the unemployment rate in NI compares to others in the European Union and beyond. The NI rate (5.4%) is 2.2 percentage points lower than the European Union 15 average (7.6%). It is 1.0 percentage points above the current rate in the RoI (4.4%).



 Table 4: Regional Summary (seasonally adjusted)

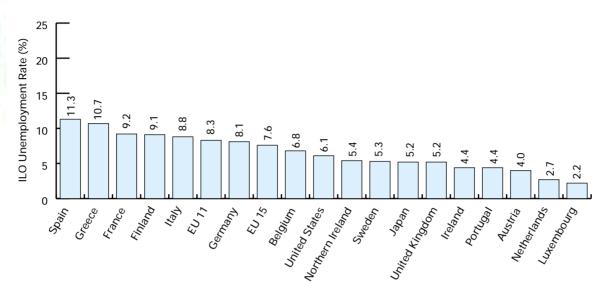
	Total aged 16 and over (000's)	Activity rate (%) 16-59/64	ILO Unemployed (000's)	ILO Unemployment rate (%)	LTU as % of total unemployed*
North East	2,031	74.1%	82	6.9%	29.0%
North West & Merseyside	5,408	76.4%	186	5.6%	27.5%
Yorkshire & Humber	3,990	77.7%	134	5.4%	20.6%
East Midlands	3,356	80.1%	91	4.2%	22.6%
West Midlands	4,177	79.0%	147	5.6%	20.3%
Eastern	4,369	82.4%	104	3.6%	19.4%
London	5,899	76.3%	264	6.9%	24.4%
South East	6,445	83.6%	171	3.9%	16.2%
South West	4,002	82.4%	94	3.7%	17.1%
Wales	2,331	73.5%	82	6.1%	19.6%
Scotland	4,052	79.0%	176	6.9%	26.9%
Northern Ireland	1,286	72.1%	42	5.4%	37.9%
United Kingdom	47,346	78.9%	1,572	5.2%	22.9%

LTU = Long-term unemployed (1 year or more). * Not seasonally adjusted.

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Figure 19: International Unemployment (seasonally adjusted)





FURTHER INFORMATION

More detailed labour market analysis are published in the monthly report "Labour Market Statistics". This can be obtained (free of charge) by;

Writing to Statistics Research Branch, DETI, Room 110, Netherleigh, Massey Avenue, BELFAST BT4 2JP

Telephoning Belfast (028) 9052 9437 [Fax (028) 9052 9459] Textphone Belfast (028) 9052 9304

Visiting the web site www.economicstatistics-ni.gov.uk

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The Labour Force Survey (LFS) is the largest regular household survey carried out in NI, with responses obtained from approximately 2,000 households and 5,700 individuals each quarter. While these quarterly datasets permit quite detailed analysis of the labour market at NI level, sub-NI analysis is often hindered by the relatively small sample numbers.

In order to enhance the utility of the survey data collected, a series of LFS annual databases have been developed which contain 60% more records than are found in each quarterly database. These permit more extensive sub-regional analysis and results from the 2000 annual dataset are presented in this article.

LOCAL AREA DATABASE (LADB)

The local areas currently available are District Councils, however as many of the figures at this level fall below the 6,000 (grossed) suppression threshold, District Councils have been aggregated into NUTS III regions (see Figure 1). NUTS is the European



NUTS III REGION CONSTITUENT DISTRICT

COUNCILS

BELFAST Belfast

OUTER BELFAST Carrickfergus

Castlereagh Lisburn Newtownabbey

North Down

EAST OF NI Antrim

> Ards Ballymena Banbridge Craigavon Down Larne

NORTH OF NI Ballymoney

Coleraine Derry Limavady Moyle Strabane

WEST & SOUTH OF NI Armagh

Cookstown Dungannon Fermanagh Magherafelt Newry & Mourne

Omagh

Figure 1: NI NUTS III Regions



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Commission's classification of sub-national areas for statistical purposes, which facilitate socio-economic analyses of regions (Nomenclature of Units for Territorial Statistics).

The 2000 LADB has also been extended to contain an analysis of Parliamentary Constituency Areas (PCA's see Figure 2) and Travel to Work Areas ((TTWA's) see Figure 3). TTWA's are

local labour market areas within which the majority of people both live and work. Within these areas, work place serves as a substitute for residence.

Figure 2: NI Parliamentary Constituency Areas (PCAs)

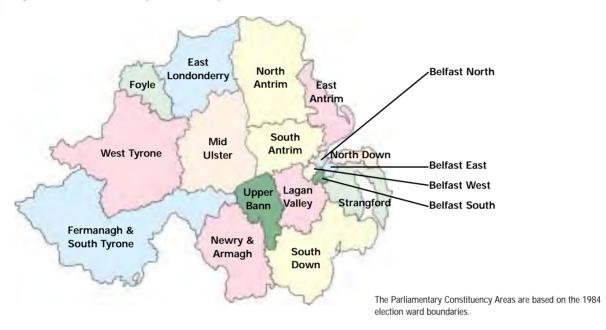


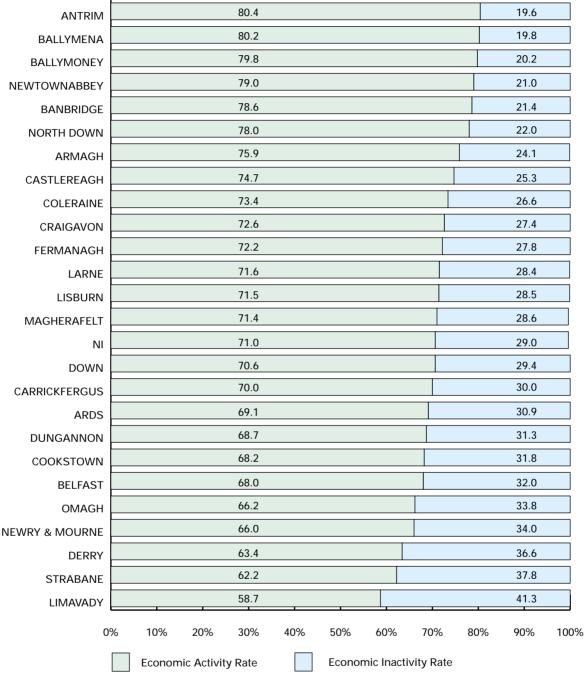
Figure 3: NI Travel-to-Work Areas (TTWA's)



The TTWA's are based on commuting patterns from the 1991 Census of Population

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Figure 4: Economic Activity* and Inactivity Rates by District Council 2000 All Working Age



^{*} The number of people who are either in employment or unemployed as a percentage of the total working age population. Where Working age is defined as ages 16 to 59 for females and 16 to 64 for males.

The Working Age economic activity rates range from 80.4% in Antrim District Council to 58.7% in Limavady, with the NI Average being 71.0% (see

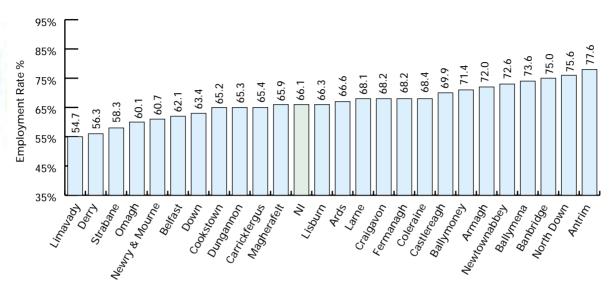
Figure 4). The same pattern is repeated in the employment rates of all working age persons ranging from 77.6% in Antrim District Council to

54.7% in Limavady, with a NI Average of 66.1% (see Figure 5). This pattern is to be expected because the economically active consists largely of those in ILO



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Figure 5: Employment Rate* by District Council Area 2000 All Working Age



^{*} The number of those working age persons in employment as a percentage of all working age persons

employment (employees, self-employed, those on government schemes and unpaid family workers) and the ILO unemployed.

Figure 6 indicates that the East of NI has the lowest percentage of people in full-time education (6.7%) while Belfast has the highest percentage (11.8%). The percentage in part-time education ranges from 4.3% in the North of NI to 6.3% in the East of NI. Overall Outer Belfast has the greatest proportion not in education (87.6%) and Belfast has the lowest (82.2%).

23.5% of the working age population living in the Outer Belfast area have achieved NVQ level 4 and above which includes degree level and above as compared to only 15.3% in North of NI (see Figure 7). In

Figure 6: Educational Status by NUTS III Region 2000 All Working Age

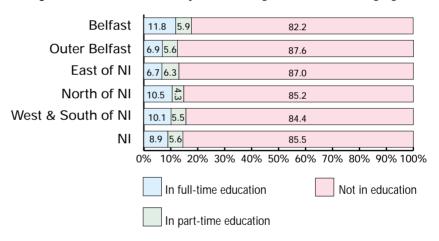


Figure 7: Qualifications achieved by NUTS III Region 2000 All Working Age

Belfast	23.4	50.9		25.7		
Outer Belfast	23.5	56.1		20.4		
East of NI	16.9	57.4		25.7		
North of NI	15.3	54.6		30.1		
West & South of NI	15.7 52.1		32.3			
NI	18.9	54.4		26.6		
0	% 10% 2	0% 30% 40% 50% 60% 70	% 80	90% 100%		
Achieved NVQ level 4 & above No qualifications						
Achieved below NVQ level 4						

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large part this reflects where the higher level jobs are on offer - London has about twice the level of NVQ 4 in its population, than the rest of GB even though its production of NVQ 4 is 'average'. (See Figure 3, Chapter 4 and Work Skills in Britain 1986-2001 P30 DfES). While in the Outer Belfast area 20.4% have no qualifications rising to 32.3% in the West and South of NI. The NI average figures are 18.9% achieving NVQ level 4 and above with 26.6% with no qualifications.

Job related training follows a similar pattern to qualification levels, with the lowest proportion of people receiving job related training within the past 4 weeks being in the West and South of NI (7.4%) while the greatest is in Belfast (13.7%).

Figure 8: Occupation* in Main Job by NUTS III Region 2000 All Working Age

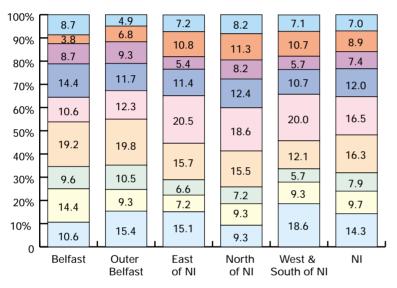


Figure 8 gives an indication of the distribution of different occupations across NI. For example the West and South of NI has the greatest proportion of Managers and Administrators as this category includes farmers whilst the greatest proportion of clerical and secretarial occupations are found in Belfast and Outer Belfast.

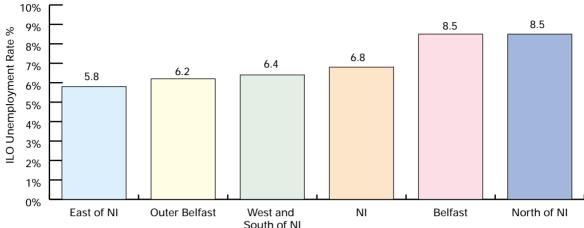


 $^{^{\}star}$ The classification of respondents' occupation is based on the Standard Occupational Classification (SOC).

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Figure 9 ILO Unemployment Rate*by NUTS III Region 2000 All 16+





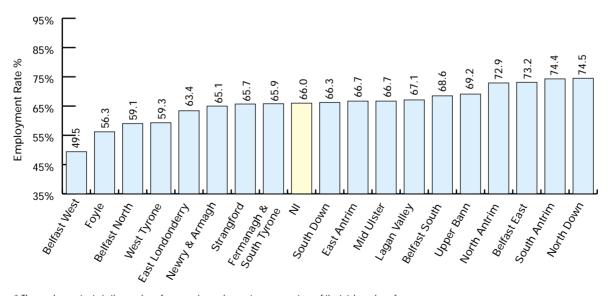
^{*} The International Labour Organisation (ILO) unemployment rate is the number of people unemployed as a percentage of total persons economically active.

Figure 9 shows that the ILO unemployment rate for NUTS III areas varies from 5.8% in the East of NI to 8.5% in both Belfast and North of NI. The overall ILO unemployment rate for NI at 2000 was 6.8% of the total workforce.

Figure 10 indicates that the Belfast West Parliamentary

Constituency Area has the lowest employment rate (49.5%), which is considerably lower than the next lowest Foyle (56.3%). North Down has the highest percentage of people in employment (74.5%). The overall NI average employment rate is 66.0%. **Figure 11** displays a similar pattern ranging from 55.6% in Belfast West to 80.1% in North Antrim, with a NI average of 71.0%. As described earlier the similar patterns are to be expected as the economically active consists largely of those people in employment.

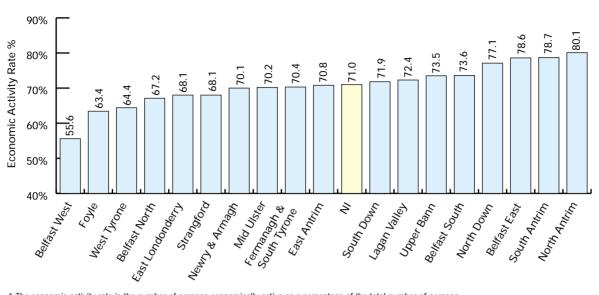
Figure 10: Employment Rate* by Parliamentary Constituency Area 2000 All Working Age



^{*} The employment rate is the number of persons in employment as a percentage of the total number of persons.

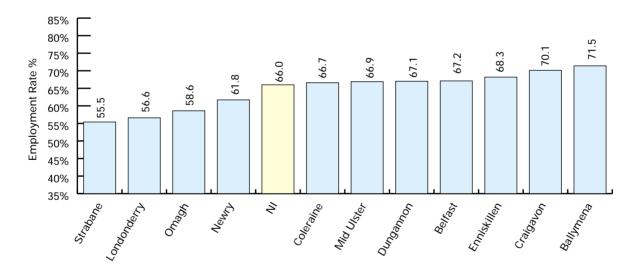
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Figure 11: Economic Activity Rate* by Parliamentary Constituency Area 2000 All Working Age



^{*} The economic activity rate is the number of persons economically active as a percentage of the total number of persons.

Figure 12: Employment Rate by Travel-to-work Area 2000 All Working Age



Figures 12 and 13 compliment the economic activity and employment rate information in Figures 10 and 11, with a breakdown by TTWA. Strabane has the lowest proportion of persons in employment

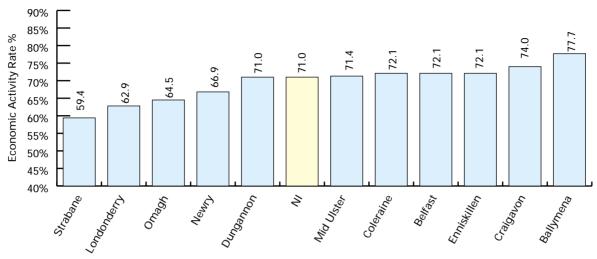
(55.5%) and economically active (59.4%) with Ballymena having the highest employment (71.5%) and economic activity rates (77.7%). The respective NI averages for employment and economic activity rates are 66.0% and 71.0%.

As can be seen from the previous information the LFS Local Area Dataset is a useful source of Sub NI data. LFS annual local area databases containing NI data are available for the years 1996 to 2000.

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Figure 13 Economic Activity Rate by Travel-to-work Area 2000 All Working Age





FURTHER INFORMATION

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Graduate Employment in NI

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Introduction

This article focuses on the employment of graduates and non-graduates in the labour market. Data have been taken from the Labour Force Survey (LFS), which is the largest regular household survey in NI. Graduates refer to those persons who have, at any time, obtained a degree, which may either be a first or higher degree. This may have been obtained just recently (i.e. within the last year) or several decades ago. All information relates to graduates of working age (i.e.16-64 for males and 16-59 for females).

GRADUATES OF WORKING AGE, 1990 - 2002

Figure 1 shows how the stock of graduates of working age has increased during the period 1990-2002. Overall the number of graduates more than doubled from 60,000 in 1990 to 141,000 in 2002, with 39,000 of this increase occurring in the last five years. Since 1990, the number of female graduates has increased proportionately more than males, up 222% from 22,000 to 72,000, while the number of male graduates increased by 83% from 38,000 to 69,000. During this time, however, the total population of working age (16-64 for males and 16-59 for females) increased by only 12%. As a result the proportion of the working age population who are graduates has doubled from 7% in 1990 to 14% in 2002 (from 8% to 13% for males and from 5% to 14% for

females). Whilst females accounted for 37% of graduates in 1990, this proportion had risen to just over half (51%) by 2002; in fact 2002 was the first year that there were more female graduates than male graduates.

GRADUATES OF WORKING AGE IN EMPLOYMENT, 1990 - 2002

Figure 2 shows the number of graduates of working age in employment during the period 1990-2002. Overall the number of graduates in employment more than doubled from 54,000 in 1990 to 130,000 in 2002, with 38,000 of this increase occurring in the last five years. Numbers of female graduates in employment increased more than males, up two and a half times (251% from 19,000 to 66,000), compared with males (up 84% from 35,000 to 64,000). As the total number of persons of

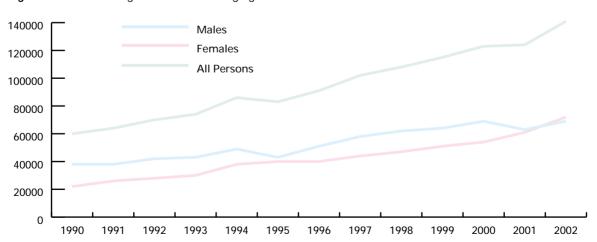


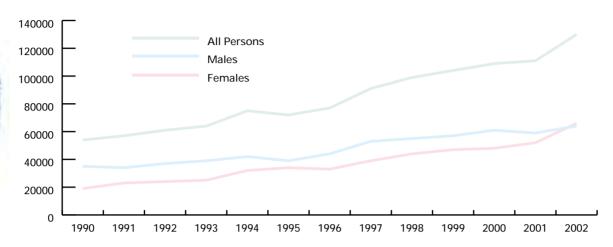
Figure 1: Number of graduates of working age 1990 - 2002



Graduate Employment in NI

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Figure 2: Number of graduates of working age in employment, 1990 - 2002



working age in employment from 1990 to 2002 increased by 17%, the proportion of persons of working age in employment who were graduates rose from 9% to 19%. Whilst in 1990, 7% of females in employment were graduates compared with 10% of males; in 2002 the proportion of those in employment who were graduates was higher for females than males (17% of males and 21% of females).

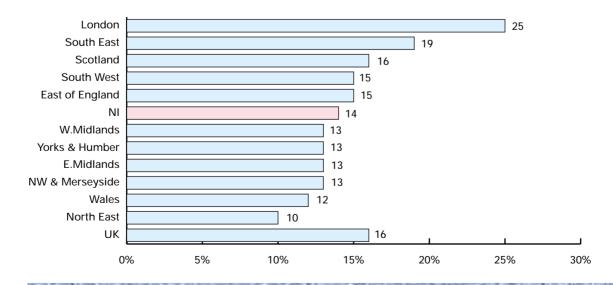
The proportion of graduates in employment who were female rose from 35% in 1990 to 50% in 2002.

UK REGIONAL COMPARISON, SPRING 2002

In NI at Spring 2002, there were 141,000 graduates of working age, equivalent to 14% of all persons of working age. This is slightly less than for the UK as a

whole (16%). Of these 69,000 (49%) were male (7% of all persons of working age) and 72,000 (51%) were female (7% of all persons of working age). Figure 3 shows that there was considerable variation among the UK regions in the proportion of persons of working age who were graduates. This reflects demand rather than supply – London and the South East have a disproportionately

Figure 3: Percentage of persons of working age who were graduates for UK regions, Spring 2002



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large proportion of higher paid, higher skill, jobs to offer graduates as may be evidenced by New Earnings Survey data. Whilst in the North East (10%) of working age persons were graduates, the proportion was much larger in London (25%) and the South East (19%). The proportion in NI (14%) was between that in Wales (12%) and Scotland (16%).

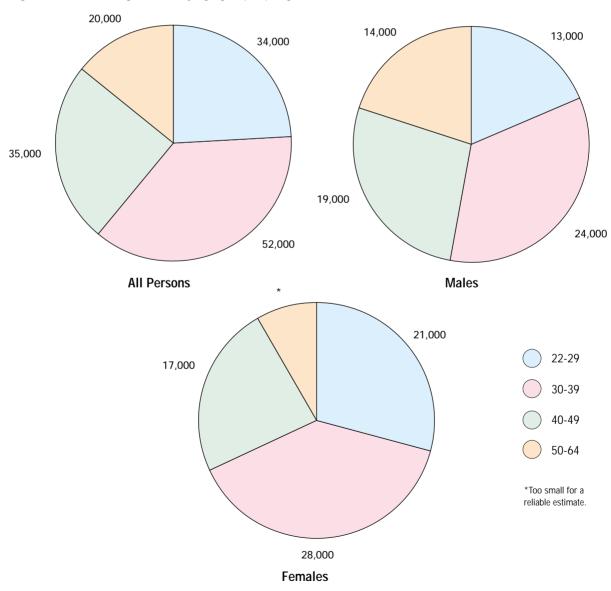
Out of the 141,000 graduates of working age in NI at Spring 2002, 130,000 (92%) were in employment. This was the **highest** employment rate out of all the UK regions, the employment rate for the UK as a whole being 88%. Employment rates did not show much variation across the UK regions, with the lowest employment rate in the North East (86%) and

the highest rate in NI (92%). The employment rates for Wales and Scotland were both 88%.

Of the 890,000 nongraduates of working age in NI at Spring 2002, 566,000 (64%) were in employment. In contrast to graduate employment, there was considerable variation in employment rates for nongraduates across the



Figure 4: Number of graduates by age group, Spring 2002



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regions. The non-graduate employment rate in NI was the lowest of all UK regions (some fourteen percentage points below the highest rate of 78% in the South East but close to that of London (65%)).

GRADUATES IN NI, SPRING 2002

There were 141,000 graduates of working age at Spring 2002 in NI. Slightly more than half these were female (51% or 72,000). These graduates comprise all persons who have obtained a degree, irrespective of how long ago they obtained it. Thus the current stock of graduates is an accumulation of those who have qualified throughout past years.

Figure 4 shows the spread of ages of all graduates of

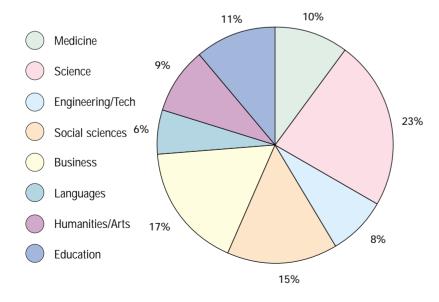
working age. For both males and females, the age group with the largest number of graduates was age 30-39, which contained 37% of all graduates. The proportion of graduates decreased over the next two older age groups, with 20% of male graduates aged 50-64 and only a small number of female graduates aged 50-59. This points to fewer persons having graduated in earlier decades and who are now "middle aged".

TYPE AND SUBJECT OF DEGREE HELD BY GRADUATES, SPRING 2002

26% (37,000) of all graduates had a higher degree, in addition to their first degree. There was little difference in the proportions for males and females (27% and 26% respectively). These higher degrees

comprised of Doctorates, Masters, Postgraduate Certificate in Education and other postgraduate degrees or professional qualifications. The majority of these higher degrees (20,000) were Masters. Figure 5 shows the main subject area for all those of working age who held degrees at Spring 2002. Science degrees, which cover Biological Sciences (including Psychology with mainly science content), Agriculture, Physical/ Environmental Sciences, Mathematics, Computer Science and Architecture accounted for 23% (32,000) of all degrees held. The subject areas with the next largest number of graduates were Business and Finance (17% or 24,000) and Social Sciences (15% or 21,000); Social Science include Economics, Sociology, Social studies, Health studies, Psychology (with mainly social content), Politics, and Law.





EMPLOYMENT RATES OF GRADUATES AND NON-GRADUATES

Table 1 shows how the employment rate varied according to graduate/non-graduate status and gender at Spring 2002. A much higher percentage of graduates were in employment than non-graduates (92% compared with 64%), giving a differential of some twenty

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Table 1: Employment Rates of graduates and non-graduates, Spring 2002

Graduate Status	All persons	Males	Females
Graduate	92%	93%	91%
Non-graduate	64%	70%	57%

eight percentage points. Both male and female graduates had similar employment rates. This contrasted to non-graduates where the male employment rate was thirteen percentage points higher than the female rate (70% and 57% respectively).

As Figure 7 illustrates, a slightly smaller proportion of graduates (91%) were in permanent positions than non-graduates (94%). This differential between graduates and nongraduates was larger for males than females, five

percentage points and one percentage point respectively. The proportion of female graduates in permanent positions was the same as that for males at 91%. It is interesting to note that although only 55% of female non-graduates were working full-time, 92% of female non-graduates were full-time.



Figure 6: Graduates and non-graduates working full-time, Spring 2002

EMPLOYMENT STATUS OF GRADUATES

Since the vast majority of graduates of working age (130,000 or 92%) were in employment at Spring 2002, this group can be analysed in more detail. Figure 6 shows that a higher proportion of graduates were working on a full-time basis than non-graduates (88% compared with 77%). Although for males there was little difference in the proportion of graduates and non-graduates who worked full-time (97% and 94% respectively), there was a significant difference between female graduates and non-graduates; just over half (55%) of female nongraduates worked full-time, while over three quarters (79%) of female graduates did so.

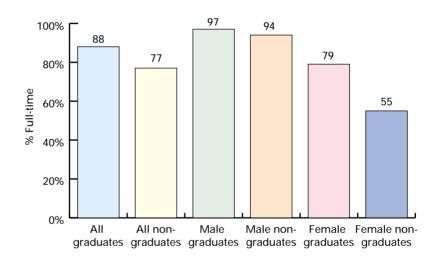
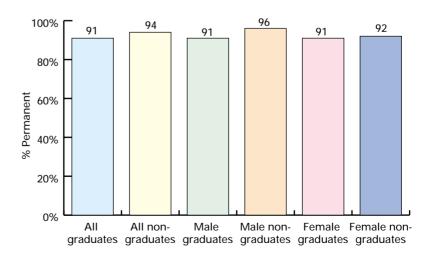


Figure 7: Graduates and non-graduates in permanent employment, Spring 2002



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EMPLOYMENT IN PRIVATE AND PUBLIC SECTORS

Smaller proportions of graduates, both male and female work in the private sector, than non-graduates. In fact, broadly similar numbers of graduates work in the private (61,000 or 47%) and public sectors (68,000 or 53%), while approximately three quarters of non-graduates (74%) work in the private sector. 56% of male graduates work in the private sector compared with 84% of male nongraduates. For female graduates the position is reversed, with 39% working in the private sector, compared to 61% of female non-graduates as shown by Figure 8.

There was a considerable difference in the major occupational groups that graduates and nongraduates worked in, as shown by **Table 2**.

93% of graduates were employed in the top four occupational groups. For non-graduates the distribution was the opposite way round, with 39% employed in the top four occupational groups. In particular, over three fifths (62%) of all graduates were employed in Professional occupations or Associate professional and technical occupations, compared with 15% of non-graduates.

The split between those working in Service and Non-service industries differed for graduates and non-graduates. A higher

proportion of graduates (86%) worked in the Service industries, than nongraduates (66%). In fact, 94% of female graduates worked in this area. Over one half of all graduates (57%) worked in Public administration, education and health, as shown by **Table 3**.

EARNINGS OF GRADUATES AND NON-GRADUATES

Figure 9 shows that average gross weekly earnings of graduates were substantially (78%) higher than nongraduates with graduates earning on average £464 per week, while non-graduates earned on average £260 per week. This graduate earnings differential is particularly prevalent in females, with graduate earnings on average more

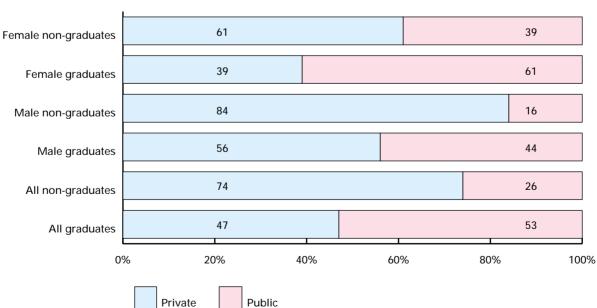


Figure 8: Proportions of graduates and non-graduates in Private/Public sectors, Spring 2000

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Table 2: Occupational group for graduates and non-graduates, Spring 2002

Occupational	group	All persons	Males	Females
Graduate	Managers and senior officials	18%	25%	-
	Professional occupations	46%	47%	45%
	Assoc professional & technical	16%	13%	19%
	Administrative and secretarial	13%	-	19%
	All other occupations#	7%	A	-
	Total all occupations	130,000	64,000	66,000
		(100%)	(100%)	(100%)
Non-graduate	Managers and senior officials	10%	12%	7%
	Professional occupations	4%	4%	3%
	Assoc professional & technical	11%	10%	13%
	Administrative and secretarial	14%	6%	25%
	All other occupations#	61%	68%	51%
	Total all occupations	566,000	323,000	243,000
		(100%)	(100%)	(100%)

[#] All other occupations comprise Skilled Trades Occupations, Personal Service Occupations, Sales & Customer Service Occupations, Process Plant and Machine Operatives and Elementary Occupations.

Table 3: Industry group for graduates and non-graduates, Spring 2002

Industry group		All persons	Males	Females
Graduate	Non service industries	14%	22%	-
	Banking, finance and insurance	16%	18%	13%
	Public admin, education and health	57%	46%	69%
	Other services#	13%	14%	-
	Total all industries	130,000	64,000	66,000
		(100%)	(100%)	(100%)
Non-graduate	Non service industries	34%	51%	12%
	Banking, finance and insurance	8%	7%	9%
	Public admin, education & health	29%	14%	50%
	Other services#	29%	28%	29%
	Total all industries	566,000	323,000	243,000
		(100%)	(100%)	(100%)

[#] Other services include Distribution, Hotels and Restaurants, Transport and Communication.



⁻ Sample size too small for a reliable estimate.

⁻ Too small for a reliable estimate.

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than double those of nongraduates (£413 compared to £194). Male graduates on average earn 64% more than male non-graduates. When comparing across gender, on average male graduates earned about 26% more than female graduates (£521 per week compared to £413 per week), while earnings of male non-graduates was 64% greater than female non-graduates (£318 per week compared to £194 per week). Comparing the two extremes, on average a male graduate earnings (£521 per week) was over two and a half times as much as an average female nongraduate earnings (£194 per week).

Gross weekly earnings are affected by the number of hours worked per week. As a higher proportion of females work part-time, average gross weekly earnings will be lower in comparison with male earnings. To counteract this, hourly earnings have been considered below.

The average hourly rate of pay for graduates was 81% higher than that for nongraduates (£12.50 per hour compared with £6.90 per hour). Male graduates were paid 78% more than the hourly rate for male nongraduates (£13.50 compared with £7.60). For females the differential was proportionately greater (89%), with graduates

Figure 9: Gross weekly pay of graduates and non-graduates, Spring 2002

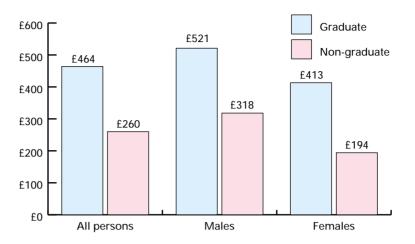


Figure 10: Gross hourly pay of graduates and non-graduates, Spring 2002



earning on average £11.70 per hour and non-graduates £6.20 per hour. On average male graduates were paid 15% more than female graduates (£13.50 compared with £11.70). For non-graduates the gender differential was greater at 23%.

GRADUATES OF WORKING AGE, ILO UNEMPLOYED 1990 - 2002

Unfortunately the estimated number of graduates of

working age who have been ILO unemployed in each year in the period 1990-2002 falls below the level deemed reliable for publication.

FURTHER INFORMATION

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Background

The original article (this is the seventh in the series), - was initiated in 1996 by the author because there was a lot of ill-informed comment being expressed about "the poor performance" of the NI economy. The fact is that, taking as a base year 1990, - we have had the fastest improving economy of the twelve UK regions.

It remains to be seen if this will also be true of the incoming decade. Currently our progress – as in other regions and nations – is being hampered by the global economic slowdown, with recovery delayed longer than expected.

PERFORMANCE MEASURES

The usual measures of the performance of an economy are:

- Growth in gross domestic product (GDP); it is a reflection of the numbers of people employed and their productivity and is important because it broadly measures changes in the standard of living.
- Growth in employment both as measured by an increase in jobs and by the increase in the employment rate - the proportion of the population of working age in employment.
- Changes in numbers and percentage of the

unemployed. Obviously this tends to move in the opposite direction to employment but employment is not the only factor - it is also influenced strongly by growth in labour supply and the economic activity rate (the proportion of the population of working age who are in the labour force).



GDP GROWTH

Table 1 shows our per capita growth in Gross Domestic Product 1990-1999 relative to the other UK regions*. The data show that NI has had the largest increase. Note the growth rates are in nominal terms - that is part of the increase is due to inflation and only part is 'real'.

Table 1: GPD per head Nominal Growth Rates 1990-1999

Region	1990 GDP per head	1999 GDP per head	1990-1999 Growth Rates
London	10,935	16,859	54.2%
South East	9,586	15,098	57.5%
South West	7,917	11,782	48.8%
East	9,711	15,094	55.4%
East Midlands	8,149	12,146	49.0%
West Midlands	7,875	11,900	51.1%
Yorkshire/Humber	7,630	11,404	49.5%
North West	7,757	11,273	45.3%
North East	7,033	10,024	42.5%
Scotland	8,321	12,512	50.4%
Wales	7,080	10,449	47.6%
Northern Ireland	6,300	10,050	59.5%
United Kingdom	8,535	12,972	52.0%

Source: Economic Trends June 2002

^{*}Unfortunately due to technical reasons the Office for National Statistics – which produces regional GDP data – has delayed release of the regional data for 2000 until the end of this year.

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Table 2: GDP % Annual Change in real terms 1990-2002

	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02
NI	-0.2%	3.0%	2.5%	4.2%	6.1%	4.9%	1.0%	4.0%	0.9%	0.9%	(3.1%)	(2.3%)	(1.7%)
UK	1.0%	-1.0%	0.3%	2.2%	4.4%	2.6%	2.2%	3.7%	3.5%	1.7%	(3.1%)	(2.6%)	(1.8%)

Table 3: NI and UK GDP Cumulative Change in real terms 1990-1999

	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99
NI	100	103.0	105.6	110.0	116.8	122.5	123.7	128.7	129.8	131.0
UK	100	99.0	99.3	101.5	106.0	108.7	110.0	115.2	119.2	121.2

Source: Economic Trends May 2001. UK excludes Extra-region. Data for 1999 are provisional.

Table 2 changes in NI GDP growth relative to the UK over the period 1990-1999 are shown.

Forecasts by the Northern Ireland Economic Research Centre for 2000, 2001 and 2002 are also supplied. Note that the GDP data in **Tables 2** and **3** are now in real terms ie inflation effects are excluded.

As can be seen from the data, NI largely missed out on the recession of 1991 and expanded more rapidly than the rest of the UK until 1996. Except for 1997, growth has

been a little lower than the UK in recent years.

Table 3 gives NI and UK GDP indexed to 100 in 1990 and shows the cumulative effect of these changes. It can be seen that NI grew 1% per annum faster than the UK over the period 1990-1999.

EMPLOYMENT GROWTH

Table 4 shows the change in the number of employee jobs in NI and the UK by broad industrial sector for the period March 1990 to March 2002. Clearly in relative terms NI had a much greater growth than the UK.

Unfortunately **regional** comparisons for that period are not available due to new Government Office Regions (GOR) being introduced (see LMB No 14 Chapter 5). GOR data are only currently available for the period March 1996 to March 2002 - see **Table 5**.

NI did well, being only outperformed by London and the adjoining area of the South East, and much better

Table 4: Employee Jobs by Broad Industry Sector, March 1990 – March 2002

		Norther	n Ireland		United Kingdom			
	1990 (000's)	2002 (000's)		1990-2002 % Change		2002 (000's)		1990-2002 % Change
Manufacturing	104	97	-7	-6.7%	4,819	3,702	-117	-23.2%
Construction	29	35	6	20.7%	1,267	1,211	-56	-4.4%
Services	373	499	126	33.8%	17,298	20,299	3,001	17.3%
Other¹	27	20	-7	-26.0%	721	434	-287	-39.8%
TOTAL	532	651	119	22.4%	24,104	25,645	1,541	6.4%

¹Other industries include Agriculture, Forestry and Fishing, Mining and Quarrying, and Electricity, Gas and Water Supply.

Source: DETI and ONS

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Table 5: Employee Jobs by UK Region, March 1996 – March 2002

Region	1996 (000's)	2002 (000's)	Absolute Change	1996-2002 % Change
London	3,446	4,044	598	17.4%
South East	3,114	3,587	473	15.2%
South West	1,831	2,047	216	11.8%
East	2,004	2,227	223	11.1%
East Midlands	1,618	1,740	122	7.5%
North West	2,635	2,822	187	7.1%
West Midlands	2,165	2,277	112	5.2%
Yorkshire/Humber	1,954	2,056	102	5.2%
North East	920	946	26	2.8%
Scotland	2,059	2,190	131	6.3%
Wales	993	1,061	68	6.8%
Northern Ireland	578	651	73	12.6%
United Kingdom	23,316	25,645	2,329	10.0%

Source: Quarterly Employment Survey, DETI and ONS: Figures for changes are based on unrounded figures.

than Scotland and Wales. But removing the period June 1990 to March 1996 (and noting the point about the early 1990s when NI excelled the UK) makes the NI performance look comparatively less impressive.

EMPLOYMENT RATE

Another way of looking at this is to take the percentage of those of working age (defined as 16-64 for males; 16-59 for females) who are in employment – this is known as the employment rate* and the results are shown in Table 6.

Here NI had an above average growth in this rate in the period examined, well above that for Scotland and Wales but less than two

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other regions – the South West and West Midlands. It may seem puzzling that a strong job creation performance does not lead to a bigger increase in the employment rate. The answer is that NI has had a larger growth in labour supply than the rest of the UK.

 Table 6: Employment Rates: Spring 1992-Spring 2002

Region	1992	2002	Absolute Change
London	67.9	70.9	3.0
South East	76.0	80.1	4.1
South West	73.5	79.0	5.5
East	75.8	79.2	3.4
West Midlands	69.6	74.3	4.7
North West	69.2	72.0	2.8
East Midlands	73.1	76.5	3.4
Yorkshire/Humber	70.6	72.9	2.3
North East	65.9	68.5	2.6
Scotland	71.1	73.1	2.0
Wales	67.3	68.5	1.2
Northern Ireland	63.2	67.5	4.3
United Kingdom	71.1	74.4	3.3

Source: Labour Force Survey, DETI and ONS

*Note the employment figure used in the numerator differs in several respects from the employee jobs figure used in the previous section. For example, the employment rate counts people with jobs – rather than jobs – and includes the self-employed.



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Table 7: Unemployed: Spring 1992-Spring 2002 (seasonally adjusted)

Region	1992 (000's)	2002 (000's)	Absolute Change	Change %
London	418	264	-154	-37%
South East	313	171	-142	-45%
South West	214	94	-120	-56%
East	204	104	-100	-49%
West Midlands	276	147	-129	-47%
North West	330	186	-144	-44%
East Midlands	180	91	-89	-49%
Yorkshire/Humber	248	134	-114	-46%
North East	143	82	-61	-43%
Wales	116	82	-34	-29%
Scotland	242	176	-66	-27%
Northern Ireland	85	42	-43	-51%
United Kingdom	2,769	1,572	-1,197	-43%

Source: Labour Force Survey, DETI and ONS.

But NI still has the lowest employment rate in the UK and this indicates hidden labour market reserves (see LMB No 11 Chapter 7 and LMB No 14 Chapter 3). However whilst it is unlikely that NI will ever reach the level of South East England - if only because of our much higher birth rate (with mothers staying at home especially when the children are young), higher numbers in education, lower local wages interacting with benefit levels paid at national rates, a higher proportion of long term unemployed, inferior public transport etc - it does illustrate how increases in employment have a smaller effect on unemployment. Thus in a strengthening labour market 'hidden' labour reserves are drawn

into the market driving up the **employment rate** with a smaller effect on unemployment. A further analysis of variations in the employment rate is supplied in Chapter 7.

CHANGE IN UNEMPLOYMENT

Table 7 shows the numbers unemployed as measured by the Labour Force Survey (ILO basis) and the percentage change Spring 1992 to Spring 2002. The NI performance has been very good with a fall of 51%; better than the fall in the UK

as a whole (-43%) with only the South West doing better and well ahead of Wales (-29%), and Scotland (-27%).

MANUFACTURING OUTPUT

One final additional piece of evidence is the change in manufacturing output-less important than the GDP measure because manufacturing only represents about one-fifth of total GDP. **Table 8** shows the relative change in manufacturing output for NI and the UK over the past six years (base 1995=100) and

Table 8: Manufacturing Output 1995-2002 (Q1)

	1995	2002 (Q1)	Change
NI	100	121.6	+21.6%
UK	100	98.6	-1.4%

Source: DETI and ONS

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our much better performance even taking into account the recent sharp fall in output in the ICT Sector.

And since was accomplished with fewer employees, between 1995 and 2001 there has been a substantial improvement of 33% in labour productivity.

VAT REGISTRATIONS

One would expect that those regions which are performing well, such as London and its neighbouring regions, and NI, would also show an increase in businesses registered for VAT, whereas under-performers, say the North East of England and Wales, would do less well by this measure.

As **Table 9** shows there is a good correlation between a good labour market performance and the change in the stock of VAT registered businesses. Only four of the twelve UK regions showed an increase, with NI the only area outside of London and its adjoining regions to register an increase.

Table 9: VAT Registrations 1994-2000 Net Change

Region	% Increase
London	+13.4%
South East	+ 5.0%
East	+2.4%
East Midlands	-0.7%
West Midlands	-1.2%
North West	-1.2%
South West	-2.0%
Yorkshire/Humber	-4.4%
North East	-5.0%
Scotland	-1.0%
Wales	-6.3%
Northern Ireland	+3.6%
United Kingdom	+1.8%

Source: DTI Small Business Service's Research Unit.

EFFECT ON MIGRATION PATTERNS

Traditionally there has been substantial emigration from NI - to avoid "the troubles", take up higher education places, seek better jobs. NI lost 120,000 people in the 1970's, 60,000 in the 1980s but the last decade there has been net in-migration of some 14,000 see Table 10. But note all this improvement (+16,589) took place in the 90/91 to 95/96 period when NI was easily out performing the rest of the UK; since then there has been a small amount of net emigration (-2,222). The

earlier data on GDP growth, employment and unemployment help explain this change.

Further evidence for the role of a strong labour market in affecting migration can be shown in the change turnaround in migration patterns with Rol. Thus in 1990/91, 1,300 people left NI for the Rol but 2,300 came in, – a gain of 1,000; later the situation reversed as the Rol economy powered ahead; in 1999/00, 2,179 came in from Rol but 2,249 left – a loss of just 70. Perhaps surprisingly, in 2000/01 more migrated to

Table 10: Inward and Outward Migration: NI 1990/1991 - 2000/2001

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01
In	17,640	19,611	18,423	16,302	16,937	23,970	18,287	18,455	18,915	19,701	20,623
Out	16,197	15,454	14,367	15,288	17,279	17,709	17,615	18,423	21,759	19,915	20,491
Net	1,443	4,157	4,056	1,014	-342	6,261	672	32	-2,844	-214	132

Source: NISRA.



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NI from RoI (2,252) than left NI for RoI (2,010) a net gain to NI of 242 people. But the movements are nowhere as large as many think.

HOUSE PRICES

It is not at all surprising therefore that the strengthening economy and rising population are also reflected in NI having in recent years the third highest house price increase of any UK region as **Table 11** shows. (Note the index is based on 1993 at 100).

CONCLUSION

It is clear that in the last decade we have had the fastest improving regional economy in the UK.

But is also clear that - with the benefit of a full decade of data - that all the **relative** improvement took place in the first half of the decade. As **Table 3** shows, in the period 1990 to 1995 our GDP growth was 22.5% v 8.7% in the UK; but in the period 1996 to 1999 our growth was just 7.3% v 11.2% in the UK. And the migration figures mirror these trends.

But the fact remains that it has been a decade of substantial progress; we have lost our unenvied tag of being the UK region with the highest unemployment rate (several other regions

Table 11: House Prices: 1993=100; 2002 Q1

Region	2002 (Q1)
London	227
East	222
South East	211
South West	201
East Midlands	174
West Midlands	169
North West	145
Yorkshire/Humber	142
North East	140
Wales	168
Scotland	146
Northern Ireland	211

Source: Economic Trends August 2002.

are worse), unemployment is at its lowest for over a generation and at 5.7% it is the closest it has ever been to the UK average of 5.2% and is well below the EU (7.7%) level and we no longer have a large population loss through net emigration.

OUTLOOK

Looking out to the new decade will our economy perform well? There are grounds for a canny optimism:

- (i) the world economy's recovery from the slow down of 2001 and 2002 may gather pace in 2003 or more likely in 2004.
- (ii) there is an export boost potential from the

strong performance of Rol's economy although the strength of sterling relative to the Euro is presently reducing this opportunity and growth rates in Rol have halved – in round terms from 8% to 3%;

- (iii) agriculture and tourism recover from a number of recent setbacks and job losses in the clothing and textile sectors slow down:
- (iv) inward investment which, as elsewhere throughout Europe, has been at a low level, recovers its success in supplying a substantial number of high quality projects to replace lower productivity sectors;



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- (v) past and present improvements in education and training pay off;
- (vi) capital and labour inputs grow faster than the UK average;
- (vii) political stability leads¹ to improved economic decision-making.

But with threats to the international economic scene still around - from a slow international recovery to oil induced shocks to the unexpected!





Michael Anyadike-Danes, NIERC

Context¹

The inadequacies of the conventionally measured unemployment rate as an indicator of the state of the labour market in the less prosperous regions of the UK has long been appreciated. Indeed there is a small, but well-established, literature which has drawn attention to the fact that "hidden unemployment", "inactivity" and "sickness and disability" are more heavily concentrated in some parts of the UK than others². However there does not seem to have been a systematic treatment of the relationship between the lack of employment, nonemployment, and the prevalence of different 'varieties' of nonemployment. This is all the more concerning now that "employability", which seeks to focus on the movement from non-employment into employment, has become a key organising idea in the design of active labour market policies.

This paper provides a context for the discussion of employability by investigating regional variations in the composition of male³ nonemployment. Specifically we set out to answer the question: how is the composition of nonemployment related to the size of the non-employment rate? We ask whether or not there is a statistically significant difference between the relative importance of different categories of nonemployment which depends on the level of the nonemployment rate. So, for example, where the nonemployment rate is higher, is the share of unemployment share in non-employment significantly different? And if so is it higher or lower?

We use data from the Labour Force Survey (LFS) to construct a four-fold classification of nonemployed working age men. The categories are: unemployed; in education or training; not working through sickness and/or disability; and inactive for other reasons. These data are used to calibrate the relationship between the size and composition of nonemployment across the 12 **Government Office Regions** (regions) of the UK for the period 1995 to 2001.

The rest of the paper is organised into three sections. First we motivate the discussion with a description of the male nonemployment rate and its constituents. This is followed by a section that presents the results of the more formal statistical modelling exercise and works out the implications of the estimates for the sizecomposition relationship. The last section looks at some possible lessons for policy-makers.

NON - EMPLOYMENT OF WORKING AGE MEN ACROSS THE REGIONS

The simplest place to start is with the non-employment rate itself. It is recorded on Figure 1. The Figure displays, for each region, the ratio of the non-employed to the working age population (that is aged 16 to 64) averaged over the years 1995 to 2001⁴. The regions are arranged in increasing size of the non-employment rate, and range from the South East at just over 15%, to NI with roughly double the South East's nonemployment rate at just over 30%.

The non-employment rate rises⁵ across the chart and there is a familiar spatial pattern. Most of the 'south' appears at one end, and the poorer parts of the 'north' at the other. The average of the twelve regional rates (24%)

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A slightly longer version of this paper with some more technical detail and further references can be found on the "Conference Papers" section of the NIERC website (www.qub.ac.uk/nierc): Getting the Measure of Employability: Some Evidence on Male Non-Employment across the UK Regions

Wate Non-Employment across the UK regions
 See the references in Beatty, C, S. Fothergill and R. Macmillan (2000), "A Theory of Unemployment

and Sickness" *Regional Studies*, vol 34, pp 617-630 and, for NI, 630 Armstrong, D (1997), "Hidden Labour Reserves in NI" *Labour Market Bulletin*, no 11, no 26-29.

no 11, pp26-29.
3 This is the first report from a larger programme of research. Future reports are planned on female non-employment and non-employment in NI at the sub-regional level.

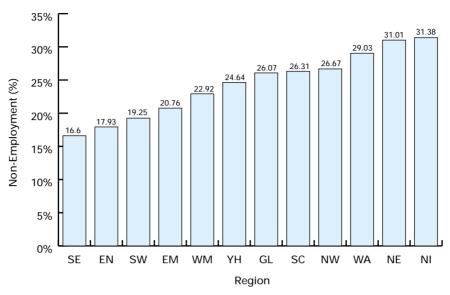
We use period averages here to reduce the noise in the year-to-year data generated by the interaction between LFS sampling variability and slight inter-regional differences in cyclical timing.

slight inter-regional differences in cyclical timing.

5 Of course since the horizontal axis is categorical the region-to-region 'slope' has, properly speaking, only ordinal significance.

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Figure 1: Male Non-Employment by Region ratio to Working Age Population, 1995-2001 av %



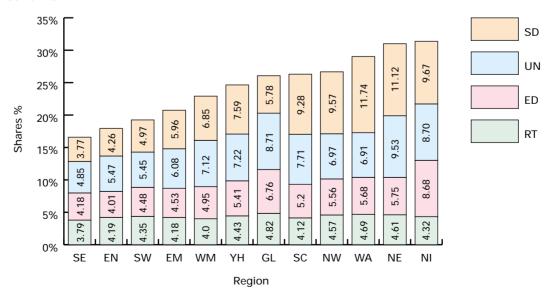


falls between the West Midlands and Yorkshire & the Humber. The one clear anomaly in this simple north/south picture is Greater London.

Let us now take a first look at the composition of nonemployment. Figure 2 repeats the bars of Figure 1 but distinguishes the contribution of each of the four components - unemployed (UN); in education or training (ED); not working through sickness and/or disability (SD); and retired and other inactive (RT).6

The category recorded at the bottom of each bar - the retired and other inactive - is clearly the smallest (about 4% of the working age population on average) and the least variable. This category is mainly those of working age who are retired (but it also includes carers, and those looking after the home as well as the 'other inactive' category from the LFS).

Figure 2: Components of Male Non-Employment by Region, ratio to Working Age Population, stacked 1995-2001 av %



⁶ Details of the classification of LFS 'activities' into the four categories of non-employed can be found in the Appendix to Anyadike-Danes, M.K. (2002), "Is this as good as it gets? Male Non-employment across the UK's regions at the end of the 1990s" *NIERC Working Paper No 76*, October (Belfast, NIERC).

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Whilst rising slightly across the chart, the education rate (the ratio of those in education and training to the working age population) also typically lies in a relatively narrow range, between 4% and 6%. There is one clear outlier here, NI at 8.5%.7

The ratio of the number unemployed to the working age population - the unemployed rate⁸ - like the overall non-employment rate (and unlike the other inactive and the education and training rates) varies by a factor of two, from about 5% in the South East to almost 10% in the North East. Whilst it rises pretty uniformly from left to right, Greater London, most notably, is much higher up the unemployed rate rankings (the second from the top with a rate over 8.5%) than the overall nonemployment rate rankings.

The last category - the ratio of those unable to work through sickness and disability to the working age population - the sick/disabled rate, displays the most striking 'gradient'. It ranges over a factor of three, from just under 4% in the South East to almost 12% in Wales. And, more noticeably than any of the other categories (or even overall non-employment), it exhibits a clear north/south split. In this case Greater London records a more

'southerly' rate (ranked between the South West and the East Midlands) than it does for non-employment overall.

THE ESTIMATED SIZE COMPOSITION RELATIONSHIP AND ITS IMPLICATIONS

The data here have a distinctive character. Each observation on the dependent variable - the composition of nonemployment - is a set of four shares, where each share is non-negative (but no greater than 100%) and each set of shares (by definition) must add to 100%. Such data is referred to as "compositional data", and our interest is in comparing across different sets of compositions.

Compositional data poses particular problems for standard methods of statistical inference, most notably because the fact that the shares 'add up' induces correlation between them. In the (trivial) two component case, for example, movements in shares will be perfectly negatively correlated: when one goes up, the other goes down. As a consequence, even in the more general case with more than two components, it is not possible to infer relationships from a set of 'raw' share data. Fortunately this problem is soluble,9 the special difficulties of

compositional data can be overcome by transformation of the data prior to estimation, and system - wide hypothesis testing after it. Here the focus is on the implications of the estimated model for the relationship between the size and composition of non-employment rather than its specification and estimation.¹⁰

The simplest way of appreciating the implications of the estimated model is to use it to construct a set of hypothetical, 'projected', shares of non-employment. Figure 3 records the results of these calculations over the observed range of the non-employment rate from the South East to NI (16.5% to 31.5%, as we saw from Figure 1). And, to make the pattern more transparent, the shares have been 'stacked'.

On the bottom of the stack it is easily seen that the share of the unemployed in nonemployment is virtually constant. The share does in fact fall across the range recorded on the figure, but the downward slope is almost undetectable. The coefficient capturing the dependence of the share of education and training on the non-employment rate turns out to be almost identical to that for unemployment.

An extraordinary 63% of NI's 16-19 year old males are in education or training, more than 15 percentage points higher than any other region.

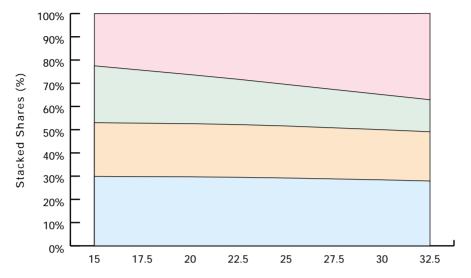
percentage points higher than any other region § This unconventional term is used as a reminder that this is the ratio of the unemployed to the working age population and not the unemployment rate which is the ratio of the unemployed to the labour force.

⁹ Due principally to the work of Aitchison, J. (1986) The Analysis of Compositional Data (London, Chapman and Hall).

¹⁰ In brief, double log relationships are estimated between the natural logs of a set of 'share' variables and the non-employment rate and the statistical significance of the set of coefficients is tested against the null of no connection between size and composition.

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Figure 3: Male Non-Employment level and Projected Compostion, stacked shares (%)



Non-Employment Rate (%)

Consequently the education and training share displays a similarly slight fall as well. The decline in the retired share is more evident and clearly far steeper. By far the most dramatic change though, is the rise in the sick/disabled share equal to the combined fall in the other three components.

Table 1 brings rather more precision to these contrasts. It tabulates the pattern of shares for two non-employment rates: the one at bottom of the observed range, 16.5%, and referred

to as 'Low' in **Table 1** (it is in fact the South East rate); and the other from the top of the range, 31.5%, and referred to as 'High' in the table (it is the rate for NI).

The extreme 'south' to 'north' differences ('Low' to 'High' in the table) for the unemployed and education shares are small, less than 2 percentage points; the differential for retired share is also negative, about 5 times larger, almost 10 percentage points. These three, taken together and with sign reversed, match

the 'south' to 'north' differential in sick/disabled of about 13 percentage points.

SD

RT

ED

UN

The message is clear. The proportion of the nonemployed recorded as unemployed or in education and training is largely independent of the extent of non-employment, and so pretty uniform across regions. What differs quite strikingly is the strong dependence on nonemployment on the proportion recorded as either retired or sick/disabled, which implies a corresponding north south contrast across the country.

Having isolated the effect of size on composition we can use this to sharpen our analysis of the ratios of non-employment categories to the working age population. First of all though, let us

 Table 1: Projected Composition of Non-Employment percentage

	Non-Emplo		
	Low (16.5%)	High (31.5%)	Difference
Unemployed	29.8	28.1	-1.7
Education & Training	23.1	21.4	-1.7
Retired & Other Inactive	23.4	14.3	-9.1
Sick/Disabled	23.6	36.3	12.7

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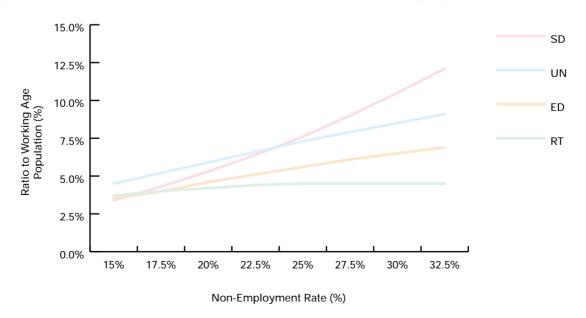
simply examine the effect of re-expressing the projected shares as ratios to the working age population. The results are displayed in Figure 4. Although the overall slope of these curves might have been anticipated from the raw data (Figure 2), the picture is now rather clearer. The retired and other inactive rate is broadly flat. There is little variation across the country in this, largely demographically determined, category. The education and unemployed rates are rising roughly in parallel, whilst the sick/disabled share of the working age population is not just rising, but rising at a very slightly increasing rate. And notice, the sick/disabled curve intersects the unemployed curve at a nonemployment rate of about 23%. Looking back to Figure 1 we can see that this is the

non-employment rate recorded by the West Midlands, just below the regional average and the boundary which separates 'north' from 'south'.

There is more, though, to be learned from our statistical analysis of the dependence of size upon composition, than a sharper picture of the data. We can compare the pattern of shares projected from our estimated size composition model (like those displayed in Figure 4) with those generated by an alternative, 'neutral', model where composition is independent of size. Some illustrative calculations are recorded in Table 2. The first two columns show the compositions (expressed as ratios to the working age population) projected using the estimated model for the top and bottom of the range, with the difference between them in the third column. The fourth column records the 'neutral' model figures for the 'High' nonemployment rate. These are calculated by simply multiplying each entry in the 'Low' column by the ratio of the 'High' to the 'Low' nonemployment rate (that is by, $1.91 = (31.5 \div 16.5)$). The difference between the two models appears in the last column.

Of course, there is little difference between the two models for either the unemployed or education and training categories - these two rates, when simply scaled for size are the same in the extreme 'north' as they are in the extreme 'south'. The magnitudes in other two categories are rather larger.

Figure 4: Male Non-Employment level and Projected Compostion, ratio to Working Age Population (%)

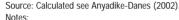


¹¹ Another way of saying that there is little dependence of composition on size as far as these two categories are concerned.

Michael Anyadike-Danes, NIERC

Table 2: Projected Composition of Non-Employment Comparison of Estimated and 'Neutral' Models ratios to working age population, percentage

	Estimated Model			Neutral		
	'Low'	'High'	Difference	'High'	Neutral less	
	(16.5%)	(31.5%)		(31.5%)	Estimated	
					'High'	
Unemployed	4.9	8.9	4.0	9.4	0.5	
Education & Training	3.8	6.7	2.9	7.3	0.6	
Retired & Other Inactive	3.9	4.5	0.6	7.4	2.9	
Sick/Disabled	3.9	11.4	7.5	7.4	-4.0	
Non-employment	16.5	31.5	15.0			



^{1.} The projections for the estimated model are calculated by applying the projected proportions (see Table 1) to the 'Low' and 'High' Non-employment rates.

We can see that for the retired category the effect of size on composition is to reduce the 'north/south' differential by almost 3 percentage points. But the largest effect is recorded for the sick/disabled category. Here the difference between 'north' and 'south' is 7.4 percentage points and more than half of that - 4 percentage points - is proximately accounted for by the dependence of composition upon size. Or, to put it another way, if extreme 'southern' rates applied only 7.4% of the working age population in the extreme 'north' would be in the sick/disabled category, rather than the 11.4% projected by the model (and close to the actual figure in the North East).

Finally, it is worth reflecting on the behaviour of the education rate. As we now know, its rise across Figure 4 derives quite simply from the combination of a constant share of education in nonemployment with the 'gradient' in the nonemployment rate across the regions. Nonetheless, it does not seem generally appreciated that the proportion of the male working age population in education and training in the 'north' is so much higher than it is in the 'south'. A number of different factors may be operating here, for example: in regions with low employment rates more effort may be made to improve the chance of employment by pursuing further qualifications; amongst younger males in particular, higher nonemployment rates may simply deter labour market entry; and, finally, there may be some effects from 'active

labour market policies' which direct the unemployed into education and training. Whatever the explanation, there is clear evidence of a systematic, but little noticed, cross - regional pattern.

LESSONS

We have found, first of all, that there is a statistically significant link between the size of the non-employment rate and the composition of non-employment. Secondly, we have a series of related findings about the nature of the size-composition relationship,

 A similar share of those not employed are ILO unemployed (that is without a job and actively seeking work) in the 'north' as in the 'south'.

^{2.} The projections for the 'Neutral' model are calculated by applying the ratio of 'High' to 'Low' (1.91 = (31.5 ÷ 16.5)) to the 'Low' column.

6

Why is our Employment Rate the Lowest in the UK? Does it matter?

Michael Anyadike-Danes, NIERC

- A similar share of those not employed are in education and training in the 'north' as in the 'south'.
- A lower share of those not employed are retired in the 'north' than in the 'south'.
- A higher share of those not employed are sick and/or disabled in the 'north' than in the 'south'.

Given that the nonemployment rate has a distinct (and well-known) spatial pattern - higher in the 'north' than the 'south' we can immediately infer the spatial pattern in its composition.

Moreover the findings about shares of non-employment can be re-expressed, quite straightforwardly, as proportions of the male working age population. Since the non-employment rate is higher in the 'north' than in the 'south', it follows that the unemployed are, correspondingly, a larger proportion of the working age population in the 'north' than in the 'south'. Less appreciated though, is the same implication which follows from the parallel finding about the share of education and training: the proportion of the working age population in education and training is also larger in the 'north' than in the 'south'.

The most important policy lesson to be drawn from this investigation is that the discussion of employability should focus firmly on the boundary between employment and non-employment and not be too distracted by the different categories into which the not employed are classified. Health/education/welfare

policy may well affect the form in which nonemployment is reported whether the non-employed are classified as unemployed/education/sickdisabled/retired - without necessarily being its root cause. By implication, therefore, health/education/ welfare policy may not necessarily be the appropriate cure. Indeed, the results reported here are consistent with the view that it may be simply a scarcity of jobs that provides the key to understanding some of the most striking 'north'/'south' contrasts in labour market outcomes.

This is by no means an original conclusion, but it is one that seems rather to have dropped out of sight in recent discussions of employability and its role in reducing regional differentials in the employment rate.



Gayle Kennedy, Research and Evaluation Branch, DEL

This is the eighth in a series of Bulletin articles presenting findings from the NI Social Omnibus Survey. A regular feature of this series, examination of 'The Most Important Problem in NI', has been retained and will be familiar to previous readers. Other questions are new for this year and examine themes such as Information Dissemination via Digital TV, and Employability.

INTRODUCTION

The annual NI Social
Omnibus Survey, conducted
between February and
March 2002 by Research
and Evaluation Services (a
locally based private sector
research company),
provides an opportunity for
the Department for
Employment and Learning
(DEL) and other interested
organisations to ask
questions of a
representative sample of
adults (aged over 18¹) in NI.

The Survey automatically included questions defining the basic characteristics of the sample (age, gender, etc.) and also allowed other organisations to 'sponsor' questions covering their own area of interest.

This is the eighth year that we have sponsored questions in the Survey and is also the eighth year that an article based on the results of the Survey has appeared in this Bulletin. This article contains a brief summary of some of the key findings of the DEL sponsored questions.

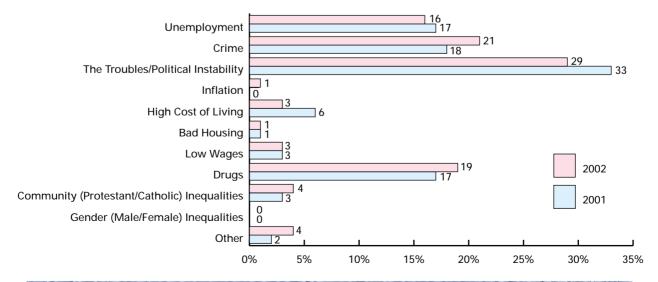
FINDINGS OF GENERAL INTEREST

The Most Important Problem in NI.

Since 1996, the Survey has provided an opportunity to gauge the current concerns of people in NI. As in previous years, respondents were asked to state what they considered to be 'The Most Important Problem in NI' at the time the interview was conducted.²

Figure 1 presents the findings for 2001 and 2002. The problems most frequently reported were: The Troubles/Political Instability (29%), Crime (21%), Drugs (19%), and Unemployment (16%).





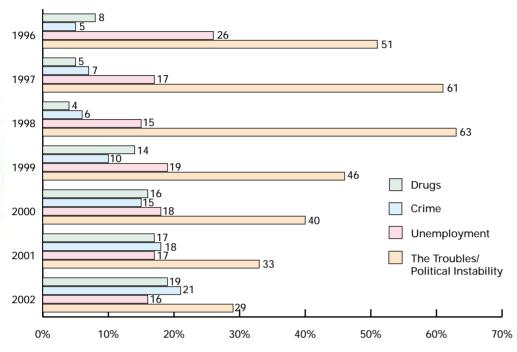
¹ The Survey was designed to yield a representative sample of men and women aged 18 and over living in NI. The 2002 Register of Electors was used as a sampling frame. The responses in this paper relate to the target age group in which the Department are most interested i.e. females aged 18-59 and males aged 18-64. A total of 723 valid responses were received.



² The question was prompted by the categories: 'Unemployment', 'Crime', 'The Troubles/Political Instability', 'Inflation', 'High Cost of Living', 'Bad Housing', 'Low Wages', 'Drugs', 'Community (Protestant/Catholic) Inequalities', 'Gender (Male/Female) Inequalities' and 'Other.'

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The Most Important Problem 1996 – 2002

Data on 'The Most Important Problem' are available since 1996³ allowing for trends in perceptions to be examined. **Figure 2** shows trends over the period in the four most frequent responses.

The most notable change over the seven year period has been the decline in the perception of 'The Troubles/Political Instability' as 'The Most Important Problem' from 51% of all respondents in 1996 to 29% in 2002. This is its lowest level since the question was asked in 1996⁴.

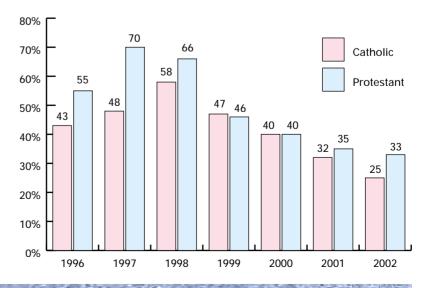
Over the past 4 years there has been an annual increase in the proportion of respondents classifying

'Crime' (6% in 1998 to 21% in 2002) and 'Drugs' (from 4% to 19%) as 'The Most Important Problem in NI.'

Figure 3 illustrates the perceived view of the Troubles/Political Instability

as 'The Most Important
Problem in NI' since 1996 by
community background.
Consistent with data in
Figure 2, there is a
decreasing trend in the
numbers of individuals
reporting The Troubles/

Figure 3: The Troubles/Political Instability The Most Important Problem 1996-2002



³ These comparisons are illustrative only as there have been some changes in the Survey methodology and structure of the question over the period. For example, data for 1998 onwards cover those aged 18-59 while the 1996 and 1997 data cover those aged 16-59. Prior to 1998 the category 'The Trouble/Political Instability' was referred to a 'Community Conflict/The Troubles'.

⁴ Percentages quoted for all respondents aged 18-59 will be accurate to within plus or minus 3%.

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Political Instability as 'The Most Important Problem in NI'. This decrease is evident in both the Catholic and Protestant Communities. In 1999 and 2001, there was no significant difference between the two Communities in relation to their perception of the Troubles/Political Instability as 'The Most Important Problem'. However, in this year's Survey a higher proportion of Protestants viewed The Troubles/ Political Instability as 'The Most Important Problem' - a pattern previously seen in 1996 - 1998.

Importance of Problems in NI

As in previous years, respondents in the current Survey were asked to consider each of the problem categories and to rank their importance as

problems in NI today on a scale of 'Very Important', 'Quite Important', 'Unimportant' and 'Not Important at all'. This information provides an important distinction as, while 'The Troubles' may have been reported by the majority as The Most Important Problem, it was not known how serious the problem was perceived to be.

Although The Troubles/ Political Instability is viewed as The Most Important Problem in NI, when ranked in order of importance, other areas were considered more important. As in the last two years, a higher proportion of respondents noted Drugs (88% in 2002; 83% in 2001) and Crime (85% in 2002; 77% in 2001) as 'Very Important' problems in NI compared to The Troubles/Political Instability (68% in 2002; 67% in 2001). However in the current Survey almost three quarters of respondents also considered Unemployment as 'Very Important' (72%).

LABOUR MARKET ISSUES

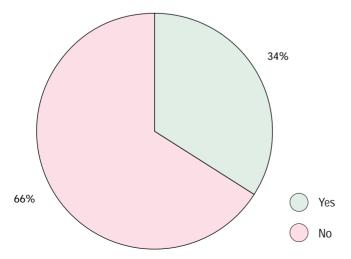
Training

A number of questions were included to assess respondents' participation in training and employment. All respondents were asked if they had received training in the last 12 months arranged through their employer. Of those who have been in employment for all of the previous 12 months (some 410 persons or 57% of the total valid sample), 34% had received training arranged by their employer – interestingly the same result as in the 2001 Survey. Of the 34 individuals who had started work within the previous 12 months, only 14 had received training.

Information Dissemination

As in the last 2 years, respondents were asked about accessing Employment Service information (for example, information on job vacancies or training opportunities) via the Internet. This year the question was expanded to include Digital Television.

Figure 4: Have you received any training in the last 12 months arranged through your employer?





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Respondents were asked if they had Internet Access or Digital Television at home. Less than half of the sample (41%) had access to the Internet at home. Of the 427 respondents who did not have this facility, only 12% intended to get Internet access at home in the next year. Fewer individuals (36%) answered 'yes' when asked if they had Digital TV at home. Only 8% intended to get this appliance in the home in the next year.

As can be seen in **Figure 6**, only a small proportion of the sample would be willing (or currently) use either the Internet (20%) or Digital TV (10%) to look for Employment Services information.

Employability

Labour Market Bulletin 15 featured an article detailing the work of The Taskforce on **Employability and Long** Term Unemployment, which is chaired by the Minister for Employment and Learning. As outlined in the article, the Taskforce commissioned a Scoping Study to determine the broad parameters that affect employability in the NI context, and to identify possible areas for action that Departments might take to increase the employability of individuals. The Scoping Study was followed by a wide-ranging engagement process, with more than 30 meetings with interested

Figure 5: Have you got Internet Access or Digital Television at home?

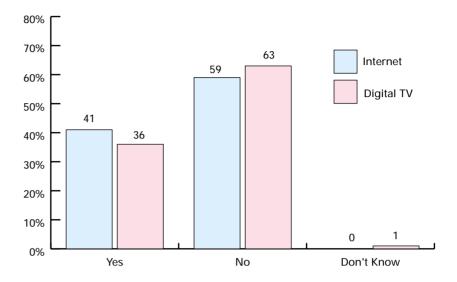
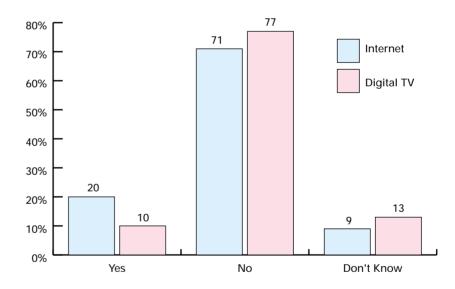


Figure 6: Access ES Information



parties. A number of issues which impacted on employability arose during the engagement process. There was a fair degree of unanimity between different groups as to these key factors, which included transport, especially public transport; wage levels and the interaction with benefits; the role of schools in

preparing young people for work; the availability of flexible and affordable childcare; the availability of jobs; the difficulties faced in obtaining and keeping employment by people with illness or disability; poor literacy and numeracy holding many people back; and the role and attitude of employers. It was therefore

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considered appropriate to include questions in the 2002 NI Social Omnibus Survey to explore the state of public opinion on these issues.

Employability Issues

Respondents were read the following nine statements about factors that might help or hinder people in obtaining and keeping a job in NI.⁵

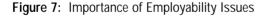
- Public transport is good enough to help people get to and from work.
- Wage levels in NI are high enough to encourage people to move off benefits and take up work.
- Schools in NI do enough to prepare children for the world of work.

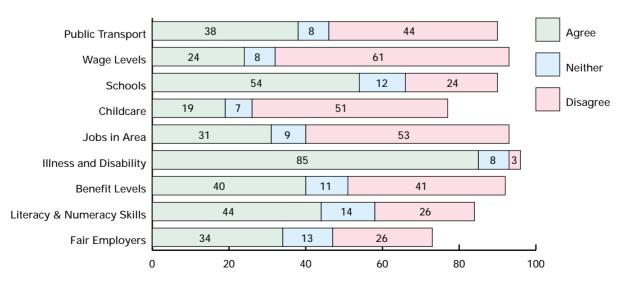
- There is sufficient affordable childcare in NI to allow people with young children to go to work.
- There are enough jobs in my area for people to find work if they really want it.
- People with illness and disability should be given greater assistance to help them keep jobs they have or to gain new jobs.
- Benefit levels are too high and this encourages people to stay on benefit rather than go out to work.
- Too many people today do not have the literacy and numeracy skills to help them to work in a modern economy.
- Employers in NI are fair to unemployed people

when recruiting employees.

As can be seen in Figure 76, a high proportion of individuals (85%) agreed that "People with illness and disability should be given greater assistance to help them keep jobs they have or to gain new jobs". Over half of the respondents (54%) agreed that "Schools in NI do enough to prepare children for the world of work." However a large proportion of responses (44%) indicated that "Too many people today do not have the literacy and numeracy skills to help them to work in a modern economy."

Over half of respondents disagreed with the statement "There are enough jobs in my area for people to find work if they really want it" (53%). This was further examined





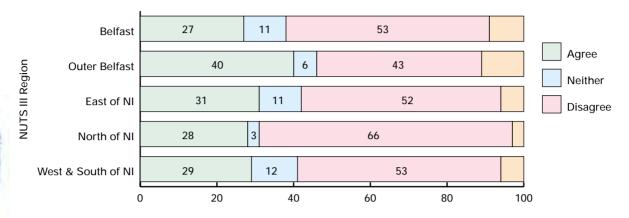
⁵ Possible responses are 'strongly agree', 'agree', 'neither agree nor disagree', 'disagree', 'strongly disagree' and 'don't know'.



⁶ Figure 7, conflates 'strongly agree' and 'agree' into 'agree' and 'disagree' and 'strongly disagree' into 'disagree'.

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Figure 8: "There are enough jobs in my area for people to find work if they really want it" by Region



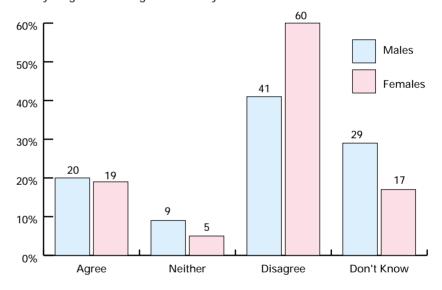
according to the region in which the respondent lived⁷ (as shown in **Figure 8**).⁸

In each of the five Regions, the majority of respondents disagreed with the statement "There are enough jobs in my area for people to find work if they really want it." This perception was most evident in the North of NI.

According to Figure 7, over half the population also disagreed with the statement "There is sufficient affordable childcare in NI to allow people with young children to go to work." (51%). A higher proportion of females disagreed with this statement as shown in Figure 9.

Chapter 18 of this issue of the Bulletin, provides an update on the work of the Employability Taskforce.

Figure 9: "There is sufficient affordable childcare in NI to allow people with young children to go to work" by Gender



SUMMARY

Over the past eight years the inclusion of questions in the NI Social Omnibus Survey has made available results which are both diverse and interesting - this year being no exception. Once again this has provided useful insights to issues relevant to DEL.

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8

The Work of the NI Skills Task Force - An Update

Mark Livingstone, The Skills Unit, REB, DEL

Since its establishment in February 1999, the NI Skills Task Force has put in place robust systems for researching the current and future skill needs of the NI economy with a view to ensuring that education and training provision is better targeted at areas of skills need. In October 2001 the Skills Task Force published its Summary Report which, drawing on the research findings, examined current practice and made a series of recommendations to DEL to address identified weaknesses. This article provides a further update on the work of the Task Force and on initiatives funded from the Skills Agenda Budget.

BACKGROUND

It is clear that the current global economic slowdown continues to affect the national and local economies. In the past year there have been a number of well-publicised redundancies and a further loss of confidence following the September 11th attacks. In particular the electronic engineering; IT; and aerospace sector appear to have suffered most. However the NI economy does not appear to have been as badly affected as in some other regions with the large public sector and a lesser exposure to international markets having a 'cushioning' effect. Positive economic trends have continued, with employment continuing to grow, albeit at a more subdued rate, and unemployment appears to have plateaued at its lowest level since current records began.

Compared to the 1990s, in the immediate post millennium period, the NI economy is likely to enjoy steady but unremarkable growth. Some signs of a slowing of labour demand can be seen in the various studies commissioned by the Skills Task Force as discussed below. However while recruitment difficulties and skills shortages may have moderated (the 2002 NI

Skills Monitoring Survey will provide robust data on this) there are still major challenges to be faced in the pursuit of a world class workforce. These challenges include the need to continually address skills deficiencies in the existing workforce and the need to equip all young people entering the labour market with the essential skills they will need in the world of work. In the aftermath of the global slowdown, competition for inward investment will be intense. A more demanding business environment means indigenous companies will also be dependent on workforce skills to contribute to increased productivity and improve the competitiveness of their products and services. The Skills Task Force research programme and initiatives funded from the Skills Agenda Budget continue to address these challenges.

THE PROGRAMME OF WORK TO DATE

Skills Research

When the Task Force was established, it was clear that despite increasing reports of skills shortages, there were no systems in place to gather robust data to guide policy makers in better matching skills supply to demand. This information

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The Work of the NI Skills Task Force - An Update

Mark Livingstone, The Skills Unit, REB, DEL

gap needed to be filled if resources including the funds made available under the Chancellor's Initiative (henceforth the Skills Agenda Budget) were to be effectively targeted on areas of skills deficiency. Since February 1999 high quality data systems for monitoring and forecasting skills supply and demand have been put in place to inform the Task Force. With these systems now established the Task Force is well placed to make recommendations for action based on robust data.

Skills Monitoring

The NI Skills Monitoring Survey 2000

In February 2001 the NI Skills Task Force published the NI Skills Monitoring Survey 2000, the largest survey of employers' skill needs ever undertaken in NI. The Survey provided, for the first time, a robust overview of the current skill needs of NI's private sector employers provided a baseline against which future trends could be measured; and highlighted areas of concern for further investigation (see LMB 15, Chapter 11 for a summary of the results).

In general, the Survey results supported the perception that the NI labour market had tightened considerably with many employers reporting

difficulties in filling vacancies. A high proportion of vacancies (64%) were considered by employers to be 'difficult to fill' however many difficult to fill vacancies were not due to skills shortages per se, rather they were due to factors such as unattractive working conditions or other 'internal' factors. There appeared to be a perception that many vacancies were not seen as attractive while at the same time employers perceived a lack of basic 'employability' skills in many jobseekers and skills gaps in the existing workforce. The Survey also suggested that, while there was demand for high level skills such as computer programmers/analysts there was also a high level of demand for vocational skills.

The NI Skills Monitoring Survey 2002

The Skills Monitoring Survey was designed as a biennial survey which would take a detailed 'snapshot' of current skill needs every two years. Consequently survey fieldwork for the follow-up 2002 survey was carried out between May and July 2002. The 2002 survey is designed to provide an update of the main measures collected by the 2000 survey including levels of labour turnover and the incidence of vacancies: difficult to fill vacancies; skills shortages; retention difficulties; and skills gaps.

However the 2002 survey also offered the opportunity to improve the survey and to reflect developing areas of policy interest. In response to more frequent reports of skills shortages amongst NI public sector employers, the 2002 Survey has been extended to cover public sector employers in central and local government; education; and health. A section of questions investigating the incidence of training and training needs has also been added in response to the increasing focus on the importance of workplace learning in meeting employers' skill needs.

A preliminary analysis of responses shows that 73% of eligible employers responded positively to the survey illustrating the degree of interest in skills issues and the level of support amongst employers. The survey responses are currently being analysed in detail with the report due to be published early in 2003.

PA/NISTF Executive Skills Watch

While the Skills Monitoring Survey provides a comprehensive snapshot at a point in time (April/May 2000; and May-July 2002) there is a need for more continuous data. Since January 2000 the Skills Task Force has supported the enhancement

8

The Work of the NI Skills Task Force - An Update

Mark Livingstone, The Skills Unit, REB, DEL

of the Executive Skills Watch survey carried out by PA Consultancy which appears quarterly in the Belfast Telegraph's Business Section. The survey analyses by industry and occupation advertisements placed in the Belfast Telegraph for 'executive' vacancies attracting an annual salary of £22k or more and as well as gathering qualitative data on recruitment issues in key sectors. For 2002 the survey has been extended to cover the public as well as private sectors. With the survey now running for almost three years; sufficient data has now been collected to examine trends over time: in particular how the labour market for executive skills may have changed since the 2000 Skills Monitoring Survey and the global economic slowdown (see Chapter 9 in this Bulletin for further details).

The Executive Skills Watch provides evidence of the impact of the global slowdown on NI businesses. **Executive vacancies** advertised for the quarter January to March 2002 showed a 21% decrease compared to the number recorded for the same period of 2001. On closer examination, the fall in the number of posts advertised is confined largely to IT professionals and engineering professionals reflecting the

difficulties in the telecommunications and related sectors. Interestingly macroeconomic indicators show that aggregate numbers in employment have continued to grow; but at a reduced rate; while unemployment continues to fall but may have reached a plateau. In this context, it will be interesting to see if the results of the 2002 Skills Monitoring Survey reflect the macro economic trends and show a reduction in the level of vacancies and skills shortages.

Priority Skills Research

While the Skills Monitoring Survey provides an overview of skill needs across the economy and acts as a baseline for assessing long term trends, a general survey such as this provides insufficient detail to allow for appropriate interventions to address identified skill needs. In September 1999 the Priority Skills Unit was established at the Northern Ireland Economic Research Centre (NIERC) as a centre of excellence for skills forecasting and to take forward a programme of detailed research into skill needs in priority sectors. This more detailed research is impossible to carry out for all sectors simultaneously, therefore research has concentrated initially on skill needs in those priority skills

areas where shortages could hold back the growth of the NI economy.

The first areas of research covered skill needs in the IT and Electronic Engineering sectors and the results of these were published in August 2000 and October 2001 (see LMB14 Chapter 8 and LMB 15 Chapter 13 for summary results).

Two further studies have now been completed and published on the Mechanical Engineering and Tourism and Hospitality sectors. Summary results are given below (see Chapters 10 and 11 for more detail).

Mechanical Engineering

- · The historical pattern of employment in the industry had generally mirrored that of the UK with a general decline since the 1980s. However since 1993 employment trends in NI have diverged from that of the UK with over 4,500 net jobs created to 2000. The overall employment trends mask ongoing changes in the composition of the sector with the trend decline in larger sectors more than counter-balanced by growth within the smaller sectors.
- It is projected that employment growth is likely to be subdued in

The Work of the NI Skills Task Force - An Update

Mark Livingstone, The Skills Unit, REB, DEL

the short to medium term. There appears to be little prospect of shortages occurring at graduate level with problems more likely to occur at craft and technician level.

- The relatively small numbers of technician level shortages projected suggest that they may be easily remedied and are unlikely to constrain the performance of the industry. However there is a potentially greater need for actions in relation to projected shortfalls at craft level.
- Additional education and training provision at craft level need not be the principal policy response to any shortfalls as compositional changes within the sector could provide skilled labour through appropriate training or up-skilling.
- However the study also noted concerns over a lack of transferable mechanical engineering skills within the sector as well as concerns over shop-floor literacy and numeracy.

Tourism and Hospitality

 This study sought to distinguish between genuine skills shortages and recruitment and retention difficulties

- which may be due to other non-skills factors. The primary focus of the study, carried out by McIver Consulting Ltd, is on the hotels and restaurants sector.
- The sector has been well studied over the last decade with a number of key issues consistently identified including: low levels of qualifications; a lack of skills; unattractive working hours; poor pay; difficulties in filling jobs; and a high level of labour turnover.
- The scale of human resource difficulties were reinforced by the Skills Monitoring Survey 2000 which showed that the sector had: the highest levels of employees turnover; the highest proportion of employers reporting vacancies; difficult to fill vacancies; and retention difficulties; and a high level of skills gaps in the existing workforce.
- experiences in relation to skills issues in tourism and hospitality suggest that skills were very much a third order problem. The structure of the industry, low profit margin and competitive strategies which emphasise cost based competition result in and exacerbate long standing

- problems relating to poor HR practice. Therefore concerns with skills are likely to be subordinate to the need for wider change. Interviews with key informants confirmed these findings.
- The study concludes that any actions to address recruitment and retention difficulties, where identified, will have limited success unless they are part of a wider set of measures.
- Firms should seek to develop business strategies that aim to enhance their profitability. Central to these strategies is a commitment to best practice Human Resource Management which will enable them to tackle recruitment and retention difficulties while helping to deliver an enhanced product.

Work is now nearing completion on a further examination of skill needs in the Northern Ireland IT sector to be published in late 2002.

Labour Market Research

In addition to the primarily skills focused research, the Department also supports an ongoing programme of research into a range of labour market issues which also informs the work of the

The Work of the NI Skills Task Force - An Update

Mark Livingstone, The Skills Unit, REB, DEL

Skills Task Force. Labour market research currently ongoing includes an in depth investigation of the Belfast Labour Market for IT skills and Subject Choice by Gender (See Chapters 12 & 15).

enhancing the ICT skills of participants. With the ending of the 3-year Skills Agenda funding announced by the Chancellor in 1998, the Task Force has noted that much of what that fund developed has been incorporated into mainstream programmes.

The Task Force is now considering how best it can play a facilitating role in the area of skills creation and workforce development alongside the targets of the Economic Development Forum².

CONCLUSION

The range of labour market research commissioned by the Skills Task Force and the recommendations made in the Summary report to the Department in October 20011 continue to have an impact on the Department's mainstream provision and policies. The emphasis given to the skills needs required to develop the knowledge based economy permeates the priorities given to ICT, electronics and engineering in higher and further education and vocational training programmes. The main providers of vocational education and training have welcomed the increased flow of information and have begun to use that data to inform decisions on provision. The Department has increased the number of Modern Apprenticeships focusing on priority skills areas; the Lecturers into Industry scheme is now a well established part of Further Education; graduate conversion programmes have extended to the electronics sector as well as ICT; and New Deal is. through its programmes,

Skills Task Force Membe	rship			
Bill McGinnis	Chair			
Michael Anyadike-Danes	Director, NI Economic Research Centre,			
	The Queens University Belfast			
Bill Brown	Chair, Engineering Training Council			
	President, Engineering Employers Federation (NI)			
Tony Doran	Chief Executive, Construction Employers			
	Federation, Board Member, CITB			
Tom Gillen	Acting NI Officer, NI Committee of the Irish			
	Congress of Trade Unions			
Tony Hopkins CBE	Chair, Laganside Corporation			
Ann Shaw CBE	Chair, Institute of Directors (NI), Director, Shaws			
	Farms, Chair Health & Safety Agency (NI)			
Ann-Marie Slavin	Managing Director, Western Connect Ltd			
Vivienne Walker	Board Member, Centre for Competitiveness			
	Head of Human Resources, South & East Belfast			
	H&SS Trust			
Peter Williamson	Regional Secretary, Amalgamated Engineering			
	& Electrical Union			
Richard Sterling	Managing Director, Coolkeeragh Power Ltd			
(resigned May 2002)	Chair, Basic Skills Committee			
Gordon Milligan	Human Resources Manager,			
	Nortel Networks CBI			
Stephen Peover	Deputy Secretary, Department of Education			
Tom Scott	Director, Skills & Industry Division, DEL			
Jim Hanna	Head of Sectoral Development, DEL			

In addition the Task Force is supported by an Officials Group comprising representatives from relevant qovernment departments and agencies.

The Work of the NI Skills Task Force - An Update

Mark Livingstone, The Skills Unit, REB, DEL

Copies of the NI Skills Task Force reports are available from:

The Skills Unit, Research & Evaluation Branch, DEL 39-49 Adelaide Street Belfast BT2 8FD

Tel: 028 90 257683

Or electronically: www.delni.gov.uk

The NI Skills Task Force - Terms of Reference:

To advise the Department for Employment and Learning on matters of strategy to meet the skills needs of the NI economy and to advise the Department on its labour market research programme in order to assist in targeting the allocation of education and training resources.



The PA/NI Skills Task Force Executive Skills Recruitment Watch

Michael McDonnell and Andrew Dowie, PA Consulting

Two years ago the NI Skills Task Force commissioned PA Consulting Group to build on their existing analysis of higher level jobs advertised in the Belfast Telegraph the only (daily) evening paper in NI and where most of such jobs are advertised. This research was to build on our existing knowledge of job vacancies with a view to analysing higher level skill shortages. The comprehensive NI Skills Monitoring Survey is only conducted biennially whereas the Executive Skills Watch Survey provides up-to-date quality data. The **Employment Service's** Vacancy System only covers about one-third of all job vacancies and predominantly lower skilled occupations. **Accordingly the Executive Skills Watch Survey provides** up-to-date information on the demand for higher skilled occupations and points up where the supply of skills needs to be increased as well as tracking sector analyses over time.

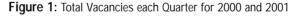
INTRODUCTION

Whilst the NI Skills Task Force (NISTF) and PA Consulting Group (PA) have only been accumulating data since the start of 2000, it is now providing a valuable insight into the labour market for higher skills in NI. The number of vacancies being advertised has been taken as an indicator of the health of the economy in general and of the various industrial sectors in NI. Juxtaposed to this, the changes in the skills being demanded by these various industries has been monitored through analysis of the functional posts needing filled.

The quantitative information collected has been based on the jobs being advertised in the Belfast Telegraph's Jobfinder – being the largest destination for job adverts in NI. All jobs with a salary of greater than £20,000¹ were analysed in this survey

in line with the Standard Industrial Classification (SIC) and the Standard Occupational Classification (SOC)

During 2001 some 1,043 positions were advertised, down by nearly 10% from the figure of 1,152 for the previous year. The PA/NISTF survey had tracked the decline in executive recruitment activity throughout 2001 and the picture for the full year is therefore not surprising. It is clear from Figure 1 that the trend has been downwards with one or two peaks and troughs along the way. Throughout the period of study, it has always been clear that there are clear elements of seasonality when it comes to the search for executive skills. The low point in any year appears to be the final quarter up to Christmas, which is immediately followed by the annual high of the New Year rush to fill vacancies.





¹ From 2002 the threshold for the executive positions to be included in the survey has increased to vacancies advertised with a salary greater than £22,000 to allow for wage inflation

The PA/NI Skills Task Force Executive Skills Recruitment Watch

Michael McDonnell and Andrew Dowie, PA Consulting

INDUSTRIAL SECTOR ANALYSIS

Rather than looking at all of the SIC industries involved in the study, we have focused on those areas which have seen the greatest change in demand for high level skills - and there are some clear winners and losers in terms of industrial sectors. As can be seen from Figure 2, Wholesale and Retail vacancies have risen from 74 positions in 2000 to 121 in 2001 - which could indicate that consumer confidence in the high street has not been dented by the difficulties facing the local manufacturing. Similarly Financial Services numbers are also up - from 105 to 125 positions. But sectors such as manufacturing; Transport and Communications; and **Business Services (which** includes computers and

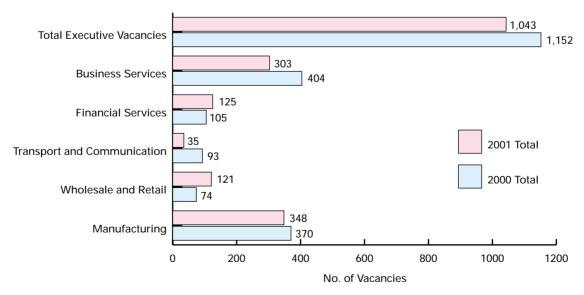
related activities) have all shown a fall in executive recruitment in the year 2001.

The difficulties of the manufacturing sector in recent times have been well documented. A combination of the strong pound, difficulties in the Information Communication Technology Engineering sector; the general economic slowdown (exacerbated in some areas particularly aerospace – by the events of September 11th) have all contributed to a drop of nearly 6% in the positions advertised; down from 370 positions in 2000, to 348 in 2001. The difficulties of the Transport and Communications sector have been affected by factors such as higher fuel costs and the protracted transformation to third generation telecoms technology. As a result, the

35 positions advertised in 2001 were a sharp drop on the 93 positions advertised in 2000.

Figure 3 outlines the position of the aforementioned industrial sectors over the eight quarters included in the survey. Even those two areas that increased in demand over the two years (Wholesale and Retail and Financial Services) had peaks and troughs broadly inline with the trend identified at the industry wide level in Figure 2, they are not as marked as for those industries which suffered reducing need for executive skills - in particular the Manufacturing and Business sector. The pattern for these two industries was that a downturn in the need for executive skills for the manufacturing industries

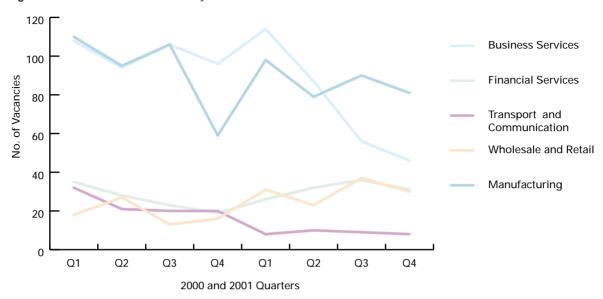
Figure 2: Industrial Analysis





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Figure 3: Industrial Sectors Trend Analysis



The PA/NI Skills Task Force Executive Skills Recruitment Watch

was quickly followed by changes in the needs of the Business Services sector indicating a link between the two.

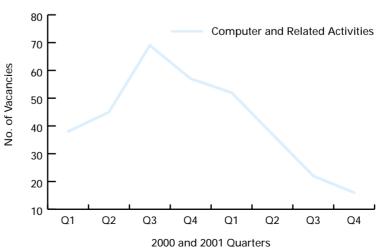
Looking at Business Services in particular, organisations in this area were the success story of the 1990s, but are now working through the rationalisation of structures and staffing following considerable merger and acquisition activity. Coupled with the collapse of nonessential corporate expenditure associated with the general economic downturn, it is not surprising that business services positions advertised fell from 404 in 2000 to 303 in 2001 - a drop of 25%. It is also important to note that Computers and Related Activities are also included in this category. Figure 4 shows the pattern of

demand for computer and related activities over 2000 and 2001. Demand rose steadily through 2000 to a peak of almost 70 executive vacancies in the third quarter of 2000. After that point though the demand for executive skills fell rapidly. A major cause is likely to be the well publicised difficulties that have faced hi-tech industries and also the fallout from the 'dot com' collapse.

FUNCTIONAL AREAS

Not surprisingly when a particular Industrial sector suffers, demand for those individuals with the core skills particular to the industry also suffer. Whilst there are minor differences

Figure 4: Computer and Related Activities



The PA/NI Skills Task Force Executive Skills Recruitment Watch

Michael McDonnell and Andrew Dowie, PA Consulting

in absolute terms across a range of functions, most of the overall shortfall in positions advertised can be attributed to one particular occupational group namely Engineers and Technologists. This major grouping includes engineering professionals (mechanical, civil, electrical and so on) as well as information and communication technologists (software engineers, analysts and programmers). It has been noticeable that as the bubble has burst in the high technology sector, the previous tightness in the technology labour market has eased, with a number of high profile redundancies in sectors feeling the economic pinch.

Figure 5 also highlights that the other high demand

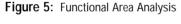
executive skills such as **Business and Financial** Professionals (including accountants); Specialist Managers (i.e. function managers - HR managers; sales managers; Finance Managers and directors); and General Managers have not contributed significantly to the down turn in demand. In fact in the case of business and financial professionals and general managers the opposite is the case. This appears to demonstrate that certain (perhaps more general) skills are better isolated from downturns in specific industrial sectors. Those functions with more specialised skills requirements and needs are therefore the most difficult to estimate future patterns of demand and plan provision accordingly.

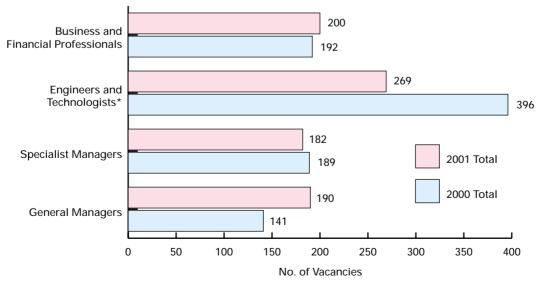
CONCLUSION

Certainly in comparison, demand for executive skills was not as high in 2001 as in 2000 but it is not clear how the flurry of activity in the early parts of 2000 in the hi-tech sector has distorted the true picture. As the study continues and more data becomes available more conclusions can be drawn regarding individual years. The expansion of the review to include the public sector from 2002 onwards will increase the skills knowledge specific to the sector and also allow valuable comparisons with the private sector.

THE FUTURE

Initial data for 2002 would indicate that the decline in demand for executive skills





The PA/NI Skills Task Force Executive Skills Recruitment Watch

Michael McDonnell and Andrew Dowie, PA Consulting

is slowing - the rate of decrease between quarter one and quarter two has dropped from 17% in 2001 to 3% in 2002. Only when there is an increase in demand for executive skills identified in the quarterly skills watch figures can we start to think in terms of turning the corner. Early economic indicators would appear to be more upbeat with a full recession being avoided and growth resuming later this year. However recent accounting scandals in the US have dealt a blow to an already weak Stock Market with effects at time of writing not yet fully worked out. Accordingly there is an unusual lack of certainty.

The challenge remains, NI will always need to be able to anticipate changes in the demand for skills and the ability to develop indigenous skills over the longer term and must not be over influenced by short term cyclical variations.





The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

As of August 2001 an estimated 24,626 persons were employed within the NI Mechanical Engineering Industry. Employment within the NI & UK industries declined steadily during the 1970s and 1980s with employment particularly susceptible to rapid and extreme negative shocks. However, since 1993 the NI pattern of employment appears to have diverged from that of the UK with local industry experiencing an upturn in employment whilst the UK level of employment remained static. The recently improved performance of local industry is due to employment loss e.g. in the larger traditional industries such as Other Transport and Machinery being more than counter-balanced by growth within once less prominent industries such as Metal **Products and Electrical** Machinery manufacture.

INTRODUCTION AND BACKGROUND

This article provides a summary of results from a recent study of labour market conditions within the NI Mechanical Engineering sector. The work was conducted by the Priority Skills Unit (PSU) of NIERC on behalf of the NI Skills Task Force as part of their ongoing research programme designed to identify areas of labour market shortage that have the potential to impede future economic growth with a view to taking corrective actions. The analysis is based on a survey of NI Mechanical engineering firms carried out between August -September 2001.

Previous work by the PSU (see Labour Market Bulletins, Nos. 14 and 15) has demonstrated that if a thorough understanding of the labour market position is to be achieved, then it is necessary to examine current labour market conditions/practices in addition to assessing potential demand/supply side imbalances. Consequently this article uses survey data to assess the nature of unfilled vacancies, relative wages and inter-organisational competition within the mechanical engineering sector and where possible make comparisons with other industries.

The article then goes on to consider a number of forecasting scenarios in order to assess the adequacy of educational supply to the sector over a five-year time horizon.

EMPLOYMENT PATTERNS

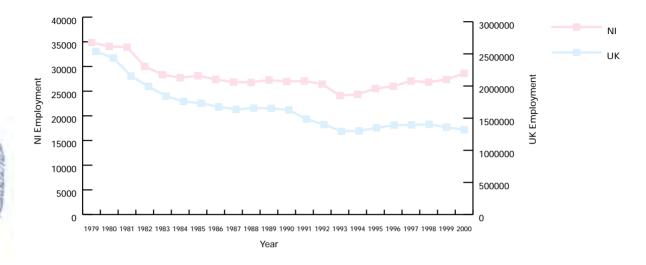
The historical pattern of employment in the NI mechanical engineering industry has generally mirrored that of the UK and has been characterised by a general decline since the beginning of the 1980s. Industry employment in NI has fallen from just under 35,000 in 1980 to below 29,000 in 2000, a reduction of 19 per cent, and an annual average decline of one per cent. However, the rate of decline within the NI sector was slower than that of the UK industry generally which contracted by more than 45 per cent over the same period, with the number of persons employed falling from 2.8 million in 1979 to just over 1.5 million in 2000. However, the 1990s saw the NI pattern of employment diverge from the UK average with local industry employment expanding by over 4,500 between 1993 - 2000 period whilst the UK level remained relatively static (Figure 1). The improved performance of NI industry was attributable to employment growth within smaller subsectors such as Electrical



The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

Figure 1: Mechanical Engineering Employment in NI/UK 1979-2000



Machinery outweighing the decline experienced within larger traditional aggregates such as Other Transport.

Mechanical engineering skills are employed in many sectors of the NI economy, however, demand tends to be most heavily concentrated within the following Industrial groupings (Official 2000 employment in brackets):

- Manufacture of Fabricated Metal Products (6,000)
- Manufacture of Machinery and Equipment Not Elsewhere Classified – (NEC) (6,500)
- Manufacture of Electrical Machinery and Apparatus (3,200)

- Manufacture of Motor Vehicles, Trailers and Semi-Trailers (4,500)
- Manufacture of Other Transport Equipment (8,300)

DEMAND - SIDE ISSUES - SUMMARY OF SURVEY FINDINGS

Sampling Framework

Information was collected during a specifically commissioned survey of employers conducted between July and August 2001. According to official data, a total of 1,289 industrial units were operating within the five SIC groupings employing a total of 27,907. Of this grouping, a cohort of 477 units employing 25,129 were confirmed as mechanical related firms. A list of these

companies was circulated amongst a group of key informants who subsequently identified 249 firms employing 21,339 as key mechanical engineering organisations. A total of 98 firms employing 16,537 (on the basis of official figures) agreed to participate in our study indicating a survey response rate (measured in terms of employment) of 80 per cent and a target population coverage rate of 77 per cent.

Size and Ownership Distribution of Employment

Preliminary analysis of the data revealed that official sources had somewhat under-estimated the level of employment in the industry, respondents to the survey reporting a total employment of 19,464, some 18 per cent above the

The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

official estimate. After grossing up for non respondents and non sampled firms, we estimate that the actual size of the NI mechanical engineering industry as of August 2001 was in fact 24,626, a level 15 per cent above the official based estimate. Foreign owned firms heavily dominate the sector accounting for over 80 per cent of total employment. The distribution of sectoral employment is also heavily skewed with over 70 per cent of industry employment concentrated within the 8 largest firms.

Structure of Industry Employment

Almost half of the industry was composed of operators/ assemblers, whilst craft level workers represented the next largest occupational grouping of labour, accounting for 27 per cent of employment (Table 1). Approximately 13 per cent of the workforce held technician level qualifications or were graduates from mechanical engineering degree programmes. Just over 10 per cent of employment was made up of non operational labour, such as administrators etc., not directly involved in engineering related production activities. Females accounted for 10 per cent of total employment, and are most

Table 1: NI Industry Employment Structure

	No. employees	% of Total Emp
Operators/Assemblers	9,554	49
Mechanical Craft Level	5,194	27
Mechanical Technicians	460	2
Mechanical Grads no exp	112	1
Mechanical Grads 1-2 yrs exp	294	2
Mechanical Grads 2+ yrs exp	687	3
Mechanical Project Leaders	497	3
Mechanical Senior Managers	418	2
Other Staff	2,248	11
Total	19,464	100

heavily represented within the support staff aggregate however, they account for less than 10 per cent of total employment within the operational categories.

The structure of the NI industry appears to differ substantially from the GB average with local firms more reliant on assemblers and craft level workers (Table 2). A natural reaction to a finding of higher concentrations of low-skilled labour, would be to conclude that local firms' operations are more heavily focused on lower value-

added activities. However, this seems unlikely given that the NI industry also employs higher proportions of graduate engineers. The employment share of non operational staff in GB is almost twice that of NI industry, however, this is likely to be driven by a divergence in the sectoral composition of industry employment that generates a greater need for professional level staff such as software and/or electronic engineers fulfilling design roles. Thus, whilst the pattern of employment in NI diverges from that of GB,

Table 2: NI/GB Employment Structure

	NI %	GB %
Operators	49	34
Craft Workers	27	21
Technicians	2	9
Professional Engineers	9	5
Mechanical Managers	2	4
Others	11	27
Total	100	100

Source: NIERC (2001), EMTA (1999)

The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

Table 3: Number and Rate of Unfilled Vacancies in last 12 months

	No. of	No. of Unfilled	Total No.	%	Vacancy
	Firms	Vacancies	Employed	Shortage	Rate
Operators/Assemblers	10	46	9,554	0	0
Mechanical Craft Level	16	55	5,194	1	1
Mechanical Technicians	7	17	460	4	4
Mechanical Grads no exp	0	0	112	0	0
Mechanical Grads 1-2 yrs exp	0	0	294	0	0
Mechanical Grads 2+ yrs exp	2	3	687	0	0
Mechanical Project Leaders	1	1	497	0	0
Mechanical Senior Managers	2	2	418	0	0
Total	24	124	17,216	1	1

Source: NIERC (2001)

there is no simple underlying pattern to these differences. It is not correct to characterise local industry as being concentrated at the lower value-added end of the market, instead it seems more likely that the NI firms require a different mix of skills due to differences in the sectoral composition of the industry.

Unfilled Vacancies

24 firms reported a total of 124 unfilled vacancies over the period July 2000 - July 2001 (Table 3), with over 95 per cent of these vacancies occurring at the sub-graduate level. Recruitment problems were most apparent at the operator and craft levels. Accepting that assembly level staff require little prior training, most of the current skill problems within NI mechanical engineering appear to be centred around a shortfall of new entrants

holding intermediate level qualifications e.g. NVQ level 3s/Modern Apprenticeships. By standardising the number of unfilled vacancies in each category by the number of persons employed in that category, we can derive actual vacancy rates. Although the vast majority of vacancies occur at the operator and craft levels, the highest rate of shortage is evident at technician level. The relatively small size of the technician category implies that firms are more likely to be exposed to constraints arising from small shortfalls in the availability of qualified labour. However, on the plus side, such potential problems are easily avoided through minimal expansions in the levels of new qualifier supply. The craft level and total industry categories are the only other aggregates exhibiting positive shortage

rates of one per cent respectively. Thus, despite the relatively high numbers of unfilled vacancies reported within the sector, our analysis suggests that, with the exception of technician level operations, the overall performance of the industry is unlikely to be heavily constrained by shortfalls.

We can benchmark the vacancy rates of the mechanical engineering industry against those of our earlier studies. The rate of shortfall experienced in the market for mechanical technician level staff is similar to that reported for firms in electronic engineering, however, the shortage of mechanical craft level workers appears much less severe (Table 4). Generally however, the total vacancy rate suggests that relative to either the electronics or IT sectors, there appears to be a

The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

Table 4: Comparative Vacancy Rates

	Mechanical*	Electronics**	IT***
Operators/Assemblers	0	2	7 /
Craft	1	24	1
Non-Grad Tech Support	4	3	1
Graduates no experience	0	10	
Graduates <2 years experience	0	6	3.4
Graduates 2 + years experience	0	22	-
Project Managers	0	7	11
Senior Managers	0	0	1
Total	1	4	5

Source: NIERC (*2001, **2000, ***1999)

Table 5: Inter-organisational Labour Flows

	Total Lost	% Within NI	% of Total Emp
Operators/Assemblers	518	96	5
Mechanical Craft Level	139	96	3
Mechanical Technicians	22	95	5
Mechanical Grads no experience	4	100	4
Mechanical Grads 1-2 years experience	9	100	3
Mechanical Grads 2+ years experience	33	97	5
Mechanical Project Leaders	10	100	2
Mechanical Senior Managers	5	100	1
Total	740	96	4

Source: NIERC (2001)

significantly lower likelihood that performance levels within the mechanical engineering industry will be constrained as a result of skill shortages, however, these studies were conducted at different times - albeit earlier than the slowdown of the present year (2002).

Inter-Organisational Labour Flows

A further indicator of labour market conditions was obtained by tracking labour flows within the industry in the twelve months preceding the survey. A total of 740 workers changed jobs throughout the year. The rate of turnover was highest at operator level accounting for 70 per cent of total flows. A significant amount of movement also took place at craft level, with almost 140 workers changing jobs throughout the year (Table 5). Despite the relatively high number of mobile workers, the actual rate of turnover was remarkably low at 4 per cent

of total employment. The industry turnover rate equated to one third of that reported for the electronics industry in a recent study (NIERC 2001). The bulk of inter-organisational labour flows took place between NI firms with a minimal amount of leakage to other regions or countries.

Relative Wages

Information was collected on annual wage rates within the various occupational categories (Table 6). This

The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

Table 6: Gross Average Annual Salaries in NI, GB & Rol (£stg)

	NI	GB	Rol
Operators/Assemblers	12,841	2338	- / /
Mechanical Craft Level	13,038	15,039	15,405
Mechanical Technicians	15,846	2	13,455
Mechanical Grads no exp.	15,584		APT -
Mechanical Grads 1-2 yrs exp	15,713		14,000
Mechanical Grads 2+ yrs exp	19,478		19,500
Mechanical Project Leaders	20,436	29,921	-
Mechanical Senior Managers	27,876		-

Source: NIERC (2001), New Earnings Survey (2000), Marlborough Group (2001)

Note: Rol Craft Level salary represents the mean annual salary of fitters and toolmakers with 1-2 years experience. Rol technician salary represents the average annual salary for technicians with 1-2 years experience.

Table 7: Gross Average Annual Salaries: Mechanical, Electronics & IT

	Mechanical	Electronics	IT
Operators/Assemblers	12,841	10,275	-
Craft Level/Technician Level 3	13,038	13,821	12,918
Technician Level 4	15,846	14,451	12,918
Graduates with no experience	15,584	17,194	14,939
Graduates <2 yrs experience	15,713	20,333	18,213
Graduates 2+ yrs experience	19,478	22,217	-
Project Managers	20,436	24,971	22,907
Senior Managers	27,876	34,000	26,375

Source: NIERC (2000, 2001)

Note: The Salaries for the IT sector were recorded in 2000 whilst those for electronics are 2001 figures

information is useful as it enables us to assess both the distribution of earnings within the industry and also across regions. Earnings ranged from £12,841 for operators/assemblers to £27,876 for senior managers however, the distribution is relatively tight with just £2,872 separating the annual earnings of operators and graduates with <2 years experience. The annual earnings of new and inexperienced graduates fell below those of technicians -

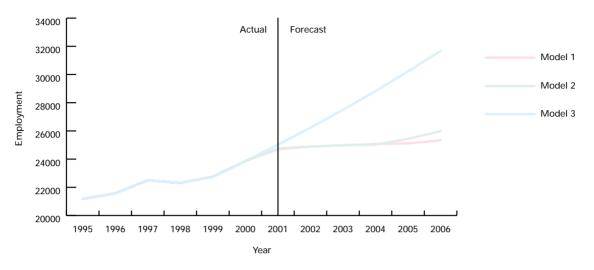
this is not necessarily surprising given the contribution to the sector made by experienced technicians and the traditional pay progression for example with apprenticeships. Given that significant wage differentials between proximate geographical regions are likely to impact on labour supply, an assessment was made of relative wage rates in NI vis-à-vis like firms in the Republic of Ireland (Rol) and Great Britain (GB).

Comparable data for Rol were unavailable for the upper and lower ends of the distribution however, the wage rates offered to craft and new/inexperienced graduates within NI were broadly in line with those offered in the Rol. Data availability became even more problematic for the GB sector, nevertheless comparable data was available at craft and project leader level and whilst the wages of NI craft workers were broadly in line with

The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

Figure 2: Actual & Forecast Employment 1995 - 2006



those in GB, project leaders within NI appeared to earn substantially less.

Relative to other industries, wage rates up to and including technician level 4 are broadly comparable with those of the electronics sector however, mechanical engineering earnings lag those of electronics for more senior grades of staff (Table 7). Generally speaking wage rates within mechanical engineering appear to be in line with those of the IT sector.

POTENTIAL DEMAND AND SUPPLY IMBALANCES

In addition to providing an overview of general labour market conditions in the mechanical engineering industry, the report also assessed the adequacy of current labour supply emanating from educational and training institutions over

a five year forecast horizon. The subsequent analysis is purely quantitative in nature, designed solely to identify any potential supply-side imbalances that might exist. Accordingly issues relating to course content and /or quality are not considered nor are the adequacey of skill levels in the current workforce (skill gaps). The adequacy of educational supply was assessed at various levels for the period 2001-2006 under high, medium and low growth scenarios.

Predicted Future Employment Trajectories

Over the period 2001 - 2006 employment is projected to expand from 24,691 to 25,331 under model 1 (the low growth model), from 24,758 to 25,978 under the model 2 (the medium growth scenario) and from 25,022 to 31,676 under model 3 (the high

growth/risk scenario¹). Within models 1 and 2 employment is projected to remain relatively constant at around 25,000 over the forecast period. The highrisk scenario represents an almost linear extension of the 1999 - 2001 employment pattern across the forecast horizon. Since both models 1 and 2 generate very similar projections we consequently employ just one i.e. model 2 (here after referred to as the low growth model).

Projected Imbalances

By subtracting forecast demand from forecast supply, we can assess the adequacy of educational and training provision at the different qualification levels. Under the high growth scenario the projected balance remains in shortage throughout the forecast horizon with the level of shortfall ranging from -135

The high growth scenario is labelled high risk as it is the outcome likely to put most pressure on future supply arrangements

The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

Figure 3: NVQ Level 3 Supply minus Craft Level Demand 2001 - 2006

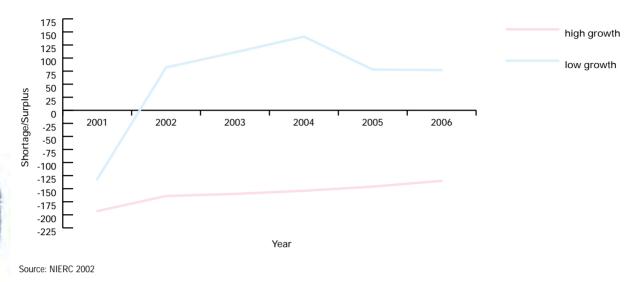
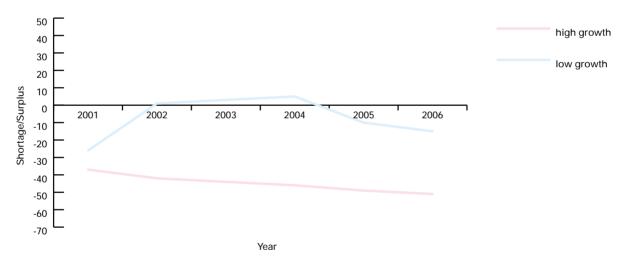


Figure 4: HND & NVQ Level 4 Supply minus Technician Demand 2001 - 2006



Source: NIERC 2002

to -193. However, the craft level projections are based around an assumption of rapid supply-side expansion that, if not met, will have serious implications for the surpluses projected under the low growth model (Figure 3). Supply at technician level is relatively low which when combined with the relatively stagnant demand levels forecast

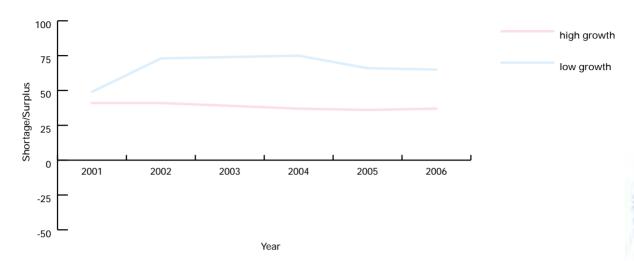
under the low growth model results in a situation of slight shortfalls/surpluses over the forecast period ranging from -26 to 5. However, demand under the high growth scenario is somewhat higher generating a pattern of sustained shortage over the forecast horizon, ranging from -37 to -51 (Figure 4). Finally, there appears to be

little prospect of shortages occurring at graduate level with both the low and high growth models projecting surpluses over the forecast horizon. The projected surpluses range from 49 to 64 under the low growth model and 36 to 41 under the high growth model (Figure 5).

The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

Figure 5: Graduate Supply minus Graduate Demand 2001 - 2006



Source: NIERC 2002

SUMMARY AND CONCLUSIONS

Employment in the NI mechanical engineering industry has been in general decline since the beginning of the 1980s, with growth rather volatile and particularly susceptible to rapid and extreme negative shocks. The current industry structure is heavily skewed in terms of ownership and firm size, with 80 per cent of employment located in foreign owned companies and over two thirds located in fewer than 10 firms. In the twelve months preceding the survey a total of 124 vacancies remained unfilled within the industry with the vast majority of these occurring at the operator, craft and technician levels. Although the highest number of unfilled vacancies occur at craft and operator level, the highest rate of shortage was evident at technician level implying

that the relatively small size of this aggregate leaves it much more susceptible to constraints arising from skill shortages. The overall rate of industry skill shortage was calculated at 1 per cent and relative to either the electronics or IT sectors there appears to be a significantly lower likelihood that industry performance will be inhibited as a result of unfilled vacancies. Staff turnover in the mechanical engineering industry equated to 4 per cent of total employment with the vast majority of activity concentrated between NI firms as opposed to labour leakages to other regions. The rate of labour turnover activity within the mechanical engineering sector was very low, amounting to one third of that reported for the electronics sector in a previous NIERC study.

Where data were available, occupational wage rates appear to be broadly comparable with those in the Rol. However, relative to GB, project managers in NI tend to earn significantly less. Generally occupational earnings in mechanical engineering reflect those on offer within the IT sector but tend to lag those of electronics for more senior grades of staff.

There were concerns relating to the business awareness competencies for all levels of new entrants from the education and training sector and the IT and technical competencies of new NVQ level 3 new entrants. Finally, turning to the competencies of the existing workforce, there was evidence, deriving from both the survey and key informant interviews, to suggest a lack of basic numeracy and literacy skills

The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry

Seamus McGuinness & Karen Bonner, Priority Skills Unit, NIERC

amongst operator level staff and a lack of transferable basic engineering skills amongst workers seeking reemployment within the industry.

In relation to the forecasting scenarios, two of the models developed within this study predict that the mechanical engineering sector is unlikely to grow rapidly over the forecast horizon, nevertheless the possibility of a more rapid growth scenario is accounted for by the inclusion of a "high demand" scenario. There is little prospect of any graduate level shortages occurring under either the low or high growth scenarios. However, problems are more likely to occur at craft and technician level. Whilst the small size of technician level shortages imply that they could be easily eradicated and are unlikely to constrain the performance of the industry,

there is a potentially greater need for action in relation to problems at craft level with relatively more significant shortfalls predicted under both forecasting scenarios. In addition, potential shortages at craft level will be even more pronounced should the assumed supply - side expansion fail to materialise.

Although we are relatively confident in our forecasts, we are also conscious of the fact that the mechanical engineering sector in NI has historically been, and is likely to remain, subject to large shocks such as the rapid downscaling of employment within shipbuilding and the impacts that September 11th had on the aerospace industry. Whilst the labour market position in relation to craft workers is prone to a rapid reversal, policy must remain focused on the alleviation of potential

supply-side constraints. However, the ramping up of level 3 educational and training provision need not constitute the principal policy response to potential shortfalls. The general trend decline in employment within the traditionally sub sectors (Other Transport and Machinery NEC) implies that there may exist sufficient numbers of craft trained workers already available to the labour market. Whilst some workers are likely to have been working outside their trades or require retraining within their trades, they could potentially be equipped to re-enter their chosen professions within a relatively short time frame. Such a policy could potentially be facilitated by bodies such as DEL which is in a position to match sources of redundant skill labour with those firms seeking craft level workers.

Labour Recruitment Issues in the NI Tourism and Hospitality Industry

Frank O'Donoghue, McIver Consulting

This article sets out the principal findings of a recent study on the skills and training needs of the NI Tourism and Hospitality industry, a key sector with potential for significant employment growth. This study was commissioned by the Department for Employment and Learning (DEL) in conjunction with the Tourism Training Trust (TTT) from McIver Consulting.

It starts with a review of a wide range of studies on the sector over the last decade which have highlighted significant gaps in the sector's performance. It also looks in detail at the findings of the Skills Monitoring Survey in 2000 which underlined the labour issues facing the Hotel and Restaurant sector, findings which were confirmed in a number of interviews undertaken as part of this study. A major objective of this study was to determine whether the skills issues in the industry were a "first order problem." If skills were found not to be a first order problem, any increase in the supply of skills would only have a beneficial impact if associated with a wider strategy for change in the industry.

Studies of the sector outside of NI show that the problems of high labour turnover and low skills levels are a factor in the industry worldwide. However, there is evidence that 'Best Practice Human Resource Management' does reduce retention and recruitment difficulties in this industry.

Factors such as comparatively low wages and unsocial working hours make for recruitment difficulties - the solution to these problems requires some fundamental changes within the industry.

A DECADE OF INTENT

The Tourism and Hospitality sector has not been neglected in terms of studies of training needs over the last decade. These studies have pointed to significant

weaknesses within the sector, and while progress has been made, this sector continues to experience labour market problems as shown in the Skills Monitoring Survey in 2000 and also confirmed in interviews undertaken by McIver Consulting as part of this study. The following is a summary of the principal studies on Tourism and Hospitality over the last decade.

Current and Future Manpower Needs (MMD 1994):

This study, which was undertaken on behalf of the Tourism and Hospitality Training Council, identified a number of challenges which had to be addressed if growth in the Hospitality sector was to be achieved.

Regional Training Strategy 1995 - 2000:

This Price Waterhouse report builds on the findings of the 1994 report and set out a regional training strategy for the Tourism and Hospitality sector in NI. The strategy identified two barriers to be overcome in any future skills strategy; the structure of the industry and the gap between education and industry.



Labour Recruitment Issues in the NI Tourism and Hospitality Industry

Frank O'Donoghue, McIver Consulting

Tourism Training Plan 1995 - 2000:

The Tourism Training Plan 1995 - 2000 set out the activities whereby the Regional Training Strategy would be implemented. The aim of this plan was to raise the standards of customer care and service through a well-trained and accredited workforce.

1997 Review of Training and Education Activities (BDO 1997):

In January 1997 the Tourism and Hospitality Training Council commissioned BDO Stoy Hayward to determine the extent of the investment in training in the sector.

1997 Northern Ireland Tourism Strategy (NITB):

This strategy recognised that while the reputation for quality of NI's tourist product attracted visitors in the first place, only a satisfactory level of service and human interaction would bring them back.

1999 saw the publishing of three closely related reports on Tourism and Hospitality. The three related documents were jointly commissioned by the Tourism Training Trust (TTT) and the Training and Employment Agency (T&EA).

Review of Training in the Tourism and Hospitality Industry

(17 June 1999) sets out the long-term aim of creating conditions that will provide world-class service standards and offer an attractive career.

TTT training: A Strategy for Training in the Tourism and Hospitality Industry in NI: Executive Summary (June 1999).

This strategy proposed the restructuring of the Tourism Training Trust with the establishment of a Task Force.

"A Strategy for Training in the Tourism and Hospitality Industry in NI".

This is the printed version of the Executive Summary.

1999/2000 Hospitality Training Requirements:

This study was undertaken to provide information on training and training needs of the hospitality industry in NI.

2001 Chef School Report (BDO):

BDO Stoy Hayward was commissioned in January 2001 by the Tourism Training Trust to conduct a feasibility study into a Chef School in NI.

2001

Co-ordinated Approach to Delivery of GNVQ (Bickerstaff F&I):

This report argued the need to introduce the industry to students as a career option at an earlier stage of their education.

THE SKILLS POSITION IN HOSPITALITY

The Skills Monitoring
Survey (see LMB15 Chapter
11) which was undertaken in
2000 provides a detailed
insight into labour market
issues in the Hotels and
Restaurants sector. The
survey highlighted the
problems of the sector.

The following Table contrasts the Hotel and Restaurant key data with the wholesale and retail sector and all employers in the private sector.

In summary the Hotel and Restaurant sector had:

- The highest employee turnover level.
- The highest level of vacancies.
- The highest level of difficult-to-fill vacancies.
- External skills shortages accounted for only 30% of the difficulty in filling vacancies.

Labour Recruitment Issues in the NI Tourism and Hospitality Industry

Frank O'Donoghue, McIver Consulting

	Hotels & Restaurants (1)	Wholesale & Retail	All Employers	Comment on Hotel and Restaurant Sector
Labour Turnover	32%	16%	18%	 Not unexpected because of the high number of casual/seasonal staff 50% labour turnover in Belfast
Firms with Current Vacancies (3,225)	30%	19%	21%	 Vacancies increased with company size
At least one difficult-to- fill vacancy (2,205)	23%	12%	15%	 70% of vacancies are difficult-to-fill
Difficult-to-fill due to external skill shortages(2)	30%	31%	43%	 Defined as lack of practical/ technical skills, qualifications, or work experience
Difficulties in in retaining staff	18%	6%	7%	Highest in BelfastHighest in firms with +50 employees
Skills gap in existing workforce	20%	14%	15%	 Larger employers had more skills gaps



Source: NI Skills Task Force

- (1) includes Hotels, Hostels, Self-Catering, Restaurants, Cafes, Take-Away, Bar, Licensed Pubs, Canteens and Catering (2) proportion of difficult-to-fill vacancies due to external skills shortages
- The highest level of
- A high level of skills gaps in the existing workforce.

retention difficulties.

The overall position is that of a sector with significant labour and human resource management issues.

Labour turnover and vacancy rates are significantly higher in Hotels and Restaurants than other sectors. Thus the Wholesale and Retail sector has a similar skills profile, is a very labour intensive industry and is characterised by low pay rates. But the rate of labour turnover in the Wholesale and Retail

sector, was much lower. The variation in labour turnover rates in part reflects the greater choice open to staff in major population centres. The recent growth in new properties in Belfast will also have contributed to increased labour 'churn'.

It was estimated that there were 3,225 unfilled vacancies in the Hotel and Restaurant sector. These vacancies were primarily in larger properties. Of the vacancies reported, some 70% were considered difficult-to-fill. The judgement as to whether a vacancy was difficult-to-fill was left to the discretion of

the employer. By contrast the Wholesale and Retail sector did not experience the same level of labour recruitment difficulties.

Many factors can contribute to vacancies being difficult-to-fill. Difficulties can be due to company or sector specific issues such as low wages, unattractive working conditions etc. Alternatively the difficulty may be due to external skills shortages i.e. a lack of technical or practical skills, qualifications or work experience.

Employers in the Hotels and Restaurants sector identified external skills as the cause of difficulties in recruiting

Labour Recruitment Issues in the NI Tourism and Hospitality Industry

Frank O'Donoghue, McIver Consulting

only 30% of vacancies against the average for all employers of 43% of vacancies. Thus, it is other factors such as low wages, working condition's, etc., which account for most of the difficulties.

The survey also focused on staff retention difficulties. The level of difficulty in staff retention within the Hotels and Restaurants sector is more than twice that of industry in general - with 18% of Hotels and Restaurants reporting staff retention problems.

The major issues from an industry viewpoint are long and unsocial hours, together with a lack of interest in working in occupations in the sector. The 'Benefits Trap' was seen as a greater factor than for industry as a whole.

The survey ranked the occupations, which were most frequently identified by employers as being difficult-to-fill due to external skills shortages:

- · Chefs, Cooks
- · Waiters, Waitresses
- Kitchen Porters
- · Cleaners, Domestics

The occupations identified include skilled and unskilled occupations. The findings in relation to skills shortages were defined as one or more of the following: a lack of practical skills, a lack of

experience or a lack of qualifications. However, it must be recognised that these findings reflect the perception of employers.

ISSUES CONFIRMED BY INDUSTRY

Interviews were undertaken as part of this study. These interviews were with key personnel drawn from the Industry, Colleges, and Government Agencies.

These interviews focused on the issues of the sector and how they might be addressed. The issues which emerged in the interviews were consistent with the issues identified by the research studies of the last decade

While the Skills Survey of 2000 suggests that the industry has a distance to travel before modern management principles are accepted, it is also important to note that some businesses are actively implementing Human Resource Management practices.

These enterprises are very much focused on capturing the full potential of their staff. Reference was made by a number of informants to NI Hospitality firms who are actively implementing Best Practice Human Resource Management. A number of these companies were identified in the

"Whole of the Moon" initiative launched by Tourism Training Trust in early 2001. The purpose of this initiative was to promote the benefit of training to employers and illustrate these benefits through NI case studies.

Interviewees, however, were of the view that examples of good practice human resource management were in the minority and that in general the industry was characterised by traditional 'command and control' style management with training seen as a cost rather than as an investment.

There was a consensus in relation to the fact that the image of the industry remains a major problem in attracting new recruits to the industry.

ARE SKILLS A FIRST ORDER PROBLEM?

The review of international experience in relation to the skills issues in Tourism and Hospitality shows that recruitment and skills difficulties exist in many countries. Of particular interest was a study commissioned by the National Skills Task Force in the UK. The brief of this research was "to examine the nature and causes of recruitment difficulties within the leisure sector".

Labour Recruitment Issues in the NI Tourism and Hospitality Industry

Frank O'Donoghue, McIver Consulting

The research argued that skills were part of a much wider need for change in the industry. There is a need for change in product market strategy, approaches to market segmentation, service quality, employment conditions, work organisation, etc. It was concluded that, while the skills base in Leisure and Tourism is a problem, it is not the main problem and is often due to other structural factors. It was argued that first order problems are those which concern the ownership structure of the industry. In Tourism, the preponderance of very small owner - managed micro businesses, coupled with low profit margins and competitive strategies, result in cost-based competition.

These types of product, market and market segmentation strategies in turn tend to exacerbate long-standing second order problems relating to the structure of the labour market and poor personnel management practices, which include:

- Relatively low wages.
- Unsocial working hours and patterns of work.
- Weak equal opportunities policies.
- Poor or non-existent career structures.

- Informal recruitment system.
- A lack of formalised, sophisticated systems of human resource management.
- Lack of any significant trade union presence.
- High levels of labour turnover.
- · Poor record on training.

Thus the report concluded that skills were not a first order problem, but were rather a result of first order problems.

The study underlined the difficulty of recruiting and retaining staff of the required calibre in a sector which offers its staff the worst reward and the poorest career opportunities. It concluded - "Human Capital does not seem to be highly valued in the sector".

It was argued that, for a world class sector to be developed, skills are but part of a much wider need for change. Strategy, employment conditions and work organisation must also change.

FUTURE ACTION

The study concludes by recommending that firms should seek to develop

business strategies which offer them the possibility of repositioning their businesses to achieve enhanced profitability. In developing their business strategies, firms need to consider how best they can improve the attractiveness of their company and the industry generally if they are to successfully recruit and retain the personnel they require.

Firms should implement
Best Practice Human
Resource Management. This
requires a total commitment
by senior management and
must be an integral part of
business strategy. The
implementation of HRM will
address two of the key
issues currently facing the
industry - the high level of
labour turnover and the
difficulty in recruiting to the
sector

It is suggested that DEL fundamentally reviews its strategy and priorities in relation to training in the Tourism and Hospitality industry. Government investment in Education and Training should be increasingly targeted at helping the industry make the strategic move to the implementation of HRM policies.

In relation to the skills shortages identified by firms, it is argued that ways of addressing these should be investigated if shortages



Labour Recruitment Issues in the NI Tourism and Hospitality Industry

Frank O'Donoghue, McIver Consulting

are again indicated in the 2002 Skills Monitoring Survey. It is recognised that these findings reflect the perception of employers and therefore require detailed examination to confirm that there is a shortfall in the supply of skills. If the shortages are as a result of first order problems, a supply side response of increasing the number in training will not address the fundamental problem.

Skill Shortages - The Effect of Subject Choice at Secondary School?

Robert Osborne School of Public Policy University of Ulster, Ian Shuttleworth School of Geography Queen's University of Belfast

Introduction

The ongoing research programme of the NI Skills Taskforce (NISTF) indicated that there are hard-to-fill vacancies and skills shortages in the priority skills areas of the IT and **Electronic Engineering** sectors1. These difficulties are especially pronounced for Electronic Engineering companies. Whilst recruitment problems occur at a variety of occupational and skill levels, it is possible that shortages of new graduates will worsen in the medium term as the demand for graduate entrants in this sector increasingly outstrips supply. Current and forecast graduate shortages, and the concerns of the NISTF therefore mean that it is important to learn more about the uptake of subjects relevant for employment in the IT and electronic engineering sectors, where these graduates study, and where they go after they complete their degrees.

NI is not alone in being concerned about this sector. Indeed, in the Rol, employers and government have recently become deeply concerned about the shortage of electronic engineering students and in particular the sharp drop in the numbers enrolled in IT in the current academic year.

There are also potential equality implications since the shortage of graduates in numerate disciplines suitable for entry to IT and electronic engineering could in large part be assumed to be because disproportionately few women and Catholics take these subjects in higher education. Since IT and electronic engineering jobs often have attractive pay and conditions, low levels of entry by women and Catholics to these vacancies might be argued to exacerbate male/female and Catholic/Protestant labour market differentials, and to have significant equality implications over and above the creation of labour supply difficulties.

Accordingly, the Research and Evaluation Branch (REB) of the Department for **Employment and Learning** (DEL) commissioned research to investigate the supply of graduates with suitable qualifications for employment in the IT and **Electronic Engineering** sectors with special emphasis on the graduate

labour market in electronic engineering where graduate shortages are likely to be greater. This article reports the first stage of this work. Based on data from the **Higher Education Statistics** Agency (HESA) it explores the broad nature of the cohorts of students in higher education gaining qualifications in the 1990s, subject uptake in higher education by religion and gender, where students study, and where they go after graduation as these factors could all influence the numbers of graduates available to the NI, IT and **Electronic Engineering** sectors.



THE COHORT OF STUDENTS GAINING QUALIFICATIONS

HESA data can provide detailed breakdowns by subject. Trends in the uptake of the Mathematics and Engineering subjects which were chosen as the focus of the study², which are closely related to entry to the IT, Electronic Engineering and general engineering sectors, are shown in Table 1. The picture that emerges from the Table should be treated with some caution - the classification of subjects in higher education changes. as course content is modified through time, explaining the apparent decline in Electrical Engineering numbers.

See Labour Market Bulletin 15, pp92-102 Physics, Mathematics, Statistics, Computing Science, Other mathematical sciences, Combinations within Maths, General Engineering, Civil Engineering, Mechanical Engineering, Aeronautical Engineering, Electrical Engineering, Electronic Engineering, Production Engineering, Chemical Engineering, Combined Engineering/Technology

Skill Shortages - The Effect of Subject Choice at Secondary School?

Robert Osborne School of Public Policy University of Ulster, Ian Shuttleworth School of Geography Queen's University of Belfast

Table 1: First-degree qualifiers from NI in Mathematics/Engineering subjects 1994-1999 expressed as a percentage of all first-degree qualifiers from NI

			Υe	ar		
Subject	1994	1995	1996	1997	1998	1999
Physics	0.67	0.48	0.60	0.49	0.54	0.71
Mathematics	0.41	1.19	0.82	1.04	1.05	1.14
Statistics	0.07	0.01	0.03	0.04	0.04	0.01
Computing Science	3.45	3.28	3.47	3.38	3.19	3.54
Other mathematical sciences	0.27	0.37	0.31	0.26	0.32	0.22
Combinations within Maths3	0.28	0.20	0.22	0.26	0.17	0.26
General Engineering	0.62	0.80	0.61	0.55	0.36	0.42
Civil Engineering	1.96	2.25	1.38	1.38	1.06	0.90
Mechanical Engineering	1.20	1.32	1.35	1.42	1.23	1.59
Aeronautical Engineering	0.47	0.33	0.44	0.48	0.21	0.35
Electrical Engineering	0.99	0.75	0.12	0.14	0.09	0.08
Electronic Engineering	0.70	0.58	0.53	0.49	0.59	0.50
Production Engineering	0.65	0.57	0.57	0.68	0.46	0.52
Chemical Engineering	0.76	0.43	0.53	0.57	0.43	0.54
Combinations in Engineering/Technology	0.58	0.75	1.20	1.19	0.87	1.09
Number of students qualifying in						
Mathematical and Engineering Subjects	883	937	893	905	792	882
Students in this group as a percentage						
Of all qualifiers	13.08	13.32	12.20	12.38	10.61	11.86
Total of all qualifiers	6751	7037	7319	7310	7464	7437

Source: HESA

Nevertheless, looking at the bottom three lines of the table it is possible to draw some basic conclusions.

Firstly, the absolute numbers of those with these subjects has remained relatively stable over the period for which the data are available but there is evidence of a slight decline in the latter part of the review period. Secondly, the proportion of students with these subjects as a proportion of all students gaining a qualification shows a slight decline, from 13.1% in 1994/95 to 11.4% in 1999/00. If, as is argued by employers, these disciplines are of particular demand in

the labour market, there is not as yet any great evidence that NI students are opting for these courses in any significant numbers. Since this Table shows all those domiciled in NI, whether they study in NI or the rest of the UK, then those opting for these subjects are not constrained by the cap on numbers in NI. Thirdly, the contribution made by some subjects, such as Statistics, is extremely small. In contrast, Computer Science, Mechanical Engineering, and Civil Engineering make the largest contribution to the pool of qualified graduates in the subject selection although though,

even in these cases, there is evidence of a downward drift in uptake.

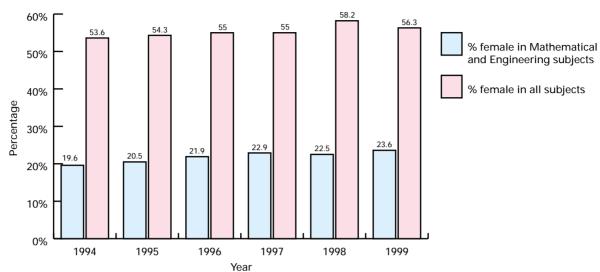
EQUALITY CONSIDERATIONS: GENDER AND RELIGION

The proportion of female qualifiers in Mathematical and Engineering subjects is shown in Figure 1 in comparison with the general female share of qualifiers in total. The chart shows in the period under review that consistently females represent over half of those gaining a qualification in general but only around one in five of those gaining one in Mathematics/Engineering subjects - although there

Skill Shortages - The Effect of Subject Choice at Secondary School?

Robert Osborne School of Public Policy University of Ulster, Ian Shuttleworth School of Geography Queen's University of Belfast

Figure 1 : Percentage female all subjects and percentage female in Mathematics/Engineering subjects



was a steady but small increase in female representation in these subjects during the 1990s.

It is also worth commenting on individual subjects. Hence, it is striking that women are consistently highly represented in Mathematics - representing a half of those gaining a qualification in this subject a level well above all the other subjects in this group and close to the female representation amongst all qualifiers. On the other hand, in the discipline which arguably has had one of the most significant levels of demand in the recent past, computer science, female representation peaked at 28% in 1996 but fell back thereafter to about 20%.

The data for religion are collected and returned to HESA by the two NI universities only. A scrutiny of the data suggests that

religion monitoring by the universities has only recently become comprehensive rising from around 28% coverage in the late 1990s to 85% in 2000/01. In light of these data inadequacies we have confined our analysis to the most recent data. These data reveal that the proportion of those receiving a qualification in the two universities are categorized as 37% Protestant and 54.1% Catholic with the remainder as 'other'. The representation in Mathematics/Engineering subjects shows a slightly higher representation at 43% for Protestants than the overall figure, while the Catholic figure at 48% is slightly lower than the overall figure.

LOCATION

The HESA data set covers all NI domiciled students

gaining a qualification in any year. A feature of higher education participation in NI, however, is that the demand for higher education places in NI exceeds the supply of places which in terms of fulltime places is capped by DEL. As a result, many NI students leave to study mostly in the rest of the UK (see Chapter 26 in this Bulletin). Some of these students leave because they wish to leave to study elsewhere ('determined leavers'), others because of the shortfall of places relative to the demand, ('reluctant leavers'), or because their scores only allow them to access some GB universities, or because a particular course is only available in GB or Rol.

Our analysis, therefore, needs to consider where people go to study and given the information to us from the First Destination Survey (FDS) we can also

Skill Shortages - The Effect of Subject Choice at Secondary School?

Robert Osborne School of Public Policy University of Ulster, Ian Shuttleworth School of Geography Queen's University of Belfast

analyse where people have gone for a job or further study after obtaining their qualification. The FDS is sent to all graduates from UK universities a few months after graduation. Response rates vary for different universities. While 70% response rates are common, this means that FDS data are not based on the 100% returns universities report for those gaining qualifications. This difference should be born in mind when considering the data below. Table 2 shows where NI domiciled students gained their qualifications in Engineering and Technology. The proportion gaining their

qualifications in NI is consistently about twothirds with those located in the Rest of England and Scotland showing the next highest proportions respectively followed by London and the South-East of England. It would appear, therefore, that at the point at which students gain qualifications in these subjects, employers in NI are able to draw upon a large pool of potential graduates in these subjects.

However, migration after higher education complicates the picture since graduates do not always stay in the region where they gained their qualification. Table 3 therefore presents information on the regions where Mathematics/ Engineering graduates studied and where they went. The general picture is that graduates in these subjects remain in the region where they studied. Just under 80% of those who studied in NI, for example, remained in NI. There are also relatively high proportions of graduates from NI, but who studied in England, also stayed in England. However, importantly, there is also some evidence of return flows of Mathematics/

Table 2 : Region of study of first-degree qualifiers in Mathematics/Engineering subjects from NI – percentage distribution

	Year					
	1994	1995	1996	1997	1998	1999
NI	68.4	65.3	64.3	69.9	67.4	71.3
Scotland	8.1	13.6	12.5	12.5	10.9	9.4
Wales	0.7	0.6	0.5	0.3	0.5	8.1
London &SE	3.3	3.4	4.1	2.3	4.6	3.2
Rest of England	19.5	17	18.6	14.9	16.6	15.3
Total	883	937	893	905	792	882

Source: HESA

Table 3: Migration Table 1999-2000 Mathematics/Engineering subjects – percentages moving from region of study to region of first destination

Region of First Destination									
Region of Study	London & South East	Rest of England	Wales	Scotland	NI	EU	Other	No.	
London & South East	75	13	0	0	6	6	0	16	
Rest of England	21	44	0	4	19	8	4	77	
Wales	13	25	25	0	25	13	0	8	
Scotland	8	28	0	25	34	4	2	53	
NI	1	8	0	1	79	10	1	480	

Source: HESA

Skill Shortages - The Effect of Subject Choice at Secondary School?

Robert Osborne School of Public Policy University of Ulster, Ian Shuttleworth School of Geography Queen's University of Belfast

Engineering graduates to NI after study in other parts of the UK. The highest return rates are from Scotland and Wales - although from Wales the absolute numbers are low - but there are also returns from England. These flows are balanced to some extent by the migration of graduates who studied in NI - here the most important destinations are England and the EU (which mainly includes cross-border flows to the Rol). These patterns are broadly similar to those for all graduates except that a slightly lower proportion of Mathematics/Engineering graduates are retained in NI and a higher proportion go to the EU.

CONCLUSION

The findings in this article represent the first results from a wider project. Nevertheless it is possible to draw some general conclusions which can inform debates about graduate numbers, skills shortages, and the IT and **Electronic Engineering** sectors. Firstly, even though graduates in Mathematics/ Engineering subjects are in demand by employers, and there are skill shortages, there is no evidence that supply is adapting to the situation in that NI students are opting to take these subjects. Table 1 shows that absolute numbers qualifying in these areas has remained

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roughly constant although the proportions of graduates in these subjects has decreased as overall graduate numbers have continued to grow. It might be argued that there are insufficient places in these subjects in NI but since the analysis deals with all graduates from NI - whether they study there or elsewhere - it is unlikely that this is the full story since there is no evidence that excessive demand for courses in these areas in NI is being met by increases in the numbers of NI students taking these subjects elsewhere.

Secondly, the analysis shows that gender differentials are much larger than religion differentials. Catholics, relative to their share of all graduates, are still under-represented in Mathematics/Engineering subjects but this difference is far outweighed by the low share of women, particularly in Engineering, who take the subjects defined as the focus of the research.

Thirdly, the HESA data show that migration is potentially an important issue in determining the numbers of Mathematics/Engineering graduates resident in NI after qualification. There are returns from those who studied in other parts of the UK. But to some extent, these gains are balanced by losses to the EU from those

who qualify in NI. In practice, the EU for these purposes largely means the Rol and the data therefore point to cross-border flows of graduates who have been recruited to work in Rol's IT and Electronic Engineering sectors. Since the HESA data deal only with first destination, it is likely that they underestimate the degree of flows across the border from NI. However, there are no data on return flows from the Republic to NI and so the analysis suggests that this could be a topic for further investigation.

The analysis will be developed by using other data sources. Recently received data from the **Universities and Colleges** Admission Service (UCAS) will be used to look at entry to Mathematics/Engineering and other subjects by social class and region. Information from the NI Department of Education can be used to examine school-leaver numbers by gender, school type, qualification level, and subject and further analysis of HESA data will provide information on A Level points score and degree class of graduates. This will permit a detailed stage-bystage analysis of the flows of students through the education system and the relationship between the initial numbers of young people who are qualified for



Skill Shortages - The Effect of Subject Choice at Secondary School?

Robert Osborne School of Public Policy University of Ulster, Ian Shuttleworth School of Geography Queen's University of Belfast

entry to suitable subjects and the final numbers who exit from higher education in NI and in other regions of the UK. It will also allow some description of change through time as it will be possible to trace the fortunes of entrants to higher education over a number of years from the mid 1990s. In doing so, it will show how and when imbalances in the uptake of Mathematics/Engineering subjects occur and indicate possible ways to increase the numbers of young people graduating in this skill shortage area.



How did XEROX (Dundalk) Recruitment Impact on the NI Labour Market?

Ian Shuttleworth, James Anderson, and Darren McKinstry, QUB

Introduction

The Xerox plant was attracted to Dundalk, (about 12 miles south of Newry, the nearest large town in NI), during the late 1990s. This high-tech campus had an employment target of 2,100 employees, spread across five production units and one software unit, and it began recruitment in late 1999. At its peak in 2001, it employed some 1,200 workers. Producing for a Europe-wide market the Dundalk site was a significant expansion on Xerox's existing activities in Dublin. There were several reasons for locating in the South rather than in the North. At the level of the state, tax incentives, participation in the Euro and the company history of involvement in Dublin combined to make the South the choice. But, at a regional level, other reasons were important. A location on the main 'Dublin-Belfast' corridor was attractive in terms of transport links and access to the population centres of the North and the South.

Labour supply was therefore also significant; tightening labour markets in the Dublin area made locations in the South with greater availability of labour, such as the border region, more attractive as sites for inward investment.

Increased employment in the border counties of the Rol, like that at Xerox Dundalk, might impact on NI in a number of ways, both positive and negative. Employment growth in the Rol, and increases in crossborder commuting, could mean that employers in NI could face labour shortages, especially in border areas. But equally, cross-border labour flows could be advantageous in some circumstances, particularly if they create pools of skilled labour on both sides of the border, or enable local reductions in unemployment to be achieved. Information on the likely impacts of cross-border employers on the NI labour market might thus be useful, for example, in advising on labour supply and recruitment issues for newly-established or expanding firms in NI.

The Research and Evaluation Branch (REB) of the Department for Employment & Learning therefore commissioned research into the crossborder impacts of the Xerox plant that was established in Dundalk as an additional

element of the Large - Scale Recruitment Study. This site was chosen as a particularly interesting case study of cross - border labour recruitment because it was not only a high-status, world -class company that might have been assumed to have had a potentially major impact on the NI labour market, but also because of the widespread feeling that the proximity of factory site to the border, and the possibility of 'tapping' suitable NI labour was an important factor in attracting Xerox to Dundalk. This article, based on a series of interviews1 undertaken in 2001, reports the main findings of the research with a special focus on the crossborder recruitment impact of Xerox. It starts with a discussion of general recruitment experience of Xerox on both sides of the border. The article then moves on to consider the spatial extent of recruitment, its impact upon unemployed people and other groups, and the degree to which it had long-lasting effects. The article concludes by looking at the barriers to crossborder working and how they can sometimes be overcome.

THE XEROX RECRUITMENT EXPERIENCE IN GENERAL

Labour availability was one of the key factors that attracted Xerox to Dundalk.

The Party Manager of the St. of

¹ The interviews are not attributed to preserve anonymity. However, a selection of personnel managers, officials, and community workers were interviewed and fieldwork was undertaken both sides of the border.

How did XEROX (Dundalk) Recruitment Impact on the NI Labour Market?

lan Shuttleworth, James Anderson, and Darren McKinstry, QUB

Locally, it was well-placed to 'mop up' recent redundancies in the local labour market, and it is likely that this helped to fill lessskilled vacancies. But beyond this, the company looked further afield for workers. To attract more skilled workers it sought employees on an all-Ireland basis. Recruitment fairs, for example, were organised in Athlone, Belfast, Cork and Galway, and adverts were placed in national newspapers. It was felt that Xerox was a high-reputation international company that could recruit highly-qualified workers from other similar employers in other parts of the Island. It was expected that about 25% of workers would come from NI and, by May 2001, it was estimated that some 20% were from the North. Some of these would be skilled workers who might be drawn from virtually anywhere in NI.

However, there was also a local dimension to recruitment. The relative weakness of the local labour market in Newry and the closeness of other border areas to Dundalk meant that there were prospects to recruit local cross - border labour. There was also an interest from local organisations North of the border in linking into the Xerox recruitment:

"We were keen to get them up here to ensure that they met their commitment to recruit in the North and that there was opportunity for our young people and our long-term unemployed in Dundalk."

This interest was also reciprocated by Xerox itself which had also engaged with local bodies in the Newry area to attempt to make cross-border ties to attract workers:

"We engaged in discussions with some community groups and around the Newry area with the Chamber of Commerce there... in terms of the cross border nature of the working patterns."

The experience of other Dundalk employers was important in estimating the availability of 'local' cross-border labour. Dundalk companies such as Heinz, Panasonic, Quantum and ICL were said already to draw large numbers of employees from the North and their experience could be used to inform Xerox about the development of recruitment.

Cross-border recruitment by Xerox therefore had two distinct elements. One, largely for better paid and more skilled workers, was all-Ireland and could be said to be 'cross-border' to the extent that it drew workers from all parts of NI. This could mean daily longdistance commuting, for example from Belfast, or home relocations to be nearer Dundalk. The other, mainly for poorer paid workers, was more local and meant daily cross-border moves from areas such as South Armagh and Newry.

THE GEOGRAPHICAL CATCHMENT OF XEROX: SPATIAL IMPACTS

It is useful at this point to comment on the geographical catchment of Xerox. As might be expected, given the experiences of the Large -Scale Recruitment Study and the recruitment strategy of Xerox, there was an occupational gradient in the distances over which workers would travel for work-related journeys. General operators - the least well paid employees - were usually drawn from the immediate locale of the factory in Dundalk or just over the border. In contrast, more skilled workers were drawn from a much wider geographical catchment in NI, from companies beyond the immediate Newry-Dundalk border area:

"We've been able to draw even more people from the North because of the clean room environment there. So we've taken people from Seagate, from BCO Technologies which is now Analogue Devices in Belfast and... Nortel Networks as well."

How did XEROX (Dundalk) Recruitment Impact on the NI Labour Market?

lan Shuttleworth, James Anderson, and Darren McKinstry, QUB

This suggests that the impact of Xerox was not localised - and that to some extent it leapfrogged the immediate cross-border area, particularly since workers who lived far beyond the border, from areas such as Belfast, commuted to the site.

In general, it appeared that Xerox had a very wide spatial catchment. In the Republic workers were drawn from as far South as Drogheda and North Co. Dublin, in the West from as far afield as Co. Monaghan and Co. Cavan, and in the North, for skilled workers, from the Greater Belfast area. The catchment was possibly modified, however, by chill factors in that it did not extend as far to the North, for most occupations than it did to the South:

"Yes, because I mean...
Banbridge for example...
would only be marginally
further away than
Drogheda... you know...
Banbridge is about twenty
nine miles to here... it
almost is immediately into a
more Protestant
community.."

Interviews with Xerox workers suggested that there was a strong social dimension to cross-border working - those 'local' workers from just across the border had experience of working cross-border for other companies or had

socialised South of the border. Accordingly they already had awareness of the labour market in the area, of the possible obstacles for the crossborder employee, and some knowledge of the means to overcome them. From the worker perspective informal 'word-of-mouth' means were important in finding work at the site further emphasising the social dimension of cross-border working. Moreover, locality was significant. South Armagh was a source of workers at general operative level. In addition to experience of socialising South of the border, and a lack of 'chill', easy transport links made access to Dundalk more convenient than that to Newry. This suggests that cross-border ties can vary in strength, depending on local traditions, physical accessibility and attitudes.

XEROX AND UNEMPLOYED PEOPLE: IMPACT ON UNEMPLOYMENT IN THE NORTH

In contrast, interviews with unemployed jobseekers in Newry Job Centre suggest that only a few jobseekers were aware of the Dundalk labour market and the wider labour market in the South. These were individuals who were either in construction (a mobile occupation and had worked in the South before anyway) or who were

young and were looking both in the Newry and Dundalk areas. Other individuals were restricted by transport (poor public transport meant they couldn't cross to Dundalk in time for work), just wanted to work locally, or had been in the same job for many years and were unaware of wider labour market conditions. Local conditions were highly important on the border - people crossed to Dundalk from Crossmaglen because in many ways this was much more easy and natural than travelling to Newry. Few people came from the North of Newry. Differences in religion (e.g. chill factors) were cited as being important although the land to the North of the Mournes was said to naturally have a Northward orientation towards Portadown and Mid-Ulster, and there may have been intervening job opportunities that also meant that a commute from the north of Newry to Dundalk was unnecessary or unattractive. Some individuals were simply unaware of the opportunities and costs of working cross-border but for others the decision would not be straightforward - it would depend on the job. the exchange rate and other benefits. Moves to work in the South seemed to be categorised into two classes - construction and moves to places as far afield as Dublin

How did XEROX (Dundalk) Recruitment Impact on the NI Labour Market?

Ian Shuttleworth, James Anderson, and Darren McKinstry, QUB

as highly - skilled workers moved in search of opportunities in an all-Ireland labour market.

SHORT-TERM AND LONG-TERM IMPACTS OF XEROX

Besides occupational and spatial differences, there were also temporal differences in recruitment behaviour that impinge on assessments of the impact of Xerox on local labour markets North and South of the border. Meetings with employers confirmed that initially it was felt both in Newry and Dundalk that Xerox would have a major impact with workers moving from established firms leading to increased wage rates.

"There was concern at one point they were going to come in, offer significantly higher wages and attract people away from the existing industry base in Dundalk particularly and possibly Newry and in fact we had a company here on the estate that did lose labour initially to Xerox in the first flush of ... hype and optimism but I think that dissipated quite quickly when people got in..."

The establishment of Xerox was viewed in Dundalk as a 'quick fix' because of its size and high profile. However this scenario of labour market disruption did not occur for a variety of

reasons. One factor was the 'no-poaching agreement' that Xerox arrived at with other companies and official actors in the labour market:

"There was an agreement locally with Xerox and local Companies that no poaching would take place... we were told for example by Xerox that we were not to refer people to them who were in employment in Dundalk in similar type companies and I think in fairness by in large they stuck to it... by in large... Xerox did take people I think in the non technical side... I know they took some people in the personnel human resources side... they took some people in the supervision side"

The ability of Xerox to employ workers who had been made redundant minimised their impact on already - existing employers. A factor that hindered their recruitment was a perception of financial weakness in the company rumours of the Xerox Group's financial problems were circulating in the region for several months before the June redundancies. Finally, the 'grass is greener' effect was also apparent when examining the impact of Xerox. This was a factor noted in earlier phases of the Large-Scale Recruitment Study when the initial impacts of new start - ups

were higher than their longterm effects largely because the novelty of a new employer attracted a large pool of workers who moved opportunistically in the belief that the 'grass was greener on the other side of the hill'. The employer was perceived by in the beginning, by some, as offering better wages, better prospects, and better working conditions than established employers, and this meant that there was a high short-term impact as workers moved in search of better prospects. But this perception did not last and the information which circulated about the possible uncertainty of employment at Xerox combined with unfavourable opinions of pay and working conditions meant that some people quickly moved on, sometimes back to their original employers. Turnover was therefore quite high in the initial phase of recruitment but slowed down as the local labour market adjusted to Xerox, with little long-term impact on recruitment to other companies as perceptions of Xerox adjusted.

CONCLUSION

The article shows that the benefits of a border location were important in attracting Xerox to Dundalk because of transport links and accessibility to labour

How did XEROX (Dundalk) Recruitment Impact on the NI Labour Market?

Ian Shuttleworth, James Anderson, and Darren McKinstry, QUB

supplies in the North and the South. The impacts of Xerox on the NI labour market were not restricted to the border area since, by attracting workers from major companies such as Nortel and Seagate, its impact was not localised. It is an all-Ireland employer whose effects leapfrog the immediate border area and because of this its effects are likely to be subtle, slight but also quite widely experienced as a whole in the high-tech sector.

The research also suggests that there are likely to be few reductions in registered unemployment in the North from job creation in the South - many unemployed people have localised 'mental maps' and wish to remain in areas North of the border that they know. Even in the event that Northern unemployed people wanted to obtain jobs in the Dundalk area, they would find major problems in getting to work because of poor public transport if they did not have access to a car, and it is likely that this was especially important for Xerox because of its edgeof-town location which created accessibility problems for all workers without vehicles. The relative immobility of the unemployed stresses the social dimension of crossborder working - those who already have cross-border experience and are mobile

are likely to seek further work cross border especially since word-ofmouth in job search appears to be important.

Despite the hope of attracting labour from the North, the research indicated that the impact of Xerox on the NI labour market was less than expected because of the significant obstacles associated with cross border working. The existence of these obstacles was interesting because they not only occur between two European Union States but also across a border which is judged to be relatively open and permeable (Hamilton 2001). The main obstacles in order of importance to Northern workers working in Xerox were exchange rate fluctuations, lack of information about taxation, problems with cross-border banking, poor public crossborder transport and chill factors.

Currency fluctuations could sometimes be overcome or discounted. They complicated the recruitment process for Xerox and meant that the company probably attracted fewer Northern workers than it had planned but was accepted as part of the 'noise' of the environment - after all exchange rates might also move in a direction favourable for plans to

attract cross-border workers. Workers could try to reduce uncertainty by other means these included more skilled workers with a better bargaining position attempting to negotiate a salary margin to ensure that a fall in the value of the Punt would not disadvantage them as long as it was within expected 'reasonable' bounds. Other mainly less skilled (and less well paid) workers minimised their exposure to the exchange rate - paid in Punts they spent in Punts North and South of the border. Some workers were prepared to make short-term sacrifices for a longer-term career at Xerox but even these workers, however, were prepared to re-consider their position if exchange rates moved beyond acceptable limits. In the same manner, the problems of banking and taxation could be a discouragement to crossborder working. These arose because systems did not mesh with their counterparts on the other side of the border but they could be overcome by means of access to advice, previous experience of cross-border working, and employer help. These barriers can be overcome but the ease with which this can be done should not be overstated. Most of the interviews were conducted with cross-border workers who by definition had found a way to work in the South, and there may be

How did XEROX (Dundalk) Recruitment Impact on the NI Labour Market?

lan Shuttleworth, James Anderson, and Darren McKinstry, QUB

other prospective workers who might be discouraged by the array of problems that have been outlined. More broadly, the low crossborder impact of recruitment in this case study should not be confused with the wider importance of cross-border working in Ireland. In 'mobile' occupations, like construction, individuals frequently move cross border, and this might be the same for certain types of skilled workers in other jobs as well. This case study could therefore underestimate the broader impact of cross-border employment which is

complex, multi-dimensional and difficult to assess. This research only looks at one type of cross-border labour market and there are many which involve, for example, different work - home relationships, such as weekly as well as daily journeys-to-work, movement in both directions, and different forms of recruitment. Cross-border movement is inherently difficult to measure because of the problems of collecting statistical information on individuals who live in one jurisdiction but work in another, and the ways that cross-border movement can

be used to take advantage of taxation and benefit systems. Despite these difficulties, cross-border labour mobility could continue to increase in importance in NI's comparatively open labour market.

Finally Xerox was greatly affected by the sharp recession in the ICT sector and the research did not reach completion as Xerox announced a wave of redundancies and now employs just 650 workers.

Commuting – NI and UK Experiences Compared

Terry Morahan, Research and Evaluation Branch, DEL

The vast majority (90%) of employed people must travel to work. Exceptions would include farmers, nurses living in hospital accommodation, retailers 'living above the shop' and the rising category of 'teleworkers'. Most people who do not have to travel to work are self-employed males. We know this because in the Autumn 2001 **UK Labour Force Survey**, questions on commuting were included on the topic of how people got to work and how long it took.

METHOD OF TRAVEL

It is thus possible to give the results for NI with the GB equivalent figures in brackets.

It can be seen from Table 1 and Figure 1 that there are significant differences between NI and GB commuters with private transport (by car) being much more important in NI than public transport methods (bus and train). The majority (80%) who used a car did so as a driver. There are also significant gender differences - public transport is much more important for females than males.

TIME TAKEN

The average time taken to travel to work in NI was 21 minutes which was a little less than the GB average (25 minutes), but much less than London (56 minutes).

NI (GB) data show that men spent a little more time commuting than women 22 minutes (28) versus 20 minutes (22) and unsurprisingly part-timers spent less time (16 minutes) than full-time workers (22 minutes).

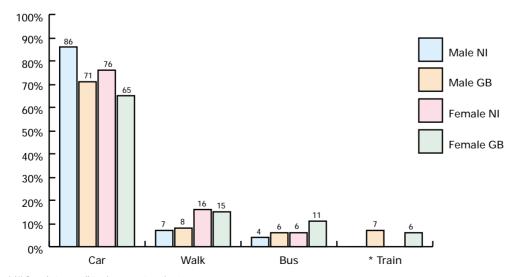


Table 1:

	Car	Walk	Bus	Train	Bicycle	Others
ALL	81% (69%)	11% (11%)	5% (8%)	* (7%)	* (2%)	* (2%)
MEN	86% (71%)	7% (8%)	* (6%)	* (7%)	* (4%)	* (3%)
WOMEN	76% (65%)	16% (15%)	* (11%)	* (6%)	* (2%)	* (1%)

^{*}NI sample too small to give separate estimate: Train includes underground, 'other' includes motorcycle, taxi etc.

Figure 1: Main Methods of Travel to Work by Gender, NI:GB



^{*} NI Sample too small to give separate estimate

Commuting – NI and UK Experiences Compared

Terry Morahan, Research and Evaluation Branch, DEL

As **Table 2** and **Figure 2** illustrate, the main difference in journey time is in the higher proportion in GB of long distance (1 hour +) commuters. In London almost one half are in this category.

CONCLUSION

The findings from the Labour Force Survey confirm general impressions but lend accuracy to the debate.

In brief:-

 The time taken to travel to work in NI was very similar to other UK regions - with the exception of London

- where time spent commuting was almost three times the NI average.
- especially for NI males dominates usage. This
 reflects in part the more
 rural nature of NI with its
 lower population density
 making public transport especially trains less
 viable, and in part underfunding of public
 transport.
- There are significant gender differences with walking and public transport more important for females.
- Women spent less time on travel - in part reflecting a greater proportion in parttime work.

 There is little evidence for the conventional wisdom that NI workers are less mobile - at least in commuting times - than their GB counterparts.

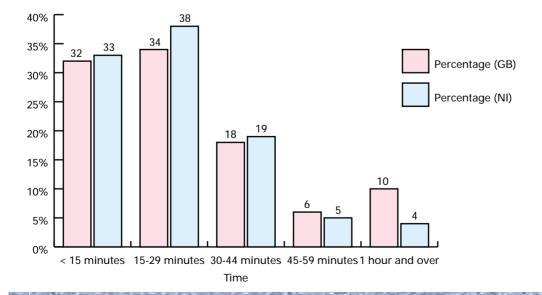
Certainly in the
Employability Consultation
process (see Chapter 18) one
of the strongest themes
emerging was the difficulties
experienced by those
without access to a private
car in getting to work especially an issue in rural
areas for shift workers.

For further detail see Labour Market Trends March 2002 and DETI's, Labour Force Survey Quarterly Supplement Autumn 2001.

Table 2:

Journey Time To Work: Minutes					
	Under 15 Minutes	15-29	30-44	45-49	1 Hour +
NI	33%	38%	19%	5%	4%
GB	32%	34%	18%	6%	10%

Figure 2: Travel Time to Work



"How far will IT Employees Commute to Work"?

- Some Case Studies

Darren McKinstry & Ian Shuttleworth C-STAR, QUB

This article presents interim findings and an overview of a study which seeks to consider factors important in the job search/recruitment process within the IT sector with specific regard to skills needs, travel to work behaviour, job selection, importance of degree subject and inter-company dynamics.

The NI labour market for IT skills has seen considerable changes in recent years both in a rapid expansion which saw employment growth estimates from a base of 4,000 in 1999 to between 10,000 (NIERC high growth scenario) and 18,000 (Software Industry Federation¹ - now Momentum) by 2004 - to a more recent slowdown following a downturn in the global economy. The Momentum 2002 survey estimates that employment in member firms in the broad ICT sector (which includes electronics) fell by around 1,000 during 2001.

In August 2000 a NIERC report on the IT sector for the NI Skills Task Force (see LMB No 14 Chapter 8 for a summary) concluded that while there were likely to be sufficient appropriately qualified entrants to the sector, there was undoubtedly a shortage of experienced staff. Further anecdotes at the time suggested high degrees of labour turnover within the sector. The issue of 'appropriately qualified entrants' is of further interest because a recent UK Skills Task Force report suggested that around one half of IT professionals do not enter the sector with an IT related degree, a factor which if replicated here would have important implications for the supply of skills.

Spatial aspects of labour supply are also significant as employment growth in the IT sector has to date been concentrated within the greater Belfast area. This 'clustering' of IT employment is found throughout the UK (see LMB No 15 Chapter 14). One of its effects, despite other potentially beneficial consequences of clustering, is to increase labour demand in the Belfast labour market while the potential for IT employment growth in other areas may be under developed. This theme is of key interest to Research & Evaluation Branch (REB) of the Department for **Employment & Learning** (DEL) and to Invest NI who have been asked by District Councils to advise on the possibility of encouraging more IT investment outside Belfast City. The Councils have advanced the argument that a good supply of relevantly - skilled people is available in their areas outside Belfast and that decentralised employment could create jobs for their residents without them having to commute or move to Belfast to gain work in the sector.

Because of these considerations, a more detailed understanding of the travel-to-work patterns of IT employees would benefit REB and also the District Councils who may be able to use knowledge of

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commuting behaviour (along with information from the soon to be released 2001 Census on resident stocks of workers) to make a case for labour availability and hence potential employment creation in their own and adjacent council areas. REB therefore commissioned research, as part of the Large Scale Recruitment Study, to examine these issues.

METHODOLOGY

The study uses both quantitative and qualitative data to extend the knowledge already gained from the Large Scale Labour Recruitment Patterns Study to date² and examines employment within the software sector via a 2 - tier case-study approach:

1. Recruitment in the IT Sector - An in-depth study of two Belfast based IT companies considering recruitment patterns, characteristics of IT staff; inter-company movements and decisions to take/change employment.

2. IT Labour Supply
Catchments - A broad based study of the labour supply catchments of a number of IT Companies in Belfast and beyond - The intention here to examine the sources of workers by geographic area across a number of locations and key employment grades

(e.g. software engineer, experienced software engineer, senior software engineer).

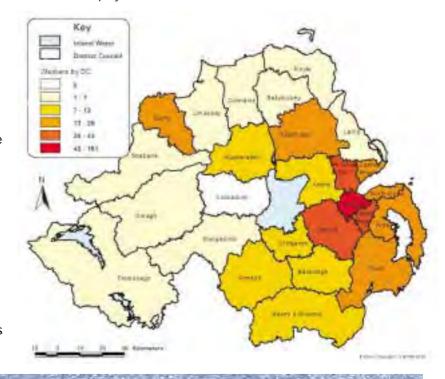
The data collection on the characteristics and catchments of the two Belfast companies (comprising some 600 employees) has recently been completed and is explored here. Work on the catchments of regional (i.e. non-Belfast) IT companies is still ongoing and will be reported in a later Labour Market Bulletin.

IT LABOUR SUPPLY CATCHMENTS IN BFI FAST

The data on 500 workers at the two large Belfast City Centre locations that we have so far analysed reveals some interesting patterns - almost half (49%) of workers are resident outside the Belfast Urban Area, with almost two thirds resident outside Belfast District Council itself indicating a widely geographically - dispersed labour catchment for these companies.

The combined labour catchment for the two indepth case study companies can be seen in Figure 1 which illustrates the number of employees by District Council of residence (at the time of application). While the resultant pattern mirrors effects of population, distance and access it also serves to indicate the considerable distance from which employees in the

Figure 1: District Council of Residence for Software workers at two Belfast IT Employers



While Phase I of the Labour Recruitment Study did include one Belfast based IT company - this information is now dated and the study at the earlier stage did not investigate many of the background issues of degree type and interfirm movements of staff.



"How far will IT Employees Commute to Work"?

- Some Case Studies

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software services sector can be drawn. This confirms the general finding of the Large Scale Labour Recruitment Patterns Studies that higher skilled people have wider commuting patterns.

The mean commuting distance of the 500 employees included in the analysis is 25km. However this average conceals substantial variations as is shown in **Table 1**. 45% of employees, for instance, live within 10km of their workplace. In contrast around 15% are drawn from more than 50km away.

An analysis of variations by Standard Occupation Classification (SOC) is unnecessary in this context as the vast majority of relevant occupations fall entirely within SOC Major Classification 2

"Professional Occupations" with the majority of the few remaining allocated to SOC 1-"Managers & Senior officials". The software workers in SOC 2 can be broken down into a number of grades of employment primarily based on experience and salary levels. Table 2 illustrates the average distance from which individuals across these grades have applied. Somewhat surprisingly, while 'experienced' and 'senior' software developers have an average commute distance of some 19km, those 'graduate' programmers with less experience and a lower salary are on average

travelling significantly further; 34km.

This is perhaps counterintuitive given that it is normally expected that those on lower wages tend to travel shorter distances. While less experienced software workers will be on lower wages than their more experienced counterparts, they are not on low wages in absolute terms and thus will not experience the significant cost barrier normally associated with extended travel to work distances. Further work is required to explore this pattern in more detail. Alternative or complementary explanations may be that senior/established IT workers will have relocated



Table 1: Successful Applicants by Distance from Site of Employment

	Frequency	Valid Percent	Cumulative Percent
0-2km	17	3.4	3.4
2-5km	126	25.3	28.7
5-10km	82	16.4	45.1
10-25km	117	23.4	68.5
25-50km	80	16.0	84.6
50-75km	37	7.4	92.0
75-100km	6	1.2	93.2
100+	34	6.8	100.0
Total	499	100.0	

Table 2: Distance from Site of Successful Applicants by Job Grade

Job Grade (at time of application)	Mean Dist (Km)	Number
Software Developer/Programmer (0-2 Yrs experience)	34.0	189
Experienced Software Developer (2-4 Yrs experience)	19.9	106
Senior Software Developer/Team Leader (5+ Yrs experience)	19.2	96
Project Manager/Leader	14.6	20

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closer to their permanent employment; that recent graduates seeking out new careers may be relatively footloose or that affordable housing for those starting out on their careers cannot easily be found in the Belfast area and less-senior staff are forced to buy homes elsewhere but to commute into Belfast.

Indeed if we consider the spatial profile of graduate appointments (i.e. only those workers who have come directly from university) we see that a greater proportion (56%) are resident (at time of application) beyond the BUA than was noted for the workforce as a whole (49%) -Figure 2 provides additional detail on the home location

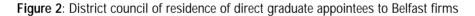
of direct graduate appointees to the Belfast case study firms.

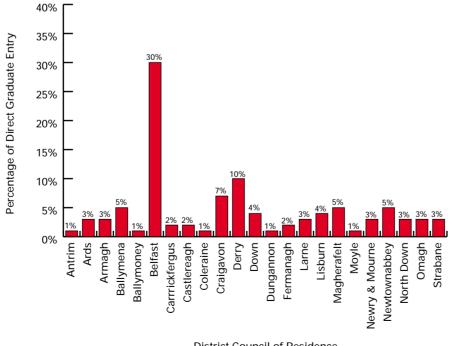
Significant in this context is the anecdotal argument that Belfast provides a major labour supply advantage to new IT firms because of its large number of resident graduates and its proximity to QUB and other higher educational institutions. Table 3 reveals that while higher education institutions located in greater Belfast (QUB 47% and UUJ 18%) do supply a considerable percentage of graduates to the case study firms, almost 40% of graduates taking work come from universities distant from Belfast, with almost 30% from the UU campuses in Derry and Coleraine. Given also that

many graduates from higher education in Belfast come from other areas in NL this information casts doubt on the assumption that Belfast is the 'natural' location for IT employment if labour supply alone was the main criterion.

RECRUITMENT IN THE IT SECTOR -STAFF CHARACTERISTICS

As mentioned above, the National Skills Task Force recently reported that around one half of IT professionals did not enter the sector with an IT related degree. Our survey of the Belfast companies sought to examine this by classifying degrees on subject area into 1: "High relevance" - where computing formed the sole or major component;





District Council of Residence

"How far will IT Employees Commute to Work"?

- Some Case Studies

Darren McKinstry & Ian Shuttleworth C-STAR, QUB

Table 3: Source of those appointed directly from University

University	Frequency	Percent
Queen's University Belfast QUB	51	47%
University of Ulster (All Campuses) UU	52	48%
University of Ulster (Coleraine) UUC	22	20%
University of Ulster (Jordanstown) UUJ	19	18%
University of Ulster (Magee) UUM	9	8%
University of Ulster (misc.)	2	2%
Scotland	3	3%
Republic of Ireland	2	2%
Other/Unknown	17	16%
Total	108	100%

2: "Some Relevance"-where computing formed a joint or minor part of the degree; or 3: "No Direct relevance" – where computing did not form a core component of the degree.

Data were available on some 461 workers - 49% with a first degree of high relevance (e.g. Computer Science) and a further 9% having a first degree of some relevance (e.g. Mathematics, Statistics & Computing) totalling 58% entering the sector with an IT related first degree - a figure broadly and favourably comparable with the UK statistic.

Of further interest though is an examination of additional and higher degrees – here our survey reveals that almost half of those 194 (42%) who completed a first degree of no direct relevance went on to complete an additional or higher degree of at least some relevance. Thus 78% of those taking a job within our case-study companies had an IT related degree prior to taking employment.

When considering the sources of new employees, patterns by previous status differed by employer - one company (involved primarily in the design and creation of software code) had recruited heavily from education with over half the workforce (56.9%) having been recruited directly from university with the majority of the remainder from employment (38.3%). The other company (involved primarily in the maintenance and testing of code) had recruited heavily from the employed (69%) and from the unemployed (22.9%) with only 7.5% directly from university.

In gender terms 74% of the two companies' combined workforces were male with 26% female. Although differences were small, as levels of experience/job

grades rose, so did the percentage of males in those roles. Percentages of females were highest amongst those entering directly from university and from courses aimed at non-IT graduates - for instance Bridge to Employment, Rapid Advancement Programme (RAP)potentially indicating an increased attractiveness of the sector to females (see also the article on Skill Shortages - Chapter 12).

The Bridge to Employment scheme is worth mentioning in a little more detail. Work with other non-IT employers (for example see the Halifax Call Centre article-Chapter 16) has highlighted the scheme as a way of widening access not only to the non-employed but also by age, gender, religion and social background. Interviews with personnel staff and workers within the companies have not only confirmed this but indicated that Bridge to Employment

"How far will IT Employees Commute to Work"?

Darren McKinstry & Ian Shuttleworth C-STAR, QUB

can provide access to individuals who are not only keen to work in IT but because of the tailored training afforded by the scheme are, upon completion of the course, as appropriately skilled to undertake certain work as recent graduates. Additionally, Bridge to Employment was viewed by personnel staff and workers as preferable over other programmes with similar remits because of the tailored training, cost benefits and the direct link to a job seeker/offer of employment.

- Some Case Studies

CONCLUSION

The above article has briefly considered some interim findings associated with worker characteristics and travel to work patterns arising from the ongoing study of factors important in the job search/recruitment process of employers and employees in the IT Sector.

From the preliminary analysis it can already be seen that the Labour market for Belfast companies extends well beyond the boundaries of the 'Belfast Urban' and 'travel to work' areas and it is hoped that the ongoing work relating to the catchments of regional companies can provide more direct insights into how catchments might

evolve if future inward investment were to be more regularly sited beyond Belfast.

The work on the degree subject area seems to indicate that not only are NI IT workers highly qualified but also that IT job creation may be possible where IT degrees are not a necessity and where schemes such as Bridge to Employment can make a valuable contribution.

Given previous and expected sectoral growth, the ongoing work will build on that above to also consider the area of intercompany dynamics for attracting/retaining skilled workers during periods of high and low demand along with supplemental work on the career path trajectories of individual IT workers examining issues such as job search mechanisms; the importance of an IT related degree; the willingness to work beyond Belfast and the extent to which movements are necessary for career progression or the maintenance of skill levels all factors important in understanding and predicting labour supply needs for the IT sector. Certainly given the wide spatial catchment area of IT employees there would seem scope for IT companies in non Belfast locations.

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The Halifax Call Centre: Employer Recruitment Practices & Employability

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"Employability is more than a supply issue. We need to do more than simply encourage people to train and get the necessary skills to successfully apply for a job. The issue is wider than that and the approach to solving it must be shared by individuals, employers, representative groups as well as Government" 2 (Minister for Higher and Further Education, Training and Employment).

Research & Evaluation branch (REB) of the **Department for Employment** & Learning commissioned a study on the recruitment experiences of the Halifax Call Centre as part of an ongoing commitment to understanding the skills needs and labour supply issues of the NI economy and indeed of the rapidly growing call centre sector. This article focuses on one area of that study to examine labour availability and specifically on how employer recruitment practices can form a core part of processes of employability.

Employability is a theme that has received increased attention over recent years. At the European level the **European Commission** identified 'employability' as one of four core themes when it announced a wide ranging European strategy for employment. In NI where unemployment is still recognised as a significant problem, particularly since the proportion of long-term unemployed people in NI remains higher than in other parts of the UK we have seen the establishment of the Taskforce on Employability and Long -Term Unemployment alongside an important strand of New Targeting Social Need Policy (New TSN) which seeks to improve employability and to reduce unemployment as the most direct way to tackle the causes of poverty.

While it is recognised that 'employability' depends on the balance between 'supply' (e.g. individual knowledge, skills and household background) and 'demand' (e.g. the economic and social context within which work is being sought) much of the emphasis in the report seemed focussed specifically on the importance of individual (supply side) characteristics in influencing outcomes in the labour market.

It is our aim in this article to focus on factors beyond the individual, specifically on how employer behaviour and the accessibility of employment impinge on the process of employability. Using material gleaned from a quantitative analysis of workers along with qualitative interviews with employees, community representatives and the employer we consider two discrete examples³ relating to the Halifax Direct Call Centre which operates within the financial services sector. Our first example considers problems of accessibility relating to a site in suburban Belfast (Dundonald) where the employer was located for its first year of operation while the second example considers measures taken to widen access to employment following a planned move to new premises within the Gasworks/Cromac Wood site within Laganside.

The Halifax Call Centre is of particular interest in the context of employability. Firstly, as the largest ever single job creation project in NI it was necessary to source sufficient workers to fulfil the promise of 1500 jobs. Secondly, as part of an emerging call centre sector, the employer is not able to benefit from any locally available traditional/ historical local labour pool

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http://www.qub.ac.uk/c-star/
Dr Sean Farren, Minister for Higher and Further Education, Training and Employment,
"Employability Taskforce starts work", DHFETE Press Release, 20th March 2001.

The case study material used here form part of the Labour Recruitment Study (see LMBs 12-15 for background), which is an on-going programme of research into the labour supply efficiency and equity implications of employment growth. To date the research has considered some 28 sites of employment comprising almost 20,000 employees.

The Halifax Call Centre: Employer Recruitment Practices & Employability

Darren McKinstry & Ian Shuttleworth¹ C-STAR, QUB

but rather is involved in sourcing new labour amidst increasing competition from other emerging call centre employers and a potentially constricted supply due to UK wide negative press reports alleging 'poor call centre working practices' and reports of 'burn-out' and high turnover. Thirdly, this employer in particular is operating within the financial services sector where jobs can be perceived - because of a general requirement for specialist qualifications and/or experience-as potentially unattainable by a section of the potential labour pool.

Together these points reveal an employer that needed to source a significant number of appropriately skilled workers amidst conditions that could serve to severely restrict labour supply. The implicit business case for implementing employability measures and motivation for widening access may thus be more acceptable (in cost/benefit terms) to this employer than might normally be the case and hence may provide useful insights into processes that may be of value in both refining notions of employability and in highlighting the benefits

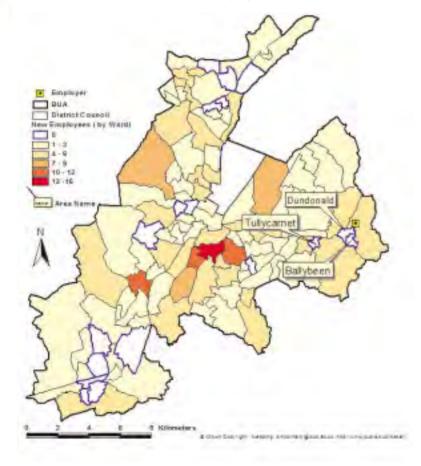
available to other employers from adopting more socially aware employment practices.

THE ACCESSIBILITY OF EMPLOYMENT

The extent to which individuals can gain reasonable access to employment, in both spatial and social terms is of importance in the evaluation of any significant job creation. With regard to the site in Dundonald, our full study explored a range of accessibility measuresspatial accessibility4, the 'chill' factor5 and the social accessibility6 of employment. While the first two of these were found to have some 'costs' associated with them (interviews with workers highlighted the issue of physical accessibility over any chill factors) it was the area of the social accessibility of employment that was highlighted as important both in quantitative and qualitative findings and will form the focus of this article.

We can illustrate the importance of social accessibility via a consideration of the employee catchment in **Map 1** which shows the number of workers drawn from each census ward in the Belfast Urban Area (BUA).





Spatial accessibility refers to an individual's ability to physically access the site of employment in terms of distance and time taken to get to work and how the cost/availability of transport, might impinge on the ability to take or seek work in any

given location.

5 'Chill-factor' refers to the extent to which an individual would wish to avoid either travelling through, or seek working in an area of the

opposite religion. It can be considered as a component of the social accessibility of employment.

Oscial accessibility refers to how the perceptions and characteristics of an individual; their family, peer group or wider community; or indeed of the area in which they reside or the areas in which they seek work might impinge on an individuals ability to seek or obtain employment.

The Halifax Call Centre: Employer Recruitment Practices & Employability

Darren McKinstry & Ian Shuttleworth¹ C-STAR, QUB

In accessibility terms it is of interest to consider those wards which did not supply workers - clearly factors such as the stock of available workers, distance from the site of employment, spatial access and available transport⁷ etc will be important in this regard. In simple visual terms it is noticeable that in general the majority of those wards not supplying workers are distant from the site, stretching toward Lisburn and Newtownabbey. What is perhaps unexpected though is to find that despite reasonably attainable jobs they fall within Standard Occupational Classification 7 (sales and customer service occupations) and do no not require any specialist qualifications or previous experience - three wards in the immediate vicinity of the employer do not supply workers.

These areas do not suffer from problems of religious chill nor physical access (they are largely within walking distance and surrounded by other wards who did provide a number of workers) and yet did not provide any of the 574 workers (at the time of analysis) who took up employment at the site. They do however coincide with the location of the economically deprived, peripheral housing estates of Ballybeen and Tullycarnet. The phenomenon went

largely unnoticed by the employer with the exception of one example:

"the guy who looks after facilities... was struggling to find cleaning staff... and put out a load of fliers in the various estates in and around Dundonald and thought it through and had gone to the sorts of places where people may be interested in that sort of work, who live close enough to walk to work even and he got a very poor response and he was quite surprised ... quite disappointed about that... now why I just don't know..."

(Personnel & Training Manager July 2001)

While further analytical and field work is required to more rigorously examine the spatial pattern in Map 1 it does raise questions about wider aspects of employability, the appropriateness of certain recruitment mechanisms, the value and importance of community outreach, and the actions that an employer might take to improve the ability (and willingness) of local residents to take work.

IMPROVING ACCESSIBILITY

It is in this context that we can consider our second example, where the same employer has implemented a number of measures to widen access to employment in relation to its Laganside site.

The Laganside site shares certain characteristics with the Dundonald site in that local communities share similar problems in accessing employment. In contrast though the Laganside communities have benefited from a community infrastructure focused on localised job opportunities and have grown accustomed to liaising with new inward investment employers, facilitated for example by Laganside and DEL.

In general, the success of local employer/community involvement schemes is seen as mixed - certainly some local people are getting jobs but the extent to which this has been recognised by the local communities and indeed to which real efforts have been made by employers to engage locally unemployed jobseekers is a topic of debate.

Many of the ways that the employer has attempted to improve the experience of working in a call centre are neither new nor unique - from the outset they have adopted a relatively flat management structure, smart/casual is the only dress code, their premises are modern and open plan, meetings are informal and

A recent UK DTLR survey noted that some 13% of respondents had decided not to apply for a job in the previous 12 months because of transport problems, a figure rising to 25% for 16-24 year olds. Transport Statistics: Accessibility of local services and facilities (2002), Department for Transport, Local Government & the Regions http://www.transtat.dtlr.gov.uk/

The Halifax Call Centre: Employer Recruitment Practices & Employability

Darren McKinstry & Ian Shuttleworth¹ C-STAR, QUB

managers sit with their teams rather than at separate desks or in offices. These practices while improving the experience of working in a call centre and potentially reducing turnover do not however directly serve - in the context of community involvement schemes - to overcome barriers to gaining employment or directly increasing labour supply and indeed for some the modern building can be seen as a socially inaccessible "employment edifice" (Community Worker, South Belfast).

GENERAL ACCESSIBILITY MEASURES

In addition to measures designed toward retaining workers the case study employer has however implemented a number of measures toward attaining them.

"We are very proactive, about finding ways to bring people into employment here other than just sticking an advert in the paper and seeing what happens... that includes designing courses specifically, providing extra support for people that need extra support. I mean all common sense stuff... but stuff that doesn't always happen..."

(Personnel & Training Manager July 2001)

The employer's approach is one of tailored flexibility to the core business needs, a process of very carefully tailoring advertisements, outreach and workplace culture. The first step in promoting access comes with those changes, sometimes minor, that can be made to engage all jobseekers and to provide an environment in which new or changing employment becomes a more fluid process on which to embark.

A notion shared by the employer and local communities is that there is a need for 'sustained momentum' in the notion of ensuring any permanent improvement in an individual's employability - a sustained effort is seen as pivotal, the key to convincing the disenfranchised individual to invest in the process - to persuade them that they are not just completing another application; that there is a real, achievable and immediate job at the end of a finite process. It is in this context that the following measures are introduced and discussed.

Flexibility - Some of those seeking work may have very specific conditions under which they may be able to take work - pay, conditions, hours etc. The case study employer has identified this as an area where flexibility on their behalf could

promote increased access to certain groups (e.g. working parents) and have implemented or are considering a number of processes. Flexibility is evident in the choice of possible start dates, hours and working patterns or indeed in the option to be placed on a waiting list until a suitable working pattern is available. Training can also be matched to the working patterns required by the individual with evening training sessions having already occurred and would be run specifically in the event of a recruitment drive targeted at evening shift workers.

Qualification/Entrance
Requirements - At the outset
the employer undertook a
highly tailored review of
skills needs and recruitment
and selection procedures.
Unusually and unlike most
other employers they
decided that they do not
require a minimum level of
qualifications for customer
service assistants/call
handler positions.

"We don't need five 'O'
Levels", there seems to be
this perception [in] Financial
Services you must have five
'O' Levels, traditionally that
may well have been the case
in banking, [here] you don't
need to have one 'O' Level
or a GCSE or... even a
hundred yards swimming
certificate. The way we
recruit is about saying "We

The Halifax Call Centre: Employer Recruitment Practices & Employability

Darren McKinstry & Ian Shuttleworth¹ C-STAR, QUB

can teach people to use the technology, we can teach people about the products... we can enhance people's customer skills"

(Personnel & Training Manager July 2001)

Additionally, previous experience within either the call centre or financial services industry is another seemingly likely prerequisite that has been dispensed with and application forms and job advertisements have been redesigned to make applicants aware of this:

"it's not about saying I've got to have Financial Services experience, or Call Centre experience, the majority of people that work here don't have either... and it doesn't have to be in work even but iust life experiences of dealing with people, working in an environment where they've had to handle change... where they've had to work with each other... and this stuff can come from college experience, life experience, home experience..."

(Personnel & Training Manager July 2001)

Rather there is requirement to find people with what they term, the right 'behaviours' and their interview process is tailored around two key areas to uncover this – a standard aptitude test which evaluates literacy, numeracy and an ability to solve logical problems and a 'behavioural competency interview' where interviewees are walked through scenarios or life experiences. Unlike qualifications, these 'measures' are seen as relating directly to the skills needed to operate successfully within their specific business environment.

WIDENING THE NET - TARGETING SPECIFIC GROUPS

The employer has a strong desire to explore and actively engage diverse pools of labour-returners, those with few or no qualifications, older workers, disabled workers, the unemployed or those with minimal work experience.

...as far as recruitment's concerned, it's about trying to just sort of get people to think again - we think very carefully about the photographs that we put in our ads, they're not just any old photographs and it's just to perhaps prompt somebody to look twice and to think "That could be me... if they can do it, I can do it."

(Personnel & Training Manager July 2001)

This process has been facilitated in part via a community forum. Facilitated by the Laganside Corporation and involving the employer, local community groups, partnership boards and JobCentre staff the forum meets to discuss accessibility measures - how perceptions can be changed and crucially how local jobseekers and the unemployed/returners can be afforded better access to employment within the site. The forum, following a period of mutual trust building, has proved an important mechanism and through it a number of processes have been put in place.

Open Days/Mock Work **Sessions - Potential** employees from local communities are encouraged by their local community representatives to visit the site and view the working environment for themselves. Employees showcasing the work environment are carefully selected to come from a range of diverse backgrounds themselves older workers, unemployment, returnees etc - thereby illustrating how they were able to overcome similar barriers to gain employment at the site. JobCentre and Benefits office staff are available to provide multi-faceted advice on benefits and moving back

The Halifax Call Centre: Employer Recruitment Practices & Employability

Darren McKinstry & Ian Shuttleworth¹ C-STAR, QUB

into employment.
Individuals benefit from
direct experience of likely
working conditions and the
encouragement of workers
while the employer benefits
from both widening their
labour supply and in
receiving applications from
individuals who now have
an understanding of the
work involved and therefore
should be less likely to form
part of any short term
turnover.

Sequencing of Employment Drives with training programmes - This is one area in which community organisations felt there was much progress to be made toward maintaining 'momentum' for jobseekers i.e. if training programmes could be sequenced with employment drives so as to remove any intervening periods of non-activity then there was a significantly higher chance of getting non-employed jobseekers into the types of work for which they were being trained. Jobseekers would thus be provided with a direct employment goal and intervening inactivity or nonoptimal types of employment could be avoided (both which may serve to disenchant the individual and lead to a possible withdrawal from the labour market). Through the forum, community organisations are now endeavouring to sequence job readiness programmes

so that they complete as recruitment drives are announced by the employers.

Enhanced Recruitment Packs - To assist the applicants with less recent in-work experience the company recruitment pack was expanded to include a guide to completing application forms, preparing for interviews and undertaking aptitude tests. Additionally non - employed applicants were advised on the importance of including non-employment related experiences in problem solving and team working etc as an alternative to in work experience - again representing an effort to remove barriers for those seeking work.

Signposting for unsuccessful applicants -Should an applicant be unsuccessful the employer uses the 'rejection' letter to not only thank the individual for their application but to provide pointers on how to perform better in the future (via help sheets on application forms, aptitude testing or interview skills) and crucially to provide immediate alternatives for the jobseeker via what is known as 'signposting' - not only is the jobseeker invited to apply again at the next recruitment drive but is also given information regarding relevant community/ government agencies and

ongoing schemes for which they may be eligible. The intent here is to capitalise on and maintain any momentum and to provide an accessible 'next step' for those seeking work.

"...it gave me a good impression of them ...they're looking for staff and they're willing to let you know where you went wrong and they're giving you a chance to reapply... nobody else ever did that."

(Worker C, CSA/Call Handler).

Employment Initiatives -The employer is a keen advocate of schemes such as GEMS⁸ and Bridge to Employment⁹.

"we've been really fortunate that we've been able to work very closely with the T&EA and the Bridge Schemes and have had some fantastic results and have got some very, very, very good people here through that route ... I've been involved in similar types of exercises in other parts of the UK and I've not seen results anywhere near as good as we have here..."

(Personnel & Training Manager July 2001)

For the company the Bridge scheme provides a source of pre-screened workers for whom training is not only tailored to company needs but is also subsidised. In

Belfast GEMS (Gasworks Employment Matching Service) is a local employment initiative primarily focused on providing access to employment with business situated within the Gasworks and Laganside sites.

Bridge to Employment is a government programme providing the unemployed with employer linked customised and, if successful, a direct offer of employment.

The Halifax Call Centre: Employer Recruitment Practices & Employability

Darren McKinstry & Ian Shuttleworth¹ C-STAR, QUB

addition, because it targets specifically the unemployed, effectively bypassing those already in employment, it reduces any within sector turnover, thereby growing and strengthening the sector as a whole. It can also be seen as having a workforce balancing effect in that it may provide access to a wider range of social groups than normally associated with the sector - be it on qualifications, gender, age, location or community background. For those seeking work it is additionally perceived, because of its visible link with employment opportunities, as a direct route into employment rather than simply another training scheme.

CONCLUSION

As indicated at the outset, 'employability' measures should be focussed beyond individual supply side factors onto a wider consideration of the demand side (employer) and factors influencing interaction between the two such as prevailing labour markets and social/spatial access considerations.

On the demand side the Call Centre industry, as a result of its explosive growth in recent years, has acquired an appetite for appropriately skilled labour. On the supply side the willingness of individuals to seek and take work in the sector has however been effected by negative press reports, with turnover an issue in those employers with poor working conditions.

Our examples point to job search and social accessibility as being important in gaining employment (supplementary field work is planned to examine this specific case in more detail). In addition we have examined how the employer can play a role in improving 'employability' - the case study employer has made considerable efforts to not only provide good working conditions but to make itself and the type of employment it offers, not only more attractive but also more widely accessible. Here it has embarked on a process of sustained outreach and has reviewed the skills and aptitudes necessary to undertake the jobs in question, removing qualification barriers from the process of gaining work.

As has been illustrated, individual jobseekers - particularly those previously non - employed - have benefited from the employers reassessment of skills needs and the outreach measures designed to improve access.

For the employer, while initial motivation may have

been the need to ensure labour supply, additional benefits have been found in improved perceptions of the employer by local jobseekers and in a more varied and stable workforce. Certainly interviews with workers would seem to support this with those recruited via the Bridge to **Employment scheme** seeming more willing to stay with the employer for an extended period of time when compared with those gaining employment via conventional means.

"I'm happy here... I'm hoping to stay for as long as possible... the working conditions are excellent... I'm happy here, I don't think I'll be moving..."

(Worker C, CSA/Call Handler & Bridge to Employment Recruit).

The process of outreach and its link with workforce stability is an important factor which over time has been recognised by the employer:

"The people from the outreach mechanisms are in many cases some of the most loyal people we have..."

(Operations Manager, May 2002)

For the community there are also benefits to be accrued from engaging employers

The Halifax Call Centre: Employer Recruitment Practices & Employability

Darren McKinstry & Ian Shuttleworth¹ C-STAR, QUB

and encouraging outreach measures. Interviews with community representatives in the Laganside area provided insights into how more accessible and attainable employment opportunities were slowly changing attitudes toward seeking work:

"there has been an upturn in employment in the area ... increased opportunities on the doorstep that have allowed people to go into the service industries... there's more of a momentum about employment in the area... I've noticed that several of the young men in the community who were doing informal, casual work are now starting to ask us if it's viable that they could get into [the employer], because they've seen some people get in... and then there's the whole knock on about improved esteem and identity..."

(Community Development Worker, South Belfast)

The employer has taken a number of significant and innovative steps which can serve as lessons for NI plc. The individual, social and business benefits accrued may serve to persuade other employers to adopt employability measures when explicit business benefits may not be immediately apparent. As a result of their actions, the case study employer has provided avenues for the non-employed (local and otherwise) to gain work and are now widely seen as offering good and accessible employment opportunities and have already succeeded in fulfilling their promised target of 1500 jobs. Our thanks to the management and workforce of the Halifax Call Centre; Laganside Corporation; the South Belfast Partnership; and the various community representatives who participated in this research

project.

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"What Happened to the Former Harland and Wolff Workers"? - A Further Follow Up

Ian Shuttleworth, QUB & Peter Tyler, University of Cambridge

Introduction

In September 2000 Harland & Wolff (H&W) announced that they would make 580 workers redundant. In response to this, and with a keen desire to help the workers gain new employment opportunities, a **H&W Taskforce was** established. As part of their work, the Taskforce asked **Research and Evaluation** Branch (REB) of the **Department for Employment** and Learning to commission survey-based research to establish how employees fared in the labour market and, in particular, how quickly they were being reabsorbed back into employment. The research also focussed on the effectiveness of government interventions in helping the ex-employees back into work and how these services might be improved to help with other redundancy situations.

A team from Cambridge University and Queen's University undertook the research, and the results of the first survey, describing the experiences of the former employees some six months after the redundancy, were reported in the previous Labour Market Bulletin¹. Whilst it was useful to see how the ex-workers had fared at this stage, this information was a snapshot, and only showed what had happened shortly after the redundancy. In general, little is known about the longerterm consequences of redundancy, and there could be significant changes in the longer-term as the readjustment process continues. The NI labour market is less 'tight' than in 2001 (when the first study took place) and so perhaps too optimistic a picture was painted. Some former H&W workers, for example, could have lost their jobs again because of the redundancies that were announced in Autumn 2001 in the Belfast aerospace industry since around a quarter who had been employed at the time of the first survey worked in this sector.

REB therefore commissioned a second survey of the former H&W workers to learn more about what had happened to them since 2001 and how they had coped with recent labour market

developments. This followup survey was undertaken in the Spring of 2002 and achieved 205 responses. Questions were asked on a wide range of labour market topics such as spells of employment, unemployment, and training, as well as subjects such as attitudes to the labour market and training, the quality of jobs after H&W, and the means by which jobs were found. There appeared to be no systematic biases in the pattern of response to the follow-up survey in May 2002 when compared with the first survey in May 2001. The article therefore presents some of the main findings from the survey. It begins by looking at the experience and employment status of the respondents eighteen months after the redundancy. It considers labour market experiences through time, showing how the workers got to their present situations. Finally, the article finishes with a summary of some of the policy points derived from the research.

WHERE WERE EX-H&W WORKERS EIGHTEEN MONTHS AFTER THE REDUNDANCY?

The good news, as revealed by the comparison of the follow-up survey results in **Figure 1** with those from last year, is that the share of those in employment has grown to nearly 80% (up

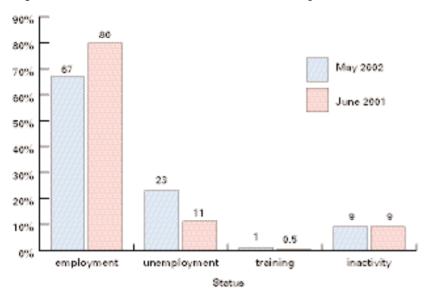


"What Happened to the Former Harland and Wolff Workers"?

- A Further Follow Up

Ian Shuttleworth, QUB & Peter Tyler, University of Cambridge

Figure 1: Labour Market Statuses after Six and after Eighteen Months



Source: H&W Redundancy Study

from 67% a year ago), the proportion unemployed had fallen from 23% to around 11%, and the percentage of the inactive has staved steady at around 9%. As in the first survey only a very small fraction of respondents to the follow-up survey were in education/training.

For those in employment, job turnover was below normal. About 75% of those workers who had been in employment since the last survey were in the same job as in 2001 and around a quarter of those employed in May 2002 remained in the aerospace industry. There was also stability in the main occupations in which workers were employed. The leading job titles in the follow-up survey were Fitter (31% of those employed), welder (14%), engineer (15%), and electrician (10%)

and this was a similar ranking to that seen in the first survey. Indeed, most of those in employment in May 2002 had not changed jobs or occupations since May 2001. Despite this, views had changed about working conditions and pay. The follow-up survey showed that the proportion who stated they had poorer pay than in their H&W jobs was down from 59% to 48%. But to balance this apparent improvement, the share of those who felt the general conditions in their current job were an improvement on H&W fell from 51% to around 40%. Perhaps workers, after they had become more accustomed to their surroundings, took a more jaundiced view of their new jobs.

Whilst there was roughly an even balance in the share who thought that recent

changes had made it harder to find a job as compared with those who thought they had made it easier, only 6% thought that there were now more suitable jobs available for them than last year, and 51% thought there were fewer. In these circumstances, the follow-up survey respondents showed considerable resilience in holding the jobs they had a year ago and in increasing the percentage of those in employment.

HOW DID THE EX-H&W WORKERS GET WHERE THEY WERE?

Table 1 shows the labour market status of the respondents six months after redundancy and compares it with the position in May 2002 as shown in the follow-up survey after eighteen months. The table reemphasises the theme of continuity. For example, 95% of those who were in employment after six months were still employed at eighteen months - and nearly 70% were still employed in the same company as when they were surveyed before. The category with the greatest flows into and out of it was unemployment. The majority of people exiting it went into work although a minority became inactive. After employment, the category with the greatest stability in its membership



"What Happened to the Former Harland and Wolff Workers"?

- A Further Follow Up

Ian Shuttleworth, QUB & Peter Tyler, University of Cambridge

Table 1: Movement between Labour Market Statuses Six and Eighteen Months after Redundancy

	Status after 18 months				
Status after 6 months	Employment	Unemployment	Training	Inactivity	Number
Employment	95%	5%	-	- 10%	137
Unemployment	60%	30%	. 1	10%	47
Training	75%	-	25%	-	4
Inactivity	12%	6%	-	83%	17

Source: H&W Redundancy Study

was inactivity - 83% of those inactive after six months were still inactive at the time of the follow-up survey although for this category, and for training as well, numbers are low and so the results should be treated with caution.

Table 1 shows only the general dimensions of the paths followed by the ex-H&W workers and it can be supplemented by other key statistics. Particularly noteworthy are the observations that since May 2001 12% of the follow-up survey respondents had been employed at least once

at H&W, 25% had been employed on at least one occasion at Bombardier Shorts, over 70% had not experienced unemployment, and since the redundancy only nine ex-workers had taken up training options. Again, this indicates the stability of employment, the continued significance of employment in the Harbour Area, and the low levels of training uptake noted in both 2001 and 2002.

FACTORS SHAPING POST-REDUNDANCY EXPERIENCES

Tables 2 and **3** show the socio-economic

characteristics of the ex-H&W workers organised by their statuses after six and eighteen months respectively. Some clear and statistically significant patterns stand out. Table 2 shows that those who were inactive after six months, in comparison with those in employment, were much less likely:

- to have sought work urgently than those in employment
- to have considered training
- to have been owner occupiers

Table 2: Post-Redundancy Status after Six Months by Selected Background Variables (all figures are percentages)

Variable	Employment	Unemployment	Inactivity
Sought work extremely urgently	49.0	42.9	5.7
Used car to travel to work at H&W	90.3	70.3	85.7
Live less than 5 miles from H&W	49.8	74.7	71.4
No qualifications	19.3	58.2	71.4
Owner occupiers	87.3	73.6	71.4
Aged 55 or over	11.6	33.0	71.4
Worked in SOC 9 at H&W	5.4	11.0	22.9
Considered training	37.8	44.0	20.0
Number	259	91	35

Source: H&W Redundancy Study



"What Happened to the Former Harland and Wolff Workers"?

- A Further Follow Up

Ian Shuttleworth, QUB & Peter Tyler, University of Cambridge

Table 3: Post-Redundancy Status after Eighteen Months by Selected Background Variables (all figures are percentages)

Variable	Employment	Unemployment	Inactivity
Sought work extremely urgently	49.1	44.1	7.1
Used car to travel to work at H&W	73.4	53.6	57.1
Live less than 5 miles from H&W	52.4	75.0	59.3
No qualifications	31.5	32.1	77.8
Owner occupiers	89.9	70.4	70.4
Aged 55 or over	21.3	35.7	39.3
Worked in SOC 9 at H&W	8.9	17.9	35.7
Considered training	40.5	48.1	22.2
Number	163	22	19

Source: H&W Redundancy Study

Note: The follow-up survey has been weighted to the first wave

but were more likely:

- to have lived within 5 miles of H&W
- to have had no qualifications
- to be over 55 years old
- to have worked in lessskilled occupations.

Those who were unemployed after six months were, in comparison with those in employment, less likely:

- to have used a car to travel to work at H&W
- to have been owner occupiers,

but were more likely:

 to have lived close to the site

- to have had no qualifications
- to be aged over 55
- to have had less-skilled work at H&W.

We have seen that there were many similarities in the status of the ex-H&W workers at six months with their position at eighteen months so it is no surprise that Table 3 identifies broadly the same trends as Table 2. Those who were inactive after eighteen months, in comparison with those in employment, were, as before, less likely to have sought work urgently at the outset and less likely to be owner occupiers, but were more likely to have no qualifications, to be aged 55 or over, and to have been involved in less-skilled work at H&W. Those who were unemployed, relative to

those in work, continued to be less likely to have been owner occupiers, to have travelled by car to work at H&W, and tended to live closer to H&W.

POLICY IMPLICATIONS AND ISSUES FOR FURTHER RESEARCH

The overall findings from the follow-up survey of May 2002 are reassuring employment levels have increased. The vast majority of those who were in employment six months after the redundancy were in work after eighteen months, and a significant proportion of those who were unemployed had made a transition to employment. This, taken together with other information on employment type and quality, indicates that most of the former H&W workers have adjusted to their

"What Happened to the Former Harland and Wolff Workers"?

- A Further Follow Up

Ian Shuttleworth, QUB & Peter Tyler, University of Cambridge

changed circumstances and have gradually overcome the effects of the redundancy.

The results of the follow-up survey also show that the labour market status of the former H&W workers at eighteen months is strongly influenced by their position after six months. This indicates that the key period for readjustment into the labour market is within six months of the redundancy. One implication of this is that the most effective time for intervention is within a few months of the redundancy as this initial period sets the context for later developments.

Provision for redundant workers is currently through early access to New Deal on a voluntary basis and through the various elements of the 'Focus for Work' initiative. The fact that a substantial minority of redundant workers considered training but that only 9 took it up may point to deficiencies in generic training programmes. On the other hand job-specific training which was funded under the Bridge to Employment element of Focus for Work was successful in helping the exshipyard workers make a relatively successful transition to the aerospace industry. This suggests that greater emphasis on

developing job-based training opportunities for workers in transition might be the most effective form of government intervention.

The tendency of those who were unemployed or inactive to have poorer qualifications supports the case for training interventions to increase employability. However, the analysis also shows that other factors are important in shaping the adjustment process and that training is only one part of the policy mix necessary to help the efficient re-absorption of redundant workers into employment since those who were unemployed or inactive after six or eighteen months differ in a number of other ways from those who were employed. Geographical factors, for instance, seem to be significant. Workers who were less likely to use their own cars to travel to work at H&W, and who lived close by the site, were older, tended to be in lower-skilled occupations, and appeared to be more tied to the locality around H&W and therefore perhaps less likely (or able) to move widely in the Belfast labour market to get work. Ex-workers who remained unemployed were also significantly less likely to own their own cars than those employed, in training, or inactive and this, together with evidence on the

locations where work was found by those in employment, supports the hypothesis that geographical immobility in the local labour was at least a partial explanation of unemployment. But in a broader spatial sense, the redundant workers seemed to be relatively immobile few had left the Belfast area to work (although some mobility associated with sub-contracting was noted) but this is hardly surprising. Belfast has the greatest concentration of jobs in NI with other towns unlikely to have its numbers and diversity of jobs so rather than move elsewhere in NI if a job could not be found in Belfast, the chances are that the ex-H&W workers would have to look outside NI.

The diversity of postredundancy experiences, and the ways in which they are related to personal characteristics, indicates that there will always be a section of redundant workers who will not be absorbed into the labour market even if there were various changes in policy involving, for example, training and geographical mobility. The workers who are not re-absorbed tend to be those who are older and also lacking qualifications. For this group, the barriers to employment would be formidable or, perhaps by choice, after forty years or



"What Happened to the Former Harland and Wolff Workers"? - A Further Follow Up

Ian Shuttleworth, QUB & Peter Tyler, University of Cambridge

so in the labour market, they may elect to become inactive and not to seek work. This again points to the need to focus interventions on the groups most likely to benefit.

Further work on redundancies will focus more on the paths that the former H&W workers followed from redundancy, to learn more about how and why they moved between unemployment, employment, inactivity and training. This information will be coupled with that from other redundancy studies to learn more about the dynamics of reabsorption into the labour market so as to draw general policy conclusions which can be applied across a range of redundancy situations.

Employability Taskforce - An Update

Taskforce Secretariat, DEL

Background

Arising from the Executive **Programme for Government** a Taskforce on Employability and Long-term **Unemployment** was established in March 2001 to drive forward action on employability and reduce long-term unemployment. The Taskforce was chaired by the Minister for the **Department for Employment** and Learning and includes senior representation from across Departments, the Northern Ireland Office and the Equality Commission for NI. The Equality Commission is included in recognition of its statutory duty in this area. The Taskforce has met on 10 occasions.

ACTION

The Taskforce commissioned Deloitte & Touche to carry out a Scoping Study to review the existing evidence on employability, to clarify the issues surrounding it and also to develop workable definitions. Details are given in LMB No 15 Chapter 7. A Discussion Document, which was developed from the Scoping Study, was launched by Dr Farren at a meeting with the Business Alliance in June 2001. Since then the Taskforce has completed a series of some 31 engagement meetings and met with organisations representing various sectors: the discussion document was used as a basis for dialogue during this process. Over 2000 Discussion Documents, (with questionnaires) were issued to over 450 organisations and 68 written responses were received. A number of broad themes have emerged and these include benefits issues, childcare provision, educational issues, transition to work, transport. basic/essential skills, employers' attitudes to the Long-Term unemployed etc. These concerns have been discussed with the relevant Departments through bi-lateral meetings prior to production of the Taskforce's Report and Action Plan. The final draft of the Report has

taken longer than

anticipated to prepare, principally due to the complexity of the issues, and the need to consider the recent Report of the West Belfast and Greater Shankill Task Forces.

NEXT STEPS

Due to the suspension of the Assembly, approval of the Executive to proceed with publication of the Report was not obtained. In light of the return to direct rule, DEL is currently considering how to take this issue forward.

FURTHER INFORMATION

For further details contact:

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Farmers - How can Training help them take up Off - Farm Opportunities?

Chris Hughes, Economics & Statistics Division, Department of Agriculture and Rural Development

A recent large-scale survey
of farmers and their
families¹ examined their
interest in being trained to
help secure paid work off
the farm. This article looks at
the potential labour pool
from family farms, and how
aspirations of potential
trainees compare with the
needs of NI employers.

BACKGROUND

Many of those involved in commercial farming have found that this alone no longer provides them with a sufficient income, and have responded by seeking new ways to earn money. Diversifying the activities carried out on the farm, for example into Bed and Breakfast enterprises, has been promoted widely over the last decade. However diversification enterprises typically service niche markets, meaning successful approaches can't be rolled out widely. A second way farmers can boost their income is through paid work off the farm. With farm incomes failing to provide a livelihood for many farming families, off - farm income looks set to become increasingly important.

The data here are derived from a large survey of farmers and their families. Interviews were completed for about 10% of active family farm businesses in NI, with a response rate of 85%. The sample was weighted to estimate the total population living on family farms in NI. This article presents only a small part of the information available from the survey. More details are available in the main report or by special request; see the contact information at the end of this article.

CURRENT OFF - FARM WORK

Farmers² were asked if they had done any paid or self - employed work away from the family farm.

Table 1 shows that half of all farmers had at some stage worked off the farm, with a quarter regularly working 30+ hours per week in the last year.



PLANS FOR OFF-FARM WORK

We now look at the remaining potential labour pool for off-farm work.

Table 1: Estimated number and percentage distribution of farmers who had ever worked off the family farm

Work off-farm	Estimated	Percent of
	number	farmers
In last year worked regularly:	of farmers	
30+ hours per week	8,390	24
under 30 hours per week	1,800	5
In last year worked occasionally	1,170	3
Previously worked regularly	6,570	19
Had never worked regularly	17,210	49
Total	35,150	100

¹ Farmers and Farm Families in NI, DARD, July 2002. See also Labour Market Bulletin No 14, Chapter 15.

Farmers and business partners, referred to here for brevity as "farmers".

Farmers - How can Training help them take up Off - Farm **Opportunities?**

Chris Hughes, Economics & Statistics Division, Department of Agriculture and Rural Development

Table 2: Estimated number interested in obtaining work off the family farm

Currently looking for	Estimated	Percent
off-farm work	number	
	of Persons	
Yes: away from farming	1,200	5
No: but might if farming didn't improve	6,400	27
No: don't know if will in future	430	2
No: not likely ever to look	15,360	66
Total	23,410	100

A selected group of household members who were heavily dependent, either directly or indirectly, on the income from farming³ were asked if they had plans to find off-farm work; see Table 2. Two thirds of respondents had no intention of seeking work off the farm, even if farming didn't improve, mainly because of current farming or family commitments, or due to their age/health. This indicates that around 7,600 people were looking or might look for off-farm work. They were asked if there were any obstacles to them taking up such work and only 2% stated that having "No skills or experience" was a problem.

TYPES OF JOBS SOUGHT

Having established the demand for off-farm employment, the survey then looked at the sectors of the economy where jobs might be sought. The answers can be compared with data4 on vacancies that

are hard-to-fill, due to external skill shortages.

Males were primarily interested in work as drivers (35%), in trades (30%) or unskilled work (20%), concentrating on the construction, agriculture or transport sectors. Information on 'current' hard-to-fill vacancies shows that drivers are difficult to recruit, as are many types of tradesmen. There is no reported difficulty in getting unskilled labour. However, projections⁵ to 2010 suggest that employment may decrease in construction and manufacturing, leading to an easing in demand for skilled trades. While craft skills will still be sought for these 'traditional' sectors, strong employment growth is expected in other sectors, such as public and private services, and distribution/ transport. In the longer term the strongest growth in labour market demand is likely to be for occupational groups such as professionals and associate professionals, personal

service occupations, and sales and customer service occupations.

In the survey females expressed interest in clerical/secretarial jobs (35%), personal services (27%), sales (14%) or professional/managerial jobs (13%). The main industrial sectors of interest were health care, retail and hotels and catering. Employers have reported hard-to-fill vacancies in all of these occupations. Again, projections to 2010 suggest that the strongest employment growth will take place in the public and, particularly, the private service sectors. It seems, therefore, that compared to males, females are interested in occupations that are likely to provide more numerous employment opportunities.

CURRENT SKILLS THAT PEOPLE HAVE THAT WOULD HELP WITH FINDING **OFF-FARM WORK**

Those in the survey who had expressed some interest in off-farm work (representing 7,600 people) were asked if they had any skills that would help them find such work; see Table 3. The majority (71%) of those interested in off-farm work said they did have such skills.

Some mismatches between current skills and future

Most farmers, plus some economically inactive

household members, all under retirement age

Labour Market Bulletin No 15, Chapter 11
 Labour Market Bulletin No 15, Chapter 12

Farmers - How can Training help them take up Off - Farm Opportunities?

Chris Hughes, Economics & Statistics Division, Department of Agriculture and Rural Development

Table 3: Current skills available among those currently or possibly considering looking for off-farm work

Type of skills or experience that people feel	Estimated number	Percent
would help them find off-farm work:	of Persons	
Experience in job being sought	2,720	36
Experience in similar work	2,200	29
Driving skills (other than private car)	1,350	18
Experience in dealing with the public	740	10
Clerical skills	430	6
Business management skills	400	5
IT skills	400	5
Professional skills (e.g. teaching, nursing)	220	3
Any of the above	5,420	71
None of the above	2,180	29
Total	7,600	100

aspirations were revealed. Driving skills were possessed by 18% of respondents, while 28% said they were looking for driving work. Only 6% reported having clerical skills, compared with 9% considering clerical employment.

This data can be compared with information from the NI Skills Monitoring Survey 2000. Likely shortfalls in areas viewed by employers as "work readiness" skills become apparent. Only 5% of those in the survey of farmers possessed IT skills and 10% experience in dealing with the public. As well as low numbers having clerical skills (6%), there were few people with business management skills (5%).

INTEREST IN RECEIVING TRAINING

Just under half of those interested in off-farm work had no desire to train to help them find work away from the farm. A third were interested, and the remainder might be interested. Raising these proportions to the whole

population indicates 2,700 would be interested in training, with a further 1,230 less positive in their interest. Those who said they would or might be interested were asked what types of training they would like.

Their answers are shown in **Table 4**.

Table 4: Estimated number of people interested in different types of training

Type of training	Estimated number of persons
Use of computers	1,590
Trades	1,200
Driving skills	1,100
Business management	710
Dealing with the public	440
Clerical skills	270
Personal services (e.g. security, catering)	240
Professional (e.g. teaching, nursing)	200
Basic reading and writing	30
Other	210
Total	3,930

Farmers - How can Training help them take up Off - Farm Opportunities?

Chris Hughes, Economics & Statistics Division, Department of Agriculture and Rural Development

CONCLUSIONS

There are areas of training that will help farmers take up off-farm opportunities. In particular, training in computer and driving skills was popular with both employers and prospective employees. However, three further points are worthy of note.

- 1. Farmers must consider employment in expanding sectors of the economy. Many in farming may feel that work in skilled trades or construction plays to their traditional strengths. While demand for skilled trades will continue, other sectors offer greater potential employment growth.
- 2. Training such as clerical work, dealing with the public and in personal services is more aligned with those sectors and occupations where rapid employment growth is expected. Employers currently report a mismatch between the skills they want, and the skills offered by those in the labour market. Training would be most beneficial if it addressed such skill deficits, particularly in growth areas.
- 3. Lastly, although employers report a need for staff with better basic literacy skills, almost no one stated an interest in such training. In NI one in four adults have very

poor literacy skills⁶. The survey showed that a larger share of farmers had no qualifications compared with other employed persons (55% vs. 16%). Social stigma may stop people seeking literacy training, but the evidence suggests that it could benefit some of those seeking off-farm work.

FURTHER INFORMATION

Further information on the survey of farmers is available from Sheila Magee, Tel 028 9052 4427 or e-mail sheila.magee@dardni.gov.uk

The report is available at www.dardni.gov.uk



Deirdre McGill, Qualifications & Learning Policy Branch, DEL

In responding to the International Adult Literacy Survey (IALS) in 1996, which identified some 24% of the adult population in NI as having low levels of literacy and numeracy, DEL set up the Basic Skills Committee to provide specific advice on the standards, curriculum, tests and qualifications for learners and tutors in the area of adult literacy and numeracy.

The Basic Skills Committee's advice combined with research from GB, the Rol and the USA helped inform the Department to produce a Strategy for tackling the low levels of literacy and numeracy in the adult population in NI.

The Executive's Programme for Government sets out its vision and priorities for NI which includes:

"Our aim is to allow everyone to fulfill his or her personal development and contribute fully to societal development. To support citizens participation in a modern work force and have lifelong learning opportunities to update their skills"

Improving literacy and numeracy levels will contribute to helping this vision become a reality. Low levels of literacy and numeracy are associated with a wide range of social, economic and personal difficulties. A study by Brynner and Parsons in 1997 entitled 'It Doesn't Get Any Better' found that those with the lowest levels of literacy are:

- up to five times more likely to be unemployed or out of the labour market;
- likely to have more children and earlier;

- more likely to have children who also struggle with literacy in adult life;
- more likely to be in poor health;
- more likely to live in rented accommodation;
- more likely to suffer depression;
- more likely to be homeless;
- less likely to take part in public activities or local community groups; and
- over-represented in prisons and young offenders institutions.

INDIVIDUAL

Those employed adults who performed at the lowest levels of literacy and numeracy had a low income. Research also shows that they are most likely to end up in unskilled or semiskilled work, twice as likely to have been made redundant or sacked from their first job and four times more likely to experience long-term unemployment.

FAMILY

It is likely that parents with limited literacy and numeracy skills will be less



Deirdre McGill, Qualifications & Learning Policy Branch, DEL

able to give their children a good start in life or to help them if they have problems.

SOCIFTY

Adults with higher levels of literacy and numeracy can help reduce the levels of crime, social welfare requirements and poverty. Addressing the weaknesses in literacy and numeracy could have a significant positive consequence for the criminal justice system, the public health and social welfare agendas, and will increase the likelihood of people participating in the democratic process and community regeneration.

ECONOMY

People at work need good literacy and numeracy skills to be able to cope with the demands of the job, both safely and effectively. A survey undertaken by Gallup in 1993 estimated that poor literacy cost the British economy more than £4.8 billion each year in terms of poor quality control, lost orders, mistakes due to bad communication, and the cost of recruiting employees externally, when poor literacy and numeracy skills among the existing staff limit internal promotion.

In NI the Executive's Taskforce for Employability and Long-Term Unemployment² has identified poor literacy and numeracy as major barriers to securing employment. Enhancing an individuals level of Essential Skills can promote greater economic development, social inclusion and cohesion, and possibly, enhance his or her employment opportunities.

Poor literacy and numeracy skills have therefore serious consequences for the individual, the family, society and the economy.

Addressing this serious problem of low levels of literacy and numeracy in the adult population is a key challenge facing the Department. The challenge to reduce the 24% will only happen through engaging new learners and the Department aims that over the next 10 years to reduce by half the numbers of adults with low levels of literacy and numeracy. In the short term the Department plans to engage some 25,000 new learners over the period 2002-2005.

To achieve this target the Department recognises it needs to attract and motivate learners, remove barriers which prevent adults returning to learning, ensure provision that is significantly more flexible and build an improved professional tutor base. This requires a new radical approach and the Essential

Skills for Living Strategy which was launched by the Minister for Employment and Learning, Carmel Hanna, MLA on the 17 April 2002, aims to meet these challenges.

The Strategy has at its heart quality and is built around five key themes:

- Leadership
- Building a structured framework
- Building quality
- Building capacity
- Engaging learners

LEADERSHIP

Building quality provision in Essential Skills is, of necessity, a long-term task. It is only through working in partnership we can address this complex and important task. The Strategy will be led by the Minister for **Employment and Learning** who will establish and chair an Essential Skills Committee to ensure that all strands are fully implemented. This Committee will include key stakeholders from government departments, business and industry, further education and the voluntary and community sectors.

It will be imperative for all the key players in this area to work together in partnership to ensure that the Strategy is implemented



Deirdre McGill, Qualifications & Learning Policy Branch, DEL

in an effective way to ensure that all citizens in NI have the opportunity to contribute fully to their own and societal development.

BUILDING A STRUCTURED FRAMEWORK

The proposed approach to Essential Skills provision in NI must be structured and coherent. A structured framework that includes standards and curriculum, initial assessment, assessment and accreditation and progression is being developed.

A new regional curriculum is proposed which will facilitate learners of different abilities and achievements and different learning styles. An assessment and accreditation regime will also be established to ensure a number of flexible progression routes for learners and to provide a continuum with existing Key Skills qualifications. A tutor training and qualification framework will be established to provide a more professional approach to Essential Skills and a better career change for tutors and thereby raise its profile and professionalism.

Targets

 By January 2003, NI will possess an assessment and accreditation regime

- for Essential Skills at entry level.
- By September 2003, the CCEA will provide advice on assessment methodology for levels 1 and 2 to provide a continuum with Key Skills.

BUILDING QUALITY

The aim of the Strategy is to ensure that all providers of Essential Skills should work to a single set of quality assurance indicators. All practitioners regardless of the setting will be encouraged to evaluate the quality of their own provision. The Education and Training Inspectorate will monitor and evaluate the quality of the provision and will report on standards and outcomes as well as trends in enrolments and progression of the learners.

In response to advice from the Basic Skills committee the Department has commissioned Queen's University's Lifelong Learning Department and the University of Ulster to develop a tutor education framework. The framework is aimed at developing the professionalism of all tutors ranging from volunteers, to new tutors entering the field through to continuous development of existing tutors and management development.

Engaging new learners will be a major test for the Strategy and it will be important to carry out major research to help identify where the learners are and the barriers that prevent them from engaging in learning. This will enable any promotional campaign to create awareness and drive up demand for Essential Skills learning.

Target

By March 2005 to increase the tutor base of new tutors by 50% and for volunteer tutors by 100%.

The Strategy has highlighted the importance of additional research specific to NI recognised in the Strategy. It is necessary to know what works best in NI and how different learners respond in different contexts. In particular, the strategy will answer questions such as the following:

- what are the factors which contribute most to learners' progress and what factors hinder progress?
- how far does adult literacy and numeracy learning impact on the quality of adults' lives, and how can adults continue to build on their progress by transferring their skills to new situations?



Deirdre McGill, Qualifications & Learning Policy Branch, DEL

Targets for Engaging Learners

	2002-03	2003-04	2004-05	Total number supported over the next 3 years
Learners currently supported by colleges and the voluntary sector	5,500	5,500	5,500	16,500
New learners helped with new funding	1,000	2,500	5,000	8,500
Total number of learners	6,500	8,000	10,500	25,000

 how can the most disadvantaged and excluded adults be reached?

traditional providers such as the Further Education and voluntary and community sector;

BUILDING CAPACITY AND ENGAGING LEARNERS

to encourage more innovate and flexible ways to learning;

Significant numbers of new learners will need to be engaged if the Essential Skills for Living Strategy is to be successful. At present, 5,500 adults go through this type of learning which represents only 2% of the target group. Some of the reasons for the low level of demand have been; a failure to attract and motivate learners in sufficient numbers; a failure to make provision which is sufficiently flexible; and the existence of particular barriers which prevent adults with limited formal education from returning to learning.

to recognise excellence in provision and identify champions and examples of excellence:

to engage employers and

trade unions to play an

encouraging employees

to take up learning

active role in

to promote family learning as a vehicle for

opportunities and to enhance their Essential Skills across the population; and

Engaging new learners will be a major test for the Strategy and it will be important to carry out major research to help identify where the learners are and the barriers that prevent them from engaging in learning. This will enable

improving essential skills across the population.

For further information contact: Deirdre McGill, Qualifications and Learning Policy Branch, DEL, Adelaide House, 39-49 Adelaide Street, Belfast, BT2 8FD.

any promotional campaign

to create awareness and

Essential Skills learning. The Strategy sets out the direction to be taken to

ensure the number of adults

with low levels of literacy and numeracy is reduced.

The challenge is significant

participation of a range of

literacy and numeracy, not

just those who work in the

those in the community and

voluntary sectors, employers

education sector but also

and trade unions and the

partnership, everyone can

interests of addressing this

distinctive and important

general public. The challenge is huge but, in

work together in the

issue.

and requires the active

stakeholders across NI.

Many people have an

interest in developing

drive up demand for

to expand their provision significantly across

The Strategy recognises the

importance of meeting these

challenges. Some examples

in the Strategy are the need:

Telephone: 028 90 257785

Dave Rogers and Christine Thompson, Research and Evaluation Branch, DEL

The New Deal was introduced in NI in April 1998 in line with Great Britain, initially for young people aged 18 to 24 who had been unemployed for six months or longer. Later in the year a New Deal for longer term (18 months+) unemployed people aged 25 or over was introduced on a pilot basis. This was subsequently replaced by an enhanced New Deal 25+ programme in April 2001. In April 1998 unemployment in NI, as measured by the seasonally adjusted claimant count, stood at 57,900: today (August 2002) it has fallen to 35,300 (a 39% decrease). Unemployment in the New Deal target group for young people has fallen from 6,448 to 2,790 (a 57% decrease) over the same period: and in the 25+ target group, it has fallen by 11,848 to stand at 2,890 (an 80% decrease).

While other factors have impinged on the level of unemployment over this period, the figures appear to show that New Deal has contributed significantly to the reduction in long-term unemployment. The aim of the evaluations of New Deal, the first phase of which have now been completed, is to gauge what the impact of the programme has been on participants and on their chances in the labour market - and hence, on unemployment. Previous articles in the Labour Market Bulletin have reported the findings of earlier evaluation reports on New Deal, principally the findings of the qualitative work and case studies of service delivery, and the earlier stages of the quantitative evaluation: readers are referred to the most recent previous article for details of earlier work¹.

This article summarises the findings of these reports, outlines further work currently in progress, and draws out a number of main findings that have emerged from the whole programme of evaluation to date.

this year, two from the quantitative evaluation of New Deal and an analysis of the JSA register.

Quantitative Work with Individuals (Survey of Participants). As in GB, a cohort approach has been adopted, with individuals entering both New Deals in the period May - August 1999 included in the cohort. This work was carried out by KPMG and Economic Research and Evaluation, with interviews by a local survey firm, Research and Evaluation Services (RES). Initial interviews took place with 1,600 New Deal participants around 6/7 months after entry to New Deal, i.e. in early 2000. These interviews collected data on previous labour market experience; jobsearch patterns; aspirations of New Deal participants; experiences of the first few months of New Deal and so on. The interim findings from this initial stage were reported in a previous Bulletin and full evaluation reports are available².

The initial survey was followed by a second round of interviews ("Stage 2") with as many of the same sample as programme and the

The Party State of the Party of

EVALUATION REPORTS were able to be contacted some 9/12 months later -Three New Deal Evaluation i.e. the period November reports have been published 2000 - April 2001. By this time most of the participants had left the

See Rogers, D and McFadden, E (2001) "New Deal Evaluations - State of Play" Labour Market Bulletin No. 15 (November 2001) Chapter 25. The Bulletin and other New Deal publications are available from Research and Evaluation Branch, DEL, Adelaide House, Adelaide Street, Belfast and on www.delni.gov.uk

² KPMG et al (2001) Survey of Participants - New Deal for 18-24 Year Olds - Stage 1 Report. New Deal Evaluation Report No.3, Department for Employment and Learning. Also KPMG et al (2001) Survey of Participants - New Deal Pilot for 25+ - Stage 1 Report. New Deal Evaluation Report No.4, Department for Employment and Learning

Dave Rogers and Christine Thompson, Research and Evaluation Branch, DEL

survey collected information on their experiences of the programme and subsequent labour market activity, for example jobsearch and employment including wage levels and job satisfaction.

The overall response rate for Stage 2 was just under 60%, yielding 930 interviews. The response rate for the participants on the New Deal for 18 to 24 Year Olds (55%) was lower than that for those on the New Deal Pilot for 25+ (67%), perhaps unsurprising given the more mobile nature of the younger age group. Two reports - one on the New Deal for 18 to 24 Year Olds (ND18 to 24) and one on the New Deal Pilot for 25+ (ND25+) will be published towards the end of 2002 - preliminary findings are

♦ There is some evidence that undertaking a New Deal helped develop participants' personal capacity, thus enhancing their employability and improving their chances of making and sustaining transitions into employment. This impact was much less marked in the 25+ age group than for the 18 to 24 year olds. Young people especially

- gained work experience and work-based training in excess of what they could have received if they had not gone on an option, and ND 18 to 24 options participants were likely to register positive change in qualitative aspects of capability, especially selfconfidence. These participants were also generally positive in their view of the helpfulness of New Deal and its impact on their job prospects. **Evaluation outcomes** for options participants on the Pilot 25+ programme were much more equivocal. There was some improvement in training, development, and capacity-building, but these were modest. Views of participants on the options were sharply divided: those who took the subsidised employment route were generally positive; those on the Intensive Activity Period (IAP) and the **Education and Training** Opportunity (ETO) were negative.
- For both the New Deal for 18 to 24 Year Olds and the New Deal Pilot for 25+, the subsidised employment option proved more effective at getting people into

- jobs than other options: this was the case even when controlling for other factors (for example, educational qualifications).
- ♦ There is mixed evidence from the evaluation of the success of the Full Time **Education and Training** Option (FTET) for the New Deal for 18 to 24 Year Olds in getting people into sustainable employment. The evaluation findings in relation to the Voluntary Sector and **Environmental Options** of ND18 to 24, and the IAP/ETO of the ND25+, suggest that participants were not likely to make a transition into employment following participation, and if they did they experienced difficulties in sustaining it.
- ◊ Views of New Deal from participants on the ND18 to 24 were generally positive; they generally support the view that New Deal should be compulsory; but there was a degree of concern that sometimes New Deal drove people into doing what they didn't want to do and what didn't suit them. ND25+ participants were much more negative than



Dave Rogers and Christine Thompson, Research and Evaluation Branch, DEL

- their younger counterparts, thinking especially that, apart from the subsidised employment element, New Deal did not help them find work.
- ♦ New Deal tended to work better with more "job-ready" participants - i.e. those with higher levels of qualifications and with a recent labour market history. It also tended to operate better in areas not experiencing high levels of deprivation. It worked less well with those at furthest distance from the labour market - both in literal and figurative terms.
- **Analysis of Claimant** Count Data - NIERC. The Northern Ireland **Economic Research** Centre (NIERC) and University of Southampton (UoS) have carried out an analysis of the New Deal for 18 to 24 Year Olds using data from DETI's longitudinal database on Jobseekers' Allowance (JSA) claimants: the report was published earlier this year³. The NIERC analysis centred on the estimation of hazard functions (rates) (which show the probability of the 18 to 24 age group leaving the JSA register after different lengths of time

- unemployed) before and after the introduction of ND 18 to 24. Similar hazard functions for the 25-29 age group are used to estimate the counterfactual (i.e. what would have happened to the 18 to 24 age group had ND 18 to 24 not been introduced). The main findings of the research were:
- ♦ ND 18 to 24 has significantly reduced unemployment duration for young people. Females are 45-50% less likely to experience an unemployment spell of one year or more. Males are 25-30% less likely to experience an unemployment spell of one year or more.
- ♦ Hazard rates for exits to employment have increased by a factor of around 25% for females and around 10% for males over shorter unemployment durations as a result of ND 18 to 24. Hazard rates for exits to education and training have increased by a factor of 100% or more following three months of unemployment. Hazard rates for exits to other benefits have increased by a factor of around 50% following six months of unemployment.
- ♦ The effects of ND 18 to 24 on hazard rates for exits to employment are stronger at shorter unemployment durations for both males and females. The effects of ND 18 to 24 on hazard rates for exits to education and training are stronger after longer unemployment durations (three months plus). The effects of ND 18 to 24 on hazard rates for exits to other benefits are stronger after six months of unemployment. There are no unemployment durations for which ND 18 to 24 has consistently reduced hazard rates. This suggests that there is no strong 'substitution effect' where young people on ND 18 to 24 take jobs that would have otherwise been taken by young people in their first few months of unemployment, yet to enter ND 18 to 24.
- ♦ ND 18 to 24 has had significantly stronger effects for females than for males. Other than this, the results do not suggest ND 18 to 24 effects have been significantly stronger for certain 'types' of young people in any consistent way, although older young people and those with



Dave Rogers and Christine Thompson, Research and Evaluation Branch, DEL

fewer qualifications may have benefited more from ND 18 to 24 in terms of increased exits to education and training than their younger or more qualified counterparts.

ONGOING AND FUTURE EVALUATION PROJECTS

New Deal changed in 2001 and again in 2002. The initial New Deal Pilot for 25+ was redesigned in 2001, and, within the constraints imposed by a UK - wide programme, some of the emerging findings from the evaluation of New Deal were taken into account - for example the Intensive Activity Period was adapted and expanded to be relaunched as the Preparation for Employment Programme (PEP). Further work will be needed to evaluate whether these changes have sufficiently enhanced the programme. Similarly, an initial review of New Deal for 18 to 24 Year Olds, which took account of recent New Deal evaluation reports, was carried out in 2001. As a result of this review a number of enhancements are to be introduced throughout 2002/2003, including a restructuring of the FTET option. The time spent on this option will be reduced from a year to 6 months and participants are now allowed to move directly onto the

Employment Option after their time on FTET. An other aspect of the programme that will change is the prevocational training which will now be called Essential Skills Training and is to be extended from 20 to 26 weeks. Other projects include

- Survey of New Deal Leavers. This is designed to enhance data which is derived from DEL's database of New Deal participants. Survey work commenced in April 2002 and was completed in June. Publication of initial findings will take place soon and further in-depth analysis is planned which will give more information on the extent to which New Deal participants move into jobs; the sustainability of any employment obtained; and further labour market progression. Also, the survey will pick up for the first time those who have been through the New Deal cycle on more than one occasion, and will yield valuable data on this very important group.
- Analysis of Claimant
 Count Data by DETI. The
 Statistics Research
 Branch of the
 Department of
 Enterprise, Trade and
 Investment (DETI)
 maintain a longitudinal

database of all Jobseeker's Allowance (JSA) claimants since 1994. The analysis carried out by NIERC (as mentioned earlier) uses these data. From this, they are able to carry out a range of analyses including the propensity of individuals or groups to re-claim JSA, and analyses of the duration of claim for particular sections of the unemployment register. These data are particularly useful in the New Deal context as being in receipt of JSA is necessary for entry to New Deal, and all of those who are in the New Deal target group should join the programme. DETI have already carried out some initial analyses of the New Deal target groups which were reported on in earlier bulletins. Further work will progress as agreed between DEL and DETI.

Some Overall Conclusions

Now that a number of evaluation reports have been concluded, covering both quantitative and qualitative elements of the evaluation, it is possible to identify a number of overarching conclusions about the way New Deal has worked so far [see **Box 1**].



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Box 1

NEW DEAL EVALUATIONS - KEY POINTS

- New Deal has had a positive impact on many participants. The evaluations have found a consistent pattern of positive impacts for substantial numbers of participants. In particular, New Deal has worked well with the younger age group; those with positive experiences of and attitudes towards the labour market; and those living in areas with a generally buoyant labour market. The benefits have been noted in terms of skills acquisition; self-esteem and confidence; and employment. The work of NIERC has demonstrated in relation to the 18 to 24 age group a modest but significant reduction in unemployment attributable to the programme, and this is backed up quantitatively by the findings of the survey of participants and qualitatively by the work of PricewaterhouseCoopers in the qualitative and case study research. There is also some evidence that the general approach of New Deal the philosophy, the element of compulsion, the organisation of the programme etc was in general supported by many in the younger age group.
- New Deal worked less well with participants at greater distance from the labour market, for example the older and generally longer unemployed; those living in areas with more difficult labour markets, those with poor or no qualifications. Participants with these characteristics not only perform poorly in terms of measurable labour market outcomes especially moves to employment but were also less successful than others in terms of self-confidence, skills acquisition etc. Their views of the programme were generally negative. These are the most difficult group to help and many of the factors for example local labour market conditions are outwith the scope of a programme such as New Deal. Some of the factors that contributed to the older age groups poor perception of the programme for example, the short length of some of the New Deal options and their content have been addressed, but it is clear that New Deal would wish to continue to examine its performance with participants with these characteristics if it is to make substantial inroads to reducing social exclusion.
- Structure of Programme. The general organisation of the programme was generally supported by the evaluation that is, the introduction of a Personal Adviser who can then help participants to identify a course of action for them including, if appropriate, participation on a New Deal option. Personal Advisers were seen as adding value to the process, and links with employers through the employment option were seen as particularly helpful. The degree of choice and the ability to select options which were appropriate to the needs of the participants are a step forward in delivering this type of service. However, there are a number of caveats. The role of the Personal Adviser was seen as crucial and thus when clients did not have access to a well-informed, supportive Personal Adviser or when Personal Advisers changed too frequently the programme was perceived to work much less well. Also, a significant minority of participants especially on ND25+ considered that they were placed on options that they did not want and felt that they would not benefit from. A programme such as New Deal especially given the element of compulsion within the programme must avoid becoming supply rather than demand led. There was also the view echoed by Personal Advisers that some of the New Deal "rules" were overly restricted and that Personal Advisers needed more autonomy to make decisions in conjunction with clients.
- Options. The subsidised employment option was seen in a generally positive light and was demonstrated to help improve employment prospects. The Full-Time Education and Training Option of the ND 18 to 24 assisted in enhancing skills acquisition amongst many participants, although there was mixed evidence of the success in getting people into sustainable employment. However, there was a significant "tail" of those who had not progressed in the labour market, and the definitive view of FTET will have to await further evaluation. The Voluntary Sector and Environmental Options of ND18 24, and the IAP/ETO options of the ND25+ (since changed) were not associated with net positive outcomes. Given that people with few and no qualifications and with poor labour market histories are more likely to take these options than the employment option, this will have to remain an area of scrutiny.



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Evaluation of Worktrack - Some Findings and Conclusions

Martin Carey, DTZ Pieda Consulting

The Programme

Worktrack was introduced in August 1999 to provide training and employment opportunities for those individuals who are not suited to or ineligible for other DEL labour market interventions, largely to replace the Action for **Community Employment** Programme (ACE). This meant that it focussed largely, although not exclusively, on the non-JSA (Jobseekers Allowance) long - term unemployed, a large proportion of whom are women returners.

Box A: Main features of the Worktrack programme

- temporary employment programme lasting 26 weeks (6 months) with fulltime or part-time opportunities
- participants earn a wage, in line with the National Minimum Wage
- provision for an Advisory Access Programme (AAP) comprising a series of up to 6 interviews/sessions with potential participants to help providers perform an outreach function
- each participant is provided with an Individual Training and Employment Plan (ITEP)
- approximately 30-45% of employees' time should be devoted to personal development training
- · participants should also receive support in job search skills

Delivery of Worktrack was contracted to provider organisations. A Lead Provider was responsible for the conduct of the programme in each of the 26 District Council areas including arranging the job placements with a variety of secondary providers, largely community/voluntary sector organisations. The main features of the programme are outlined in **Box A**.

WHAT WAS DTZ PIEDA ASKED TO DO?

The brief we were given for this assignment had something of a dual aim. First, the evaluation had a specific and historic focus on assessing how Worktrack had performed between inception and the commencement of the evaluation in Summer 2001. Second, there was a broader and more forward looking consideration of how and

where Worktrack should best be accommodated within DEL's planned future strategy for training and employment assistance to unemployed adults. In respect of this wider context the most important issue was the development of Focus for Work (FfW) which brings together a number of existing programmes for unemployed adults under one "umbrella" along with a new range of provision. The latter includes Employment Review Interviews, an extended network of JobClubs, and a new programme called Training for Work.

HOW DID WE GO ABOUT IT?

Our approach to this evaluation combined both qualitative and quantitative research techniques, the main elements of which are summarised below:

22

Evaluation of Worktrack - Some Findings and Conclusions

Martin Carey, DTZ Pieda Consulting

- Face to face interviews with a range of key stakeholders to discuss perspectives on Worktrack and on work experience and training needs of unemployed adults generally.
- Consultations with a sample of lead and secondary providers (work placement employers) to discuss experiences of Worktrack from a delivery viewpoint.
- Focus Groups with Worktrack participants to gain a detailed "user" perspective and further understanding of the needs of the client group.
- Face-to-face survey of 249 past-participants to facilitate a thorough analysis of the labour market impacts of Worktrack.
- Telephone survey of Worktrack "non participants" (i.e. individuals completing AAP but not the work placement element) to provide comparative information and discuss reasons for not continuing with the programme.

These field work elements supported a detailed analysis that in turn produced a range of findings relating to various aspects of the programme. The findings are summarised in the remainder of this article.

LABOUR MARKET OUTCOMES - A COMPARATIVE ANALYSIS

The key objective of Worktrack is to help participants to establish a work history so as to improve their prospects of securing sustainable employment. Thus, a key outcome indicator for the programme is the proportion of participants finding employment. A comparative approach to assessing the effect of Worktrack on post placement transitions into employment was adopted.

Comparisons between Worktrack and other labour market programmes in relation to post-programme labour market outcomes are set out in **Table A**.

The most relevant and direct comparison or benchmark for Worktrack is its predecessor ACE. As demonstrated in **Table A** the proportion of participants in a job subsequent to their Worktrack placement (40 per cent) was not significantly different from the proportion reported in the Cambridge Policy Consultant's evaluation of ACE (42 per cent).

There are a number of possible reasons for this,

including perhaps the shorter duration of the Worktrack programme (6 months as opposed to 12 with ACE) which was a constant refrain amongst providers and participants and possible differences in the mix of attributes of participants in terms of job readiness and capacity to find employment. However, overall the rate of flow of Worktrack participants into employment is disappointing when measured against the ACE baseline.

Comparisons between Worktrack and New Deal cannot be made as directly given the significant differences in the respective programmes in terms of target group and programme design. Therefore any conclusions drawn must be seen in this context and cannot be taken, in themselves, to suggest that Worktrack has performed either well or poorly. Nonetheless, some interesting issues are raised by particular comparisons. For instance, the proportion of participants finding employment post -Worktrack was much closer to the out-turn for participants on the New Deal 18 - 24 year olds Voluntary/Environmental Task Force options, which like Worktrack is focused on the Community/Voluntary sector (33 per cent) than to the subsidised employment



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Table A: Labour market status in week prior to interview:

Worktrack compared to other labour market programmes

	Worktrack	ACE	New Deal 18-24			New Deal 25+	
			Subsidised employment	Voluntary/ ETF	Left at Gateway without going on an option	IAP/ETO	Subsidised employment
	%	%	%	%	· %	%	%
Employed	40	42	70	33	45	19	60
Full-time	17	24	68	32	39	13	42
Part-time (LT 30 hours pw)	23	18	2	1	7	6	18
Government scheme	1	n.a.	4	8	5	4	2
Education/training	2	3	0	9	9	1	0
Unemployed	29	44	20	46	29	68	33
Looking after home	20	7	2	2	6	4	0
Other inactivity	8	4	4	2	6	4	4
All	100	100	100	100	100	100	100

Sources: DTZ Survey of Worktrack Participants; CPC Evaluation of ACE, 1998; KPMG/RES/ERE Survey of New Deal Participants, 2002. Figures refer to labour market status after having left each programme.

option, which is focused on the private and public sectors (70 per cent). The New Deal for 25+ subsidised employment option also produced a significantly higher flow into employment (60 per cent) than did Worktrack. All of these New Deal options are of six months duration. This suggests that, while there may be a set of Worktrack participants who would benefit from a longer placement duration, the employment outcome is perhaps rather more affected by the sector in which the placement is located than the duration of the placement per se.

Finally, in relation to labour market outputs it is worth

noting that a significant proportion of Worktrack participants withdrew from the labour market entirely subsequent to their programme placement. The 28 per cent inactivity rate for Worktrack participants (looking after the home plus other inactivity) was disappointing when considered against the objectives of the programme, which are about enabling participants to move into sustainable employment beyond the period of their placement.

SO IS THERE A CONTINUING RATIONALE FOR WORKTRACK?

Notwithstanding its apparently disappointing

performance in moving people into employment, particularly vis-à-vis ACE, the evaluation found that a rationale for Worktrack continues to exist. Developments in recent years in the economy, labour market and in the suite of provision available to assist the unemployed back into work have combined to create a clear niche for a programme like Worktrack. This rationale is based mainly on the following.

 The continuing high level of Long-Term Unemployment in NI, particularly relative to the rest of the UK.



Growing awareness of the large numbers of economically inactive within the Long-Term Unemployed and the presence within their number of "hidden labour reserves". With prevailing low levels of unemployment and a tight labour market, future growth in employment in NI and maintaining the impressive economic growth of the 1990s will require the attraction of these economically inactive into the work

force.

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- The introduction of the New Deals, which has brought about a radical shift in the provision of training and work experience assistance to the unemployed. With New Deal largely catering for the needs of the JSA Long-Term Unemployed, there remains a substantial group of non-JSA unemployed with vocational training and work experience needs.
- An imbalance in training and employment programme provision for men and women. While males make up 85% of the claimant Long-Term Unemployed, most of the Long-Term Unemployed not in receipt of JSA are women. Since New Deal, the emphasis of training and employment

programmes has generally shifted to those in receipt of JSA and New Deal has thus disproportionately favoured men. There is a need for other provision to make up for this, presenting a strong equality argument for a programme such as Worktrack to cater for the needs of unemployed women.

OTHER KEY FINDINGS

As well as assessing the outcomes of Worktrack and exploring the rationale for its continued existence our evaluation produced various other findings. These include a more positive assessment of the programme's impacts when wider, more qualitative criteria and evidence than transitions into employment are taken into account. The key findings, which are outlined below, relate to various employability, as opposed to employment, impacts in terms of participants' skills, capacities and attitudes and also to the processes involved in delivering the programme, in which some significant room for improvement was identified.

Capacity Building -

Considerable employability impacts were observed from the Worktrack programme. These centred on "softer"

skills, i.e. self-esteem, confidence, motivation, awareness in relation to work, although a number also attributed a decision to obtain vocational qualifications to their participation in Worktrack. Worktrack seems to have been of greatest benefit to those who had been removed from the labour market for the greatest time and less to those with more developed skills.

Accessibility - Worktrack has attracted individuals who, largely through lack of confidence/capacity/recent experience, were reluctant either to attempt to return to the labour force directly or to become involved in more formal academic/ vocational training. Therefore, the programme's provision of a practically based introduction or reintroduction to the world of work was appropriate to the needs of many of the target group. The use of placements in the Community/Voluntary sector, seen by many as an environment more conducive to development than the private sector, was important in encouraging the participation of some for whom the perceived pressures associated with the latter sector would have been off putting.

Motivation - Partly as a result of the previous two points, Worktrack had strong



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motivational impacts on participants in respect of building or reinforcing a desire to achieve sustainable employment. However, we would add the slight caveat that it also gave a degree of cause for some concern around the involvement of some participants in voluntary work prior to Worktrack. This raised questions around motivation and additionality relating to the possibility of Worktrack being used in a minority of cases to "formalise" existing voluntary work.

Variety of provision - The Worktrack "experience" varies considerably from area-to-area and provider-to-provider. This probably reflects the dilution of the programme among a large number of lead providers producing a significant degree of inconsistency in delivery.

Profile - Awareness of Worktrack appears to be generally very low. The programme has to some extent been "lost" among other labour market interventions, notably the much larger New Deal which was introduced around the same time.

Advisory Access Programme (AAP) - Our research did not reveal any evidence that AAP has been used to a significant extent in an outreach capacity. More often, it has assumed the

function of preparation for Worktrack when participants have approached or been referred to providers. However, even in this preparatory sense the use and provision of AAP has been inconsistent, and there was considerable evidence that the experience for many was often a fairly perfunctory affair.

Job Search and Exit Assistance - The level of support provided to participants during, and particularly after, their Worktrack placement also gave cause for concern, appearing patchy at best.

Social Need - the programme does not seem to have attracted those among the non-JSA Long-Term Unemployed experiencing greatest social need. In our pastparticipants survey almost three-quarters (72%) of respondents indicated that their partners were in employment in the week prior to interview. The level of unemployment among partners was as little as 9%. This finding possibly reflects the waged nature of Worktrack which, while making it attractive to many non-JSA unemployed, may be a barrier to those receiving significant benefits.

Incapacity and disability -Our survey showed that only 2.4% of participants had been on sickness or incapacity related benefit immediately prior to commencing Worktrack. The apparent failure of providers to attract this group raises the question of whether there is a need for thematically based providers to provide specialist outreach to hard to reach groups.

Work placement postings -

The vast majority of Worktrack postings are in Community/Voluntary sector organisations, as was the case with ACE. While, as mentioned, this is appropriate to the needs of a significant number of participants, it results in something of a lack of choice for participants in relation to postings and their allocation tends to be supply as opposed to needs driven. This point is also important in the context of the points made in our comparative analysis of labour market outcomes relating to the typically higher rates of transition into employment arising from private/public sector focussed programmes.

Training - Results from our survey suggest that training provision for Worktrack participants is generally poor with 76% of respondents estimating that less than 15% of their time on their work placement was spent on personal development training. Only



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10% of participants said they had an Individual Training and Employment Plan for the Worktrack placement that set out the level and type of training required.

WAY FORWARD - WHAT SHOULD WORKTRACK LOOK LIKE IN FUTURE?

Despite its only modest success in terms of transitions into employment, our evaluation concluded that the basic Worktrack model (a wage-based programme offering a job placement as its main focus) is appropriate to the needs of the non-JSA unemployed, particularly women returners. Furthermore, our qualitative research revealed largely positive views of the programme including that it represented an improvement on ACE. In particular it appears to have taken a greater focus on the needs of the individual as opposed to the placement provider and gradually overcome lingering perceptions of the programme as a job in itself. Nonetheless, there remains room for improvement in aspects of the programme's application and processes, as opposed to broad structure. Accordingly, Worktrack should continue largely along its current lines but with some modifications to delivery.

As mentioned the development of FfW has

implications for the future shape of Worktrack, but with some adjustments the programme can fit well within this context. In particular, Tier 1 of FfW (which concentrates on jobsearch/job-broking activities) largely removes the need for the AAP element of Worktrack. However, our findings in this evaluation also suggested some lessons for FfW, such as a need for an outreach element to the latter delivered by local providers. Likewise, there is a need for an "Advisory Exit

Programme" for Worktrack participants but this also probably extends to the new Training for Work programme within FfW.

Beyond these adjustments to account for the positioning of Worktrack within FfW, our evaluation envisaged that an improved Worktrack would exhibit the features set out in Box B. While some represent additions or substantial changes to the Worktrack model, many of these features do not. Indeed, some could be described as "cultural" changes relating to

Box B: Key recommendations for an improved Worktrack

- Reduced number of providers, selected with a view to their capacity to broker appropriate job placements and oversee the development of participants
- The option to undertake the programme on a waged or benefits plus basis
- More hands-on management of the programme by DEL based on a closer, more collaborative and guiding relationship with lead providers
- Further promotion of an ethos within Worktrack that emphasises progression and the role of the programme as a stepping stone to employment
- A selective approach to recruitment, delivered through FfW, exploring the various options open to potential participants and providing a challenge function to explore motivation
- Greater involvement of individuals from socially excluded backgrounds, e.g. workless households, through outreach delivered as part of FfW, and of people receiving sickness/incapacity related benefits
- Much greater use of private and public sector organisations, alongside the Community/Voluntary sector, to provide job placements
- A needs driven approach to work placements with opportunities sought out to meet individual needs and thorough "scoping" of potential opportunities
- More selective use of secondary (work placement) providers, excluding those which appear to be "churning" participants
- More flexible arrangements for part-time working and increased use of work sampling to facilitate those unsure about their future career direction
- Individual Training and Development plans for all participants to provide a significant element of personal development training



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the more effective implementation of the programme.

The evaluation concluded that discerning selection of a smaller number of lead providers, accompanied by close guidance and monitoring by DEL and the increased involvement of the private and public sectors in the provision of placements will be central to achieving this.

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The Mapping the Spaces of Fear Project

Funded by the Economic and Social Research Council (ESRC), and based in the School of Geography at the Queen's University of Belfast, the research considered the impact of sectarian violence on everyday life in Belfast. It focussed on the experiences and feelings of residents of the city who have to cope with segregation and the strategies and actions of managers in the public and private sectors who have to provide various services within the 'spaces of fear'. To capture the complexities of the effects of fear the project was multimethod. Quantitative and qualitative approaches were used including census material and employment data, in-depth interviews, focus groups and participant observation.

INTRODUCTION

The 'chill factor' - at its simplest the fear of working in a workplace dominated by the 'other' community or in travelling for work-related reasons through or to an area with a majority of the 'other' community - has widely been felt to be important in determining the structure of the NI labour market. From the perspective of equality it has been seen as a cause of labour market differentials as one community or the other, mainly but not only the minority Catholic population, has been discouraged from accessing employment. From the viewpoint of efficiency, the restricted spatial mobility of potential workers could limit the labour pools from which employers can draw thereby perhaps artificially creating local labour shortages. For both these reasons, and also in relation to wider social and political concerns, it is important to analyse the impact of fear on the labour market to inform decisions about employment location, to help policies to encourage social equity, and to discover how workers move spatially in a stilldivided society.

Yet, for a variety of other reasons, it is difficult to capture the general impact of fear on the NI labour market. One reason is its

complex geographical nature. Threats and the fear of violence can be highly localised and/or temporary - for example in interface areas - although the results of actions in these areas can spill over and be felt more widely. A second reason is that the relationship between time, fear, and violence are also far from straightforward. On the one hand, the legacy of high levels of violence during the depths of The Troubles, which created 'spaces of fear' in Belfast and in other parts of NI, influence present-day residential and spatial mobility patterns indirectly. But on the other, despite the Ceasefires of the 1990s, fear and the threat of violence are still contemporary issues. Threats by paramilitaries against teachers and postal workers in January 2002, and the increased social tensions and interface violence of the 'Marching Season', point to the continued significance of sectarian fear in the labour market. The third reason is that individuals can respond to their experiences of fear and threat in many different ways according to factors such as age, gender, car ownership and occupation - they might ignore them; they can take deliberate avoiding action in the short or the long term; or their use of the city might be substantially shaped by generalised and long-



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established traditions of behaviour.

To cope with this complexity it is necessary to examine violence, fear and the labour market from a number of different perspectives using a variety of sources of information. The article, therefore, begins by describing the spatial movements of those who are in employment using data from the 1991 Census of Population, published information from Equality **Commission Monitoring** Returns, and material from the Large-Scale Recruitment Study (see previous Labour Market Bulletins). This section deals quantitatively with how workers moved around and mixed during the 1990s as a measure of the extent to which people work separately or together, and an indirect indicator of how far fear keeps them apart. Then the article uses interviews, collected during

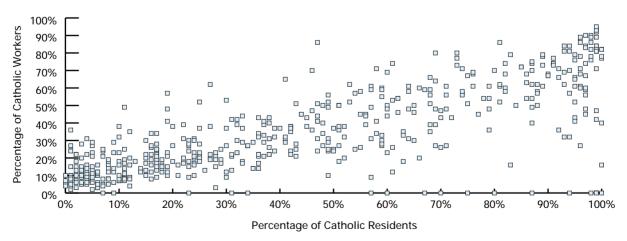
the course of the ESRC Spaces of Fear Project (based at the Queen's University of Belfast), to describe community attitudes to the labour market and geographical mobility. Finally, the article concludes by discussing where and how fear alters geographical patterns of labour mobility.

MIXING IN EMPLOYMENT?

The current most general picture of work-related flows, until the results of the 2001 Census are available early next year, is provided by the 1991 Census of Population. However, because it is old, it provides a picture of mobility at the start of last decade before the Ceasefires. Figure 1 shows the percentage of workers moving between wards who are Catholics by the religious composition of wards to which they go.

This shows, at first sight, that there is a strong positive relationship between the type of residents who live in a ward and the sorts of workers who go to work there. But this overstates the degree to which there was segregation in the NI labour market in 1991. Given the background of residential segregation and the relatively short commuting average distances of NI workers (10.3km in NI as a whole, 6.2km in the Belfast Urban Area, and only 4.7km in Belfast Council area) it is not surprising that the geography of employment reproduces segregation in residential terms. Also, further analysis that goes beyond the comparison of percentage rates shows that there is a far more interesting and complex geography of employment and workplace mixing.





Source: 1991 Census of the Population, Special Tabulations

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The geography of employment in NI is highly concentrated - 15 wards out of 566 had 25% of the jobs and 65 wards had 50% of the jobs in 1991 - and these leading employment wards, often the locations for large employers, act as 'magnets' which draw workers from all areas and all sides of the community. In contrast, it is often the jobs located in segregated residential areas, typically with low absolute worker numbers, that tend to be the most segregated. Furthermore, the analysis of commuting distances of workers, in a wide variety of contexts, shows that there are few differences between Catholics and Protestants in the distances to which they travel for work. To some extent in 1991, therefore, there was evidence that there was segregation in some locations (as measured by wards) but that there were also other areas, often with high absolute

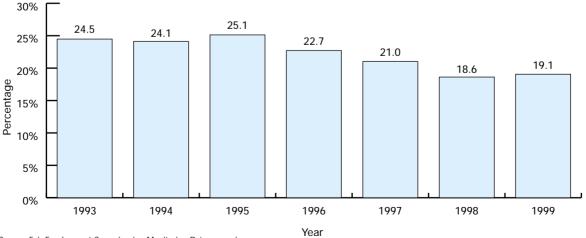
numbers of employees, of substantial mixing.

The use of published Monitoring Returns from the Fair Employment Commission allows us to extend the analysis from geographical areas such as wards to companies and to bring it more up to date. The use of these data is complicated by multi-site companies - at one location they could be entirely Protestant, in another entirely Catholic, and thus internally segregated but overall might seem to be 'mixed' in the overall return that is made. Figure 2 minimises this effect by only considering companies with less than 150 employees - probably less likely to be multi-site than very large employers and with more than 25 employees to limit the effects of small numbers which lead to non reporting when there are fewer than

10 Catholic or Protestant workers. This shows that there has been a decline in the number of workers who work in "highly polarised" companies - more than 90% Catholic or 90% Protestant in the 1990s. In the first year for which data were available - 1993 - some 25% workers were employed in highly polarised companies. But by 1999, this proportion had decreased to less than 20%. Likewise, the proportion of companies that were highly polarised has also decreased through the 1990s in line with these trends in workforce composition. These decreases are the consequence of falls at both ends of the scale as both the number of "highly Catholic" and "highly Protestant" companies decreased. Taken together with the increasing Catholic shares of employment in a variety of occupations and industrial sectors this indicates that



Figure 2: Percentage of workers employed in concerns more than 90% Catholic or Protestant (private sector concerns with 26-149 employees)



 $Source: Fair\ Employment\ Commisssion\ Monitoring\ Returns,\ various\ years$

"Does Fear of Violence Influence where People are Prepared to Work in Belfast"?

Ian Shuttleworth & James Anderson School of Geography, QUB

there was a trend to greater workforce mixing for much of the 1990s although it will be essential to update these data with information from later Monitoring Returns to see if these patterns have continued or been reversed.

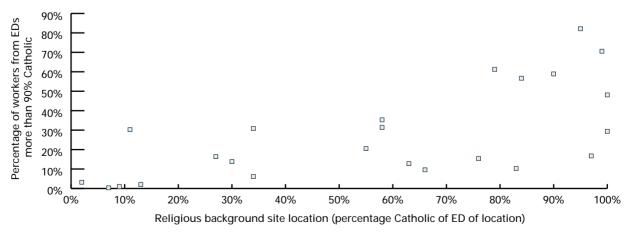
The third data source is the Large-Scale Recruitment Study. This provides information on individual workplaces and workforces -24 in all, covering diverse industries and occupational mixes - located in a wide variety of areas throughout NI. Because data on individual religious background were unavailable, the proportion of workers living in residentially-segregated areas - in this case enumeration districts more than 90% Catholic - is compared in Figure 3 with the proportion of Catholics in the enumeration district where the workplace is located. This is a measure of

the religious background of each employment site. Figure 3 is interesting on a number of counts. Firstly, it shows that there is a general relationship between the share of workers from largely Catholic areas and the religious background of the area in which the jobs are located. But, secondly, it also reveals that there is not a one-to-one match between these proportions. Workplaces located in highly Catholic areas of NI can have small shares of workers from mainly Catholic enumeration districts and, vice versa, jobs in areas with few Catholics can still attract substantial Catholic minorities. In addition, employers in 'new' sectors such as hospitality and tourism, and financial services, can draw workers from all parts of Belfast and from all communities particularly if they have city

centre locations but also if they are located in other areas which can be treated as 'neutral'.

The discussion so far has concentrated on employment patterns. It could be argued, however, that people in employment have already successfully overcome barriers to gain work, and that the extent to which there is mixing in employment therefore understates the problems that have not been overcome by people from deprived communities who might have problems in accessing employment. To begin to take account of this, to examine the way in which fear shapes individuals' everyday life and mobility, and to get insights on how perceptions shape labour market behaviour we draw on some in-depth community interviews which were undertaken in Belfast as part





Source: Large-Scale Recruitment Study

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of the QUB ESRC Mapping the Spaces of Fear Project. These can be used to examine the degree to which sectarian fear influences access to employment as well as to other services and activities.

PERCEPTUAL PERSPECTIVES

The interviews were used to collect qualitative information on the perceptions, decisionmaking, and behaviour of individuals who lived in communities in South and Inner-Fast Belfast, The communities were selected to include neighbourhoods near interface areas, areas that might be termed 'mixed', as well as other neighbourhoods that had a majority of one community or the other, or which were near various concentrations of employment. Most of the communities were ranked as highly socially deprived according to the Robson and Noble indices¹, and they had significant levels of joblessness. Because the interviews were in-depth and collected qualitative information it is not easy to tabulate information from them in a condensed form. Instead, some quotes have been selected to illustrate general themes and to show the types of responses that individuals made. Neither the identity of communities nor individuals is revealed to preserve confidentiality.

On being asked to speak about sectarian fear and the labour market one class of responses, typified by the quote below, drew explicit attention to fear as a major factor in decisions about where to work. This respondent felt unsafe in many locations in Belfast, and almost seemed to arque that fear was a deeply-conditioned reflex that automatically started when forced to travel to areas that were seen as dangerous.

I honestly think fear is a factor. There will be a fear factor, who I'm working with, there's a suspicion. Anybody. Honestly. I really do think, if you're born and bred in Belfast, I truly believe there's a suspicion. It's almost a gene! "Right, you can't work in north Belfast", "you can't work in west Belfast", "you can't work in east Belfast". It automatically clicks in and then the fear starts and you're sweating. I remember going for an interview in the Upper Springfield, that was the worst day of my life. (Male, South Belfast)

Fear is not always experienced in such a direct way. One issue raised by the next quote was that of time and the ways in which fear had changed. There was a widespread opinion, for example, represented by this quote and contrary to

conventional wisdom, that things had got, at least for some people, safer since the Ceasefires although the degree to which workers were recognisable on the way to or from work and thereby put in danger was also raised.

It's not a problem at present, but if the troubles were on people would be hesitant, from east Belfast, going into it, people who maybe would be spotted who had been an ex-Loyalist prisoner, or people who would be known by Nationalists in that area. They would stand there watching for a specific car or specific people coming. That would be a danger that everybody would be wary of. But at the present people don't really have that fear of going into it. (Male, Inner-East Belfast)

This illustrates that the chill factor can be generated by fear not in the workplace, and caused by colleagues' actions, but by the problems of travelling through dangerous areas. Employed respondents in our study, however, were able to overcome these problems by adopting several different avoidance strategies such as using a range of routes for work-related trips or being flexible in the timing of their journeys. These, and similar adaptations could reduce risks sufficiently for employment to be continued in a dangerous area but



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sometimes, especially at a peak of tension, the most appropriate avoidance strategy was to change jobs altogether.

Another aspect of the relationship between time and fear is the way in which events in the past act to create contemporary landscapes of fear. Individuals need not directly have experienced violence to be wary of working in or travelling through certain areas but they could be inhibited by traditions, the reputation of some areas, and the ways in which some areas are understood to be the territory of one community or the other. This is exemplified by the quote below which shows how events in the 1970s shaped the contemporary use of space near the Gasworks site in South Belfast.

But yes I think they're frightened of being on that part of the road cause that part of the road was never seen to be their part of the road. Because in the early 70s it would have took a brave Catholic to walk on this side of the road yet everyone walked on the far side of the road for they made holes in the gas works and they went through the back way.

(Male, South Belfast)

Fear might thus for some people be a direct response

to contemporary events but also for others could be related to the historical legacy of The Troubles and this illustrates some of the problems in analysing it.

The evidence so far presented in this section suggests that sectarian fear, either as a direct response to events or an indirect response to the legacy of past events, plays an important part in shaping labour market behaviour. Yet it would be mistaken to say that it was the only significant factor influencing behaviour or that communities live in high levels of sectarian fear at all times. Some of these caveats are apparent in the following quote which emphasises that there is sometimes a generalised fear of the unknown in the city that hinders spatial mobility despite there being a less cautious attitude to work location:

It was the area. I don't know that area, didn't know the people, didn't know the geography. You're going into somewhere strange. That's my opinion. Like I don't care where I work but I would have that fear. (Male, Inner-East Belfast, aged in 30s)

And, to some degree, other issues that are non-sectarian such as access to transport (but which could interact with the ways in which

sectarian fear is experienced or avoided) are also important as is shown below with reference to training and car ownership:

People who set up training...People who set these things up do not think prior to it about the movement of people and maybe it's easy for them to be mobile because they live on the Malone Road and they have all these fancy cars. You got to remember that all these working class communities do not have cars. Very few of them have one car let alone two. (Male, community worker, South Belfast)

Access to private transport is important in two ways. Firstly, it means that it is possible to access jobs and services over a wider radius than would otherwise be the case everything else being equal. Secondly, access to a car can lessen the effects of sectarian fear; it gives the potential for avoiding strategies, insulating car owners from fear arising from travelling through some parts of Belfast.

Finally, sectarian fear, and the ways in which it is used as an explanation of behaviour can be mixed with other factors and could be a post facto justification of non-involvement in the labour market. Some respondents felt that fear was an important factor that

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prevents individuals gaining work but this was also mixed with the belief that jobs are 'difficult' to get, that many individuals are unwilling to be mobile (perhaps linked to past legacies of violence but perhaps due also to other non-sectarian factors), and the perception that training for many 'new' jobs is insufficient. From this point of view, sectarian fear is only one barrier of many to involvement in the labour market and it can be used as an explanation of the failure to gain work when other causes discourage individuals from entering employment.

CONCLUSION

The article shows some complexity of the impact of sectarian fear on the NI labour market. One of its main conclusions is that, despite the history of violence in NI, and continued threats and harassment of workers, that public reports and perceptions of increasing workforce segregation are not necessarily justified by the available evidence. The ward-level spatial analysis of 1991 Census data indicates that there were some areas. usually wards with high concentrations of workers, which attracted Catholics and Protestants to city and town centres, and major areas of employment in less

central locations. The examination of monitoring data from the Fair **Employment Commission** suggests that many sizeable companies became less segregated in the 1990s. Site-level data from the Large-Scale Recruitment Study shows that, whilst there are workplaces in segregated areas that have segregated workforces, there are other workplaces that are relatively mixed even though they are in segregated locations. New employers in new sectors, in particular, have succeeded in attracting workers from wide geographical catchments and from both sides of the community. Bearing in mind the constraints imposed by already-existing patterns of residential and workplace segregation there is thus considerable evidence that people who gain work can, in some circumstances, overcome barriers associated with sectarian fear in that they work in mixed areas and mixed workplaces.

The evidence is less clearcut in the community interviews. In some cases, sectarian fear does seem to act as a barrier that can prevent some individuals from finding work so the power of fear as a hindrance ought not to be discounted. But even in this evidence, there are other significant barriers than sectarian fear.

Lack of transport, and lack of knowledge of Belfast, for instance, are non-sectarian factors that also seem to limit access to job opportunities although these non-sectarian issues have some links with how sectarian fear is experienced and avoided. Overall, therefore, whilst the importance of sectarian fear is recognised, it should not be exaggerated although the results of the 2001 Census will offer important data to measure changes since 1991.

In translating these observations into policy recommendations there are two points that spring to mind. First is the requirement to ensure that iobs are located in areas that are accessible to all where possible. Bearing in mind the existing geography of employment, with the greatest concentration of employment in city and town centres, and the structure of public transport networks there is a strong case for locating jobs in central locations perhaps through the renovation of brownfield sites although this can sometimes involve travelling through nonneutral spaces. Tools that can help in this task of assessing the merits of broad locations are data on the geography of employment and commuting from the 1991 and 2001 Censuses of



"Does Fear of Violence Influence where People are Prepared to Work in Belfast"?

Ian Shuttleworth & James Anderson School of Geography, QUB

Population. Second is the need to be sensitive to local geographies of fear in making decisions about employment location. The qualitative information presented in the article suggests that local traditions, histories, and experiences of violence can give particular places very special meanings down to the micro (and very local) scale of whether one side of the street is safe or not. In situations where it is impossible to find a neutral area this type of approach might at least indicate degrees of fear and danger and perhaps help to select locations with the best chances of being accessible to all. Further exploration of these issues can help in locating jobs in such a way that local/community obstacles to mobility can be overcome, social and religious differentials in the NI labour market reduced, and barriers to labour market efficiency removed.

Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

In Spring 2000, some 3,000 15 year olds in NI took part in a major international study of performance in Reading, Maths and Science. This article highlights some of the main findings. In all three subject areas covered in the study, NI performed well (as did England): in each subject area only two or three countries did significantly better. In Reading and Science, the range of scores in NI was among the widest anywhere.

INTRODUCTION

The Programme for International Student Assessment (PISA) is a collaborative study among the member countries of the Organisation for Economic Co-operation and Development (OECD). Its main purpose is to assess the knowledge and skills of 15 year olds in three broad areas of "literacy": reading, mathematics and science. It does not provide information about the extent to which pupils have mastered particular school subjects (which is already available from examination results, although the content of the curriculum differs from country to country), but rather aims to assess the extent to which young people can use their knowledge and skills to meet the challenges they are likely to encounter in adult life. PISA was carried out in 32 countries in 2000. when the main focus was on reading literacy, and will be repeated in 2003 and 2006, when the main foci will be on mathematical literacy and scientific literacy respectively. The survey in NI was commissioned by the Department of Education, and conducted by the Office for National Statistics; the fieldwork was undertaken by the Central Survey Unit of the Northern Ireland Statistics & Research Agency (NISRA). England

participated in PISA 2000, but not Wales. A separate study was conducted in Scotland, which contributed to the UK PISA figures. However, because of differences in the implementation of the survey in Scotland, the Office for National Statistics did not present separate results for Scotland.

DEFINITIONS

PISA's three domains of literacy are defined in terms of the ability to complete a range of tasks that reflect real-life situations:

- reading: the ability to understand, use, and reflect on written texts to participate effectively in life (PISA does not seek to measure the extent to which pupils are fluent readers or their ability in spelling or word recognition);
- mathematical: the ability to formulate and solve mathematical problems in situations encountered in life; and
- scientific: the capacity to acquire and use scientific knowledge, and to draw evidence-based conclusions.

In each domain of literacy, a pupil's score is expressed as a number of points on a scale, and shows the highest



Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

difficulty of task that the pupil is likely to be able to complete. The scales are constructed so that the average score for pupils from all OECD countries participating in PISA 2000 is 500 and its standard deviation is 100 – that is, about two-thirds of pupils internationally score between 400 and 600. Each country contributes equally to this average irrespective of its size.

PISA AND PREVIOUS COMPARATIVE STUDIES OF ACHIEVEMENT

Other national and international assessments have already been conducted to measure achievement in reading literacy, maths and science. These include the Third International Mathematics and Science Study (TIMSS) which was conducted in 1995 among students aged 9 and 13, a repeat of TIMSS (known as TIMSS-R) in 1999 among students aged 13, and the International Adult Literacy Survey (IALS1) between 1994 and 1998 among 16 to 65 year-olds. There are differences between PISA and these previous comparative surveys in both their methodology and scope: PISA's target population of 15 year olds differs from those of TIMSS, TIMSS-R, and IALS, and PISA assesses a wider range of skills and knowledge. NI did not take

part in TIMSS or TIMSS-R. NI performed better in PISA than in IALS, but no direct comparison is possible, and as already noted, IALS related to a very wide agerange.

THE SURVEY IN NI

In NI, co-operation was obtained from 2,849 young people born in 1984, in a representative sample of 115 schools throughout the region: 71% of those initially selected and 79% after including replacement schools for those that refused to take part. Thirty pupils who were born in 1984 were randomly selected to take part from each school. In March 2000 each pupil took a written assessment lasting two hours, which was administered in his or her own school using standardised methodology and in test conditions. All pupils were assessed in reading literacy, which was the main focus of this survey. In addition, random subsamples of pupils were assessed in mathematical and scientific literacy. The response rate among pupils who were selected to take part and were eligible for the survey was 86%.

READING LITERACY

Pupils in NI scored an average of 519 points on the

reading literacy scale, significantly higher than pupils in OECD countries as a whole, where the mean score was set at 500. NI pupils were at a similar level of achievement as those in, for example, England², the Republic of Ireland, Japan, Korea, Australia and New Zealand. Countries with lower average achievement than NI included France and Germany, and in only two countries, Finland and Canada, did 15 year olds do significantly better than in NI (see Table 1).

In NI, girls scored significantly higher than boys in reading literacy - a finding that was repeated in all the participating countries. The performance of boys relative to girls was similar in NI to that of most other countries: over all OECD countries, the average difference in scores between boys and girls was 32 points, and in NI it was 33 points. Male/female differences in scores for reading literacy were not significantly different from those in England or the Republic of Ireland.

The range of reading literacy skills was wider in some countries than others: the country with the least variation in pupil scores was Korea. NI was one of the countries with the greatest variation in pupil scores, alongside Germany, New Zealand and Belgium.



Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

Table 1: Mean scores in reading literacy by country

Countries in descending order of their mean score in reading literacy	All Pupils	Girls	Boys	
Finland	546 (+)	571	520	
Canada	534 (+)	551	519	
New Zealand	529	553	507	
Australia	528	546	513	
Republic of Ireland	527	542	513	
Korea	525	533	519	Mean score for all pupils
United Kingdom	523	537	512	significantly higher than
England	523	537	512	for the OECD as a whole
Japan	522	537	507	TOI THE OLOD as a WHOLE
Northern Ireland	519	537	504	400
Sweden	516	536	499	
Austria	507 (-)	520	495	
Belgium	507	525	492	
Iceland	507 (-)	528	488	17
Norway	505 (-)	529	486	
France	505 (-)	519	490	Mean score for all pupils not
United States	504	518	490	significantly different from
Denmark	497 (-)	510	485	the OECD as a whole
Switzerland	494 (-)	510	480	- //
Spain	493 (-)	505	481	7
Czech Republic	492 (-)	510	473	31 (4)
Italy	487 (-)	507	469	9
Germany	484 (-)	502	468	Mean score for all pupils
Hungary	480 (-)	496	465	
Poland	479 (-)	498	461	significantly lower than the OECD as a whole
Greece	474 (-)	493	456	OLOD as a WHULE
Portugal	470 (-)	482	458	
Luxembourg	441 (-)	456	429	
Mexico	422 (-)	432	411	
OECD country average	500 (-)	517	485	

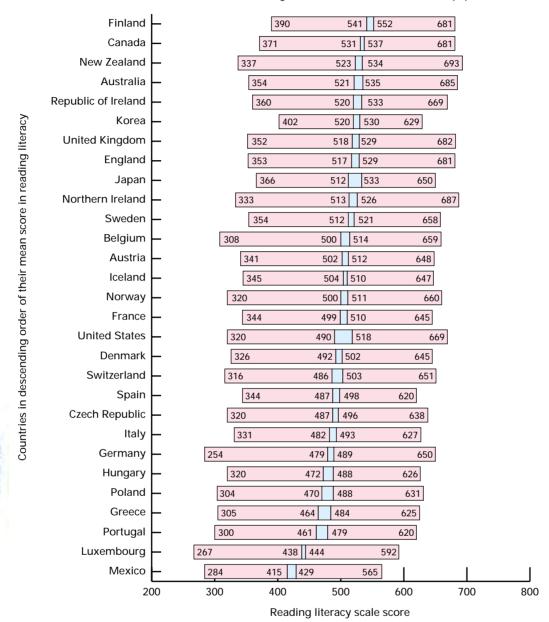
⁽⁺⁾ Denotes a country mean score that is significantly higher than NI's.

⁽⁻⁾ Denotes a country mean score that is significantly lower than NI's.

Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

Figure 1: Distribution of pupil proficiency in reading literacy by country 95% confidence interval of the mean score and the range of scores of the middle - 90% of pupils



Since reading literacy was the main focus of PISA 2000, more detailed information is available about reading literacy than about the other two domains. The overall reading scale was derived from three component scales which relate to the type of task: retrieving information, interpreting

text, and reflecting on and evaluating a text.
Achievement in NI was significantly higher than the OECD average in each of the three components of reading literacy, and NI pupils were particularly proficient on the 'reflection and evaluation' scale. It was noted above that in all

participating countries girls were more proficient than boys in reading literacy: in NI, the difference between girls and boys was most marked in their skills in reflecting on and evaluating text (girls scored on average 555 points, compared with 511 for boys) (see **Table 2**).

Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

Table 2: Mean score in the components of reading literacy by country

Countries in descending order of their mean score	AII	Retrieving			Interpreting All Girls Boys		Reflecting & Evaluating All Girls Boys		
in reading literacy	Pupils	Girls	Boys	Pupils	GIIIS	Boys	Pupils	Girls	Boys
Finland	556(+)	578	534	555(+)	579	529	533	564	501
Canada	530(+)	543	519	532(+)	547	518	542	566	521
New Zealand	535(+)	555	516	526(+)	549	506	529	559	502
Australia	536(+)	551	523	527(+)	545	511	526	548	507
Republic of Ireland	524	536	514	526(+)	541	513	533	552	515
Korea	530	533	527	525(+)	530	521	526	541	514
United Kingdom	523	534	515	514	527	503	539	557	522
England	523	533	515	513	526	503	539	558	523
Japan	526	539	512	518	530	505	530	551	508
Northern Ireland	517	532	505	512	528	498	532	555	511
Sweden	516	532	501	522	540	505	510 (-)	536	486
Austria	502 (-)	510	495	508	520	497	512 (-)	532	493
Belgium	515	529	504	512	529	498	497 (-)	522	475
Iceland	500 (-)	517	485	514	535	497	501 (-)	529	476
Norway	505	523	490	505	527	487	506 (-)	539	479
France	515	527	503	506	519	492	496 (-)	515	477
United States	499	512	486	505	518	491	507 (-)	524	488
Denmark	498 (-)	506	491	494 (-)	506	485	500 (-)	523	480
Switzerland	498 (-)	510	487	496 (-)	510	484	488 (-)	511	465
Spain	483 (-)	493	477	491 (-)	502	481	506 (-)	526	487
Czech Republic	481 (-)	495	467	500	517	483	485 (-)	511	457
Italy	488 (-)	504	474	489 (-)	509	470	483 (-)	507	460
Germany	483 (-)	497	471	488 (-)	505	472	478 (-)	503	455
Hungary	478 (-)	491	465	480 (-)	494	466	481 (-)	503	460
Poland	475 (-)	489	461	482 (-)	500	465	477 (-)	504	451
Greece	450 (-)	466	435	475 (-)	492	459	495 (-)	522	468
Portugal	455 (-)	464	447	473 (-)	485	461	480 (-)	497	461
Luxembourg	433 (-)	444	424	446 (-)	460	433	442 (-)	464	423
Mexico	402 (-)	408	396	419 (-)	427	410	446 (-)	463	428
OECD country average	498	510	486	501	516	487	502	525	480

Denotes a country mean score that is significantly higher than NI's. Denotes a country mean score that is significantly lower than NI's.

⁽⁺⁾ (-)

Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

Pupils were categorised into five levels on each of the three component scales and on the summary scale, with Level 5 indicating the most proficient pupils. Most pupils had neither very good nor very poor reading skills: as many as 68% of pupils in NI were at Levels 2, 3 or 4, a slightly smaller proportion than in OECD countries as a whole. In NI, however, the proportion of pupils demonstrating the highest level of proficiency in reading literacy was, at 16%, similar to the proportion in England (16%) and the Republic of Ireland (14%), and significantly higher than the figure for the OECD as a whole, which was 10%. Pupils at this level are capable of completing sophisticated reading tasks such as managing information that is difficult to find in unfamiliar texts. comprehending such texts and inferring which information is relevant, accommodating concepts that may be contrary to expectations, and being able to evaluate the material critically and form hypotheses. At the lower end of the proficiency scale, 10% of pupils in NI were classified as being at Level 1, significantly higher than in the Republic of Ireland (8%) but not significantly different from the proportion in England (9%). These pupils were able to complete tasks such as locating a single piece of

information, identifying the main theme of a text, or making a simple connection with everyday knowledge. A small proportion of 15 year olds were not able to demonstrate the lowest level of proficiency: in NI, 5% of pupils were in this category, similar to the proportion for the OECD as a whole (6%) but significantly greater than in both the Republic of Ireland (3%) and England (4%). This does not necessarily mean that these pupils are unable to read, but they do have serious difficulty in using reading literacy as an effective tool for extending their knowledge and skills in other areas (see Table 3).

MATHEMATICAL LITERACY

The average mathematical literacy score of pupils in NI was significantly lower than in Japan and Korea, by 33 and 23 points respectively, but there was no significant difference between NI pupils and those in New Zealand. Finland, Australia, Canada, Switzerland, England³, Belgium, France, Austria, Denmark, or Iceland. NI pupils scored significantly higher, on average, than those in all other countries including Republic of Ireland, the US and Germany (see Table 4).

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Ivor Johnston, Statistics & Research Branch, Department of Education

Table 3: Reading Literacy: the proportion at each level of proficiency by country

Countries in descending		Proficiency Level							
order of their mean s in reading literacy	core	Below Level 1	Level 1	Level 2	Level 3	Level 4	Level 5		
Finland	%	2	5	14	29	32	18		
Canada	%	2	7	18	28	28	17		
New Zealand	%	5	9	17	25	26	19		
Australia	%	3	9	19	26	25	18		
Republic of Ireland	%	3	8	18	30	27	14		
Korea	%	1	5	19	39	31	6		
United Kingdom	%	4	9	20	27	24	16		
England	%	4	9	20	28	24	16		
Japan	%	3	7	18	33	29	10		
Northern Ireland	%	5	10	19	25	24	16		
Sweden	%	3	9	20	30	26	11		
Austria	%	4	10	22	30	25	9		
Belgium	%	8	11	17	26	26	12		
Iceland	%	4	11	22	31	24	9		
Norway	%	6	11	19	28	24	11		
France	%	4	11	22	31	24	8		
United States	%	6	12	21	27	21	12		
Denmark	%	6	12	23	29	22	8		
Switzerland	%	7	13	21	28	21	9		
Spain	%	4	12	26	33	21	4		
Czech Republic	%	6	11	25	31	20	7		
Italy	%	5	14	26	31	19	5		
Germany	%	10	13	22	27	19	9		
Hungary	%	7	16	25	29	18	5		
Poland	%	9	15	24	28	19	6		
Greece	%	9	16	26	28	17	5		
Portugal	%	10	17	25	27	17	4		
Luxembourg	%	14	21	27	25	11	2		
Mexico	%	16	28	30	19	6	1		
OECD country average	%	6	12	22	29	22	10		

Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

Table 4: Mean scores in mathematical literacy by country

Countries in descending order of their mean score in mathematical literacy	All Pupils	Girls	Boys	
Japan	557 (+)	553	561	
Korea	547 (+)	532	559	
New Zealand	537	539	536	
Finland	536	536	537	
Australia	533	527	539	
Canada	533	529	539	
Switzerland	529	523	537	Mean score for all pupils
United Kingdom	529	526	534	significantly higher than
England	529	526	534	the OECD as a whole
Northern Ireland	524	524	526	the ocob as a whole
Belgium	520	518	524	4 9
France	517	511	525	
Austria	515	503	530	
Denmark	514	507	522	177
Iceland	514	518	513	A Comment
Sweden	510 (-)	507	514	
Republic of Ireland	503 (-)	497	510	Mean score for all pupils not
Norway	499 (-)	495	506	significantly different from
Czech Republic	498 (-)	492	504	the OECD as a whole
United States	493 (-)	490	497	I'll occid as a whole
Germany	490 (-)	483	498	4
Hungary	488 (-)	485	492	
Spain	476 (-)	469	487	
Poland	470 (-)	468	472	Mean score for all pupils
Italy	457 (-)	454	462	significantly lower than the
Portugal	454 (-)	446	464	OECD as a whole
Greece	447 (-)	444	451	
Luxembourg	446 (-)	439	454	
Mexico	387 (-)	382	393	
OECD country average	500 (-)	495	506	

Denotes a country mean score that is significantly higher than NI's.

⁽⁺⁾ (-) Denotes a country mean score that is significantly lower than NI's.

Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

There is no evidence of a significant male/female difference in mathematical literacy in NI; the mean score for boys was just 2 points higher than for girls. In all but two countries, Iceland and New Zealand, boys had a higher average score than girls although the difference was relatively small and not significant in

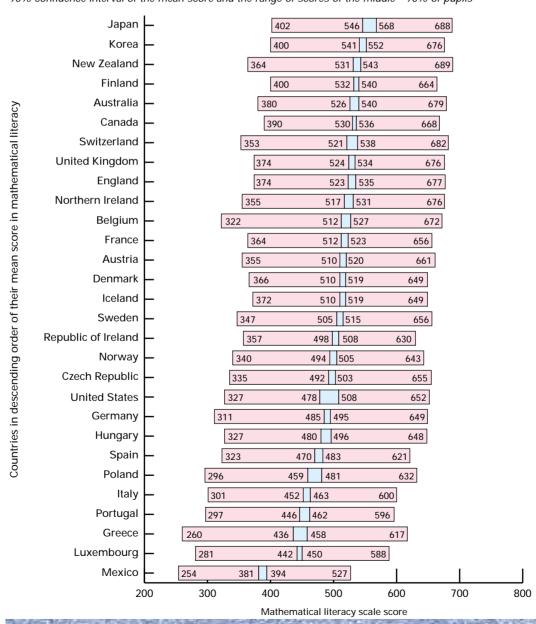
half of the countries.

Differences between boys and girls were particularly marked in Austria and Korea where, on average, boys scored 27 points higher than girls.

The difference in achievement in mathematical literacy between the most able and

least able pupils in NI was greater than the average for OECD countries. The countries with the least variation in pupil scores were Finland, Republic of Ireland, Mexico, Korea, Iceland and Canada. Pupils in Greece, Belgium, Germany and Poland showed the highest degree of variation (see Figure 2).

Figure 2: Distribution of pupil proficiency in mathmatetical literacy by country 95% confidence interval of the mean score and the range of scores of the middle - 90% of pupils



Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

Table 5: Mean scores in scientific literacy by country

Countries in descending order of their mean score in scientific literacy	All Pupils	Girls	Boys	
Korea	552 (+)	541	561	
Japan	550 (+)	554	547	
Finland	538 (+)	541	534	
England	533	533	537	
United Kingdom	532	531	535	
Canada	529	531	529	Mean score for all pupils
New Zealand	528	535	523	significantly higher than
Australia	528	529	526	for the OECD as a whole
Northern Ireland	523	525	522	TOT THE OECD as a WHOLE
Austria	519	514	526	
Republic of Ireland	513	517	511	40
Sweden	512	513	512	
Czech Republic	511	511	512	
France	500 (-)	498	504	7
Norway	500 (-)	505	499	
United States	499	502	497	Mean score for all pupils not
Hungary	496 (-)	497	496	significantly different from
Iceland	496 (-)	499	495	the OECD as a whole
Belgium	496 (-)	498	496	107
Switzerland	496 (-)	493	500	
Spain	491 (-)	491	492	٦
Germany	487 (-)	487	489	13
Poland	483 (-)	480	486	
Denmark	481 (-)	476	488	Mean score for all pupils
Italy	478 (-)	483	474	significantly lower than the
Greece	461 (-)	464	457	OECD as a whole
Portugal	459 (-)	462	456	
Luxembourg	443 (-)	448	441	
Mexico	422 (-)	419	423	
OECD country average	500 (-)	501	501	

Denotes a country mean score that is significantly higher than NI's.

⁽⁺⁾ (-) Denotes a country mean score that is significantly lower than NI's.

Programme for International Student Assessment – NI & International Results Compared

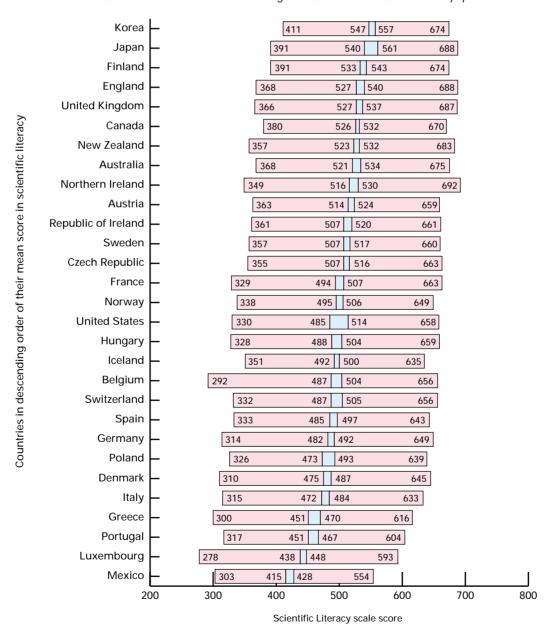
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SCIENTIFIC LITERACY

The average scientific literacy score of pupils in NI was significantly lower than in Korea, Japan and Finland, but was not significantly different from those in England⁴, Canada, New

Zealand, Australia, Austria, Republic of Ireland, Sweden, Czech Republic and the US. Pupils in NI had higher average scores than those in all other countries including France, Switzerland, Germany and Denmark (Table 5). In NI, the mean scientific literacy score of girls was only 3 points higher than for boys and this was not statistically significant. Indeed male/female differences in scientific literacy were small and not statistically significant in all

Figure 3: Distribution of pupil proficiency in scientific literacy by country 95% confidence interval of the mean score and the range of scores of the middle - 90% of pupils





Programme for International Student Assessment – NI & International Results Compared

Ivor Johnston, Statistics & Research Branch, Department of Education

OECD countries except for Korea and Denmark where boys scored an average of 19 and 12 points higher than girls, respectively.

The two countries with the least variation in scientific literacy were Mexico and Korea. The greatest variation in scientific literacy scores was in NI and Belgium (Figure 3).

As well as extensive background on PISA, including a description of the PISA assessment and the survey methods, the Report examines reading literacy in relation to characteristics of the pupil, the family and the school, e.g. socio-economic background, and whether the pupils attended a secondary or grammar school.

DETAILED REPORT ON PISA IN NI

This article is largely drawn from a report by Baljit Gill, Mark Dunn and Eileen Goddard, entitled Student Achievement in Northern Ireland London: The Stationery Office 2002 (ISBN 0 11 621560 7) price £45. The Report may be accessed electronically at http://www.statistics.gov.uk/ statbase/Product.asp ?vInk=8170&More=N.

MORE INFORMATION ABOUT PISA **INTERNATIONALLY**

The OFCD website www.pisa.oecd.org contains more information about PISA, the OECD's initial report, and forthcoming thematic reports.



The Economics of Education: Some Recent Research

Gavan Conlon, The Centre for the Economics of Education, London School of Economics

One of the prime drivers for investment in education is the perceived link it has with economic growth through, for example, increased productivity. Standard economic theory would suggest that, all other things remaining equal, as an individual's productivity increases so would their wage rate. Recent research commissioned by the **Department for Employment** and Learning entitled **Education and Earnings (see** LMB 14) confirms the findings of other studies (eg **OECD Education at a Glance)** with regard to the additional earnings associated with extra education. The results for NI indicate that, on average, an extra year of education adds around 8% to male earnings and 12% to female earnings. This compares with around 6% and 10% for GB men and women respectively.

THE PART HAVE BEEN AND THE CONTRACTOR TO SHARE AND ADDRESS.

The Department for Education and Skills (DfES) in England has recently assisted in the establishment of the Centre for the Economics of Education (CEE) to assess further the costeffectiveness of various forms of educational interventions and investments. The CEE brings together economists and educationalists to undertake research in the economics of education field. While much of the Centre's work is focused at the UK or GB level, many of the research outcomes are relevant to the NI context. The following article provides a brief summary of the CEE's current research and provides a more detailed examination of work that is of specific interest to NI.

THE CEE'S RESEARCH PROGRAMME

The CEE's research programme is subdivided into five strands. The *first* is concerned with **The Production of Education and Skills** and examines the efficiency with which the education system carries out its current operations. In particular this strand incorporates research on school effectiveness, the role of teachers and the labour market for teachers.

Three other themes relate to the wider environment in which the education system

operates, namely The Supply of Education and Skills which investigates questions such as 'How far does the environment external to the education system tend to promote education?' and 'How does the system of incentives in the wider society impact on young people and adults, and affect skill supply?'. The Strand relating to The **Demand for Education and** Skills raises questions such as, 'What indications can we find of education over and under-supply?' and 'How far can we identify substantive skills and clusters of skills that are highly productive and desired?'. The Returns to Education and Skills looks at the system's efficiency from a wider perspective. It looks at how the attainment of education and skills is rewarded over time and how far the current structure of spending on education reflects the needs of the economy. In addressing all of these questions, the need for innovative methodologies and analytical tools is recognised and this forms the basis for the final research strand, namely Methodological Developments.

RESEARCH OUTCOMES

A full list of the CEE's published research can be accessed online at http://cee.lse.ac.uk/. The



The Economics of Education: Some Recent Research

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following looks specifically at the results of some recent work by the CEE on the demand, supply and returns to education and skills.

THE SUPPLY OF EDUCATION AND SKILLS

Much of the CEE's research on the Supply of Education and Skills has been concerned with the individual's decision to remain in education. Participation in postcompulsory education in the NI and the rest of the UK has increased significantly and for a prolonged period. For example, in NI participation rates for 16 and 17 year olds in full-time education rose from 57.9% in 1990/91 to 71% in 1999/00. The CEE has specifically looked at the influence of GCSE scores, local unemployment rates, future financial gains associated with remaining in education and family income on the staying on decision. Results suggest, and it should be emphasised that these relate to the UK and not NI specifically, that higher local unemployment rates have a major impact on increasing participation in post compulsory education (and visa versa), particularly for males¹. In addition, an individual's decision to remain in education is positively and significantly affected by the extent to which additional education

can add to future earning power, increased capacity of the educational system and by increased peer group participation. Interestingly, the decision to take up vocational qualifications is heavily affected by unemployment levels and the capacity of the educational system. These factors have a much lower impact on the decision to take up academic qualifications which, instead, is more heavily influenced by previous educational attainment.

A second theme of work on the supply of education and skills concerns the outcomes associated with lifelong learning. Government policy makers across the UK and beyond see lifelong learning as key to long-term economic success. This seems to derive from two propositions, namely, that the demand for skills will continue to rise, as a result of skill-biased technological change and that education is a key policy instrument for re-integrating excluded groups (e.g. the long term unemployed) into the labour market. The CEE has conducted research into: the factors associated with undertaking lifelong learning and successful completion; the probability of undertaking lifelong learning for different socioeconomic and income groups; the extent to which

current learning behaviour can be related to previous educational experiences; and the effects of lifelong learning (which has resulted in a qualification) on future income and employment experiences. The results would indicate that particular qualification types have positive effects on an individual's employment prospects. In particular, for those females not in the labour market in 1991, all forms of learning, irrespective of whether it was academic, vocational or occupational increased the probability of females returning to the labour market by the year 2000. However, for males it appears to be the case that it was only the possession of occupational qualifications (which include teacher training and nursing qualifications) that increased their probability of returning to the labour market. In addition, those with no qualifications at all do seem to gain somewhat from lifelong learning. Those individuals gaining qualifications during the period were found to earn between 8% and 20% more than they otherwise would have. This is of particular interest in the NI context where the 26.7% of the working age population have no qualifications compared with 16.4% for the UK as a whole (Regional Trends, 2001). Indeed the recently launched NI

The Economics of Education: Some Recent Research

Gavan Conlon, The Centre for the Economics of Education, London School of Economics

Essential Skills Strategy (see Chapter 20) recognises the difficulties associated with low levels of educational attainment and sets out to address them.

THE DEMAND FOR EDUCATION AND SKILLS

There has been a tendency on the part of employers to argue for a greater focus on vocational courses and "Key Skill" promotion within the education sector but, evidence indicates that it is traditional academic qualifications that are still being rewarded in practice. The CEE has been exploring alternative sources of evidence to identify which skills employers genuinely value. In particular the Centre has been examining the use of psychometric testing and other measurement based selection and promotion procedures to identify what can be revealed about the demand for education and skills.

There is a growing body of evidence indicating that the use of psychometric tests for selection purposes has increased in recent years although there has been very little information on the underlying reasons for this. Initial research by the CEE has found that the increased use of psychometric testing has not been because employers have lost

confidence in formal qualifications or the standard of degrees. It is instead a reaction to changes in employment regulations and legislation, the growth within firms of formalised human resource policies and the reduction in the costs of this method of testing compared with other methods of selection.

THE RETURNS TO EDUCATION AND SKILLS

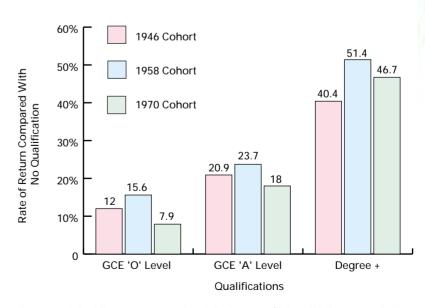
Researchers at the Centre have recently examined data relating to cohorts of individuals born in 1946, 1958 and 1970. Differences in living standards between the 3 cohorts when they were in their early 30s were examined. As expected, one of the most important

factors affecting people's living standards and wages is their level of education.

Looking at the returns to education for men and controlling for factors such as region, ability and father's social class it is interesting to see that the earnings mark-up for men in GB at each qualification level first rose, and then fell back again across the generations (see Figure 1).

For those with GCE 'O' Level and equivalent qualifications, the average wage mark-up for men was around 12 per cent amongst those born in the 1946 cohort, rising to around 16 per cent for the 1958 cohort, and falling back to 8 per cent for the 1970 cohort. Similarly the mark-up for

Figure 1: Returns to Education for Men



Notes: controls for ability are test score results quintiles from age 7 (National Child Development Study - NCDS), 11 (British Cohort Study - BCS), and 8 (National Survey of Health and Development - NSHD). Father's social class controls taken at specific ages. Standard errors are available from the author.



The Economics of Education: Some Recent Research

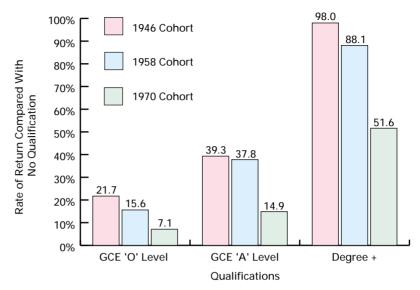
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those with GCE 'A' levels compared to those with no qualifications was 21 per cent for the 1946 cohort rising to 24 per cent for the 1958 cohort, and falling back to 18 per cent for the 1970 cohort. A similar pattern is seen for those with degrees, although it is only for this group that the return is higher for the 1970 cohort than it was for the 1946 group.

For women, the picture is quite different, with the returns to education falling between each successive cohort (see Figure 2). Thus, the average wage difference for those with GCE 'O' levels or equivalent qualifications compared to those with no (or low) qualifications was around 22 per cent amongst those born in the 1946 cohort, falling to around 16 per cent for the 1958 cohort, then falling further to 7 per cent for the 1970 cohort. The mark-up for those with GCE 'A' levels compared to those with no qualifications was 39 per cent, about the same for the 1958 cohort (38 per cent), and falling back to 15 per cent for the 1970 cohort. Again, a similar pattern is seen for those with degrees, with the biggest drop in the average return occurring for the 1970 cohort.

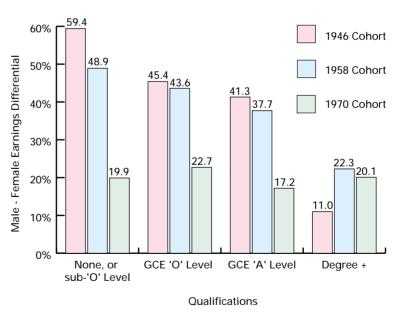
A further interesting feature of the education-wage differentials presented

Figure 2: Returns to Education for Women



Notes: controls for ability are test score results quintiles from age 7 (National Child Development Study - NCDS), 11 (British Cohort Study - BCS), and 8 (National Survey of Health and Development - NSHD). Father's social class controls taken at specific ages. Standard errors are available from the author

Figure 3: Education and Male-Female Wage Differences



The Economics of Education: Some Recent Research

Gavan Conlon, The Centre for the Economics of Education, London School of Economics

above is that the returns to education for the older two cohorts were higher for women than for men, whereas amongst the 1970 cohort this was no longer the case. This suggests that education played an important role in reducing gender-wage differences amongst previous generations, but has not had such a dominant role more recently. Figure 3 provides further evidence for this, showing the difference in average hourly pay of men and women within education groups: the results show clearly that for the 1946 and 1958 cohorts, the gender-wage gap declined significantly with education. For the 1970 cohort, the gap is similar within all education levels.

LOOKING FORWARD

CEE's research has now produced a total of twenty nine Discussion Papers on key issues in the economics of education. Indeed the Centre has recently agreed a work programme for the next two years with the DfES. The programme covers projects in the five strands listed above and includes both new research and extensions of research currently being undertaken.

Specifically, the programme of research includes studies on issues such as:

- Education transitions, financial constraints and parental background;
- School competitiveness;
- The labour market for teachers: using a database of teacher records to study retention:
- The age 16 staying on decision: the analysis of educational choices;
- Lifelong learning; and
- Longer-term effects of measured academic attainment, returns to education and inequality.

Dr Gavan Conlon acts as the Co-Ordinator for the Centre of the Economics of Education and can be contacted at: The Centre for the Economics of Education, London School of Economics, Houghton Street, London WC2A 2AE (or e-mail: q.conlon@lse.ac.uk).





At Which Universities do NI Students Study?

Terry Morahan, Research & Evaluation Branch, DEL

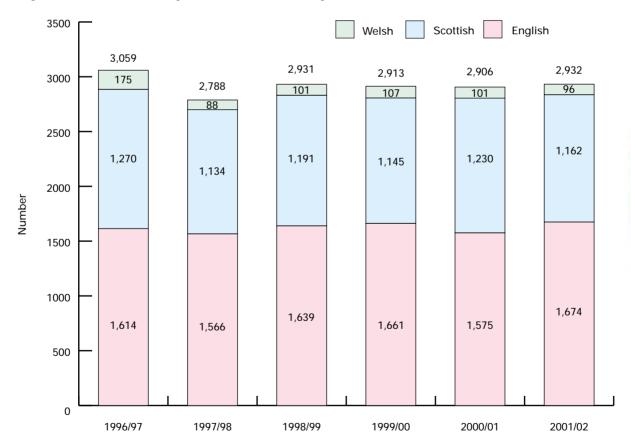
As is well known, NI students do disproportionately well in their 'A' levels compared with their GB counterparts. As there are insufficient places available locally a number must go to GB to obtain a place in higher education. Some do this by choice; others because there is no place available in NI given their grades, or because there is no course available, eg Veterinary Studies.

In round terms there are only two places available at the two NI universities for the three students who are eligible to take up a place. Accordingly each year onethird (or almost 4,000 students) leave NI to study in GB and Rol. In 2001/02, approximately 3,600 students went to GB and 300 to Rol to take up fulltime undergraduate courses (for more detail see Chapter 18, LMB No 14 -"Who Studied Where?").

This brief note focuses on which GB countries NI students go to, and which universities they attend - as measured by where they obtained their qualifications.

What is noticeable from Figure 1 is how few graduate from Welsh institutions and contrary to popular opinion, there are more graduating from English than Scottish institutions.





Source HESA: *NI Domiciled, full-time, undergraduate:

2001/02 data are estimates based on those students in their final year of a course and who are expected to graduate in the 2001/02 academic year.

At Which Universities do NI Students Study?

Terry Morahan, Research & Evaluation Branch, DEL

However, in terms of NI students at particular universities - see Figure 2 -Scottish universities dominate (because there are far fewer of them than English ones). There were 21 institutions where on average over the past five years there were over 40 students from NI qualifying in each year. Seven of the top ten and twelve of the top 21 were Scottish: the remainder English - and no Welsh. As students typically study for four years at a Scottish university - and some courses, such as

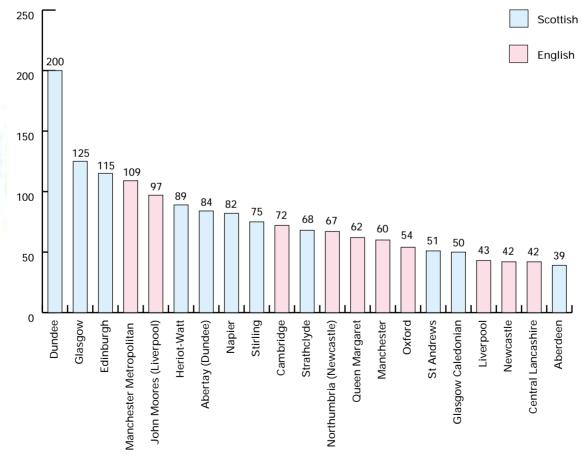
medicine and architecture take longer, it can be seen that close to 1,000 students from NI would be at Dundee and over 500 at Glasgow.

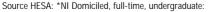
This would help explain the high proportion of NI students in Scottish universities' sports teams, for example, recently the majority of the Dundee Rugby Team and the Glasgow Rowing Crew were from here!

Over time, choices change both in countries and universities. The abolition of

fees in Rol has a knock-on effect as more NI places open up to NI students, as more Rol students opt to study in Rol rather than go to NI universities with the number from Rol entering NI institutions as full-time undergraduates falling from 925 in 1996/97 to approximately 650 in 2001/02. Changes to student financing arrangements in Scotland may also have knock-on effects, with less places available in Scotland to NI students as more Scottish students stay "at home".

Figure 2: Annual Average (1996/97-2001/02*) NI Students Gaining Qualifications from GB HE Institutions





2001/02 data are estimates based on those students in their final year of a course and who are expected to graduate in the 2001/02 academic year.

At Which Universities do NI Students Study?

Terry Morahan, Research & Evaluation Branch, DEL

In Figure 3 the bar graphs in Figure 2 have been replicated with the latest year's (2001/02) data beside it.

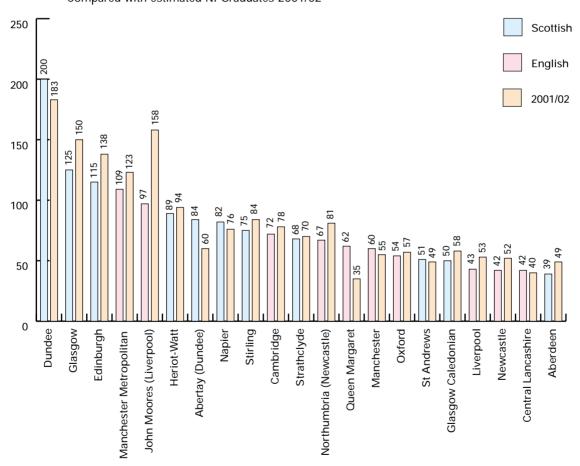
In terms of past student choices which universities are gaining or losing?

Looking at the top ten, what is striking is how the figures jump around each year. In 2001/02 Dundee has produced the most 'NI' graduates. However when compared with the next five highest universities where the number of graduates in 2001/02 is higher than their average over the past five

years, the number of graduates from Dundee has fallen.

Only one university in the London area features (Queen Margaret) and that, at number 13, perhaps due to the high cost of living in the South of England?

Figure 3: Annual Average (1996/97-2001/02) NI Students* Gaining Qualifications from GB HE Institutions Compared with estimated NI Graduates 2001/02



Source HESA: *NI Domiciled, full-time, undergraduate:

2001/02 data are estimates based on those students in their final year of a course and who are expected to graduate in the 2001/02 academic year.

Note: In **Figure 1** the figures are an average for the five year period 1996/97 to 2001/02; in **Figure 3** the latest year's figure (2001/02)

is then shown compared with the five year average.

Acknowledgement: With thanks to Michelle McAteer,

Tertiary Education Statistics & Research Branch for supplying the data.





David Armstrong, Graham Cash, Tony Dignan, PricewaterhouseCoopers

Rationale for Job Chains Investigations

As part of their New
Targeting Social Need (TSN)
responsibilities, the
Department of Enterprise,
Trade and Investment (DETI)
and its Agencies are charged
with monitoring and
reporting on the direct
effects of their activities on
unemployment in NI.

This reflects the emphasis being placed on New Targeting Social Need (New TSN) by NI Government Departments following the publication in March 1998 of the White Paper Partnership for Equality (Secretary of State for NI, HMSO, Cm 3890). As stated in Partnership for Equality, (Page 28) the main aim of New TSN is:

"To tackle disadvantage by directing resources and efforts towards those individuals, groups and areas objectively defined as being in greatest need, irrespective of community background."

Consequently, indigenous and foreign direct investment (FDI) businesses seeking selective financial assistance are required to provide information on the community background, residential location and previous economic status of those gaining employment. The objective of this policy is to ensure that, if someone who was previously unemployed gains employment in a DETIassisted company, this is reflected as a direct effect of assistance on unemployment.

However, the Department has long held the view that the economic development activities of its Agencies have wider impacts on unemployment beyond these direct effects, insofar as Government assistance may also have *indirect* or *secondary* effects on unemployment.

THE DIRECT AND INDIRECT EFFECTS OF ASSISTED EMPLOYMENT

Indirect or secondary effects will manifest themselves in a number of ways. For example, people who are currently employed in Company 'A' may be recruited to new jobs directly created in DETIassisted Company 'B'. In principle, unemployed people may subsequently fill the positions in Company 'A' vacated by these previously employed persons who have relocated to Company 'B.' This is the manifestation of the *indirect* or *secondary* effect of assistance on employment.

Similarly, if an assisted company significantly increases orders from its suppliers, as a result of DETI assistance, new jobs may be created in these supplier companies, or indeed throughout the supply-chain, creating further or 'knockon' opportunities for the unemployed to find jobs. These are the theoretical secondary effects on unemployment, but have historically not been quantified.

In 2000, DETI appointed PricewaterhouseCoopers (PwC) to undertake research



David Armstrong, Graham Cash, Tony Dignan, PricewaterhouseCoopers

into the secondary impacts on unemployment. The main aim of this study was to develop a methodology which DETI could use in future years to quantify - and hence monitor - the impact of secondary effects on the unemployed in NI and to provide estimates of those secondary effects.

The study sought to identify and quantify three separate secondary effects, namely:

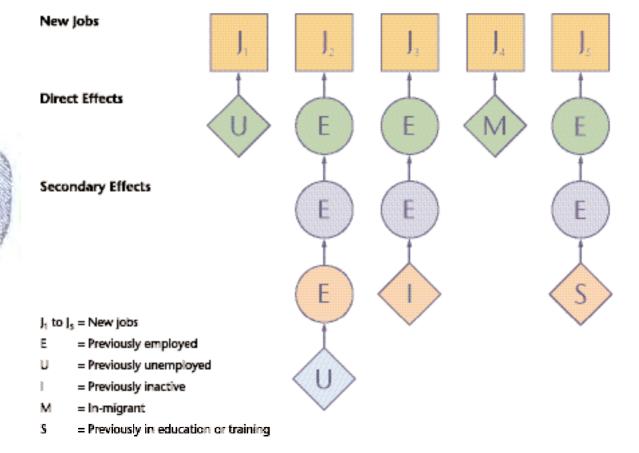
 'Chain Reaction' employment; i.e. the

- extent to which the unemployed take up the jobs vacated by those moving into employment in businesses benefiting from assistance from DETI Agencies;
- 'Linkage' effects; i.e. the extent to which job opportunities for the unemployed are created in companies servicing or supplying businesses which themselves benefit from assistance from DETI Agencies; and
- 'Multiplier' effects; i.e. the extent to which opportunities for the unemployed are created by the increased economic activity and spending resulting from businesses benefiting from assistance from DETI Agencies.

JOB CHAINS: AN ILLUSTRATIVE EXAMPLE

The 'job chains' concept is best illustrated by an example. Suppose that, as a

Illustrative example of the job chain concept



David Armstrong, Graham Cash, Tony Dignan, PricewaterhouseCoopers

result of Government assistance, five jobs are created (J₁ to J₅). As shown opposite, one of these jobs (J₁) is filled by a person who was previously unemployed. This is an example of a *direct effect* on unemployment. A second job is also filled from the labour supply side, by an in-migrant in this example.

Persons who were previously employed in NI fill the remaining three posts. The recruitment of these three previously employed people results in their former positions becoming vacant. Thus, three 'job chains' are set in motion.

Assuming that their former employers seek to fill these vacancies, these three job chains provide further opportunities for unemployed people to find a job. The employment of previously unemployed persons in these new positions gives rise to secondary effects on unemployment.

As shown opposite, the three illustrative jobs chains eventually terminate when someone from the supply side of the regional labour market fills the last 'node' in each chain. Thus, new job number two (J2) filters down through three 'links' to a person who was previously unemployed. The other two job chains (new job

numbers three and five i.e. J₃ and J₅) terminate with the employment of persons who were previously inactive in the labour market (J₃) or have joined from full-time education or training (J₅).

IDENTIFYING JOB CHAINS - METHODOLOGY

In order to test the likelihood of satisfactorily defining and quantifying these three secondary effects, a work programme was designed by PricewaterhouseCoopers and agreed with the DETI Steering Group. This consisted of the following main stages:

- Interviews with officials in each of the four DETI agencies (IDB, LEDU, IRTU and NITB), and the then Training and Employment Agency (T&EA); (later subsumed into DEL)
- A review of existing studies in the UK and elsewhere, which have examined secondary effects;
- An analysis of the Labour Force Survey data and existing surveys of NI employers;
- A 'Job-Chains Survey' representing a major survey of NI companies which had received some

- form of DETI assistance, and other related companies; and
- The development of a model, referred to as the 'NISEM' – the 'NI Secondary Effects Model', which could be used to calculate secondary effects for a given set of data on the direct effects.

The PwC 'Job-Chains Survey' was a major survey of employers in NI, which made contact with two broad groups of companies:

- Assisted companies: 301 companies that had received some form of Government assistance were asked about the jobs created on the basis of the assistance and, in particular, the previous labour market status of the people who filled those jobs. Some 82 companies were able to provide this information. Where the jobs had been filled by people who were previously in employment, the assisted firms were asked to provide information on the companies these people had worked for (the 'job chain companies');
- Job chains companies;
 275 job chain companies were contacted as part of the survey, and valid responses were achieved



David Armstrong, Graham Cash, Tony Dignan, PricewaterhouseCoopers

from 154. The firms were also asked about whether or not the resulting vacancy had been filled1 and, if so, what was the previous labour market status of the person who filled it. Some of the companies indicated that the existing position had been filled by an unemployed person. This represented a secondary impact of Government assistance on unemployment.

to people who were previously unemployed.

Secondly, the results suggest that the secondary effects on unemployment will be of the order of 26, i.e. an additional 26 unemployed people will gain employment outside the original group of companies, as a result of either a chain reaction effect, a linkage effect or a multiplier effect. These results are summarised in Table 1.

firms in the manufacturing sector the corresponding figure is 16 unemployed persons, compared to a figure of 9 unemployed persons for firms in the tourism sector.

This is mainly because many jobs in tourism are seasonal and, as such, are taken up by people who are already in some form of full-time or part-time employment. Even within the manufacturing sector there are some important differences.

The detailed contrasts by industry are undernoted, which serve to highlight the differing impacts of job chains by industrial sector and particularly the very large contrast between manufacturing and the remaining sectors.

Most of this is due to the very large difference in the direct effects, as previously unemployed people account for 36 per cent of new recruits to jobs created by manufacturing firms, compared to 11 per cent in tourism and 14 per cent in the miscellaneous other sector.

In particular, the secondary impacts on the unemployed are relatively high, when a large number of the jobs created are for semi-skilled or unskilled operative staff. This is because such jobs, and their subsequent job

KEY FINDINGS

The key findings from the study are best illustrated by means of an example. Say that DETI assistance is provided to a group of companies that, on the basis of the assistance, create 100 new jobs. Within that group of companies, the research results suggest, firstly, that the direct effects on unemployment will be of the order of 31, i.e. of the 100 new jobs created, 31 will go

Table 1 reflects the overall findings for jobs created by companies throughout NI. However, the results of the model vary according to factors such as the sector in which the firm operates, and the particular type of jobs created by way of Government assistance.

For example, **Table 1** shows that, on average, 14 unemployed people gain employment through the 'chain reaction' effect. For

Table 1: Summary of estimated secondary effects on unemployment per 100 new jobs created by assisted companies

New jobs created by assisted companies	100.0
Approximate effects on unemployment	
Direct	30.5
Secondary - Chain Reaction	14.1
Linkage	4.5
Income multiplier	7.4
Total secondary	26.0

Source: NISEM



¹ i.e. the vacancy that resulted from a member of their staff leaving the firm to take up employment with the assisted firm.

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Table 2: NI Secondary Effects Model – summary of estimated direct and secondary effects from Model B (per cent of jobs created)

		Sector		All
	Manufacturing	Tourism	Other	
Jobs claimed to have been created	100.0	100.0	100.0	100.0
Direct effects – previous labour n				
Unemployed	35.9	11.4	14.3	30.5
School/training/university	9.7	15.4	26.0	12.3
Other labour supply	0.7	22.2	3.0	3.6
Previously employed	53.6	50.9	56.7	53.7
Secondary effects – labour marke	et outcomes			
Previously unemployed	15.6	8.5	10.2	14.1
From school/training/university	5.0	9.0	14.7	6.6
Other labour supply	0.7	13.0	1.8	2.2
Not subsequently filled	32.0	20.5	29.9	30.4
Total effects – labour market outo	comes			
Previously unemployed	51.5	19.9	24.5	44.6
From school/training/university	14.7	24.4	40.7	18.9
Other labour supply	1.4	35.2	4.8	5.8

Source: based on PricewaterhouseCoopers Job Chains Survey

chains, are more likely to be taken up by unemployed people.

JOB CHAINS - CONCLUSIONS

It is important to recognise that there are a number of limitations to the model on which the results, discussed above, is based. In particular, there is the issue of statistical robustness. Constructing this model has represented a major methodological challenge, and has been based on the best information which was available, and which could be collected through

surveys, at the time of conducting the study.

Nevertheless, the data are not perfect and the model is, in effect, a simplification of reality. This means that the estimates should be treated as the best estimates that could be derived, given the available data and our understanding of how the labour market works. The results may change to some extent in due course, if better, more robust, data were to become available.

Our overall view is that the NISEM model provides an efficient and effective tool for monitoring the secondary effects on unemployment arising from DETI assistance to industry in NI. To that extent, it has the potential to make a significant contribution to that Department's New TSN monitoring capability.





Equality Monitoring Update in DEL

Linda Bradley and Christine Thompson, DEL

The former Training and Employment Agency (T&EA), now part of the Department for Employment and Learning (DEL), has monitored the uptake of its main programmes and services in terms of gender, community background and disability since 1993. In June 1994 the then T&EA published a report called 'Equality of Opportunity Monitoring Results' which gave a picture of the occupancy on the Agency's programmes by gender, community background and disability. Since then this information has been regularly updated in the Labour Market Bulletin.

Last year's issue of the Labour Market Bulletin updated the monitoring statistics to 2001 but the article also brought together for the first time equality monitoring information for the whole of DEL. This included most of the functions of the T&EA together with Higher and **Further Education functions** of the former Department of **Education for Northern** Ireland (DENI). This article updates these figures to 2002 and provides an update on how the Department has taken account of the results from its review of monitoring arrangements.

The introduction of the Northern Ireland Act (1998) has meant significant changes in the way in which DEL monitors equality of opportunity. Section 75 of the Act places a statutory obligation on all public authorities, in carrying out their functions, to have due regard to the need to promote equality of opportunity:

Between persons of different religious belief, political opinion, racial group, age, marital status or sexual orientation;

Between men and woman generally;

Between persons with a disability and persons without; and

Between persons with dependants and persons without;

Although this article only covers three of these dimensions - gender, community background and disability, information on racial group, age, marital status and dependant status is available on the Department's website www.delni.gov.uk. The Department, in common with practice elsewhere in Government, does not monitor for political opinion or sexual orientation for any of its programmes or services. A full discussion of this issue was included in last year's Labour Market Bulletin and the Department will continue to examine whether or not it is possible to monitor either of these dimensions.

UPDATE ON THE DEPARTMENT'S REVIEW OF MONITORING ARRANGEMENTS

A review of the
Department's monitoring
arrangements was
completed in March 2001
and the results of this
review were reported in last
year's Labour Market
Bulletin. One of the main
issues raised by this review
was the gaps in dimensions
monitored by the
Department. It was found
that although the majority of
the Department's major
programmes and services



Equality Monitoring Update in DEL

Linda Bradley and Christine Thompson, DEL

do monitor participation by community background, ethnic origin, age, marital status, gender, disability and dependant status there are still some programmes which are not monitored by all of these dimensions. The Department has been working to try to cover these gaps within the restrictions of the current IT systems and the additional costs of doing so.

Last year the Rapid
Advancement Programme
did not monitor for ethnic
origin, disability, dependants
status or marital status. It is
now monitored by ethnic
origin and marital status.
The IFI/Wider Horizons
programme also now
monitor for ethnic origin and
Walsh Visas are now
monitored by dependant
status.

UPDATE ON THE DEPARTMENT'S EQUALITY MONITORING STATISTICS

For HE and FE the question on religion is not compulsory. In addition, in HE, it is only requested for NI domiciled students studying in NI. This results in a high percentage non-response in both the HE and FE sectors (38% in HE and 32% in FE).

Table 1 provides updated information on the composition of the eligible

groups for each of the programmes and services listed. The eligible group is the total number of people eligible to participate in the programme or service. The breakdown of the eligible population was taken from the 2000 Labour Force Survey (most recent annual data available). Not all eligible group figures are available as the data are taken from a sample survey and once the estimated number in a category drops below a certain level (6,000), data are deemed to be unreliable and are not published. Numbers exceeding 6,000 are also subject to sampling error.

This information on eligible groups allows a comparison for the occupancy on the Department's programmes and services with the eligible group to ensure that all of the Section 75 groups are appropriately represented in the Department's programmes and services. Therefore, the figures for occupancy should broadly reflect those for the eligible population.

Some of the issues raised in last year's Labour Market Bulletin article continue to be an issue. For example, the participation rate of females (21%) on Jobskills Modern Apprenticeship compared to the eligible group (60%) continues to be

low. However, it was suggested that this was due to the nature of the programme and to the high participation rates in FE and HE by females.

In March 2001, 33% of participants on the Bridge to Employment programme were Catholic but this has now increased to 52%. However, the percentage of female (27%) participants is low compared to the eligible group (59%).

Low participation of people with a disability continues to be a problem on many programmes, particularly Enterprise Ulster, New Deal 50+, Premiere and Worktrack. This may in part be due to participants who are disabled according to the DDA definition of disability not declaring themselves as disabled either because there is no extra benefit for them in doing so or because they may not want other people to be aware of their disability. The Department's provision of specific programmes and services designed to help those with disabilities may also affect the levels of participation on other DEL programmes. DEL will continue to monitor the participation rate of disabled people on all of its major programmes and services.

Equality Monitoring Update in DEL

Linda Bradley and Christine Thompson, DEL

Table 1: Occupancy and Target Group Figures¹

	% Fem	% Female		lic ^{2, 3}	% Disa	bled ⁴
Programme	Occupancy	Target	Occupancy	Target	Occupancy	Target
Job Brokerage ⁵	34%	37%	[52%]	[57%]	N/K	14%
Employment Support	34%	49%	[43%]	[48%]	100%	100%
Rapid Advancement Programme	34%	N/K	[64%]	N/K	N/K	N/K
IFI Wider Horizons	35%	44%	[67%]	[53%]	N/K	N/K
Enterprise Ulster	47%	62%	[51%]	[54%]	4%	32%
Jobskills ⁶	32%	40-60%	[55%]	[67%]	6%	N/K
Jobskills Modern Apprenticeship	21%	60%	[52%]	[54%]	0%	N/K
New Deal for Disabled People	41%	43%	[46%]	[44%]	100%	85%
New Deal 18-24	33%	N/K	[62%]	N/K	3%	N/K
New Deal 25+	16%	N/K	[60%]	[57%]	0%	N/K
New Deal 50+7	28%	37%	[46%]	[47%]	0%	79%
Premiere	73%	52%	[51%]	[53%]	1%	68%
ILA's ⁸	/	0	100	-	-	-
Worktrack	74%	65%	[61%]	[55%]	2%	36%
Job Bridge	31%	53%	[54%]	[53%]	2%	28%
Bridge to Employment	27%	59%	[52%]	[52%]	0%	22%
Walsh Visa Programme	49%	50%	[72%]	[47%]	1%	8%
Higher Education (HE) ⁹	61%	N/A	[58%]	N/A	4%	N/A
Further Education (FE) ⁹	59%	N/A	[53%]	N/A	5%	N/A

Notes

- 1. The occupancy figures are as at 31 March 2002 for all training and employment programmes and as at 01 December 2001 and 01 November 2001 for HE and FE respectively.
- 2. Percentages for community background (religion) composition exclude those not classified as either Protestant or Catholic. The accepted convention, which is followed in this article, is to give the percentage in [square brackets], except where specifically indicated. Protestant and Catholic percentages will thus sum to [100%]
- 3. For HE, information on religion is only collected for NI domiciled students studying in NI Institutions.
- 4. Disability in HE and FE is defined on the basis of a student's own self-assessment while those on a training or employment scheme are given the DDA definition of disability and asked to determine if they are disabled under this definition.
- 5. Target Group figures for Job Brokerage include only those who are either ILO unemployed or economically inactive but who would like a job. The Job Brokerage service is also available to those who are employed but fewer will take up the service.
- 6. Excludes Jobskills Modern Apprenticeships.
- 7. Target group figures for New Deal 50+ include only those of working age. Although the programme is available to those over working age the up-take is small.
- 8. Individual Learning Accounts (ILA's) were suspended in October 2001. Figures for 2002 are therefore not available.
- 9. HE enrolments at FE colleges are included in the FE figures.

CONCLUSION

DEL is continuing to monitor the uptake of its main programmes and services in order to ensure that all of these are delivered on the basis of equality of opportunity and we will continue to publish the results to enable public scrutiny.





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The Context of the Study

The Local Economy Policy **Unit at South Bank** University recently completed a study of the supply and demand for childcare in NI, commissioned by the **Equality Commission for** NI, the Department for **Employment and Learning** and the four Childcare Partnerships in NI. The study included a survey of childcare providers, a survey of parents and the analysis of data from the Family Resources Survey (for GB) and the Labour Force Survey (for the UK).

These were used to measure the supply and demand for childcare, the influence of childcare provision on women's employment rates and the extent to which lack of affordable childcare constitutes a barrier to equality of opportunity in the labour market. For the provider survey, a postal questionnaire was sent to a random sample of 500 providers, selected from registration lists of nurseries, childminders and providers of out-of-schoolhours care. A postal questionnaire was also sent to a sample of 10,000 families with children under 12, selected at random from family doctor records. The report is based on 50 providers and 1,400 families, with a sub-sample of 100 mothers who answered additional questions by telephone.

The several types of childcare provision in NI can be divided into three groups in relation to their importance for supporting parents to enter the labour market. First there are types of provision which are potentially available throughout the parents' working week: day nurseries (occasionally also described as 'crèches'), registered childminders, and other childminders who are not registered. Secondly there

are after-school clubs and school holiday schemes, which help to bridge the gap between school hours and parents' working hours. Thirdly, there are forms of childcare which are usually available for only two to four hours a day, or for short sessions on some days each week; these are playgroups, drop-in crèches, nursery schools and pre-school classes in primary schools. Parents make use of these anyway, whether they are in employment or not. Our survey of childcare providers focused on registered provision in the first and second categories, whilst the survey of parents enquired about all three categories.

The context of our study is that provision of registered childminding and day nursery services in NI as a whole is at much lower levels than in England. There is also considerable disparity between the four Health and Social Services Board areas, with the Eastern area having the best provision, approaching average levels in England, and the Southern area the fewest places. Low childcare provision invites the question: is the relatively low female employment rate in NI partly a consequence of a shortage of childcare services?



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EMPLOYMENT RATES OF MOTHERS IN NI COMPARED TO GB

Our econometric analysis used the Family Resources Survey and the Labour Force Survey to examine the relationship between women's labour force participation and the supply of childcare places, looking at differences between areas in England. The regression analysis established and quantified a positive relationship in cross-section between the supply of fulltime childcare for the under 5s and the probability that a mother of a young child will take paid work. A separate study from the Institute of Fiscal Studies, published very shortly after our first report in March 2002, confirms this conclusion using a similar methodology¹. However, we found that the low employment rate amongst women in NI masks considerable differences between women of different age groups. Mothers of children under 3, one of the younger cohorts, have a fulltime employment rate above the UK average for mothers of under 3s. For mothers of children aged 3 to 6, the employment rate is close to the UK average for similar mothers. In fact, therefore, mothers in NI appear to overcome relatively low provision of registered childcare to achieve a higher employment rate than our regression analysis would

predict. From the survey of parents carried out since, we find that they achieve this with more help from partners, relatives and friends, and also from unregistered childminders, than is found in the IFS study. Applying Paull and Taylor's findings on the use of formal care to the NI population of children would predict that 19% of mothers of children under 12 would rely entirely on formal registered care whilst they work, whereas our survey predicts that only around 15% do.

Our analysis of the Labour Force Survey data for NI over 1998-2000 suggests that childcare costs constitute a barrier for low paid women in entering employment, even though the costs, revealed in both our parents and providers surveys, are around three quarters of hourly prices in England. The barrier appears greatest for lone mothers. Earnings of lone parents are especially low in NI: about one third lower than the all-UK level for lone parents, according to the LFS. For mothers living with a partner the shortfall is less at 12%, and the average female full-time wage in NI is under 10% less than the UK average. The parents survey confirmed that mothers of under 12s who are not in employment are less likely than those who are to have had a

professional or managerial job in the past, and have relatively low potential earnings. Their entry into employment is premised to a considerable extent on low-cost childcare, but some cannot access forms of care that are eligible for support from the Working Families Tax Credit, and others cannot claim WFTC because their partner's earnings lift them beyond the range of eligibility.

USE OF CHILDCARE SERVICES BY NI MOTHERS IN EMPLOYMENT

Our survey of 1,395 parents has shown that there has been a considerable rise in the use of formal childcare in NI since a study by PPRU in 1994. After correcting for the fact that our postal questionnaire attracted the interest of more parents who were working (and therefore very often using childcare services) than of non-employed mothers, we can make the following estimates of use of formal childcare by parents in NI:-

Formal childcare is now used by 47% of all families with children under 12, 52% of couples and 37% of lone parent families. It is hardly used by parents of children aged 12-14, except in a few cases for after-school schemes. The 47% figure compares to 57% in the study made by La Valle et al² of parents of children up to



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and including 14 in Great Britain. This lower use in NI reflects the lower childcare provision, compared to the rest of the UK. Formal childcare is used by 50% of employed mothers and 33% of non-employed mothers. Amongst partnered mothers who are working, formal childcare is used by 53%, and amongst working lone parents, formal childcare is used by 42%. Nearly all of the childcare used by nonemployed mothers takes the form of playgroups, nursery schools, pre-school classes and to a much lesser extent after-school clubs. Where mothers in employment use these forms of childcare, they usually supplement them by recourse to grandparents or other relatives and friends. Most of the childcare used by mothers in employment takes the form of registered childminding, unregistered childminding, and day nurseries.

The extent to which mothers' employment is supported by formal childcare increases with the mother's earnings. Within the formal childcare categories, childminders are much more likely to be used by lower earning mothers and day nurseries are more likely to be used by mothers in professional and managerial occupations.

Relatives and friends play a considerable role in

childcare provision, especially grandparents. Around one in five of working parents' children under 5, and over one third of children aged 5-11, are cared for entirely by a grandparent, older sibling, other relative or friend. Many more parents combine formal care with help from relatives and friends.

Disabled children and those with a chronic health problem constitute about 10% of all children using formal childcare. Around 15% of families with children under 12 have at least one child with a disability or health problem, and the employment rate of their mothers is considerably lower than average.

ISSUES OF ACCESSIBILITY AND AFFORDABILITY OF CHILDCARE

A tiny proportion of families in NI, probably not more than 1%, are from ethnic minorities with specific language and cultural needs in relation to childcare. Because these groups are so small, a general survey such as ours cannot investigate their needs, which therefore deserve special consideration.

Both affordability and availability do constitute a problem for many parents. Affordability is especially a problem for parents with more than one child needing childcare whilst they work. Availability, above all of after-school places, is especially a problem in rural areas. There has been a considerable increase in the use of unregistered childminders since 1994. More children are now placed with unregistered childminders than with registered ones.

There is some difficulty about finding formal childcare where working parents need childcare outside of standard office hours. Childminders are found to be more willing to take children for long, or unsocial, or variable hours than day nurseries. Hours of use of formal childcare have a very weak relationship to the number of hours per week for which the mother works; a large proportion of children using formal childcare are only using it part-time. However, the provider survey showed that many providers prefer to take full-time customers than part-time ones, and charge more pro rata for part-time care.

The costs of childcare, according to the information given by the parents, agree quite closely with the costs found in our survey of providers. The average cost of registered childminding is £1.87 to £2.06 per hour, and of unregistered childminding



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£1.75 per hour. Day nurseries have an average hourly fee of £2.03 to £2.29. After school places – many of them provided by day care establishments – have an average cost of £1.44 to £1.58 per hour. There are slight variations in average hourly costs paid by all parents between Health and Social Services Board areas; childcare is most expensive in the Eastern area and least in the Northern.

FORECASTING THE FUTURE DEMAND FOR CHILDCARE

From the findings of the parents survey we developed estimates of the demand for childcare per thousand women in employment, distinguishing between professional or managerial jobs and other jobs, full-time and part-time. These are based on the actual use of each of the main types of childcare used by working mothers.

We then developed a forecast of the additional demand for childcare places associated with the projections of women's employment in NI made by the Institute of Employment Studies at Warwick University, and available on the DfES Skillsbase website³. We used two alternative assumptions about how employment change will affect the demand for childcare. The

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first scenario is that the split between mothers and others amongst women in employment would remain the same as it is at present amongst women aged 59 or under. The second scenario is that the increase in employment would be met from the reserve of nonemployed women, with the proportion of mothers of under 12s amongst women entering the labour market equal to their current share of the non-employed reserve. On the first assumption, mothers of under 12s would be 34% of women taking up the growth in employment; whilst on the second assumption, we use the fact that mothers of children under 12 are 36% of all inactive women aged 16-59. These proportions are estimated from the Labour Force Survey.

We now relate these projections to the scale of current provision:-

The number of childminding places will need to rise by between 654 and 695 between 1999 and 2005, representing an increase of around 4%. But this does not take into account the excess demand revealed in both the provider survey, and the survey of parents. Although it should not be assumed that all parents using unregistered childminders would use registered care if places

were available, a proportion of those using unregistered places can be regarded as showing unmet demand for registered places. Some of the unregistered ones appear to be trusted friends with whom the parents have an arrangement which is particularly valued for some reason. Bearing in mind that over 14% of children of employed mothers are currently placed with unregistered childminders⁴, and that our provider survey found excess demand of up to 20% for registered childminders, we take the view that a reasonable target for expansion of childminding places would be 15-20% between 1999 and 2005.

The number of day nursery places will need to rise by 608-646, that is at least 12%, up to 2005. The forecast shows quite a rapid increase in demand in this category, because of the shift in composition of the female workforce towards professional and managerial jobs. As we have seen in section 3, mothers in these occupational groups make relatively more use of the most costly kinds of childcare.

The number of after-school places will need to rise by 400-424 up to 2005, that is at least 13%. Although the provider survey revealed less pressure on this category of childcare than



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Table 1: Projections of number of childcare places needed to 2005 and 2010

	Professional/Managerial		Other Occ	cupations	Total
	Part-time	Full-time	Part-time	Full-time	
Projected increase in employment to 2005	700	500	31,700	-10,200	
Projected increase in employment to 2010	1,300	500	56,000	-23,200	
Senario 1: to 2005					
Number of jobs to be taken by mothers					
of children under 12 (33.6% of total)	235	168	10,651	-3,427	
Required number of childcare places:					
Registered Childminder	44	48	1,047	-485	654
Day nursery/crèche	28	18	607	-45	608
After school Club	19	10	426	-55	399
Total in first three categories	91	75	2,080	-585	1,662
Unregistered childminder	55	56	1,406	-929	588
Scenario 1: to 2010					
Number of jobs to be taken by mothers					
of children under 12 (33.6% of total)	437	168	18,816	-7,795	
Required number of childcare places:					
Registered childminder	82	48	1,850	-1,104	876
Day nursery/crèche	52	18	1,073	-101	1,041
After school club	35	10	753	-125	672
Total in first three categories	169	75	3,675	-1,330	2,589
Unregistered childminder	102	56	2,484	-2,112	529
Scenario 2: to 2005					
Number of jobs to be taken by mothers					
of children under 12 (35.7% of total)	250	179	11,317	-3,641	
Required number of childcare places					
Registered childminder	47	51	1,113	-516	695
Day nursery/crèche	30	19	645	-47	646
After school club	20	10	453	-58	424
Total in first three categories	96	80	2,210	-621	1,766
Unregistered childminder	58	59	1,494	-987	624
Scenario 2: to 2010					
Number of jobs to be taken by mothers					
of children under 12 (35.7% of total)	464	179	19,992	-8,282	
Required number of childcare places:					
Registered childminder	87	51	1,965	-1,173	931
Day nursery/crèche	55	19	1,140	-108	1,106
After school club	37	10	800	-133	714
Total in first three categories	179	80	3,905	-1,413	2,751
Unregistered childminder	108	59	2,639	-2,245	562

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the two previous categories, the survey of parents suggests that this is deceptive, because there are hardly any providers to have any vacancies in some parts of NI, especially rural areas.

HOW CAN THE SUPPLY OF CHILDCARE PLACES BE EXPANDED?

How feasible is this scale of expansion, and how much of it can be left to market forces alone? Our provider survey revealed a sense of considerable excess demand for childcare, and of an expectation that demand will continue to rise. Looking at such indicators as the proportion of establishments in the provider survey which had been full for all or most of the previous 12 months, the number on waiting lists, and the number of potential clients whom childminders had to turn away, the impression is that there is greater pressure on existing places for under 5s than for after-school care. Existing after-school providers have more vacancies than nurseries or childminders, but parents, on the other hand, find there are not enough of these providers in the right places. The growth of pre-school classes has relieved the pressure of excess demand for care for four year olds, and will in due course do the same for three year olds. But it generates a demand for

supplementary part-time care from parents who want to work full-time, creating a situation where part-time places in pre-school provision on the one hand, and childminding or day nurseries on the other, need to be dovetailed together at local level in order to avoid a situation where there is, for example, excess demand for afternoon care but surplus capacity in the mornings.

Looking at the entry and exit of childminders to and from the market, we expect that the number of childminders might expand by up to 20% by 2005. But there is already excess demand of around 20%, as reported by childminders themselves, and much of this results in use of unregistered childminders. Looking at the proportion of day nurseries and after school providers which have recently opened or risk having to close soon, the number of such settings is likely to grow by only 5% to 2005.

Many providers felt that the best form of help to them, in order to sustain and expand their services, would be financial help for parents to pay for childcare. Take-up of the Childcare Tax Credit will be very important here. Although prices of childcare services are rising faster than retail prices generally, few providers thought that

this could be attributed to the effect of WFTC. Many childminders hold prices stable for existing customers over two years or more, whilst increasing prices considerably for new customers.

Many mothers felt that employers could do more to help them with childcare issues. In particular, many suggested workplace nurseries. They pointed out that these are particularly valuable for employees with variable shift patterns, which present an awkward pattern of demand for a childcare provider unconnected with their workplace. Having a workplace nursery also relieves the worry of not being able to pick up a child in time from a childminder or nursery when the journey takes longer than expected because of adverse traffic or weather conditions.

THE NEED FOR MORE FAMILY-FRIENDLY JOBS

Some mothers in the parents survey also expressed a desire to spend more time with their children, and wished there were better opportunities to work part-time in NI. It is noticeable that the proportion of mothers working full-time in NI (as shown in the Labour Force Survey) is higher than the UK average, despite slightly



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larger families. We found some mothers in our telephone interviews who experienced difficulty finding suitable part-time jobs in rural areas, or in persuading their employers to let them return to their careers on a part-time basis following maternity leave. Several mothers also told us that they would like to work term time only, but found it difficult to obtain a job of this kind. Mothers will no doubt welcome the overall growth of part-time jobs in the NI economy which is predicted for the next few years. It will, none the less, be a challenge to ensure that these jobs offer working time patterns which are suitable for mothers of young children, and that affordable childcare is available to help them move towards equality of opportunity in the labour market.





Statistics Research Branch, Department of Enterprise, Trade and Investment

Disability Discrimination Act 1995

The Disability Discrimination

Act which came into force at the end of 1996, made employers of twenty or more employees legally liable if they discriminated against disabled people in recruitment, promotion, training, working conditions or dismissal. A new duty was also placed on employers to make reasonable adjustments to working conditions or to the physical environment to help overcome the effects of disability. In Spring 1997 the questions asked about disability in the Labour Force Survey (LFS) were extended so that those having a current long-term disability covered by this Act could be identified.

In the following analysis "disabled persons" comprise both those who are disabled according to this Act, or have a long-term health or disability problem which affects either the kind or amount of paid work they can do. Adopting this definition gives the most comprehensive and coherent coverage of disability. All analysis in this article is based on persons of Working Age (defined as ages 16 to 59 for females and 16 to 64 for males).

NUMBERS OF WORKING AGE PERSONS DISABLED

The Spring 2002 LFS estimates that one in five (20%) persons (203,000) of working age in NI had a current long-term disability, similar to the proportion for the UK as a whole (19%). The proportion was slightly higher for males (20%) than females (19%), equating to 107,000 disabled men and 97,000 disabled women.

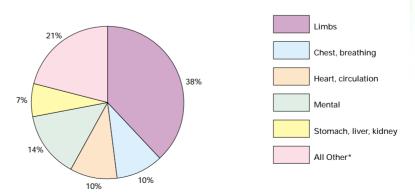
But in fact for age groups up to age 59, a higher proportion of women were disabled than men (as Figure 2 shows)

Figure 1 shows the main health problem affecting these 203,000 persons. For 76,000 (38%) persons the most common health problem was that associated with mobility of the limbs (including arthritis or rheumatism) affecting arms, hands, legs, feet, back or neck. The other main health problems were mental illnesses including depression (14%), heart and circulation problems (10%) and chest and breathing problems (10%).

DISABLED WORKING AGE PERSONS CLAIMING STATE BENEFITS

Out of the 203,000 disabled persons of working age, 139,000 (68%) were claiming at least one type of State Benefit. **Table 1** shows the number of persons who





^{*} All other illnesses include sensory illnesses, skin conditions, diabetes, epilepsy, learning difficulties and progressive illnesses not elsewhere included.



Statistics Research Branch, Department of Enterprise, Trade and Investment

Table 1: Type of State Benefit claimed by Disabled persons, Spring 2002

Type of Benefit	Number Claiming
Sickness or Disability Benefit	99,000
Income Support (not as unemployed)	40,000
Child Benefit	35,000
Housing or Council Tax Benefit	19,000
Unemployment related benefits	9,000
All other benefits#	

[#] All other benefits include State Pension and Family related benefits or tax credits.

Table 2: Type of Sickness or Disability Benefit claimed by Disabled persons, Spring 2002

Type of Sickness or Disability Benefit	Number Claiming
Incapacity Benefit	65,000
Disability Living Allowance	53,000
Invalid Care or Attendance Allowance	8,000
All other benefits#	9,000

[#] All other benefits comprise Severe Disablement Allowance, Statutory Sick Pay, Disability Working Allowance and Industrial Injury Disablement allowance.

were claiming the different types of benefit. As some persons were claiming more than one type of benefit, the total exceeds the 139,000 persons who were claiming. Nearly 100,000 persons were claiming some type of sickness or disability benefit, just under one half of all persons who were considered to be disabled, as previously defined. A further 40,000 persons were claiming Income Support (not on an unemployed basis) and 35,000 persons were in receipt of Child Benefit.

The type of Sickness or Disability benefit claimed by the 99,000 persons can be further broken down into the different type of benefits, as shown in **Table 2** (again remembering that more than one type of benefit can be claimed by an individual person). 65,000 persons were claiming Incapacity Benefit and 53,000 persons were claiming Disability Living Allowance, as a result of their disability.

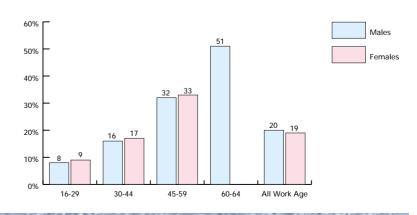
PROFILE OF WORKING AGE DISABLED PERSONS

Figure 2 shows how the likelihood of having a longterm disability or health problem increased with increasing age for both men and women. Much lower proportions of men in both age groups 16-29 and 30-44 were disabled (8% and 16% respectively) than men aged 60-64, where about one half (51%) were disabled. For women the proportion disabled increased from 9% for ages 16-29 to 33% for ages 45-59.

QUALIFICATIONS OF WORKING AGE DISABLED AND NON - DISABLED PERSONS

Figure 3 shows the highest qualification level held by disabled and non-disabled persons at Spring 2002. Disabled persons were less well qualified than their non-disabled counterparts. In particular, 9% of disabled persons held higher qualifications compared with 24% of non-disabled

Figure 2: Working Age Disability rates by age group, Spring 2002



⁻ Too small for a reliable estimate.

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Disabled

Non-Disabled

Higher

GCE A level

GCSE/GCE O level

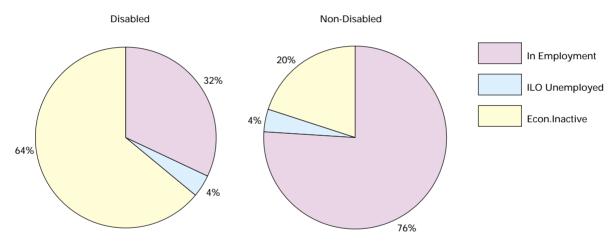
Other

None

Figure 3: Qualifications of Disabled and Non-Disabled persons, Spring 2002

Higher comprises Degree level or above, HNC/HND/BTEC (higher) and equivalent, teaching and nursing qualifications. Trade apprenticeships are included as equivalent to A-level. Excludes those who did not state their highest level of qualification. Figures may not sum due to rounding.

Figure 4: Economic Activity of Disabled and Non-Disabled persons, Spring 2002



persons. Nearly half (45%) of disabled persons had no qualifications, over twice the proportion of non-disabled persons (19%).

ECONOMIC ACTIVITY OF WORKING AGE DISABLED AND NON - DISABLED PERSONS

Figure 4 shows the relative importance of the three main economic categories for disabled and non-disabled persons at Spring

2002. A much smaller proportion of the disabled (32%) were in employment compared with the nondisabled (76%). Conversely, the majority of the disabled (64%) were economically inactive, compared with 20% of the non-disabled. Although the proportion of persons who were ILO unemployed was the same for disabled and nondisabled persons (4%), the ILO unemployment rate for disabled persons of 11.0%

was much higher than that for non-disabled persons (5.0%).

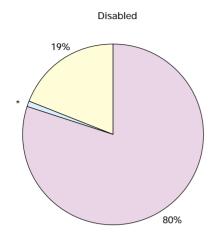
DISABLED WORKING AGE PERSONS IN EMPLOYMENT

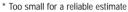
Out the 203,000 disabled persons of working age at Spring 2002, 66,000 were in employment. Nearly twice as high a proportion of these disabled persons in employment were self-employed, as non-disabled



Statistics Research Branch, Department of Enterprise, Trade and Investment

Figure 5: Employment Status of Disabled and Non-Disabled persons, Spring 2002





persons (19% compared with 10%). This may be because self-employment suited disabled persons better than working as an employee, or because disabled persons could have found it harder to obtain work as an employee.

Table 3 shows the proportions of disabled and non-disabled persons in employment according to their occupational group. The main differences were that there were 5 percentage points less disabled persons in Professional and Associate Professional and Technical professions than non-disabled persons (19% compared with 24%), but this was balanced by 5 percentage points more disabled persons in Skilled Trades occupations than non-disabled persons (21% compared with 16%). There were not sufficient numbers of disabled persons who were Managers and Senior Officials to quote a reliable estimate.

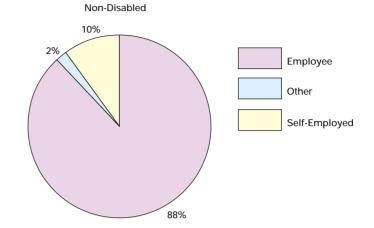


Table 3: Occupational Group of Disabled and Non-Disabled persons, Spring 2002

	Disabled	Non-Disabled
Managers and Senior Officials		12%
Professional & Assoc. Prof & Technical		
occupations	19%	24%
Administrative and Secretarial	755	14%
Skilled Trade occupations	21%	16%
Personal Service & Sales/Customer		
Service occupations	13%	14%
Process, Plant and Machine Operatives	13%	10%
Elementary occupations	13%	10%
All occupations (100%)	66,000	632,000

Table 4 shows the proportions of disabled and non-disabled persons in employment according to the industry sector they worked in. A slightly smaller proportion of disabled persons worked in the Service industries (66%) than non-disabled persons (70%).

Although a higher proportion of disabled persons in employment (27%) worked part-time compared with non-disabled persons (20%), the proportion of employees who were in permanent jobs was the same for both disabled and non-disabled persons (91%).

Table 5 shows that there was a difference in the average earnings of disabled and non-disabled employees at Spring 2002. Gross weekly pay of non-disabled persons was 12% higher than that of disabled



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persons and gross hourly pay, which is unaffected by the number of hours worked per week, was 14% higher for non-disabled persons than disabled persons.

ECONOMIC INACTIVITY OF WORKING AGE DISABLED PERSONS

The majority of disabled persons of working age (129,000 or 64%) were economically inactive (i.e. neither in employment nor ILO unemployed) at Spring 2002. Of these 129,000 persons, 28,000 persons (21%) wanted a job and 101,000 persons (79%) did not want a job. However, nearly all (27,000 persons) of those who wanted a job, were not actually seeking a job. For the 101,000 disabled persons who did not want a job, 71,000 persons (70%) gave longterm sickness or disability as the reason for their economic inactivity and 18,000 gave looking after their family or home as their reason.

Of these 129,000 economically inactive persons, 84% or 108,000 persons had previously worked while the remaining 21,000 persons had never worked.

Table 4: Industry Sector of Disabled and Non-Disabled persons, Spring 2002

	Disabled	Non-Disabled
Service industries	66%	70%
Manufacturing	13%	16%
All other industries#	21%	14%
All occupations (100%)	66,000	632,000

[#] All other industries comprise Agriculture and fishing, Energy and water and Construction.

Table 5: Earnings of Working Age Disabled and Non-Disabled Employees, Spring 2002

	Disabled	Non-Disabled
Average Gross Weekly Pay	£271	£303
Average Gross Hourly Pay	£7.10	£8.10

Table 6: When Economically Inactive Disabled persons left their last job

Length of Time ago	Number
Less than 1 year	- 57
1-5 years	28,000 (26%)
5 years or more	76,000 (71%)
Total (100%)	108,000

⁻ Too small for a reliable estimate.

Table 6 shows how long ago these 108,000 economically inactive persons left their last job. For the majority of these persons (76,000 or 71%) it has been five years or more since they previously worked, while the number who left work in the previous year was too small to quote a reliable estimate.

The LFS asks those who left work in the last eight years, their reason for doing so. For the 51,000 disabled persons who gave a reason for leaving work, 32,000 or 63% said they gave up work for health reasons.



Statistics Research Branch, Department of Enterprise, Trade and Investment

FURTHER INFORMATION

Further information about the above or other labour market information can be obtained by:-

Writing to: DETI, Statistics Research Branch, Netherleigh, Massey Avenue, Belfast BT4 2JP

Telephoning: Belfast (028) 9052 9344

Textphone: Belfast (028) 9052 9304

Fax: (028) 9052 9459

E-Mailing: owen.johnston@detini. gov.uk

Labour Market Publications available on web site www.economicstatisticsni.gov.uk



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"Too often public policy is made without regard to empirical research but in conformity with a misconceived conventional wisdom or ideological fixation". Robert Taylor, Fellow on ESRC Future of Work Programme. (See Book Reviews at end of this Bulletin for more detail).

The Labour Market Bulletin is aimed at both raising the level of our understanding of Labour Market issues and narrowing it by providing evidence in place of anecdotes.

But opinions are often dearly-held despite there being little or no evidence in support. Some examples follow: "More people are looking at the option of being self-employed".

The proportion of self-employment out of total employment in the UK has **fallen** from 1992 when it was 12.5% to 11.4% in 2002. Of those looking for work in the previous four weeks, 4.2% were looking for self-employed work in 1994, down to 3.9% in 2002 (source Labour Force Survey).

 "There has been a big increase in temporary employment which will continue to grow and jobs are becoming increasingly insecure".

There has been a rise in the population of the workforce with permanent contracts (88% in 1992; 90% in 2000 see ESRC Report "Future of Work Programme") and job tenure has lengthened (74 months 1992; 88 months 2000). So much for portfolio working.

 "Women make up over half the workforce".

It is true that just over half of all **employee jobs** are now held by females. But when account is taken of the fact that the vast majority of part-time jobs are held by females, females do less overtime work and almost all the self-employed are males, then in terms of hours worked the female proportion is closer to one-third – see Table 1.

"New Technology will destroy jobs".

A fashionable statement in the early 90s – in fact employment levels in the UK in general and in NI in particular are at record levels! Of course some jobs have been 'destroyed' – but many more created, an extra 100,000 in NI in the last decade alone.

 "In our present knowledge-driven economy".

As if manufacturing the TITANIC almost 100 years ago was not knowledge intensive – never mind the knowledge our stone-age ancestors needed at Mount Sandel (beside the River Bann at Coleraine) 9,000 years ago to live, go forth and multiply.

 "You can't spend too much on education".

Taken to extremes this is a nonsense as who would

Table 1: Weekly Hours of Work: NI

Total 22.8 million Male 14.0 (61%) Female 8.9 (39%)

Source ONS: Labour Market Trends July 2002, March 2002 data



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pay for education if noone worked! The economic returns to education are to the individual, employer, government and society. But there is considerable evidence that about onethird of graduates are in non-graduate jobs - i.e. where their learned skills are not required. But of course it is true that there are substantial noneconomic arguments (social, cultural, personal etc) for education.

 "The future will be in teleworking via IT from home".

The few that did it from home a decade ago have barely risen in number. Under 2% of the UK are so engaged.

 "ICT will lead to the death of distance".

Yet few industries than the ICT (the Information and Communication Technology industries) have clustered more ... over 80% of such jobs in NI are in Belfast; in Rol ... in Dublin, in GB over 70% are in the London/South East area.

 "One in three jobs in NI are in the Public Sector".

Stated as a fact and often highlighted as a weakness in our economic structure – neither statement is accurate.

It is broadly true that one in three jobs are in the public sector (employees only) although to be precise it is closer to one in four (see **Table 2** below) when all civil employment jobs (employee **plus** self-

employed) are used as the denominator.

Three further points:

- Some people think one in three jobs are NI Civil Service jobs, in fact it is one in 16 (6%).
- · That the size of the public sector necessarily represents a weakness is a non-sequitor. It may be too big or too small but size should just be a function of efficiency; in any case whether an activity is in the public or private sector may be just historical eq water supply is in the public sector in NI, in GB it is in the private sector, and a healthy and educated workforce, required for economic progress, is in large part, the result of public sector employment in the health and education sectors.
- · It is true that large public sectors can be considered a weakness where the associated high level of public expenditure is reflected in high taxation (although high tax Scandinavian countries are notably prosperous). In NI high public expenditure does not require high tax in NI itself and can be considered a major boost to the local economy. There are, however, some

Table 2: Public Sector Employment Jobs - June 2002

	TOTAL
NI Central Government	46,400
Bodies under aegis of NI Central Government	70,900
UK Central Government	6,600
Local Government (District Councils)	10,400
Public Corporations	70,600
Total Public Sector Employment Jobs	205,000
Total ALL employees jobs	655,800
Self Employment Jobs	95,200
Total Civil Employment Jobs	751,000
% of Civil Employment Jobs in the Public Sector	27%

Source: DETI



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Table 3: Higher Education Students Region of Study and Domicile

N	VE	NW	ΥH	EM	WM	Ε	L	SE	SW	W	S	NI
									53			

Source: Regional Trends 2001, P51.

potential disadvantages. A larger private sector might lead to larger numbers of new firms being formed. However, it is not necessarily true that if the public sector in NI was smaller, that the private sector would be larger.

 "An unusually high proportion of students from NI leave the region for higher education".

In fact of the 12 UK regions, only Scotland has a higher proportion (95%) staying in their home region to study see Table 3. For a definition of regions see Table 4 in this Article. The issue of concern is the low number from other regions studying at our local Universities.

 "We must improve the International Competitiveness of our Economy".

The prevalence of fashionable conceptions about the relationship between productivity and competitiveness provides a kind of test of the reliability of supposed experts. If you hear someone say something along the lines of

"America needs higher productivity so that it can compete in today's global economy", never mind who he is, or how plausible he sounds, he might as well be wearing a flashing neon sign that reads: "I don't know what I'm talking about". (Paul Krugman, 'Peddling Prosperity', P.280).

To understand this argument the patience of the reader is now required!

 Definitions of International Competitiveness.

The essential lack of meaningful content of the phrase not unsurprisingly leads to a myriad of different interpretations.

The World Economic
Forum defines it as - "the ability of a nation's economy to make rapid and sustained gains in living standards".

The OECD – "the degree to which it can, under free and fair market conditions produce goods and services which meet the taste of international markets, while simultaneously

maintaining and expanding the real incomes of its people over the long term".

UK White Paper (1996) the definition changes to a more sensible one -"measuring a country's competitiveness is difficult because it relates to the potential for future performance, whereas economic data only reflect past performance. Economic growth is probably the best measure of the results of competitiveness, and over time this will be reflected in a country's income per head - a key determinant of its living standards".

· Basic Principles

A central objective of any economic policy is an increasing standard of living for all; the only way that can be achieved is by having an economy that produces more over time; production is a simple function of number of people in work multiplied by how much each person produces (i.e. their productivity). Increasing both will lead to greater prosperity - although of course there are limits to increasing the proportion of the population in work so that in the longer run productivity is the key factor. Thus in the Rol, about half of their remarkable 8% annual



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GDP growth in the last decade was due to productivity, about half to more people employed. **Eventually almost** everyone is employed, so the growth rate will rely only on productivity increases. And productivity increases which are necessary to increase our standard of living are not confined to manufacturing, as it only affects about 20% of our standard of living; 80% is excluded (except insofar as manufacturers embody services). However, the technological products of manufacturing are essential to rising productivity throughout the economy.

 When can the phrase be correctly used?

Correct Use

Many companies do compete on the international market. In any given company, most input costs and exchange rates are 'given' - largely outside the control of the company - and so companies achieve international competitiveness by increasing their productivity (better good at the same price or the same good at a lower price or some combination of product quality/price).

But the argument that because companies compete, countries compete is a good example of the 'fallacy of composition'. I can see better if I stand up at a football match; therefore if everyone stands up, everyone can see better!

Incorrect Use

But countries do not compete against one another because:-

Most of a country's economic activity (GDP) serves the home sector typically 80% to 90%. Thus the major part of a country's economic activity is not internationally traded. Note - Japan has high productivity traded sector and its lower productivity service sector doesn't matter as much. But the standard of living depends on productivity in all sectors and concentrating on the 'internationally competitive sector' will ignore the greater part of the economy. And even within NI manufacturing, (which accounts for less than one in six jobs) almost 70% of manufacturing is for the home (UK) market. (NI: 35%; GB: 34%; Rol: 8%; rest of EU: 14%; rest of world: 9%).

Accordingly, 'regional competitiveness' has some credibility and one might be able to discuss regional competitiveness of the region as NI is only a small (2.4%) part of the economy of the country.

The competitiveness of a country's exports are a function of design, innovation, quality but mainly productivity, wage levels and exchange rates - these latter will vary over time to ensure a country is 'competitive'. If our wage levels rise faster than our productivity and more so than other countries with which we trade, the value of our currency will tend to decline to compensate. Indeed a deficit in a country's balance of payments (trade) can even be due to external confidence in the strength of a country's economy leading to a strong exchange rate; (e.g. the USA where the trade deficit is more than compensated by strong financial inflows) and vice-versa; so to judge the 'competitiveness' of a country by whether it has a strong or weak currency is misleading. This is less a factor where countries are part of a fixed exchange rate system as in the EMU.

The 'competitiveness' argument is presented as



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a zero-sum game; but in international trade both countries gain; we do not gain by 'competing' but by 'exchange'. This 'Theory of Comparative Advantage' was first explained to the world by David Ricardo in his book published in 1817, 'Principles of Political Economy', when he showed that countries gain through international trade by specialising in areas of comparative not absolute advantage.

The alleged wholesale loss of jobs to low cost Far-Eastern economies is a myth - estimates of purchases in the UK from these countries put the impact at about 1.5% of GDP; similarly only 2% of US income is spent on Japanese imports. In fact, the UK runs a surplus with Asia of £2 billion and of £1.6 billion with the four Asian Tigers (Hong Kong; Taiwan; Singapore and South Korea).

Typically, the value added in a manufacturing firm in NI is about 35% of the value of sales i.e. about two-thirds of a company's turnover is bought in – from other manufacturing companies, from utilities, and from the public and private sector – e.g. banks, advertising, insurance (and even within the manufacturing

sectors manual work is replaced by service type jobs).

A more comprehensive study by the OECD stated "at least three quarters of the value added associated with a manufactured product is due to service activities". Accordingly the efficiency of these supplying sectors is even more important than the value added by a company. Indeed companies which are leaders in world class manufacturing often have a co-operative, not adversarial, relationship with their suppliers – even to the extent of advising them on manufacturing technologies etc. These companies recognise that their competitiveness is critically affected by what happens outside their firms.

Some sectors have little or no real competition e.g. water supply, sewerage, electricity, etc; so competitiveness is not the criterion let alone international competition; it should be efficiency/productivity.

A large part of our recent increases in the standard of living has been due to productivity improvements in the **service** sector (e.g. aviation, telecommunications,

direct-line services in banking, insurance, retailing).

· Results of the Fallacy

Japan is an example of an undue focus on international competitiveness - the end result is a large balance of payments surplus which has resulted in a relatively poor standard of living due to a highly inefficient sectors which are neglected because they are not exposed to international competition ('SOTO' - the exposed highly efficient exporting sector; 'UCHI' - the highly inefficient sector supplying local goods and services); some examples are:

Distribution – Japanese cameras are cheaper in the UK than Tokyo;
Agriculture – where the price of rice is seven times the world price; and
Land tenure system – a modest flat can cost £1/2m.

A strong yen leading to export of jobs – e.g. Japanese electrical firms do 23% of their component-making abroad.

"The economy was distorted to the goal of aggressive exporting; to this end savings were extracted from the workforce and handed over to export-orientated



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firms that put market share over profits – powerless shareholders allowed this to happen; over-priced domestic goods and a bubble share market paid for it" – to give the companies access to cheap capital.

All of which has resulted in a much lower standard of living for the average Japanese 'salary man' than their reputation for having the world's most 'internationally competitive' economy might suggest.

Indeed one of the reasons why in NI we have a higher standard of living

than might appear from our incomes is due to our low cost of housing – which is not in the internationally traded sector!

If international competitiveness were the sole criterion, countries with large balance of payments, surpluses would be the most successful economies. Japan has the largest such surplus, the USA the largest deficit – which is the more successful?

The UK has an unusually open economy. The UK is the fifth largest exporter in the world and exports

more per capita than the USA. Is it therefore a more successful economy?

And historically, Germany and Britain have only recently exceeded their export-GDP proportions of 1913! USA exports run at 8%, Mexico's at 31%! So much for the nonsense of a direct relationship between exports and GDP levels! If the only way to grow is by exports, why hasn't for example the German export-GDP ratio risen over time?

Accordingly the focus should be on productivity in the entire regional

Table 4: Employment¹ by Region by Size Range

Region	Total employment	Size (number of employees)			
	(a000)	0	1 - 49	50 - 249	250+
North East	671	9.8	31.4	13.9	44.7
North West	2,098	12.0	34.9	13.4	39.7
Yorkshire and the Humber	1,927	10.2	28.2	11.0	50.6
East Midlands	1,522	11.6	32.3	12.8	43.2
West Midlands	1,935	10.8	31.8	12.3	45.1
East of England	2,019	12.7	32.4	11.1	43.9
London	4,300	11.1	22.8	8.6	57.5
South East	3,071	14.3	32.5	11.4	41.8
South West	1,574	18.5	39.0	11.1	31.4
England	19,117	12.4	30.5	11.2	45.9
Wales	728	15.2	39.2	11.8	33.9
Scotland	1,486	11.5	35.5	13.3	39.7
Northern Ireland	415	14.7	47.5	16.5	21.3
UK	21,746	12.5	31.5	11.5	44.6

Source: Small and Medium Enterprise (SME) Statistics for the UK, 1999



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economy - (i.e. domestic productivity); only by this route will a high standard of living at high employment levels be achieved, with a surplus for redistribution to the less fortunate. And the focus for the Department in its efficiency role is to ensure that the population (labour) has the appropriate skills to combine with the other factors of production and thereby have a productive economy.

There is no rationale for favouring certain sectors over others; in fact increases in productivity in the service sector are quantitatively more important than increases in the manufacturing sector because it is a much bigger sector.

The local labour market

There is a misconception that there is a single local labour market. The matching of the supply of, and demand for, workers does take place spatially (as well as by skill, wage offer etc). A typical labour market - as evidenced where the majority of recruits live - can vary from 3km (sav supermarket assistants) to "the world" (for chief executives on 6 figure salaries). In NI most employees live and work in some 11 labour

markets (this number may change when the results of the 2001 Census become available next vear). But for a District Council to only regard its local stock of skills as being available to a local employer is to seriously underestimate the total supply potentially available to a recruiting employer. Furthermore the supply will be less local the higher the skill level sought. Even in a city as large as Belfast the majority of people working there (147,000) live outside the Belfast District Council area (78,000).

"In our small firm economy in NI".

In comparison to what? Obviously throughout the world most enterprises are 'small' - although small needs to be defined. In the EU, SMEs are "small and medium sized enterprises" and are defined as having fewer than 250 employees; the small enterprises employ between 1 and 49 employees; medium enterprises employ between 50 and 249 employees.

But, whatever definition is used the quotation about NI is backed by evidence and is **not** a fallacy see **Table 4**.





LABOUR MARKET STATISTICS GUIDES

by the Office for National Statistics

The Office for National Statistics (ONS) recently published an updated series of booklets on the National Statistics website, covering a broad range of labour market statistics and associated data sources.

The booklets are aimed at a wide readership with an interest in labour market issues, and have been designed to be particularly useful to the non-specialist. The most recent of these booklets includes a Guide to Labour Market Statistics Releases, which provides a concise and easy to understand overview of UK statistical series, and associated concepts and methodological issues. Also, a Guide to Regional and Local Labour Market Statistics provides a useful summary of labour market statistics available at a smaller geographical level and details of where to access the data.

Other titles in this series of booklets include *How* exactly is employment measured? and *How* exactly is unemployment measured? These booklets provide brief, but thorough summaries of statistical series and data sources used

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in the measurement employment and unemployment. Some explanation of terms and definitions accompanying the statistics is also provided, with brief discussion of some datacollection issues.

The Labour Force Survey features prominently in all of the above publications, and an individual booklet entitled *What exactly is the Labour Force Survey?* has also been produced. This provides more detailed information on how the survey is conducted, and summarizes the key characteristics and composition of the survey.

The above publications are available free of charge, from the Office for National Statistics (ONS) at www.statistics.gov.uk/online products/default.asp#labour

Paper copies of the booklets may also be obtained from ONS by telephoning 020 7533 6094 or e-mail labour.market@ons.gov.uk

CENTRE FOR THE ECONOMICS OF EDUCATION WEBSITE

Those with a specialised interest in education, skills and the linkages with the economy will find much of interest at the Centre for Economics of Education website at http://cee.lse.ac.uk.

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The Centre for the Economics of Education is dedicated to combining the fields of economics education, and statistics in an interdisciplinary approach to research. CEE is a research centre based at Centre for Economic Performance at the London School of Economics in partnership with the Institute for Fiscal Studies and the Institute of Education. The CEE is sponsored by the Department for Education and Skills. The website details publications, seminars and research covering topics such as returns to education; analysis of graduate occupation choice; and deprivation and community benefits to education. Links are also provided to partnership organisations and other sites of related interest.

DOES EDUCATION MATTER?

By Alison Wolf

Sub-titled "myths about education and economic growth" the author tackles head-on a series of beliefs about education and finds that many of them are not grounded in reality.

And she has excellent credentials – currently Professor of Education at the University of London's Institute of Education where she directs the International

Centre for Research on Assessment, she has also held senior positions in the US and the UK.

She accepts – nay promotes – the view that education matters and matters more than ever, especially for the individual. But what of the returns to society? – an important question as most education is publicly financed.

The author's scepticism with simple (simplistic) targets is explained, is critical of the over expansion of the university sector (especially without commensurate funding), highlights the regressive nature of who pays and who benefits, explodes the idea that education and economic growth are highly correlated, dislikes the over utilitarian approach to education.

Penguin Books Price £8.99 ISBN 0-14-028660-8

ECONOMIC AND SOCIAL RESEARCH COUNCIL FUTURE OF WORK RESEARCH PROGRAMME

This Council initiates and funds research into a wide variety of economic and social issues in the UK.

In particular it is funding a major series of labour market research investigations.

These main areas are:-

- · Concepts, Meanings and **Changing Forms of Work** The concept of work assumes different forms in different societies and historical periods. The primary focus of this Programme is the future of paid work - to provide a better understanding of the key areas of change in the character of work organisations. employment structures, and the contents, rhythms and quality of work performed. Are the claims of paradigmatic shifts in work organisations and social practices securely grounded or not? Can we measure work and do we know what it means either to be in or out of work?
 - Work Trajectories and the **Centrality of Work** A fundamental issue is the extent to which both individual aspirations and work trajectories may be changing. Speculation about the declining opportunities for secure careers and 'jobs for life' has intensified following recent high profile examples of company reorganisation, downsizing and outsourcing. Are these structural changes representative of an enduring shift in work organisations, or are they artefacts of transient economic recession?

How does the perception of job security and prospects match with the reality of people's actual working situations?

If people are now to change from an aspiration of working until retirement age, to one of voluntary or enforced early termination of employment, what will replace work? Will people take up extended leisure opportunities, engage more in paid part-time and temporary work, or pursue voluntary and unpaid work, such as informal child care for younger participants in the formal labour market? If career paths are changing, it is almost inconceivable that there will not be impacts in other areas of the social and working environment.

Welfare, Work and Inequality

Past and present policy initiatives aimed at restructuring the welfare state have set in motion new challenges to the support functions of the family as well as employing organisations. The welfare activities of families and households may be undergoing profound change, particularly as women enter paid employment in larger numbers. Are changing patterns of work, such as the break

up of the 'standard working day' - with a range of different worktime practices - having a positive or detrimental effect on traditional welfare roles? What costs and benefits are associated with these changes, both financial and social, for organisations, the state and individuals? What alternative welfare arrangements are being set in place and at whose cost? By whom is the work of caring now being done? The research programme will explore the degree to which traditional welfare roles are being transformed and the consequences both for the cared for and the carers.

A related issue is the impact of the changing distribution of paid work (both job slots and hours) for income inequalities and the provision of state benefits. Research evidence highlights unemployment as a major cause of poverty and disenfranchisement, but as yet there has been no systematic study of the significance of the growth of small part-time and non-permanent jobs for income distribution and the incidence of poverty. The growing number of households with no member participating in

paid employment is a further issue warranting investigation.

 Employment, Restructuring and the Household Shifts in the sectoral distribution of paid employment have coincided with increased female participation rates in paid, predominantly part-time employment and the decline of fulltime manual job opportunities for men. These shifts have been accompanied by the growth of selfemployment, and more spectacularly, fixed contract and other temporary work. What factors account for this recomposition of paid employment, and what are the benefits and disadvantages for different groups in society?

What are the social and economic consequences of the restructuring of paid employment for the division of responsibilities in the household? Has the increase in female participation rates impacted on the work environment? Have work orientations and employment behaviour altered in fundamental ways or not? Are women integrated into the paid workforce as primary or

secondary earners, and if so, with what implications for public policy?

Employment Regulation and Security at Work A systematic investigation of the impact of differing systems of regulation, both statutory and voluntary, on work organisations, employment, patterns of workplace conflict, skill levels, job security and organisational performance is urgently required. Key issues include the relationship between external and internal labour markets, the balance between contract and status in the management of employment relations, and the performance implications of changes in systems of communication. representation and negotiation.

In what ways do differing national and international systems of regulation influence and constrain employers' labour market and competitive strategies? Recent Government policy in the UK and USA has promoted the deregulation of the workplace. In parts of Europe, established regulatory institutions retain a significant, if variable role in the

functioning of internal and external labour markets. Relevant cases include European Directives and the national minimum wage in Britain. How do such regulatory shocks affect the profile of skills, training and productivity within organisations? In a context of more integrated production and service provision, is there scope for specific national and international interventions to enhance employment security and business performance?

A more fluid labour market has many implications for both individuals and employers. What makes a 'good' employer? Who is responsible for training and skill formation: employers, the state or the individual? How might the state educational system respond over time to changes in the career trajectories of young and more experienced workers? Should education be rendered more general or vocational?

 Organisational Change and Performance
 The role of the contract of employment in the management of workplace relations and the social dynamics of trust, commitment and performance have been
 transformed with the application of management techniques and systems emphasising flexibility, lean production and business process reengineering. However, there is little detailed empirical evidence assessing the performance of organisations which have adopted such approaches. Do such practices effectively promote efficiencies and productivity or form the basis for rigidity and resentments within workgroups divided by individualised pay and performance appraisal techniques? Has the introduction of new working practices been supported by appropriate resources, training and information? Is the experience of work different and better after the changes?

variously reformed and

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Index of Previous Articles - 10 to 15

Issue No 10 October 1996

The Northern Ireland Social Omnibus Survey; The Fastest Improving Regional Economy in the UK; Export Growth; The Key to **Expanding Manufacturing** Employment; Company **Development Programme**; Results of the Skills Study -Stage 1; The National Information System for Vocational Qualifications; Long-Term Unemployment in Northern Ireland; Young People on the Margin in Northern Ireland.

Issue No 11 October 1997

The Northern Ireland Labour Market at a Glance; Claimant Unemployment; The Fastest Improving Regional Economy in the UK; Northern Ireland Social Omnibus Survey; Local Labour Market Reports; Hidden Labour Reserves in Northern Ireland: Recruitment Difficulties in Craigavon; Trends in Earnings; Targeting Social Needs; Equality Monitoring Update from the T &EA; Graduates and the Labour Market in NI; Evaluation of **Open Learning Access** Centres.

Issue No 12 October 1998

The Northern Ireland Labour Market at a Glance; Improved Labour Market Statistics – An Integrated Approach; The Fastest Improving Regional Economy; Northern Ireland Social Omnibus Survey; A Skills Unit for the Agency;

Trends in Wage Differentials: Travel-to-Work Patterns in the Belfast Urban Area; The Labour Recruitment Study: Coats Viyella Study; What the International Adult Literacy Survey means for Northern Ireland; The impact of a National Minimum Wage on the Northern Ireland Economy; Women in the Northern Ireland Labour Market; Monitoring Report for TSN; Programmes for the LTU -Evaluations of ACE and CWP: The New Deal - Plans for Evaluation.

Issue No 13 October 1999

Labour Market at a Glance: Labour Market Statistics; Hours Worked - A NI Series; Fastest Improving Regional Economy; Northern Ireland Social Omnibus Survey; Skill Needs in Northern Ireland; The Work of the Northern Ireland Skills Task Force/Skills Unit; The Large Scale Labour Recruitment Study; Work to Workers, Does it Work; Killyleagh Yarns and Saracens (Coats Viyella) Closures; What Happened to the Ex-Mackie Workers: Brain Drain or Brain Gain?; Bridge to Employment - an Evaluation; Why Invest Public Money in Management Training; Jobskills Quality Management Systems - an Evaluation; New Management Standards; Playcare - an Evaluation; **Employment Support for** People with Disabilities - an

Evaluation; The New Deals – Brief Guide; New Deal Evaluations – a Progress Report; Religion in the Labour Market; Disability Research; Equality Monitoring Statistics; Status 'O' Four Years On; What is the Inter-Departmental Business Register?; Labour Market Evaluation Methodology.

Issue No 14 November 2000

Labour Market at a Glance: Labour Market Statistics: Measures of Underemployment in NI; How has the National Minimum Wage Impacted on NI?; The Fastest Improving Regional Economy in the UK; The 2000 NI Social Omnibus Survey; The NI Skills Task Force - An Update; The IT Skills Forecasting Study; Measuring Skills - SOC 2000: The International Adult Literacy Survey - `The Third Wave'; PISA - A Project to Compare the Performance of Pupils Across the World; The Large Scale Labour Recruitment Study; Call Centre Capacity in Northern Ireland; What happened to the ex-Mackie Workers?; A Survey of Farming Families - Work in Progress; Education and Earnings in NI; How Fared the Class of '91? The Experience of Graduates in the Workplace; Who Studied Where? -Student Flows Between NI, Rol and GB; "Status O" Four Years On - Young People and Social Exclusion;

Index of Previous Articles - 10 to 15

Migration Flows Between NI and GB; Impact of Tax Rates North and South on the Mobility of Labour; Jobskills – an Evaluation; Joint T&EA/SSA Office `Working Together' – An Evaluation; Equality and New TSN Monitoring in DHFETE; New Deal Evaluations – Interim Findings.

Issue No 15 November 2001

Labour Market 'At a Glance': Labour Market Statistics; The Labour Force Survey Annual Local Area Database: **Employment Changes by** District Council Area 1995-1999; Still the Fastest Improving Regional Economy in the UK?;The 2001 NI Social Omnibus Survey; Task Force on **Employability & Long-Term** Unemployment - An Update; What can the Large-Scale Recruitment Study tell us about 'Employability'?; The Unemployed – where do they go when they leave the Register?; The Work of the NI Skills Task Force & Skills Unit - An Update; Where are we now? - Results of the NI Skills Monitoring Survey 2000; Where are we going? -**Projections of Occupations** and Qualifications to 2010; The Supply of, and Demand for, Labour in the NI **Electronics Engineering** Industry; Employment in the IT Sector: How does NI Compare with Other UK Regions and Republic of Ireland?; What Happened to the Former Harland & Wolff

Workers?: Work Permit Applications – A Guide to Skills Shortages; Graduates in Employment in NI; Does Taking a Part-time Job affect Student Performance?; Status 0: Young People and Social Exclusion in NI -Report on a Conference held in December 2000; New Deal Basic Skills Curriculum Project Summary Report; JobClubs - A Review; The Premiere Evaluation: Evaluation of DEL Funded Management Development Programmes; Equality Monitoring in DEL; New Deal Evaluations - A Progress Report; Work-life Balance Baseline Study: Study of Obstacles to Cross-Border Mobility between the North and South of Ireland: Information on NI Businesses from the Inter **Departmental Business** Register.

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	Labour Market 'At a Glance'	17	"What Happened to the Former Harland and Wolff Workers"? - A Further Follow Up
2	Labour Market Statistics	18	Employability Taskforce - An Update
3	The Labour Force Survey Annual Local Area Database	19	Farmers – How can Training help them take up Off-Farm Opportunities?
		20	Adult Literacy Strategy - Essential Skills
5	Progress in the NI Economy - a UK Regional Comparison	21	New Deal Evaluations
6	Why is our Employment Rate the lowest in the UK? Does it matter?	22	Evaluation of Worktrack - Some Findings and Conclusions
7	The 2002 NI Social Omnibus Survey	23	"Does Fear of Violence Influence Where People are Prepared to Work in Belfast"?
8	The Work of the NI Skills Task Force - An Update	24	Programme for International Student Assessment - NI & International Results Compared
9	The PA / NI Skills Task Force Executive Skills Recruitment Watch	25	
10	The Supply of, and Demand for, Labour in the NI Mechanical Engineering Industry	26	
11	Labour Recruitment Issues in the NI Tourism and Hospitality Industry	27	Secondary Impacts on Unemployment of Government Assistance to NI Companies
12	Skill Shortages – The Effect of Subject Choice at Secondary School?	28	Equality Monitoring Update in DEL
13	How did XEROX (Dundalk) Recruitment Impact on the NI Labour Market?	29	The Demand for, and Supply of, Childcare in NI
14	Commuting - NI and UK Experiences Compared	30	Characteristics of the Disabled in the NI Labour Market

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