

Bulletin

Institute for
Employment
Research

WHERE ARE THE HIGHLY QUALIFIED?

Introduction

During recent years the importance of a highly qualified workforce has become widely recognised. A strong relationship between economic competitiveness and the skills of the workforce is well-established, and a range of policy initiatives has been introduced to raise levels of participation and achievement in education and training.

This *Bulletin* outlines some of the results from recent research undertaken at the Institute for Employment Research on the *highly qualified*.¹

Who are the highly qualified?

The 1991 Census of Population included a question on degrees, professional and vocational qualifications. The highly qualified are identified as those who hold qualifications that are above GCE 'A' level (or equivalent) standard. In Census outputs such educational qualifications are grouped into three levels – as defined in Box 1:

Box 1: Defining higher level qualifications

Level a: higher degrees of UK standard (*higher degree*);

Level b: first degrees and all other qualifications of UK first degree standard (referred to as *degree*);

Level c: qualifications that are (i) generally obtained at 18 or over, (ii) above GCE 'A' level standard, and (iii) below UK first degree standard, (most nursing and many teaching qualifications are included); (referred to as *intermediate level qualifications*).

More detailed information on the full range of qualifications held is collected in the Labour Force Survey. However, the Labour Force Survey encompasses far fewer individuals than the Census of Population. Hence, the Census of Population provides a detailed snapshot of the highly qualified, disaggregated to the local level, while the Labour Force Survey may be used to study shorter-term trends in qualification levels at national and regional levels.

Numbers and characteristics of the highly qualified by age and gender

- *More men than women are highly qualified*

The 1991 Census of Population recorded nearly 5.7 million highly qualified residents aged 18 and over in Great Britain. Of these, men accounted for 55 per cent (3.1 million), and women for 45 per cent (2.6 million). In all age groups the number of men with higher level qualifications outstripped the number of women with similar qualifications.

- *There are more highly qualified people in the younger age groups*

Figure 1 shows the proportion of men and women in five-year age groups from 20-24 years to 60-64 years. The proportion of the population with higher level qualifications is highest in the age range 25-39. In this age range just over a fifth of men and just under a fifth of women have higher level qualifications. In the younger age range (18-24 years) many people will still be studying for qualifications, while in the older age groups the proportion with higher level qualifications tails off, so that in the 60-64 group approximately 13 per cent of men and 8 per cent of women have higher level qualifications.

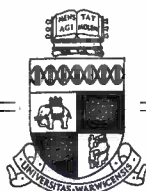
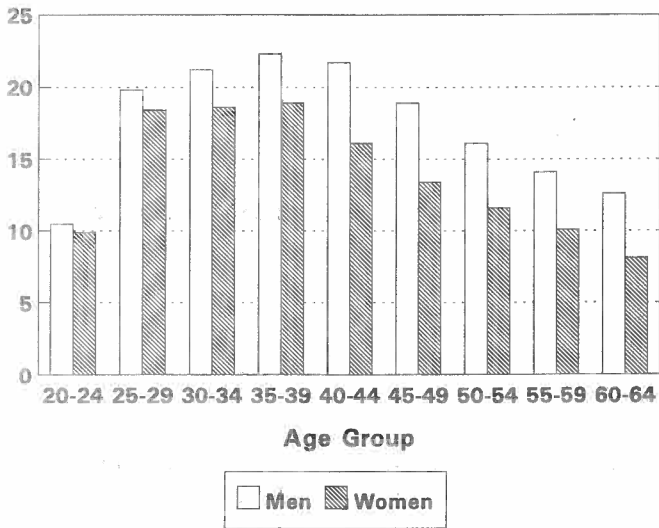


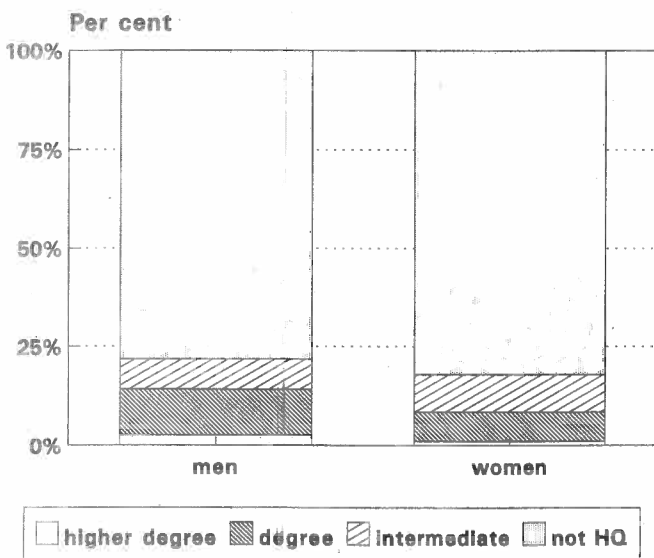
Figure 1: Highly qualified men and women by age, 1991: Great Britain



- *More of the highly qualified men have degrees and higher degrees*

In the 30-44 age group 22 per cent of men and 18 per cent of women are highly qualified. 14 per cent of men have degrees and higher degrees, compared with only 8 per cent of women, but a larger proportion of women than men have intermediate level qualifications (see Figure 2), no doubt reflecting the greater occupational concentration of women in teaching and nursing qualifications. Over half of highly qualified women hold intermediate level qualifications, compared with only just over a third of highly qualified men.

Figure 2: Qualification level: men and women aged 30-44, 1991

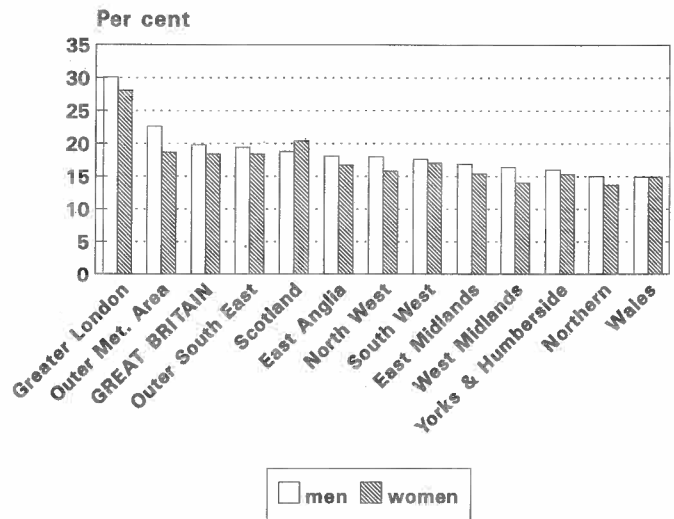


Geographical distribution of the highly qualified

- *Concentration in London and the South East*

The highly qualified are unevenly distributed by region. The greatest concentrations of highly qualified residents are in London and the South East. Figure 3 shows that for the age group 25-29 Greater London has the largest proportions of highly qualified men and women. Outside Greater London only in the Outer Metropolitan Area (in the case of men) and Scotland (in the case of women) does the share of the highly qualified exceed the Great Britain average.

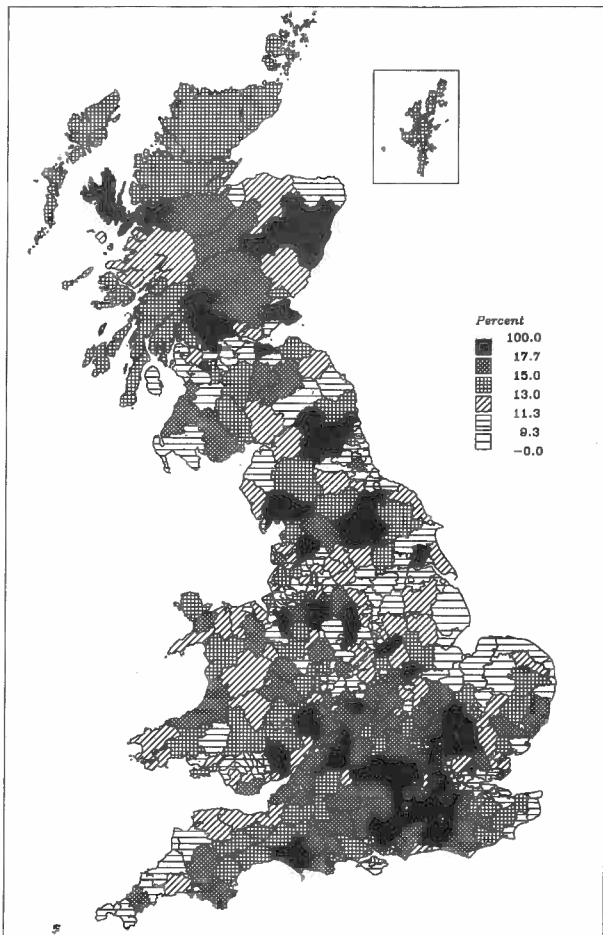
Figure 3: Highly qualified aged 25-29 by region, 1991



- *The attraction of mixed urban-rural environments*

At the local authority district level, the areas with the highest shares of highly qualified residents are located overwhelmingly in the Home Counties to the south, west and north of London (see Figure 4). Many of these districts are well-established attractive locations for the highly qualified. An analysis of data from the 1981 and 1991 Censuses of Population, in which all local authority districts were ranked on the proportion of adults with higher level qualifications, and then divided into decile groups, reveals that out of 459 districts 35 (7.6 per cent) were in the 'top' decile group in 1981 and 1991 (see Box 2), and of these two-thirds are classified as 'mixed urban-rural areas'.

Figure 4: Highly qualified adults by local authority district, 1991



Box 2: Local authority districts with largest proportions of adults with higher level qualifications in 1981 and 1991

Greater London: Camden, City of London, Kensington & Chelsea, Kingston upon Thames, Richmond upon Thames, Westminster

South East: Chiltern, East Hertfordshire, Elmbridge, Epsom & Ewell, Guildford, Hart, Mole Valley, Oxford, St Albans, South Bucks, South Oxfordshire, Surrey Heath, Vale of White Horse, Waverley, Winchester, Windsor & Maidenhead, Woking, Wokingham

East Anglia: Cambridge, South Cambridgeshire

East Midlands: Rushcliffe

West Midlands: Warwick

North West: Macclesfield

Northern: Castle Morpeth

Scotland: Bearsden & Milngavie, Eastwood, Edinburgh City, North East Fife, Stirling

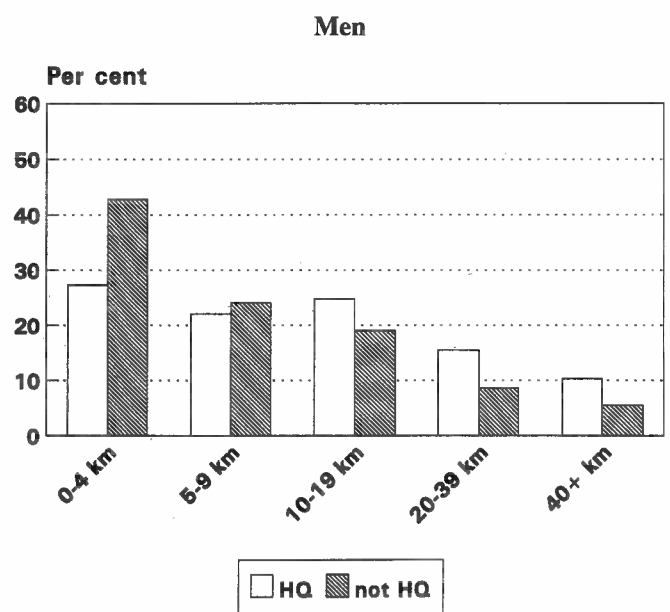
● *Increasing proportions of highly qualified in all areas*

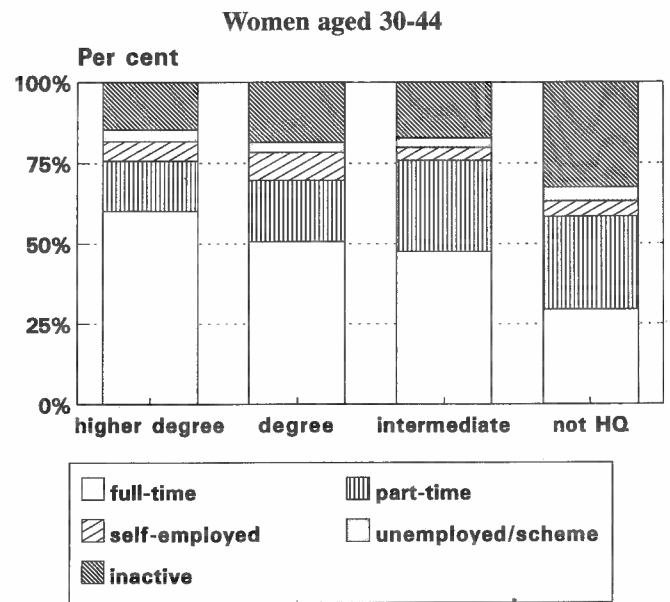
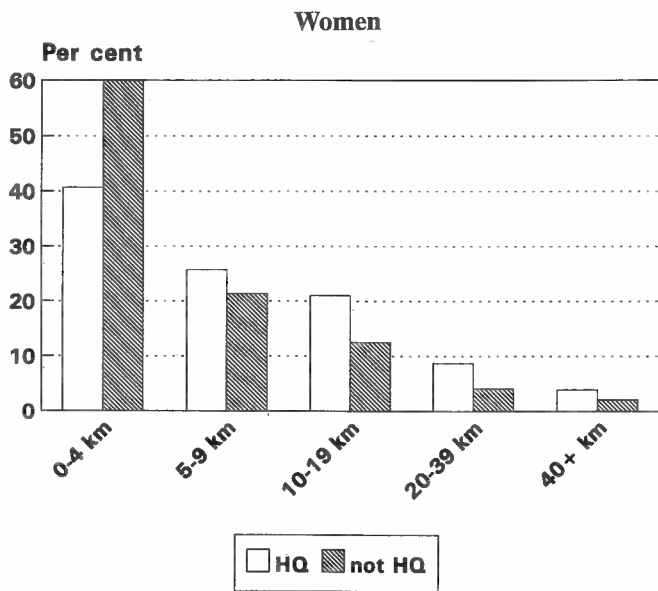
Between 1981 and 1991 the number of highly qualified adults in Great Britain increased by 1.8 million. Men and women accounted for this increase in approximately equal proportions. Virtually all areas shared in this increase. At the regional scale, the main feature of change was the increase of highly qualified people in Greater London – and more particularly Inner London. This meant that the concentration of highly qualified in London was accentuated over the decade.

● *A note on residence/workplace distinctions*

The data from the Census of Population is ‘residence-based’ (i.e. the highly qualified are recorded at their place of residence). It cannot be assumed that the highly qualified living in a particular area will also work there. Analyses of data from the 1991 Census of Population Sample of Anonymised Records show that men tend to travel over longer distances to work than women, and that the highly qualified tend to travel further to work than those without higher level qualifications. Half of all highly qualified men have journeys-to-work in excess of 10 kilometres, compared with a third of men without higher level qualifications (Figure 5); the corresponding proportions of women with and without higher level qualifications travelling such distances are a third and a fifth, respectively. Reliance on residence-based data would tend to under-estimate the proportion of highly qualified workers in large metropolitan areas.

Figure 5: Distance to work by qualification level, 1991





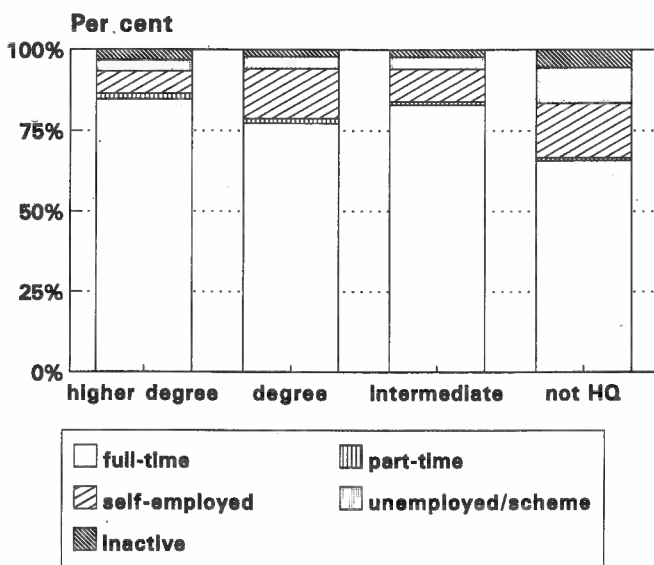
The deployment of the highly qualified

- *Economic position – better employment prospects for the highly qualified*

Figure 6 contrasts the economic position of men and women in the 30-44 years age group by qualification level. There are important differences in the economic position of men and women, most notably the greater importance of full-time employment and self-employment for men than for women, and the higher proportion of women than men who are part-time employees or economically inactive.

Figure 6: Economic position by qualification level, 1991

Men aged 30-44



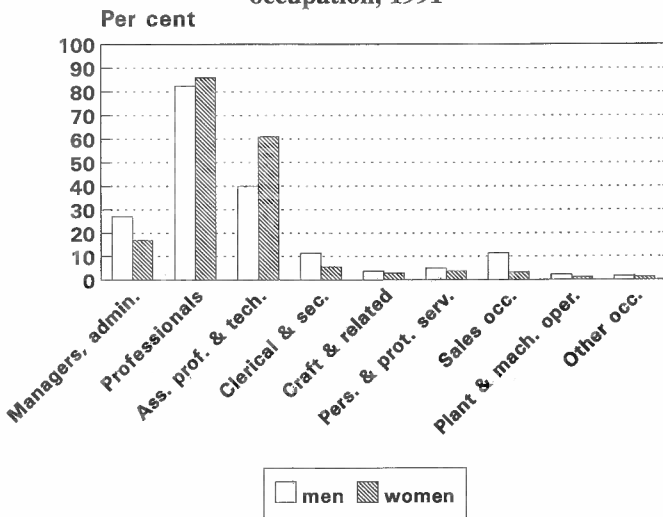
Key features of the economic position of the highly qualified in this age group compared with those without higher level qualifications are:

- *the highly qualified are more likely to be full-time employees – approximately four-fifths of highly qualified men are full-time employees, compared with two-thirds of men without higher level qualifications; three-fifths of women with higher degrees are full-time employees, compared with half of those with degree or intermediate level qualifications, and less than a third of women without higher level qualifications;*
- *highly qualified men are less likely to be unemployed – less than 4 per cent of men with higher level qualifications were recorded as unemployed or on a government scheme in 1991, compared with 11 per cent of men without higher level qualifications;*
- *women with qualifications of degree level and above are less likely to be part-time employees – 16 per cent of women with higher degrees and 19 per cent of women with degrees are part-time employees, compared with 28 per cent of those with intermediate level qualifications and 29 per cent of women without higher level qualifications;*
- *highly qualified women are less likely to be economically inactive – less than a fifth of highly qualified women were inactive in 1991, compared with a third of women without higher level qualifications.*

● Occupational deployment

The highly qualified are concentrated in SOC Major Groups 1: Managers & Administrators, 2: Professional Occupations and 3: Associate Professional & Technical Occupations. Approximately 85 per cent of the highly qualified are in these three SOC Major Groups. The highly qualified account for over four-fifths of men and women employed in SOC Major Group 2: Professional Occupations – a share exceeding that found in any other SOC Major Group (Figure 7). In SOC Major Group 3: Associate Professional & Technical Occupations a greater share of women than of men are highly qualified. This largely reflects the clustering of women in the Health Associate Professional occupations. Intermediate level qualifications are more prolific in SOC Major Group 3 than in any other Major Group.

Figure 7: Proportion of highly qualified by occupation, 1991



SOC Minor Groups displaying the highest shares (at least 75 per cent of total employment) of highly qualified are listed in Box 3. More detailed analysis shows that highly qualified women are clustered in relatively few occupations at the SOC Minor Group level, whereas highly qualified men tend to find employment across a much wider range of occupations.

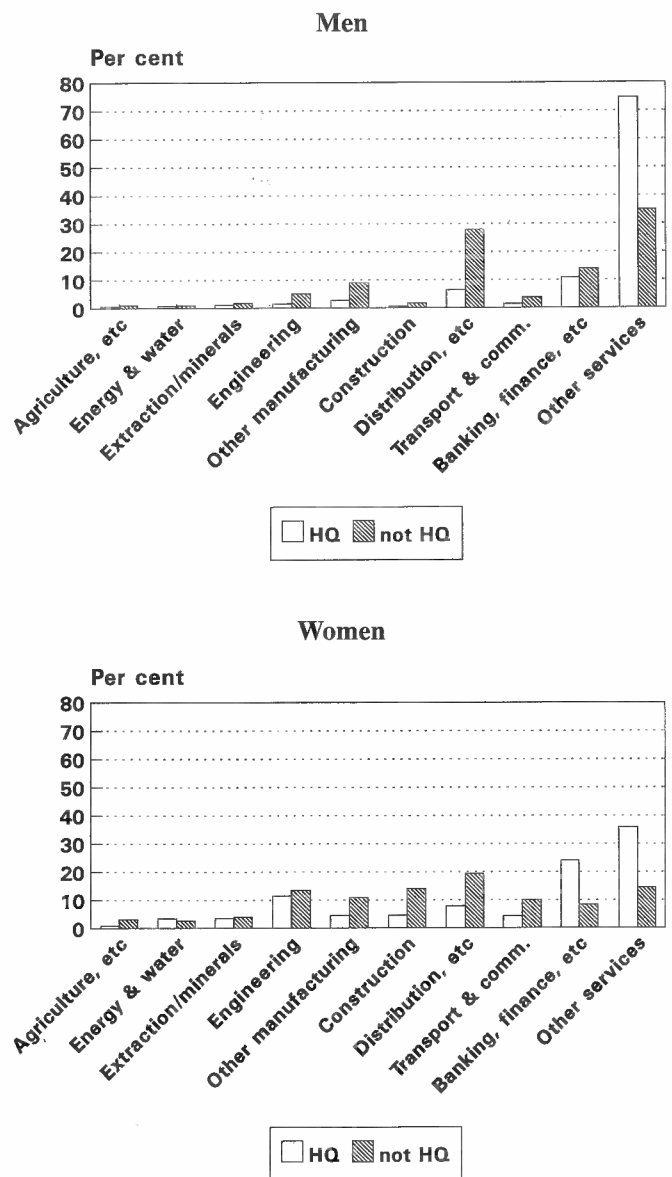
Box 3: SOC Minor Groups with the highest shares of highly qualified persons

- 22: Health professionals
- 24: Legal professionals
- 23: Teaching professionals
- 20: Natural scientists
- 27: Librarians and related professionals
- 25: Business and financial professionals
- 26: Architects, town planners and surveyors
- 34: Health associate professionals

● Industrial deployment

Figure 8 shows that the highest concentrations of highly qualified men and women are in Other Services: over a third of men, and three-quarters of women, with higher level qualifications are deployed here. The corresponding shares of men and women without higher level qualifications deployed in Public Services are 36 per cent and 14 per cent. For men the next largest industrial concentrations of highly qualified are in Banking and Finance, etc, and Engineering. Overall, highly qualified men are spread across a wider range of industries than their women counterparts.

Figure 8: Industrial deployment by Qualification level, 1991



Future prospects for the highly qualified

- *Increasing demand for highly qualified persons*

The demand for persons with higher level qualifications has risen rapidly over the 1970s and 1980s. The shift in occupational structure in favour of SOC Major Groups 1-32, which employ large proportions of highly qualified people, has been an important factor underlying this increased demand. Assuming a continuation of observed long-term historical trends, an additional 1.5 million jobs for the highly qualified are expected by 2001 compared with the level in 1991.³

- *Increasing supply of highly qualified driven by a rise in educational participation rates*

The supply of highly qualified is set to increase very rapidly. While the number of young people (proxied by the cohort of 21 year olds) 'at risk' of obtaining higher level qualifications has decreased, the rise in educational participation rates which has already occurred is expected to fuel an increase in the economically active stock of highly qualified by 2001. If educational participation rates continue to rise the increase could be even greater.

- *The supply-demand balance: a surplus of highly qualified persons?*

A simplistic comparison of supply and demand based on a continuation of medium term trends suggests the possibility of a growing surplus of highly qualified persons, reaching almost a million by the turn of the century⁴. However, this surplus might not be translated into marked increases in unemployment for the highly qualified due to:

- *the changing nature of 'graduate' jobs* – traditional perceptions of what is and what is not a graduate job may be becoming outdated, with many jobs becoming more technical and complex, so that demand might be rising more than medium-term trends suggest;

- *the need to maintain competitiveness* – the UK may need to increase employment of highly qualified persons more than implied by an extrapolation of past trends in order to compete effectively in the world economy;
- *supply creating its own demand* – the employment of highly qualified people in jobs previously done by the less well qualified may alter the nature of the jobs themselves, so helping to enhance competitiveness, and in turn create new demand;
- *position at/near the front of 'the queue'* – even if unable to secure their first choice job, the highly qualified are likely to be able to find employment (sometimes at the expense of the less well qualified).

Hence, the future picture would appear to be one of increasing dispersal of the highly qualified, as they penetrate new areas of the economy – occupationally, industrially and geographically.

Notes

- 1 This Bulletin summarises some of the results from a research project funded by the ESRC (Award No: H507255125). It draws heavily upon data from the Census of Population.
- 2 For further details of medium-term occupational projections see: Wilson, R. with Webb, T.J. (1995) *Review of the Economy and Employment: Occupational Assessment*. Coventry: Institute for Employment Research, University of Warwick.
- 3 For further details see: Wilson, R. (1995) *Review of the Economy and Employment: Future Employment Prospects for the Highly Qualified*. Coventry: Institute for Employment Research, University of Warwick.
- 4 A range of alternative scenarios of supply and demand are presented in Wilson, R. (1995) *op. cit.*

Review of the Economy and Employment, 1995
Occupational Studies (3 separate volumes) – £35 per volume
and
Highly Qualified Projections 1995/6 – £50 single volume

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