The OFFICE

Qualifications, locations and top jobs

High-status jobs are not evenly distributed across the country. Most jobs falling into the top levels of the government's socio-economic classification are found in London and the South East of England. In areas where there are relatively few of these jobs available, people with good qualifications are more likely to have a job in the lower levels of the socio-economic classification. Therefore, it seems that the place in which someone lives can sometimes be a more important influence on their prospects of a well-rewarded job than their qualifications.

Class and qualifications

Obtaining a qualification such as a degree is expensive, with an average student in England and Wales estimated to be over £12,000 in debt on leaving higher education[1]. Since this is an average, many students will leave university with higher levels of debt than this. The assumption is that a degree will lead to a financially well-rewarded job, so making the cost of obtaining a higher qualification a worthwhile investment. In this report, data from the 2001 Census is used to investigate the likelihood of someone with high-level qualifications working in a well-paid job, and the availability of those jobs across the UK.

The National Statistics Socio-economic Classification (NS-SEC) is the official way in which people are now grouped by class in the UK. It provides an indication of a person's life chances just as previous social class groupings have done before, but has now been validated and used for the first time nationally following the 2001 Census. People in higher levels of NS-SEC are likely to be paid more, be better educated, have better health, and live longer than those in lower levels[2,3]. Details of the classification scheme are given in the box overleaf.

BRICKLAYER ACCOUNTANT SECRETARY YOUTH WORKER

Life in Britain

The latest Census reveals that within the UK people live in very different worlds. For some, resources and amenities abound; for others life is characterised by deprivation and difficulties, especially when their need for support is great.

The 2001 Census marked the bi-centenary of census taking in the UK. It is the most comprehensive social record of life in this country now available. Since 1801 successive governments have asked the population to assist in the taking of a Census.

This report is one of a series of 10 showing key patterns and inequalities in life in the UK revealed by the 2001 Census. These reports focus on geographical inequalities, highlighting where services and opportunities appear not to be available or accessible to those people and places that need them most.

NS-SEC

The National Statistics Socio-economic Classification is the replacement for the Registrar General's 'social class' classification. It places people into a socio-economic category based on their occupation and certain characteristics of the work that they do (whether they are an employer, self-employed or an employee; whether or not they are responsible for supervising others; and the number of employees at the place of work). The highest group is NS-SEC 1, 'Higher managerial and professional occupations', and the lowest is NS-SEC 7, 'Routine occupations'. The NS-SEC classes are listed below with the population in 2001, examples of occupations and relative risk of death.

	NS-SEC	Population 2001[5]	Examples of occupations[3]	Relative risk of death (%)[6]
1	Higher managerial and professional occupations	3,182,614	Doctors, directors of large organisations, clergy	70
2	Lower managerial and professional occupations	6,990,083	Journalists, nurses, school teachers	94
3	Intermediate occupations	3,532,894	Travel agents, police officers (sergeant and below)	99
4	Small employers and own account workers	2,626,067	Farmers, taxi drivers, hotel managers	86
5	Lower supervisory and technical occupations	2,687,927	Train drivers, electricians, bakers	102
6	Semi-routine occupations	4,393,965	Scaffolders, traffic wardens, dental nurses	113
7	Routine occupations	3,410,122	Building labourers, waiters, cleaners	126

The 2001 Census asked questions to establish each person's class according to the NS-SEC, and also asked which qualifications were held by each individual. These qualifications are grouped into 'levels', where the highest is Level 5, which includes higher degrees and NVQ level 5[4]. Data from the Census therefore gives information on people's highest level of qualification, and also the type of occupation that they have. Using these data, it is possible to ascertain, for example, the number of people with high level qualifications working in jobs at the top (or bottom) of the socio-economic classification.

In order to assess variations in the degree to which people with good qualifications have well-paid, high-status jobs, the UK was divided up into 142 areas, as for the other reports in this series. These areas consist of counties, unitary authorities and former metropolitan authorities. The report uses these data to address the question:

> **Where fewer jobs in the top socio-economic classes are available, are highly qualified people less likely to have one of these jobs (that is, in some places is location more important than qualifications)?**

Findings

In the UK in 2001, 8.3 million people[7] had one of the highest level qualifications. Figure 1 illustrates how these people were distributed across the NS-SEC. A total of 6.4 million, around three quarters, of these people had an occupation classified in NS-SEC groups 1 to 4. Therefore, about a quarter of people with high level qualifications did not have what might be considered (especially by them) to be a 'good' job. In some cases, this was because the person was still a full-time student studying for yet more qualifications (340,000 people). However, 630,000 people with these qualifications worked in jobs in NS-SEC 5 to 7, lower level jobs, many of which are routine or semi-routine and unlikely to make use of their qualifications. While some people may choose to work in such jobs, the majority are likely to be employed in such

work because a job that would use their qualifications is unavailable. A further 68,000 had never held a job, and 54,000 were long-term unemployed. Most of the remainder of those with high level qualifications but unclassified by NS-SEC were retired.

Overall, 11.4 million people held an occupation in NS-SEC 1 or 2 in 2001. This means that 20% of the population were employed in the top two socio-economic groups of occupations. However, this figure varied across the country from around 10% to 33% of the local population of each area studied in this report.

Comparing areas

Figure 2 illustrates how the two measures are related to each other for all of the 142 areas described in the accompanying technical report. The graph shows that areas with a high availability of good jobs (that is, areas with a high proportion of their population in NS-SEC 1 or 2) tend to have higher proportions of their well-qualified population working in good jobs[TR].

The graph in Figure 3 is the inverse relationship, and shows that in areas with low availability of good jobs, people with good qualifications are more likely to be working in jobs in NS-SEC 5 to 7 (routine, semi-routine and lower supervisory/technical jobs).

Northern Ireland is the only area that falls far from the line associating all of the other areas in both graphs. While the country has an average percentage of its population in socio-economic groups 1 and 2, it has an unusually high proportion of its highly qualified population in classes 1 to 4 (85% where we would expect around 75% if it matched the pattern in other areas). This could be explained by substantial out-migration of well qualified people from Northern Ireland to other parts of the UK if unable to find a good job at home. The outlier to the right of the graph in Figure 3 is the Shetland Islands, where employment circumstances may be expected to be different to the remainder of the UK given the remoteness of the islands.

100 years ago

The first official classification of occupations into 'social grades', later referred to as 'social classes', was developed by Dr T.H.C. Stevenson and first used in the Registrar General's Annual Report for 1911 (published in 1913). The original uses of the class scheme included comparisons of fertility rates and infant and occupational mortality. Stevenson's classification included three basic groups – upper, middle and working classes – but with further division into eight including separate groups for people working in agriculture, mining and textiles. These three specific industries were incorporated into other classes in 1921 making the classification appear similar to that used to map London by Charles Booth in the 1890s. The classification system remained fairly similar until the end of the 20th century. The 2001 Census was the first to classify occupations using a major revision to the social class scheme, the 'National Statistics Socio-economic Classification', as described elsewhere in this report.

For more information see Dorling, D., Mitchell, R., Shaw, M., Orford, S. and Davey Smith. G. (2000) 'The ghost of Christmas past: health effects of poverty in London in 1896 and 1991', *BMJ*, vol 321, pp 1547-51; Rose, D. and O'Reilly, K. (1998) *The ESRC review of government social classifications*, London: Office for National Statistics; Rose, D. (1995) *Official social classifications in the UK*, Surrey: University of Surrey Social Research Update 9 (www.soc.surrey.ac.uk/sru/SRU9.html).

ACCOUNTANT

Figure 1: The distribution of people with high level qualifications in the UK in 2001 (Level 4 or 5 in England, Wales and Northern Ireland; Group 4 in Scotland) across the NS-SEC

People aged 16-74
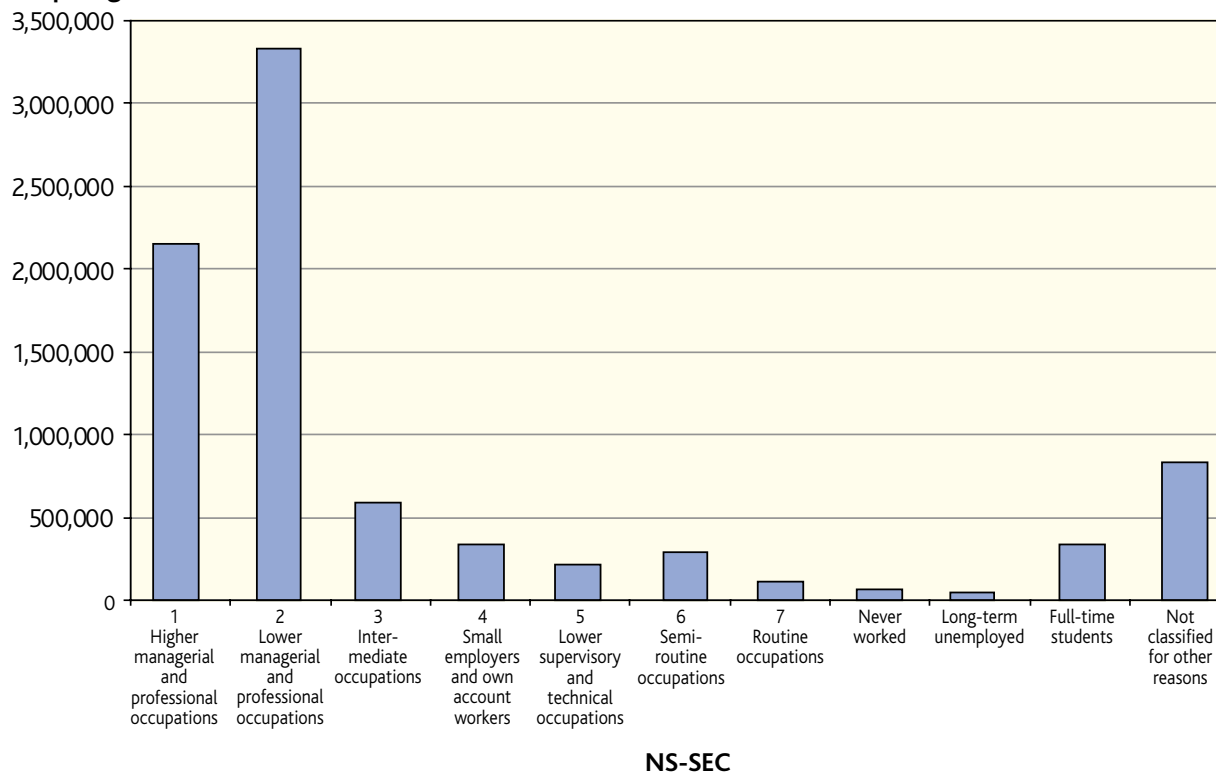
The maps in Figure 4 indicate that the greatest degree of 'under-employment' (high proportions of highly qualified people in relatively poor jobs) exists in the far South West of England, some towns and cities in the English Midlands and North East, and Scotland. The maps in Figure 5 suggest that the areas with the highest availability of top-level jobs (those in NS-SEC 1 and 2) are London and the Home Counties and some parts of southern Scotland.

Since 2001

In the 2000/01 academic year, 431,000 new higher education qualifications (first and postgraduate degrees, HNDs etc) were awarded by UK institutions to UK residents. In 2001/02 this figure was 443,000, and in 2002/03 the number of new qualifications was 469,000[7]. Thus in the few years since the Census, an additional 1.3 million high level qualifications have been obtained. There is no information on where in the country these graduates have ended up. However, the distribution of opportunities to work in top jobs continues to be

disproportionately weighted toward London and the South East. The Association of Graduate Recruiters reported that just 8% of new graduate vacancies in summer 2004 were in Scotland, Wales and Northern Ireland; 40% were in London and 11.3% in the South East[8].

Discussion

In this report we are not arguing that all people with high qualifications should hold the best rewarded jobs, nor that people with low qualifications should be poorly rewarded. In fact it is debatable whether the three years that so many people now spend at university do equip them to work in many of the jobs most move on to. Universities are educational institutions, not training schemes. Similarly it is debatable whether many of the people currently largely debarred from securing particular jobs due to lack of university degrees could not do those jobs.

Figure 2: The association between the percentage of people with high level qualifications with a job in the top four NS-SEC classifications (X-axis) and the percentage of all people in the area with a job in the two highest socio-economic classifications (Y-axis), UK (2001)[TR]
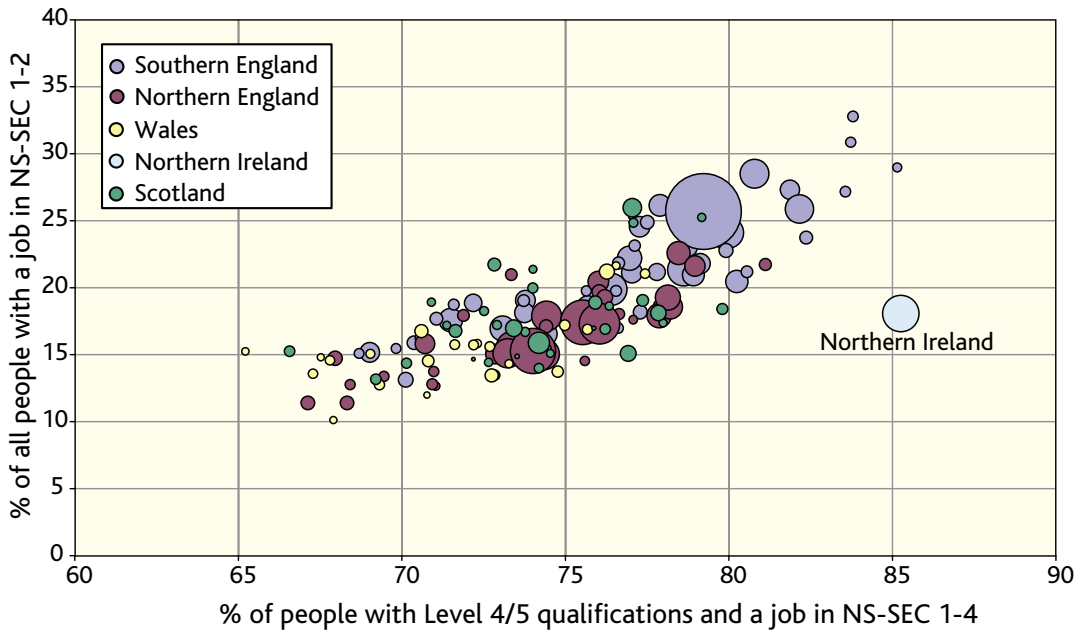

Figure 3: This graph has the same Y-axis as that in Figure 2, but here the X-axis is the percentage of people with good qualifications working in the lowest three categories of the socio-economic classification

Note: Each circle is a county, unitary or former metropolitan authority, drawn with the area in proportion to the total population in 2001 (the largest circle represents London, with a population of just over 7 million). Areas in northern England are those that lie west or north of the counties of Gloucestershire, Warwickshire, Leicestershire and Lincolnshire (the Severn-Humber divide).

Figure 4: The percentage of people with high level qualifications in an occupation in the lowest three socio-economic classifications in each area (NS-SEC 5-7)
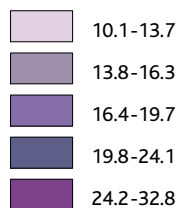
% of people with high level qualifications in an occupation in NS-SEC 5-7

	1.1 - 5.7
	5.8 - 7.3
	7.4 - 8.8
	8.9 - 10.6
	10.7 - 14.7

Approximately 100,000 people

0   50   100 miles
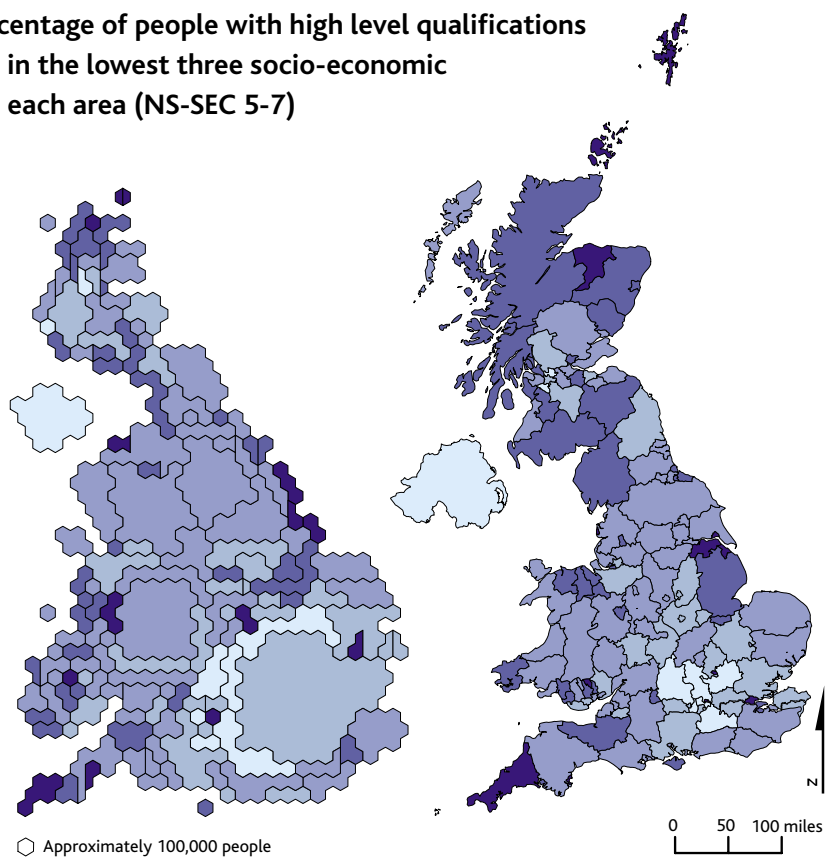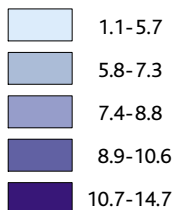
Note: Both maps in each figure represent the same places, shaded identically. The map on the left is a cartogram – each area is shown in proportion to the size of its population in 2001. The largest area is London, since it has the highest population of any of the places[TR]. The map on the right shows the actual boundaries of the areas.

Figure 5: Geographical variation in the proportion of the population working in jobs in the top two socio-economic classes (NS-SEC 1-2)

% of all people in an occupation in NS-SEC 1-2

	10.1 - 13.7
	13.8 - 16.3
	16.4 - 19.7
	19.8 - 24.1
	24.2 - 32.8

Approximately 100,000 people

0   50   100 miles

This report shows very clearly that people with the equivalent qualifications to university degrees are most likely to secure well-paid employment in the South of England, particularly around London and outside of the South only in a few areas such as the capitals of Cardiff and Edinburgh. People with high qualifications who remain in much of the rest of Northern England, Wales, Scotland and Northern Ireland are far less likely to secure well-paid employment, and are up to three times more likely to be working in lower status occupations. Given this it is hardly surprising that university graduates continue to concentrate in the South.

There is an inverse relationship between the proportions of people with well-rewarded jobs in an area and the proportions of graduates working in poorly rewarded employment. The UK employment playing field slopes steeply to the South, drawing graduates towards London and leaving those on the higher slopes far more often in poorly rewarded occupations. Thus, even when graduates remain or move northwards they are unlikely to reduce regional divisions in the UK, in say house prices, as their spending power is on average lower. Even for occupations rewarded roughly equally irrespective of location (see related reports in this series, *Doctors and nurses*, report

no 1 and *Teachers*, report no 3) the higher paid are more likely to move southwards – partly because they can afford to live there.

This inequality in the provision of well-rewarded jobs will only be altered when there are more such jobs available outside of the South East and fewer in the South East. The two areas outside of the South East which have currently bucked the trend are the capitals of Wales and Scotland. It is possible that further devolved government, if taken far enough, could begin to reverse this trend.

DATABASE PROGRAMMER

Notes

[1] 'UK student debt rises to £14bn', BBC News (http://news.bbc.co.uk, accessed 29 July 2004).

[2] Rose, D. and O'Reilly, K. (eds) (1997) *Constructing classes: Towards a new social classification for the UK*, Swindon: ESRC/ONS.

[3] Drever, F., Doran, T. and Whitehead, M. (2004) 'Exploring the relation between class, gender, and self rated general health using the new socioeconomic classification. A study using data from the 2001 census', *Journal of Epidemiology and Community Health*, vol 58, pp 590-6.

[4] In England, Wales and Northern Ireland, the highest level qualifications are Levels 4 and 5, which include first and higher degrees, NVQ Level 4 or 5, HNC and HND. In Scotland, the highest level is Group 4 qualifications, including first and higher degrees, and professional qualifications. There is therefore some inconsistency between countries; any substantial differences would be apparent in the comparisons of areas.

[5] Only people aged 16-74 were asked the questions on occupation and qualifications, so people outside this age range are excluded here.

[6] The relative risk of death was the chances of men classified by their occupation in 1981 dying in the period 1986-90. The national average was 100%. Thus, after allowing for differences in age distribution men in NS-SEC class 7 were 1.8 times more likely to die in a given period as compared to men in class 1 (126/70=1.8). The NS-SEC classification includes more people in the top and bottom categories and thus this ratio is slightly smaller than that found for men classified at the extremes of the Registrar General's classification over the same period (130/66=1.97). See Fitzpatrick, R., Bartley, M., Dodgeon, B., Fifth, D. and Lynch, K. (1997) 'Social variations in health: relationship of mortality to the interim revised social classification', Chapter 7 in Rose and O'Reilly (1997) as above.

[7] Higher Education Statistics Agency (www.hesa.ac.uk).

[8] 'Graduates' starting pay "rising"', BBC News (http://news.bbc.co.uk, accessed 14 July 2004).

[TR] Further information on this point is available in the accompanying technical report.

What do we know?

▸ People in higher socio-economic groups tend to have better life chances and live longer than people in lower socio-economic groups.

▸ The government is keen to encourage more people to obtain qualifications in the higher levels of the Census classification (mostly degrees).

▸ Having good qualifications is one way that a person can obtain a job in the higher socio-economic classifications.

What have we found?

▸ The proportion of highly qualified people working in jobs at the bottom of the socio-economic classification is highest in areas where the availability of good jobs is lowest.

▸ The highest availability of jobs at the top of the socio-economic spectrum is in London and the South East of England.

▸ In some places, location can be more important than qualifications in determining whether or not someone can get a good job.

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Other reports in the series

The companion report to this, *Open all hours*, looks as whether areas with higher levels of unemployment also have high numbers of people working long hours.

1. *Doctors and nurses*
2. *In sickness and in health*
3. *Teachers*
4. *Sons and daughters*
5. *Changing rooms*

6. *A place in the sun*
7. *The office*
8. *Open all hours*
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