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Moving up the learning curve

THE POTENTIAL ACQUISITION OF QUALIFICATIONS BY ADULTS

Frontier was commissioned by the Learning and Skills Research Centre (LSRC) to develop a model that would enable the Government to estimate the likely levels of participation by different types of adult students in different types of courses. A key input to this model was econometric analysis carried out using the Labour Force Survey. This bulletin summarises some of the results of that work.

The Government's recently-published Skills Strategy for England places much emphasis on the need to raise the level of skills as a means of raising productivity. The strategy stresses the importance of basic and intermediate skills (levels 2 and 3), and the need to widen participation. Work that Frontier has recently undertaken for the LSRC was intended to help policy-makers understand why different groups do or do not choose to acquire these qualifications.

The analysis in this paper is focused on a group whose motivation is not well-understood: adults aged 25 and over. Our starting-point was the data that can be drawn →

from the Labour Force Survey (LFS) to identify groups with low levels of qualifications. The proportion of those aged 25 and over without qualifications at or above level 2 (broadly equivalent to five or more GCSEs at Grade C and above) fell from 40% in 1996 to 32% in 2002. This proportion was, however, still significantly higher than the Government would wish and its target is to "reduce by at least 40% the number of adults in the workforce who lack level 2 qualifications by 2010".

Figure 1 shows how this percentage varied between different groups. For example, 39% of women had no qualifications at level 2 (as compared with 28% of men). An above-average proportion of single parents (46%) were in this category as compared with couples with dependent children (30%). The proportion of individuals without qualifications at level 2 or above was 66% for social class E (unskilled occupations), 53% for social class D (partly-skilled occupations) and 37% for social class C2 (skilled manual occupations).

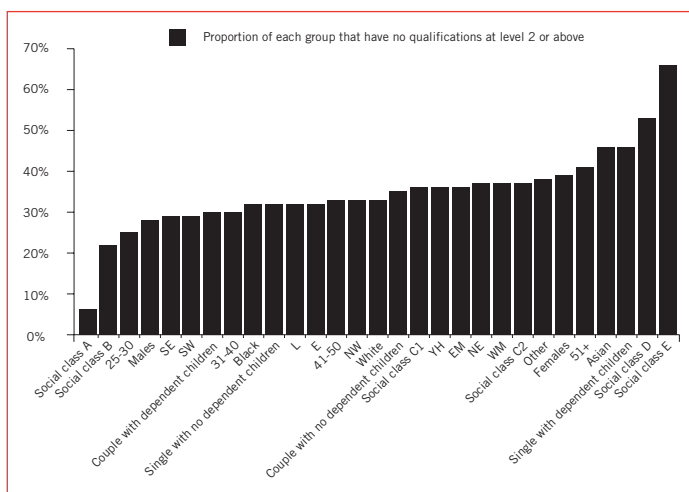


Figure 1: The proportion of individuals of each type with no qualifications at level 2 or above

Source: LFS (2001)
& Frontier analysis

Figure 1 also illustrates the fact that qualification levels were relatively low amongst the over-50s, lone parents, people of Asian extraction¹, and those living in the Midlands and North of England.

The next question we explored was the extent to which different groups might be raising their level of qualifications by participating in study courses that would lead to their achievement: i.e., the flow of individuals acquiring skills. Econometric analysis of a sample of over 400,000 individuals from the LFS² enabled us to identify the importance of such factors as age, gender, ethnicity, employment, location, previous educational attainment, social class and family type to the likelihood of participation.

FILLING THE GAP

In our analysis, we used econometric techniques to estimate the impact of different demographic characteristics on the probability of participating in learning. By comparing these characteristics with those of the groups shown in figure 1 to have low levels of qualification, we can begin to assess whether the gaps in qualification levels are likely to broaden or narrow.

Such techniques enable us to provide more detailed information on the relationship between the characteristics of individuals and their likely take-up of learning. For example, econometric analysis can give independent estimates of the effect of one individual characteristic on the probability of learning, holding other characteristics constant.

The results of the regression analysis can be presented in the form of profiles. A profile represents a group of individuals with the same set of characteristics. For example, profile group A may consist of males, aged 25, living in the North East, from social class E. Profile group B may be older, but with otherwise the same characteristics as group A.

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We began the analysis by specifying the characteristics of a "base case" profile group, with which other groups could be compared. This group was:

- male;
- aged 31 to 40;
- white;
- from social class D;
- with some GCSEs but fewer than five at A*-C;
- from the West Midlands; and
- living in a couple but with no dependent children.³

By varying just one characteristic, compared with the base group, it was then possible to identify the most significant factors affecting this basic decision. Table 1 illustrates some variations from the base case. It is important to note that these did not consist of all people aged over 50, or Asian, or whatever the heading might be: rather, they consisted only of people with the same characteristics as the base group other than in the one respect identified.

Males	Studying and in work	Studying and not in work	Not studying
"Base case"	0.13	0.01	0.86
<i>Variations:</i>			
51+	0.05	0	0.95
Asian	0.11	0.01	0.88
Black	0.2	0.02	0.78
Other ethnicity	0.13	0.02	0.85
Social class E	0.09	0	0.91
Social class B	0.21	0.01	0.78
No GCSEs	0.07	0.01	0.92
London	0.12	0.01	0.87
Single with dependent children	0.09	0.01	0.9
Part of a couple with dependent children	0.13	0	0.87

Table 1: Probabilities that men in different groups would be studying while in work, studying while not in work or not studying at all

Source: LFS (1996 - 2001) and Frontier analysis

PICK A SUBJECT

However, knowing the likelihood that different groups will study takes us only one step of the way towards an understanding of their likely acquisition of qualifications. Econometric analysis is also able to inform us about the type of learning that different types of individuals will choose to undertake. Amongst the over-25s, the largest group consists of those in work, and the next part of this bulletin therefore focuses on their choice of study. Similar analysis could, of course, be made of the much smaller group of those studying but not working.

Table 2 lists the different probabilities that individuals in various profile groups would, if studying while in work, pursue some kind of qualification; and, if they did, the probabilities that they would pursue a qualification that was: academic or vocational.

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Males studying while in work for...	...any qualification	...of which: academic	...of which: vocational
"Base case"	0.71	0.09	0.83
<i>Variations:</i>			
51+	0.64	0.11	0.76
Asian	0.74	0.22	0.64
Black	0.87	0.21	0.72
Other ethnicity	0.62	0.10	0.88
Social class E	0.69	0.12	0.76
Social class B	0.62	0.53	0.37
No GCSEs	0.50	0.06	0.50

Table 2: Probabilities that men in each group who study while in work would pursue a qualification, and the probabilities that the qualification would be either academic or vocational ("other" qualifications were included in our analysis, but are not presented in this table)


Source: LFS (1996 – 2001) and Frontier analysis

This table reveals some interesting differences. It shows that if a "base case" individual decided to study, the likelihood he would study for a qualification was 0.71. If we raised the age of the group to over 50, it was significantly less likely he would study for a qualification. The probability however rose if we focused on black people. This variation was more likely than the "base group" to study while in work, and significantly more likely than either the "base case" group or the Asian group to plump for courses that led to a qualification.

The probability that someone studying while in work would pursue an academic qualification was much higher in social class B than for someone in the "base case" group. This probability was extremely low, by contrast, for those with no existing qualifications at the level of GCSE or above. Finally, the figures in this table would have tended to be higher had they been based on a similar analysis of groups of women. The probability of a woman with the same demographic profile as the "base case" man studying while in work was 0.18 (as compared with 0.13), while the probabilities for black men and women with similar characteristics were 0.20 and 0.26 respectively.

CONCLUSION

This analysis helps to identify the nature of the task facing the Government in raising the level of qualifications across the adult population as a whole. On the whole, the groups with the greatest proportions below qualification level 2 were the least likely to be studying for qualifications that would take them over this point, while those with relatively high levels of qualifications were also most likely to participate in adult learning. The interesting exception was for women, whose existing qualification levels were significantly lower than men's, but who were also participating in adult learning to a significantly greater degree.

SOURCE	<ol style="list-style-type: none"> 1. The definition of Asian people in the LFS is "Asian or Asian British". The definition of black people in the LFS is "Black or Black British". The respondent decides whether they belong to either of these groups or the "White" "Mixed", "Chinese" or "Other ethnic" groups. 2. The econometric analysis was undertaken using data from the Labour Force Survey pooled from 1996 to 2001. 3. The reason for this particular choice of characteristics is that they produce probabilities of studying whilst in work and studying whilst not in work that most closely match the average probability of being at these points in the tree.
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