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Class Origins, Education
and Occupational
Attainment: Cross-cohort
Changes among Men
in Britain

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December 2009

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Abstract

Studies of intergenerational class mobility and of intragenerational occupational mobility have of late tended to diverge in their concerns and methodology. This reflects assumptions regarding the increasing part played by education in intergenerational mobility and the decreasing part played by class origins in intragenerational mobility, once educational attainment is controlled. The paper contributes to the questioning of these assumptions on empirical grounds. Analyses are made of the occupational mobility of men in three British birth cohorts over the course of their earlier working lives: i.e. men born in 1946, 1958 and 1970. It is found that while the most important effect on mobility chances is that of educational qualifications, the importance of education does not increase across the three cohorts; that class origins also have a significant effect on mobility chances, and one that does not decrease across the cohorts; and that features of worklife experience, in particular the frequency of occupational changes, likewise have a persisting effect on mobility chances, independently of both education and class origins. However, while secular changes in mobility processes are scarcely in evidence, the analyses do provide strong indications of a cohort effect. Men in the 1958 birth cohort, whose first years in the labour market coincided with a period of severe recession, de-industrialisation and high unemployment, would appear to have experienced various lasting disadvantages in their subsequent occupational histories.

1. Introduction

One evident advantage of the 'status attainment' approach to social mobility research (e.g. Blau and Duncan, 1967; Featherman and Hauser, 1978) was that it allowed for inter- and intragenerational mobility to be treated in an integrated, if rather schematic, way. The status of 'first occupation' (i.e. on entry into the labour market) served as a key intervening variable, following on that of 'years of education', in causal path models aiming to link individuals' social origins to the status of their current or last occupations. More recently, however, studies of intergenerational mobility, as carried out within a class structural context, and of intragenerational mobility, as carried out on the basis of detailed occupational histories, have tended to move apart from each other - focussing on different substantive issues and using different kinds of data-set and analytical technique (compare, for example, the papers collected in Breen ed., 2004 and in Blossfeld, Mills and Bernardi, eds., 2006 and Blossfeld and Hofmeister, eds., 2006). This divergence is unfortunate. In large part, we would suggest, it results from certain, often implicit, assumptions that unduly limit the attention that is given (1) in analyses of intergenerational class mobility to the part played by occupational mobility over the course of working life and (2) in analyses of occupational histories to the influence of social, and especially class, origins.

As regards (1), the underlying assumption is that a secular tendency exists, as a feature of 'modernisation', for education to become the ever-more dominant factor in whether individuals remain in or move away from their class of origin. It is within the educational system that individuals primarily acquire their human capital; and it is then their human capital, as indexed by their educational qualifications, that primarily determines not only the occupational level at which they enter the labour market but, further, their chances of subsequent mobility within it¹. While it may be recognised that the effects of education on occupational level tend to weaken as individuals age, occupational mobility in course of working life is still in effect treated as in some large degree epiphenomenal: that is, as simply reflecting prior educational attainment rather than - as was more typical in pre-modern times - the acquisition of human capital *in employment itself*, and in such a way that might *compensate for* a lack of educational attainment or opportunity.

As regards (2), the underlying assumption is that a secular tendency exists, again as a feature of modernisation, for the influence of individuals' social origins on their own work histories to be increasingly channelled *via* their education. Individuals' class origins are recognised as a major influence on their educational attainment and as having thus an important 'indirect' effect on their life-chances within the labour market. But the importance of other, 'direct' effects of class origins is taken to be in decline, as employing organisations follow increasingly 'meritocratic' personnel selection policies in

¹ In the economics literature Sicherman and Galor (1990) have developed an explicit model of occupational mobility which envisages that a significant part of the economic returns to education comes in the form of improved chances of occupational upgrading in the course of working life. This theory is criticised on empirical grounds in the work of Büchel and others, cited in the text below.

which educational qualifications are given predominant weight. If, then, in studies of worklife occupational mobility due attention is paid to individuals' educational attainment, class origin effects will in this way be largely captured, and analyses can concentrate on the dynamics of occupational change *per se* without further reference to its intergenerational context.

The assumptions to which we refer could in some degree be defended as providing useful simplifications: no analysis of social phenomena can include all potentially relevant variables. None the less, there is growing evidence, deriving largely in fact from the research in which these assumptions are embedded, that they are now in need of some re-examination.

On the one hand, good grounds have emerged for querying whether the role of education in intergenerational mobility processes is in fact of steadily increasing importance. It would appear that in many advanced societies over recent decades the association between individuals' educational qualifications and their class destinations has, if anything, tended to weaken (cf. Breen and Luijkx, 2004). Moreover, while studies of worklife occupational mobility sensitive to the effects of 'globalisation' rather than of modernisation have emphasised the disadvantages experienced by individuals with only low levels of qualification (cf. Mills and Blossfeld, 2006), they have at the same time pointed to a growing looseness and unpredictability in the transition from education to employment (see e.g. Blossfeld *et al.* eds., 2005, 2008). In particular, the range of occupations and forms of employment contract initially taken up by individuals with higher-level qualifications have become far more heterogeneous (Bukodi *et al.*, 2008). And it is by no means clear that 'over-qualification' occurring on entry into employment is then more or less automatically corrected through upward occupational mobility in later working life (see e.g. Büchel, de Grip and Mertens, eds., 2003; Büchel and Mertens, 2004).

On the other hand, while some studies have lent support to the view that social origins essentially impact on individuals' worklife occupational attainment via their education (e.g. Warren, 2001; Warren, Hauser and Sheridan, 2002), others have shown that the effects of parental social class in particular still persist when education is controlled. In other words, it would appear that the intergenerational transmission of class inequalities continues to shape individuals' occupational life-chances, not only through the creation of advantage or disadvantage in regard to educational attainment but in a range of other ways: for example, through the development of personality or sub-cultural attributes or of social networks that can also produce significant returns in working life (for Britain, see Breen and Goldthorpe, 1999, 2001; Jackson, Goldthorpe and Mills, 2005; Jackson, 2006; Goldthorpe and Jackson, 2008).

In sum, it would seem important in future research to cease to rely on supposed secular tendencies and to recognise, rather than discount, two possibilities. First, processes of worklife occupational mobility need not be shaped simply by the human capital that individuals first bring with them to the labour market via their education; these processes may themselves have some independent role in determining rates and patterns of

intergenerational class mobility. Second, the influence of class origins on individuals' worklife mobility can extend beyond its effects via their educational attainment - and in ways that may be difficult to reconcile with ideas of either human capital or 'meritocracy'. Taking this approach, arguments that imply secular tendencies in the role of education or of class origins in social mobility can then be explicitly set against arguments that would rather emphasise 'cohort-specific' effects: i.e. effects following from the particular temporal relationship that certain birth cohorts have with historical events or conjunctures (Ryder, 1965). As regards employment, a question of particular interest is that of whether, in cases where individuals' early working lives coincide with adverse labour market conditions, a damaging kind of path dependency is thereby set up ('hysteresis') rather than some recovery occurring once labour market conditions improve ('resilience'). The main concern of economists in this regard has been with the possible 'scarring' effects of early unemployment on individuals' future employment and earnings prospects (cf. Arulampalam, Gregg and Gregory, 2001). But of greater relevance to our own wider concerns with the possible effects of recession in early working life on the course of occupational histories is the approach taken by economists such as Moscarini and Vella (2008). These authors suggest that in times of recession a 'noisier' sorting of workers across jobs tends in general to occur, so that individual comparative advantage becomes less relevant to occupational choice - and with implications for the level of returns that qualifications bring. If such wide-ranging and lasting cohort-specific effects do impact on worklife mobility processes, then even in the presence of forces making for secular tendencies in these processes, the overall outcome may still prove to be one of merely 'trendless fluctuation'.

In this paper, we aim to make a start in pursuing the research programme indicated above. We examine the occupational attainment in early-to-mid working life of men in three British birth cohorts. We first present some general descriptive results on their occupational trajectories. We then go on to consider the relative importance, across the three cohorts, of individuals' educational qualifications and class origins in determining their occupational level at labour market entry. Next, we seek to establish at what point in their working lives these same individuals could be said to have reached a stage of 'occupational maturity'. And, finally, we again examine the relative importance in determining occupational level at this stage of individuals' qualifications and class origins, taken together with their entry level and the frequency with which they have changed occupations.

Two limitations of the paper will be obvious. First, we do not include women, and one may expect significant gender differences to show up as regards many of the issues that concern us. These are the subject of another paper (Bukodi, 2010). Second, while we bring class origins into our analyses, we do not attempt the further step of linking worklife occupational mobility - as measured here in terms of occupational status and earnings (see further below) - to intergenerational class mobility. This is a matter that we will be better placed to consider when we have information available for men in each cohort at a later stage in their work histories and can thus establish class destinations more

securely². We do, however, believe that the linkage is an important one to make. Even if one's ultimate interest is in class mobility - because, say, of its known, wide-ranging consequences - it is occupational advancement in terms of status and pay that in the course of individuals' working lives is likely to be subjectively salient and most immediately pursued.

2. Data and the Measurement of Occupational Level

The three British birth cohorts with which we are concerned are those covered by the Medical Research Council National Survey of Health and Development (NSHD), the National Child Development Study (NCDS) and the British Cohort Study (BCS). These studies aim to follow through their life-course all children born in Britain in one week in 1946, 1958 and 1970, respectively. The NSHD has so far undertaken 18 data collections ('sweeps') up to age 53, the NCDS, 7 up to age 46, and the BCS 6, up to age 34³.

In each case, the data-sets of these studies include recalled information, recorded in months, on respondent's previous jobs, on absences from employment, on the timing of job changes and on occupation in each job⁴. For our present purposes, we consider these work histories for men from the point at which they left full-time education and first entered the labour market up to age 34 - i.e. the latest age for which we have information for respondents in all three cohorts. The data-sets also include detailed information on respondents' social backgrounds and on their educational histories and attainment that we are able to exploit. In particular, it should be noted that in our analyses we treat education as time-variant. That is to say, if men in our cohorts attained a higher level of educational qualification at any point after their entry into the labour market, this is taken into account from that point onwards.

² For the 1946 and 1958 cohorts this information is of course already available but in the case of the 1946 cohort further work is necessary in order to bring the data into a suitable form for analyses of the kind we undertake here. In the case of the 1970 cohort, relevant data will be available in the near future.

³ It could be argued that data from such birth cohort studies are not the fairest basis on which to evaluate arguments claiming secular trends as against those emphasising cohort specific effects: the latter effects are, if present, more likely to be revealed. We would accept the possibility that the experience of separate cohorts might not show up secular trends that could in fact be observed on the basis of repeated cross-sectional surveys, representative of the entire population in question. For this reason, we restrict ourselves to noting whether the results we report are in line with or indicative of hypothesised secular trends, and do not suppose that we are in a position to demonstrate conclusively the absence of such trends.

⁴ With the 1958 and 1970 cohorts information on all jobs ever held by respondents was collected. However, with the 1946 cohort respondents were asked in each of ten sweeps from age 16 to 53 to give information on jobs they had held since the last sweep up to a maximum of three or four. In some - we believe quite small - proportion of cases, work histories, as reconstructed from this information, will not therefore be complete. For further details, see Bukodi and Neuberger (2009).

As with all longitudinal studies, the problem of missing data arises. All three studies have suffered from a considerable attrition of respondents from one sweep to another - although a number of individuals subsequently 'return' - and for each sweep there is also some amount of item non-response. However, various analyses of attrition and non-response have been undertaken and the results are encouraging in suggesting that no major biases are being created (Despotidu and Shepherd, 1998; Nathan, 1999; Hawkes and Plewis, 2006; Wadsworth *et al.* 2006).

Occupational data in each study have been re-coded to the official British SOC90 classification (OPCS, 1990)⁵. In proceeding from these data to establish a basis for treating occupational mobility of a 'vertical' kind, we follow a strategy that is set out at length elsewhere (Bukodi, Dex and Goldthorpe, 2009). The essential point is that, rather than relying on a single occupational scale of a 'synthetic' (or 'composite') kind, such as a scale of the socioeconomic status of occupations or of their 'general desirability', we work with two 'analytical' scales, each of which aims to order occupations within a specific and well-defined hierarchy. These are (i) the occupational status scale developed by Chan and Goldthorpe (2004), based on patterns of close friendship and intended to capture status in something close to the classic Weberian sense; and (ii) an occupational earnings scale developed by Bukodi which is in effect an update of that produced by Nickell (1982) and ranks occupations on the basis of average hourly earnings rates for full-time employees, using data from the New Earnings Survey 2002. The latter scale provides a score for each of the 77 minor occupational groups distinguished in SOC90 but the Chan-Goldthorpe scale gives scores for only 31 occupational categories that are either these minor occupational groups or collapses thereof. Thus, for purposes of comparability, we convert scores on both scales into percentile distributions⁶.

A positive correlation between scores on the two scales does of course exist but the correlation is not all that strong. By way of illustration, we use NCDS data to show in Table 1 how the distributions of *men* on the two scales (those of women are significantly different) are related when each scale is collapsed into five broad levels, each covering approximately 20% of the distribution of scores. It can be seen that although empty or near-empty cells occur towards the top-right and bottom-left corners of the table, still only around a quarter of men are found in cells on the main diagonal. There is a tendency for occupations associated with the manufacturing, construction and transport sectors to yield high earnings relative to their status, while the reverse applies for occupations associated with administration, sales and personal services.

⁵ Over all three cohorts, occupational data have been coded to successive official classifications. The 1990 classification proves to be that to which conversion can in general be most reliably carried out.

⁶ To check that the results of our analyses were not in any way artefactual on account of the greater refinement of the occupational categories of the earnings scale as compared with those of the status scale, we have re-run all analyses using a version of the former scale in which we collapse it to the 31 categories of the latter. No differences were found of a kind that would require significant modification of the commentary or conclusions of the present text.

Table 1: Cross-tabulation of five levels distinguished within occupational earnings and occupational status scales, showing percentage distribution of all jobs held by men aged 16-46 in NCDs birth cohort and representative occupations

Earnings Scale	Status Scale					
	1 (Top)	2	3	4	5 (Bottom)	
	11.8	5.3	2.6	0	0	
1 (Top)	Professionals in health and education, lawyers, business and financial professionals	Engineers, technologists, industrial chemists	Production managers, construction managers			19.7
	4.1	5.3	6.7	6.7	0	
2	Journalists, artists and designers, clergyman, social workers	Scientific technicians, computer analysts, health and safety inspectors	Transport managers, managers in services	Telephone engineers, electricians, policemen, customs officers		22.8
	0	1.9	1.1	10.2	12.0	
3		Community and youth workers, accounts clerks and cashiers	Travel and flight attendants	Carpenters and joiners, masons and bricklayers, train drivers	Machine and plant operators, welders, sheet metal workers, steel erectors	25.2
	0	3.8	0.6	5.7	7.4	
4		Administrative assistants, record clerks	Window dressers, telephone salesmen	Glass and ceramics makers, instrument makers, spray painters	Process workers, routine testers and inspectors, garage men	17.6
	0	0.1	2.1	9.2	3.4	
5 (Bottom)			Sales assistants, nursing assistants	Bus and coach drivers, store clerks, cooks, barmen	Labourers, cleaners, kitchen porters	14.7
	15.9	16.4	13.1	31.8	22.8	100.0

3. Occupational Trajectories

In Figures 1 and 2 we plot the average occupational levels attained by men in the three birth cohorts on our occupational status and occupational earnings scales in relation to age and to historical time.

Figure 1.1: Mean occupational status scores by year and cohort

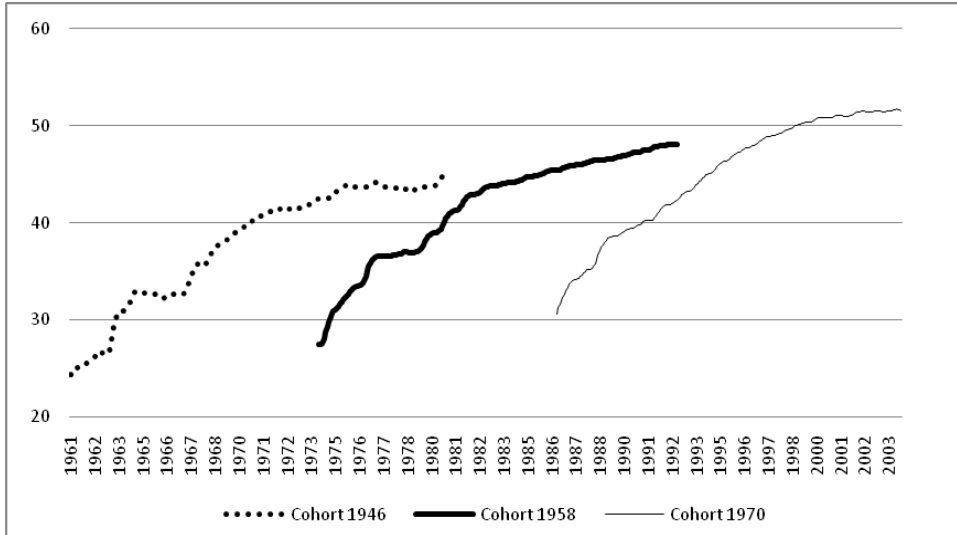


Figure 1.2: Mean occupational status scores by age and cohort

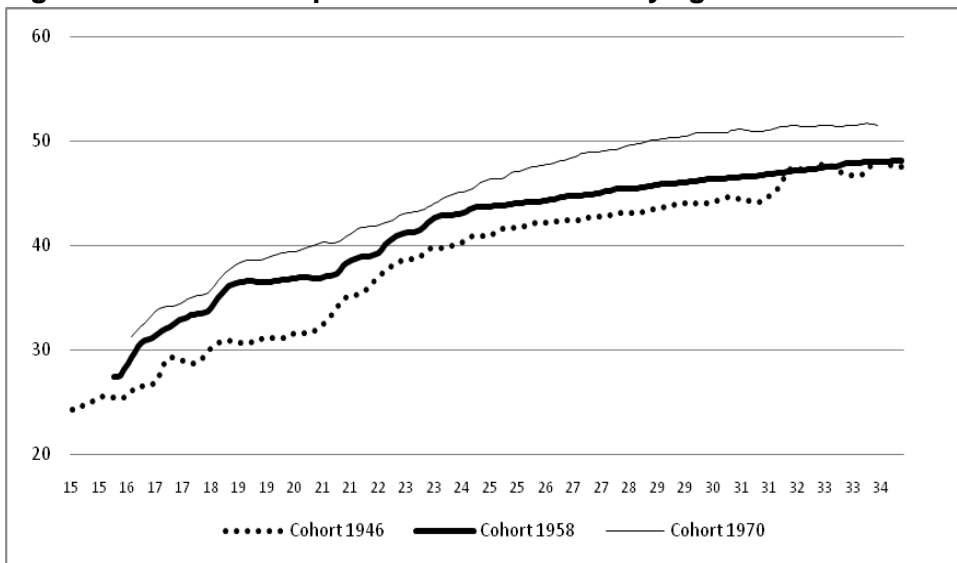


Figure 2.1: Mean occupational earnings scores by year and cohort

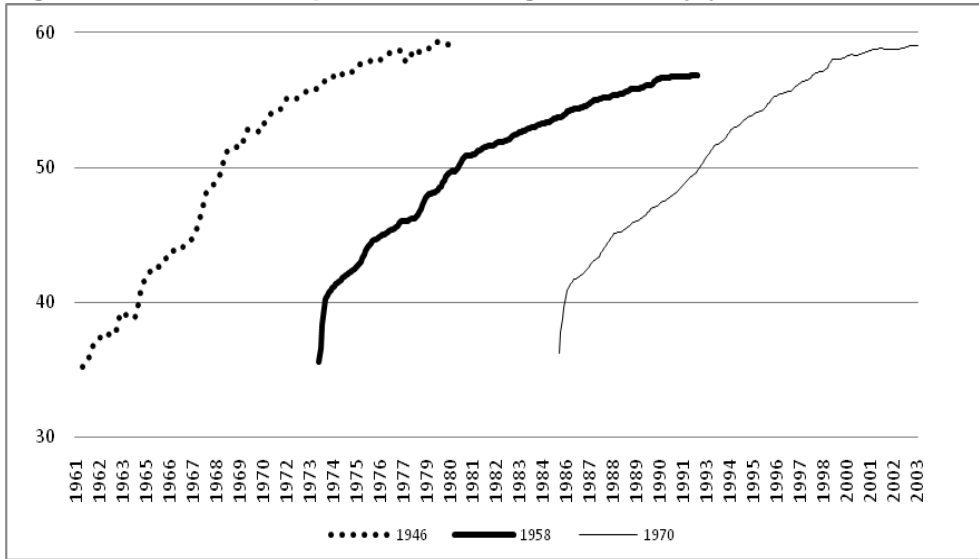
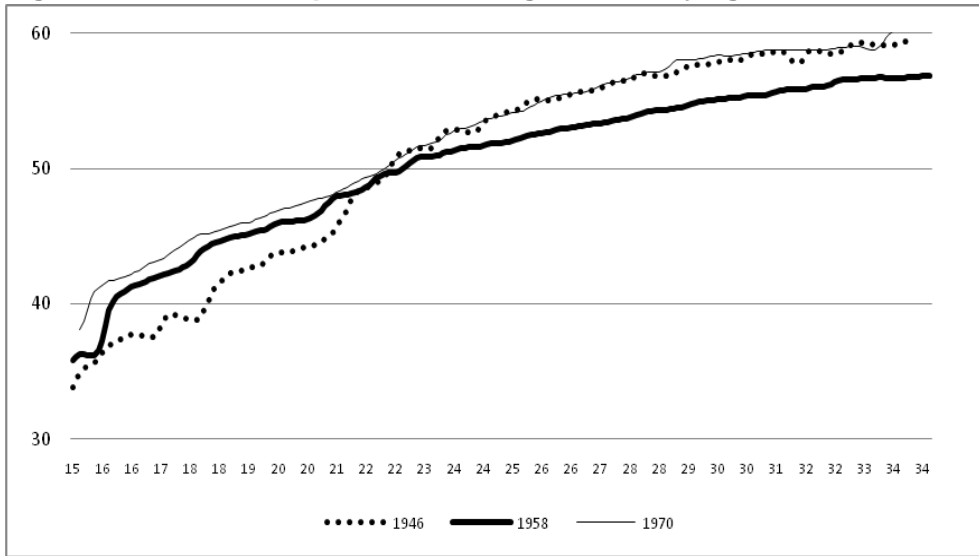


Figure 2.2: Mean occupational earnings scores by age and cohort



It may be noted, first of all, that the general shapes of the curves shown are very similar both for the two scales and for the three cohorts. Over the period covered, men have tended to move upwards occupationally during the course of their working lives, in terms of both status and earnings, and at broadly similar rates.

At the same time, though, some differences can be observed. In the case of the status scale, Figure 1 points to secular change in that, as one moves from the earliest to the latest cohort, there is a rise in average occupational level on entry into the labour market and then in the level attained at almost all ages up to age 34. In fact, on the status scale the distribution of jobs ever held by men up to this age reveals a fairly steady 'upgrading' across the cohorts (Appendix Table A1) which can in turn be linked to long-term

changes in the structure of employment: in particular, to the growth of non-manual relative to manual occupations and to the generally higher ranking of the former on the status scale (see further Chan and Goldthorpe, 2004).

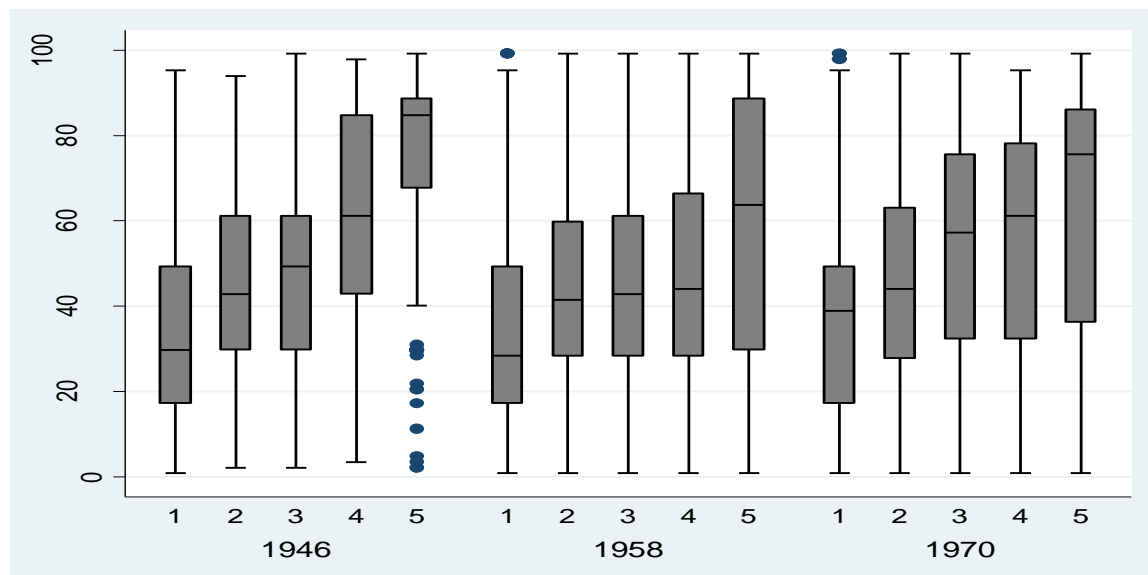
However, in the case of the earnings scale, Figure 2 reveals no similar trends. There is no great difference across the cohorts in men's average occupational level on entry into the labour market, and then, from around age 22, the occupational attainment of men in the 1958 cohort falls below, and stays below, that of men in the 1946 as well as in the 1970 cohort - whose own trajectories are from this point almost identical. One relevant factor here is that on the earnings scale, in contrast with the status scale, there is no 'upgrading' of the jobs ever held by men across the three cohorts (Appendix Table A2). If anything, some decline is apparent in the proportion of jobs in occupations with intermediate levels of earnings - for example, skilled manual jobs - consistently with the thesis of a 'polarisation' in employment shares in the UK between high- and low-pay work (Goos and Manning, 2007).

In addition, though, the distinctive trajectory of the 1958 cohort may be associated with the fact that at the beginning of the 1980s Britain entered into a severe economic recession and a period of extensive 'de-industrialisation' and consequent re-structuring of the labour market. Male unemployment rates rose rapidly and remained at double-digit levels from 1981 through to 1988. Men in the 1958 cohort would then meet with these adverse conditions in the early years of their working lives or, in the case of those who had been longest in full-time education, at the very time of their entry into the labour market. Although these better educated men might still have had good chances of moving into relatively high status, non-manual employment, they would appear to have been less able than their counterparts in either the 1946 or 1970 cohorts to establish themselves in occupations that were also high paying ones.

In Figure 3 we use box-plots to show the spread in the level of first occupations on the earnings scale by educational qualifications. As can be seen, the plots are fairly similar in pattern across the three cohorts but mean scores are in general lower for the 1958 cohort and, most notably, graduates in this cohort have more heterogeneous entry occupations than those in the 1946 and the 1970 cohorts⁷. Detailed inspection reveals that graduates in the 1958 cohort were in fact less likely than graduates in the two other cohorts to enter employment in managerial and technological occupations that would fall into cells of Table 1 lying above and to the right of the main diagonal cells - i.e. relatively high-earnings, low-status occupations. Offsetting this, they were more likely at least than graduates in the 1946 cohort to enter in associate professional, clerical and sales occupations that would fall into cells of the table lying below and to the left of the main diagonal cells - i.e. relatively high-status, low-earnings occupations.

⁷ Analogous plots based on the status scale, which are available on request, show much smaller differences.

Figure 3: Spread of level of first occupation on the earnings scale by educational qualifications and cohort



Educational levels: 1=less than O level; 2=O level or equivalent; 3=A level or equivalent; 4=sub-degree/professional qualification; 5=degree

It should be noted that men in the 1970 cohort were also exposed to unfavourable labour market conditions early in their working lives with the economic recession of early 1990s. However, as compared with the 1980s, unemployment rates remained at double-digit levels for a much shorter period - i.e. from 1992-1994 - and turbulence in the labour market would seem to have been at a generally lower level⁸.

4. Determinants of Occupational Level at Labour Market Entry

We now turn to a detailed analysis of the factors influencing the occupational level at which men in our three cohorts first entered the labour market. For this purpose, we use OLS regression models with the scores of men's first occupation on each of our two scales as the dependent variables.

In Table 2 we show the results obtained with the status scale. It can be seen that, consistently with Figure 1, occupational level at entry tends to rise across the cohorts. However, of main interest to us are the effects, and any changes in the effects, of

⁸ While the median cumulative duration of time out of employment for any reason (unemployment, incapacity etc.) is somewhat higher up to age 34 for men in the 1970 cohort than for men in the 1958 cohort, the latter show a higher proportion having some interruption in their employment and, among these, a higher proportion - 12% as against 5% - who were out of employment for more than half of the time since they first entered the labour market. The effect of the recession of the 1990s on the later working lives of men in the 1958 cohort - i.e. the effect of a second 'hit' - falls outside the scope of the present paper but is an issue that will be of obvious interest in future research.

educational qualifications and class origins. As shown, we treat qualifications on the basis of five ordered categories of highest qualification obtained, ranging from 'less than O-level' to 'degree', and class origins on the basis of a seven-class version of the Goldthorpe schema (Goldthorpe, 1987, 1997).

From Model 1 in Table 2, it is evident that qualifications are in general the major influence on the status of the occupations in which men enter the labour market, and on an entirely expected pattern. And from Model 2, it is further evident from the education-by-cohort interaction terms that are introduced that what we might call the 'status returns' to qualifications on labour market entry tend to increase across the cohorts for all levels of qualification - except degrees. Degrees have the greatest status returns for men in the 1946 cohort - only 6% of whom had degrees as compared with 9% in the 1958 cohort and 17% in the 1970 cohort - while the difference in returns as between men in the two later cohorts is not significant.

Turning to class origins, it can be seen from Model 1 that these also have independent and quite strong effects, and again on an unsurprising pattern. From Model 2, it can then further be seen that while the advantage of originating in the professional and managerial salariat, as represented by Classes I and II, is most marked for men in the 1946 cohort, no significant difference occurs in this respect as between men in the 1958 and 1970 cohorts⁹.

⁹ In considering possible changes in the effects of class origins across cohorts, we work simply with a binary, salariat/non-salariat distinction in order to keep down the number of parameters to be reported. However, while the contrast thus set up is a marked one, we do in this way tend to underestimate class origin effects.

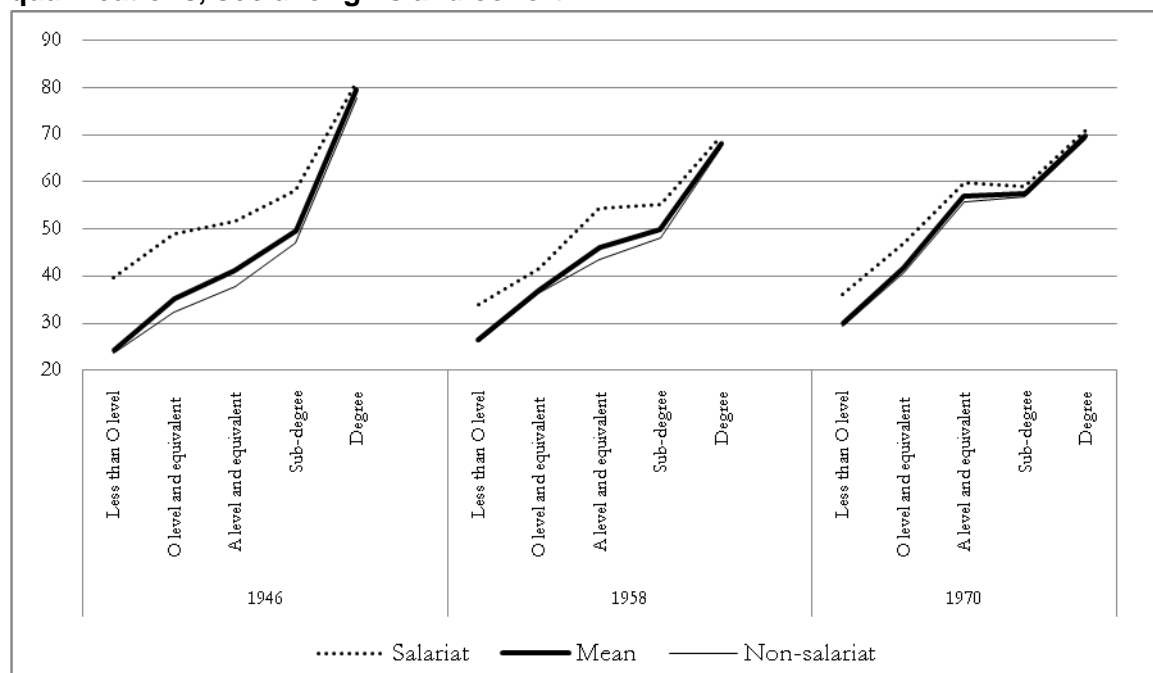
Table 2: Determinants of occupational status level in first job

	Model 1			Model 2		
	B	S.E.		B	S.E.	
Cohort 1946	-5.747	0.559	**			
Cohort 1958	-3.902	0.497	**			
Cohort 1970 (ref.)						
<i>Qualification</i>						
Less than O level	-9.972	0.510	**	-11.091	0.947	**
O level and equivalent (ref.)						
A level and equivalent	8.091	0.597	**	13.892	1.249	**
Sub-degree	12.523	0.809	**	14.568	2.219	**
Degree	29.506	0.726	**	26.042	1.167	**
<i>Qualification*Cohort</i>						
Less than O level*1946				-5.456	0.933	**
Less than O level*1958				-2.829	0.894	**
O level and equivalent*1946				-7.669	1.009	**
O level and equivalent*1958				-4.176	0.860	**
A level and equivalent*1946				-16.998	1.465	**
A level and equivalent*1958				-10.346	1.281	**
Sub-degree*1946				-8.697	2.427	**
Sub-degree*1958				-7.247	2.383	**
Degree*1946				6.396	1.830	**
Degree*1958				-2.007	1.428	
<i>Father's social class</i>						
Class I-II (ref.) Professional and managerial (salarial)						
Class III Routine non-manual	-2.606	0.784	**	-0.327	1.108	
Class IV Self-employed	-6.913	0.921	**	-4.545	1.202	**
Class V Technical and supervisory	-8.309	0.988	**	-6.021	1.246	**
Class VI Skilled manual	-10.443	0.658	**	-7.839	1.035	**
Class VII Non-skilled manual	-11.346	0.749	**	-8.913	1.098	**
Missing information	-5.825	0.686	**	-3.539	1.034	**
<i>Class I-II (salarial) background*Cohort</i>						
1946				7.235	1.610	**
1958				1.548	1.260	
Constant	47.943	0.664	**	46.169	1.025	**
R-squared	0.261			0.279		

OLS regression; N = 13,767; ** Significant at p < 0.01

These findings are set in relation to each other in Figure 4 which graphs predicted status scores of first occupation by qualifications and salariat origins under a regression model that includes the same variables as in Model 1 of Table 2 but also terms for the interaction of qualifications and salariat origins, and that is fitted separately for each cohort.

Figure 4: Predicted occupational status scores in first job by educational qualifications, social origins and cohort



Predicted scores are calculated under an OLS regression model including as explanatory variables educational qualifications, salariat background and educational qualifications*salariat background.

The stronger effect of qualifications relative to that of class origins, at least in the binary form here used, is apparent. But what also emerges is that the overall differentiating effect of qualifications is greater with the 1946 cohort than with the two later ones - at around 55 points on the status scale as against 40-45 points. And a further feature of interest is that while with both the 1946 and 1970 cohorts the effects of coming from a salariat background diminish as the level of qualification rises, this is not the case with the 1958 cohort. In this cohort, it is men with A-levels and sub-degree tertiary qualifications who appear to benefit most from advantaged social origins.

We may then say that while the results of our analyses based on the status scale are in some part consistent with the idea of education becoming of dominant importance in determining the level of first occupations, there are also, from this point of view, a number of anomalies. The returns to degrees are greatest with the earliest cohort, as in turn is the overall range of the effects of qualifications; the independent effects of class origins do not significantly weaken between the two later cohorts; and the relationship between qualifications and class origins is rather distinctive for the 1958 cohort. Is the picture at all clarified when we turn to analyses based on the earnings scale?

Table 3 gives the results of these analyses. It can be seen that, in line with Figure 2, there is no tendency for the level of first occupations to rise across the cohorts; men in the 1958 cohort tend to enter occupations with lower levels of pay than do men in the two other cohorts.

As regards qualifications, Model 1 shows that these exert a similarly large effect on level of first occupation when using the earnings scale as when using the status scale. However, Model 2, reveals a difference. There is no general tendency for the occupational earnings returns to qualifications to increase across the cohorts, with degrees providing the best returns for men in the 1946 cohort, as in the case of status. But, in addition, there is further evidence of a specific 1958 effect. For men in the 1958 cohort - as was earlier suggested in Figure 2 - all levels of qualification, but especially higher levels, give lower earnings returns than for men in the other two cohorts¹⁰. Furthermore, turning to class origins, our main finding is that while Model 1 shows their effects are less strong - though remaining significant - than when using the status scale, Model 2 reveals that with the earnings scale it is men in the 1958, rather than the 1946, cohort who appear to gain most in coming from an advantaged background within the professional and managerial salariat.

¹⁰ Here and subsequently where a difference in effect is claimed or implied as between the 1946 and 1958 cohorts, it may be assumed that this would be shown to be significant if one or other of these cohorts, rather than the 1970 cohort, were taken as the reference category.

Table 3: Determinants of occupational earnings level in first job

	Model 1			Model 2		
	B	S.E.		B	S.E.	
Cohort 1946	-0.789	0.568				
Cohort 1958	-2.341	0.506	**			
Cohort 1970 (ref.)						
<i>Education</i>						
Less than O level	-9.369	0.516	**	-7.235	0.963	**
O level and equivalent (ref.)						
A level and equivalent	5.068	0.607	**	5.505	1.277	**
Sub-degree	10.655	0.827	**	12.524	2.287	**
Degree	23.652	0.744	**	22.904	1.202	**
<i>Education*Cohort</i>						
Less than O level*1946				-4.944	0.946	**
Less than O level*1958				-3.198	0.911	**
O level and equivalent*1946				-0.282	1.025	
O level and equivalent*1958				-1.718	0.874	*
A level and equivalent*1946				-0.783	1.499	
A level and equivalent*1958				-2.477	1.312	#
Sub-degree*1946				1.644	2.503	
Sub-degree*1958				-7.446	2.456	**
Degree*1946				8.407	1.881	**
Degree*1958				-3.415	1.474	*
<i>Father's social class</i>						
Class I-II (ref.) Professional and managerial (salarial)						
Class III Routine non-manual	-2.730	0.798	**	-1.303	1.133	
Class IV Self-employed	-5.743	0.941	**	-4.843	1.232	**
Class V Technical and supervisory	-3.533	1.001	**	-2.387	1.271	#
Class VI Skilled manual	-4.111	0.669	**	-2.832	1.059	**
Class VII Non-skilled manual	-5.870	0.760	**	-4.477	1.121	**
Missing information	-3.502	0.698		-2.242	2.058	
<i>Classes I-II (salarial) background*Cohort</i>						
1946				0.295	1.633	
1958				2.352	1.170	*
Constant	48.779	0.675	**	47.115	1.047	**
R-squared	0.166			0.171		

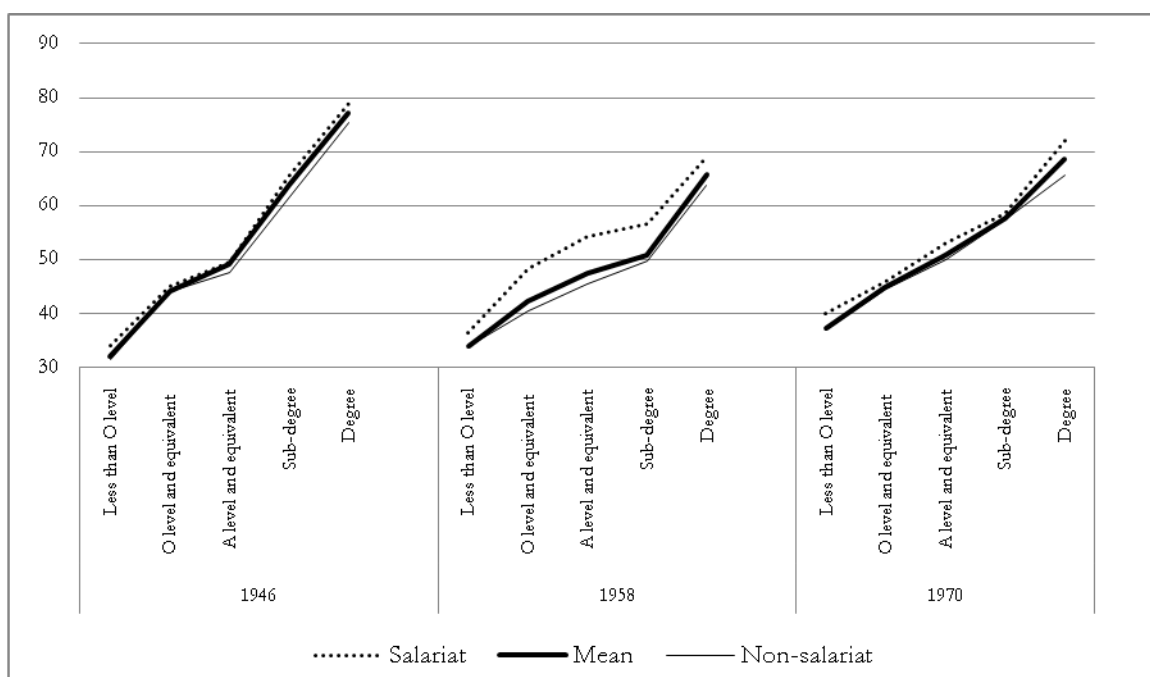
OLS regression; N = 13,767;

** Significant at p < 0.01; * significant at p < 0.05; # significant at p < 0.10

Figure 5, graphing predicted scores of first occupations on the earnings scale, is based on a model with the same explanatory variables as Figure 4. Two similarities with Figure 4 show up. Qualifications have clearly stronger effects than do class origins, but the overall range of the effects of qualifications is again wider for men in the earliest, 1946 cohort than for men in the two later cohorts; and the graph for the 1958 cohort is again rather specific - although in a different way than was apparent with the status scale.

First, the relatively low returns to degrees and also to sub-degree tertiary qualifications are clearly brought out. Second, it can be seen that while for men in the 1946 and 1970 cohorts, salariat origin effects, given level of qualification, are very small - and especially as compared with our results using the status scale - for men in the 1958 cohort the difference made by salariat origins on level of first occupation is larger: i.e. at around 5-10 points at all levels of qualification above O-levels and equivalent.

Figure 5: Predicted occupational earnings scores in first job by educational qualifications, social origins and cohort



Predicted scores are calculated under an OLS regression model including as explanatory variables educational qualifications, salariat background and educational qualifications*salariat background.

Our results using the earnings scale would tend therefore to reinforce our scepticism concerning secular trends, and especially in the role of education in determining occupational level at entry into the labour market. Although educational qualifications are of large importance in this regard, there is no indication that their importance is steadily increasing. And while the importance of class origins is less than that of education, there is no indication that it is in steady decline. Most notable in fact is the way in which results

based on our earnings scale support those based on our status scale in suggesting that the experience of men in the 1958 cohort is in some degree distinctive. For these men, qualifications give clearly lower returns than for men in the earlier and later cohorts in terms of the earnings levels of their first occupations, while their class origins appear in this respect to matter more. An obvious conjecture is that for men entering the labour market in hard times, those from relatively advantaged class backgrounds will draw on the greater resources - economic, cultural or social - that are available to them in order to compensate for the at least temporarily reduced economic value of their qualifications.

5. Occupational Change and Occupational Maturity

We now wish to extend our analyses so as to follow the men in our three cohorts from the occupational level of their first occupation to that they attain at some later stage in their working lives. The question thus arises of how this later stage might best be defined. As earlier noted, our data cover men's occupational histories from their first entry into employment up to age 34, the latest age for which we have information for men in all three cohorts. One solution would then be simply to focus on occupational level at age 34. However, this may not be the best solution. We know that in the early years of working life the frequency of job changing tends to be relatively high before falling off, usually somewhere between ages 30 and 40, and afterwards being less likely to involve significant changes of occupational level. This latter tendency is in fact apparent from the right-hand panels of Figures 1 and 2. But it may also be supposed that men with differing characteristics will tend to reach this stage of what might be called 'occupational maturity' (cf. Goldthorpe, 1987: 52-3) somewhat earlier or later in their working lives. Thus, age 34 is one at which men could be quite heterogeneous in this respect. Some will have already achieved occupational levels, whether high or low, that any further job changes are unlikely to affect, while others will still be in a period of their working lives in which occupational changes could occur leading to significant upward or downward mobility. We proceed therefore on the following lines.

We set up a model aimed at explaining the probability of *job change that entails occupational change* - at the level of the 77 minor occupational groups distinguished in the SOC90 classification. In each month t an individual i can be categorised as changing occupations (=1) or not changing occupations (=0) if he changes jobs. A random-effects logistic model for the probability of an individual being in a different occupation in job j than in job $j-1$ can then be written as

$$\text{Logit } p_{it}^{\text{change}} = \alpha + \beta \mathbf{X}_{it} + u_i$$

where \mathbf{X} is a matrix including the same explanatory variables as in the previous OLS models (see Tables 2 and 3) plus age, age²/100, number of occupations up to job j , and occupational level in first job, cohort interaction terms for each of these variables¹¹ and a

¹¹ The motivation for the inclusion of variables in the matrix was chiefly evidence from previous research that they do affect the probability of occupational change over the course of working life.

one-year lagged dependent variable; and where u_i is a term for unobserved time-invariant individual characteristics. We estimate this model twice over, with occupational level in first job being scored on our status scale and then on our earnings scale.

We use the model in a preliminary way to investigate differences in occupational change across cohorts. Results in this regard are not here presented in full (they are available on request) but are of main interest in further bringing out the distinctive experience of men in the 1958 cohort. Men in this cohort have, up to age 34, a clearly greater probability of making job changes that entail occupational changes than do men in the other two cohorts; and further, while the probability of changing occupations in general increases with level of qualifications, among men in the 1958 cohort it is greater at almost all levels of qualification and at the higher levels especially. These findings would appear consistent with the hypothesis advanced by Moscarini and Vella (2008) and previously noted that in times of recession the sorting of individuals across occupations becomes less efficient.

However, our main use for the model, appropriately adapted, is to arrive at an empirical determination of when a stage of occupational maturity could be said to have been reached. To this end, we drop the cohort interaction terms previously included, introduce interaction terms between, on the one hand, age and $\text{age}^2/100$ and, on the other, educational qualifications, salariat background, and occupational level in first job, and fit the model separately for each cohort. We then generate the predicted probabilities under the model of each man in a cohort being found in a different occupation in job j than in job $j - 1$ for each month t of his working life up to age 34, and treat occupational maturity as being reached if the probability of occupational change in month $t - 1$ is greater than the probability of change in month t and all subsequent months.

In Figures 6 and 7 we show Kaplan-Meier survival estimates under our model - where 'survival' means having not yet reached occupational maturity - with first occupation scores being based on our status and earnings scales respectively. As can be seen, up to around age 30 the model treats very few men in any cohort as having reached occupational maturity; but, after this age, the proportion increases rather sharply. Further, though, at all subsequent ages, fewer men in the 1946 cohort than in the two later cohorts are predicted to have reached maturity, and at age 34 still around 40 per cent appear as not having attained this stage in their working lives as against less than 20 per cent in the later cohorts. Finally, from a further analysis (not here reported but available on request) we find that men regarded as having reached maturity by age 34

For example, Neal (1999) shows that at early ages men tend to make frequent occupational changes in aiming to find an appropriate 'career path'. Harper (1995) finds for the UK that men who enter the labour market at higher occupational levels are less likely to change occupations than men entering at lower levels; but also that men with higher-level qualifications are more likely to change occupation than men with lower-level qualifications - a result contradicted by the findings of Parrado, Caner and Wolff (2007) for the US. Finally, as regards social background, Dolton and Kidd (1998) report that in Britain graduates from more advantaged backgrounds are less likely than those from less advantaged backgrounds to stay in their first occupation.

have significantly higher levels of occupational attainment at that age, on both the status and the earnings scale, than those not having reached this stage.

Figure 6: Kaplan-Meier survival estimates for reaching occupational maturity by cohort: level of first occupation measured on the status scale



Figure 7: Kaplan-Meier survival estimates for reaching occupational maturity by cohort: level of first occupation measured on the earnings scale



These results strengthen our view that simply comparing men across cohorts at age 34 would not, in a sociological sense, be comparing like with like. In analysing the determinants of the occupational level attained by men in later working life, we therefore opt to do this not at age 34 but rather *at the stage of occupational maturity as predicted under our model*. It could be thought a disadvantage that in this way we discard a good deal of information - i.e. on those men we treat as not having achieved occupational maturity - and especially with the 1946 cohort. However, we have analysed the

occupational attainment of these men, at age 34, under the same model as we apply in the following section, and the results reveal some significant differences that we comment on in notes to the text.

6. Determinants of Occupational Level at Occupational Maturity

We here revert to OLS regressions models with the dependent variable being scores at occupational maturity on our two scales for those men we would predict to have reached this stage. We begin with results using the status scale, as shown in Table 4.

An initial point to note from this table is that while the general level of first occupation as measured on our status scale increased across the cohorts, this is less clearly the case with level at maturity. Rather, a 1958 effect is again indicated in that men in this cohort have significantly lower levels of occupational status attainment overall.

Turning to what might be called the worklife variables, we can see that these are in fact of some enduring importance. Status of first occupation has a significant positive effect on status at maturity but so too does the number of occupations that an individual has held between entry and maturity. And, moving from Model 1 to Model 2, we find no indication that these effects are declining across the cohorts. The effect of level of first occupation is strongest for the 1958 cohort and the effect of number of occupations is actually weakest for the earliest, 1946 cohort¹².

In the case of qualifications, the main effects are, just as with status of first occupation, strong and on an entirely expected pattern¹³. However, the interaction effects of qualifications with cohort, as shown under Model 2, are different. With first occupation, status returns to qualifications, it will be recalled, increased across the cohorts for all levels of qualification except degrees, which provided the greatest returns for men in the 1946 cohort. But at occupational maturity this trend is no longer apparent. The only significant changes are those indicating a 1958 effect. For men in this cohort secondary, and in particular A-level, qualifications give lower status returns than for men in the 1946 as well as in the 1970 cohort¹⁴.

¹² It is here that results for men whom we treat as not having yet reached occupational maturity differ most notably. In their case, the effects of level of first occupation are stronger but there is no positive effect of number of occupations previously held when using either the status scale or the earnings scale.

¹³ The importance of treating education as time-variant is here underlined. Further analyses, available on request, show that in all three cohorts, men who increased their level of qualifications after entering the labour market have significantly higher levels of occupational attainment than men whose qualifications remained unchanged, although it is also of interest that this effect is relatively weak for men in the 1958 cohort.

¹⁴ For men, treated as not having reached occupational maturity the effects of qualifications are on this same pattern but are generally weaker in regard to both occupational status and earnings.

Table 4: Determinants of occupational status level at occupational maturity

	Model 1		Model 2			
	B	S.E.	B	S.E.		
Cohort 1946	-1.537	0.895				
Cohort 1958	-2.496	0.614	**			
Cohort 1970 (ref.)						
<i>Number of occupations</i>	1.043	0.132	**	1.504	0.307	**
<i>Number of occupations*Cohort</i>						
1946				-1.308	0.400	**
1958				-0.306	0.355	
<i>Occupational score in first job</i>	0.384	0.011	**	0.339	0.025	**
<i>First occupation*Cohort</i>						
1946				0.019	0.040	
1958				0.078	0.029	**
<i>Education (ref.: O level and eq.)</i>						
Less than O level	-7.425	0.642	**	-7.076	1.314	**
A level and equivalent	4.485	0.729	**	11.245	1.737	**
Sub-degree	12.787	0.829	**	17.507	3.491	**
Degree	24.153	0.907	**	23.939	1.489	**
<i>Education*Cohort</i>						
Less than O level*1946				1.998	1.964	
Less than O level*1958				-3.951	1.715	*
O level and equivalent*1946				3.401	2.316	
O level and equivalent*1958				-3.659	1.695	*
A level and equivalent*1946				-3.640	3.081	
A level and equivalent*1958				-11.562	2.341	**
Sub-degree*1946				-4.068	4.086	
Sub-degree*1958				-8.712	4.792	
Degree*1946				-0.082	8.312	
Degree*1958				0.731	2.546	
<i>Father's social class (ref.: Class I-II, salariat)</i>						
Class III Routine non-manual	-3.057	0.942		-2.758	1.489	
Class IV Self-employed	-5.217	1.125	**	-4.665	1.593	**
Class V Technical and supervisory	-6.072	1.185	**	-5.686	1.646	**
Class VI Skilled manual	-6.694	0.797	**	-6.220	1.421	**
Class VII Non-skilled manual	-7.489	0.890	**	-7.109	1.480	**
Missing information	-5.692	0.839	**	-5.229	1.423	**
<i>Class I-II (salariat) background*Cohort</i>						
1946				0.805	3.085	
1958				-0.034	1.608	
Constant	31.246	1.032	**	30.470	1.815	**
R-squared	0.384			0.389		

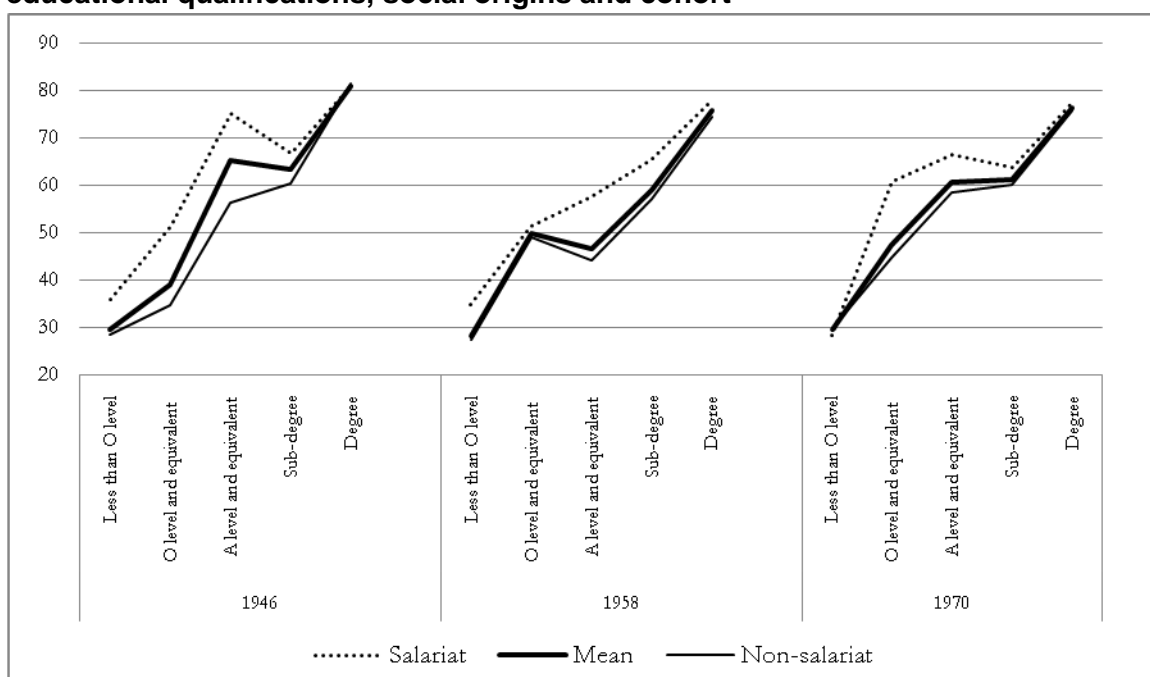
OLS regression; N = 8339; ** Significant at p < 0.01; * significant at p < 0.05

With the status scale, there is some suggestion of the 1958 effect referred to in the text but not at a statistically significant level.

Finally, as regards class origins, it can be seen that these are also quite strong, and on the same unsurprising pattern as we found with status of first occupation. But Model 2 reveals that here again a difference arises with the cohort interaction effects. Men in the 1946 cohort who came from a salariat background benefited significantly more on entry into the labour market than did their counterparts in the two later cohorts; but at maturity this relative advantage has disappeared and now the positive effect of salariat background does not differ significantly by cohort¹⁵.

To bring out more clearly some of the implications of these findings, we present in Figure 8 predicted occupational status scores at maturity under a regression model that includes the explanatory variables of Model 1 of Table 4 plus terms for the interaction of qualifications (as at maturity) and first occupation and qualifications and salariat origins, and that is fitted separately for each cohort.

Figure 8: Predicted occupational status scores at occupational maturity by educational qualifications, social origins and cohort



Predicted scores are calculated under an OLS regression model including the following explanatory variables: number of occupations held up to maturity, first occupational score, educational qualifications, salariat background, education*salariat background, education*first occupational score. Number of occupations and first occupational score are evaluated at sample means.

¹⁵ For men treated as not having reached occupational maturity, class origin effects, just like qualifications effects, are on the same pattern but weaker, and again when using both the status and earnings scales. However, with the status scale, an advantage of being of salariat background for men in the 1946 cohort still shows up.

Again, the greater importance of qualifications as compared with having advantaged class origins is apparent. But the overall differentiating effect of qualifications is no longer stronger, as it was at entry, for the 1946 cohort than for the two later ones. This effect is in fact much the same - at about 50 points on the status scale - for all three cohorts. And further it is no longer the case that only the 1958 cohort deviates from a pattern of salariat background effects declining as level of qualification increases. These effects are still in all cohorts least for men with degrees but otherwise they show no regular pattern.

In sum, on the basis of our status scale, analyses of occupational level at maturity provide, if anything, less evidence of secular trends across our three cohorts than do our corresponding analyses of occupational level at entry to the labour market. We move on now to analyses based on our earnings scale. Table 5 gives results from regression analyses analogous to those reported in Table 4.

As regards cohort effects, the most notable result is that among men whom we would predict as having reached occupational maturity by age 34, it is those in the 1958 cohort who tend overall to have the lowest levels of occupational attainment - just as was the case at entry and also, as now appears, at maturity on the basis of our status scale. In other words, some lasting impact of the relatively disadvantaged start in the labour market that these men experienced is further indicated.

The main effects of worklife variables, as shown under Model 1, are similar to those we observe using the status scale: i.e. occupational level at maturity is found to increase significantly with level of first occupation but also with the number of occupations subsequently held. And, as can be seen under Model 2, there is, again as with the status scale, no indication of these effects weakening across cohorts. In fact, no significant changes of any kind are revealed.

Turning to qualifications, we see that the main effects are strong and on a similar pattern to those reported with the status scale, including the finding that graduates in the 1946 cohort no longer have higher returns than graduates in the two other cohorts, as was the case at entry¹⁶. But what once more stands out is the pattern of results for men in the 1958 cohort. That is, the tendency for the returns to qualifications for these men in terms of occupational earnings to remain distinctively low, just as they were at entry and, as we have now also found, in the case of occupational status at maturity.

The main effects of class origins are also quite strong and similar to those revealed using the status scale; and, also as with the status scale, Model 2 reveals that the effect of being of salariat background remains essentially the same across cohorts. The particular advantage that men with this background in the 1958 cohort gained at entry is still suggested but is no longer statistically significant.

¹⁶ This advantage is however still present among the men in the 1946 cohort whom we regard as not having reached occupational maturity.

Table 5: Determinants of occupational earnings level at occupational maturity

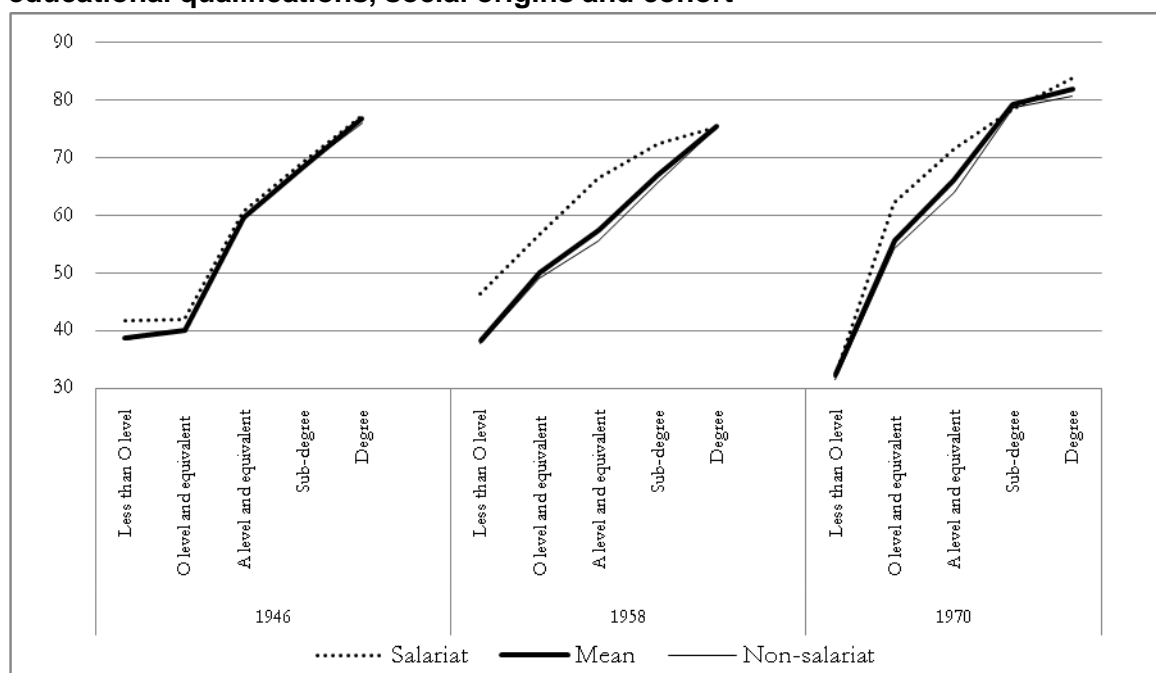
	Model 1			Model 2		
	B	S.E.		B	S.E.	
Cohort 1946	-2.245	0.884	*			
Cohort 1958	-3.844	0.628	**			
Cohort 1970 (ref.)						
<i>Number of occupations</i>	0.810	0.142	**	0.578	0.319	
<i>Number of occupations*Cohort</i>						
1946				0.445	0.439	
1958				0.184	0.370	
<i>Occupational score in first job</i>	0.218	0.011	**	0.213	0.019	**
<i>First occupation*Cohort</i>						
1946				-0.035	0.037	
1958				0.014	0.024	
<i>Education</i> (ref.: O level and eq.)						
Less than O level	-10.056	0.711	**	-12.341	1.651	**
A level and equivalent	6.610	0.732	**	8.557	1.507	**
Sub-degree	13.740	0.878	**	17.509	6.797	*
Degree	22.292	0.865	**	21.841	1.250	**
<i>Education*Cohort</i>						
Less than O level*1946				-1.224	2.364	
Less than O level*1958				-2.166	2.045	
O level and equivalent*1946				0.532	3.295	
O level and equivalent*1958				-5.606	1.820	**
A level and equivalent*1946				-0.990	3.013	
A level and equivalent*1958				-8.376	2.254	**
Sub-degree*1946				-7.458	7.222	
Sub-degree*1958				-8.657	6.940	
Degree*1946				-5.061	7.523	
Degree*1958				-3.899	1.842	*
<i>Father's social class</i> (ref.: Class I-II, salariat)						
Class III Routine non-manual	-1.315	0.937		-0.636	1.396	
Class IV Self-employed	-5.566	1.155	**	-4.894	1.542	**
Class V Technical and supervisory	-5.174	1.226	**	-4.529	1.602	**
Class VI Skilled manual	-6.059	0.811	**	-5.200	1.340	**
Class VII Non-skilled manual	-7.409	0.914	**	-6.685	1.411	**
Missing information	-4.370	1.079	**	-4.067	1.338	**
<i>Class I-II (salariat) background*Cohort</i>						
1946				-3.388	3.314	
1958				1.197	1.538	
Constant	45.175	0.773	**	47.769	1.885	**
R-squared	0.299			0.301		

OLS regression; N = 8548; ** Significant at p < 0.01; * significant at p < 0.05

Figure 9, showing predictions of occupational earnings scores at maturity, derives from the same regression model as Figure 8. The strong differentiating effect of qualifications is again apparent, although with the 1946 and 1958 cohorts this is

clearly below the 50-point range found with the status scale, which is matched only in the case of the 1970 cohort. There is here a clear contrast with the situation at entry when it was for men in the 1946 cohort that the overall effect of qualifications was largest. Now the overall effect is largest for men in the 1970 cohort, and chiefly on account of the greater differences that result from having, on the one hand, tertiary rather than secondary qualifications and, on the other hand, some qualifications rather than virtually none. However, as regards the effects of salariat origin, we find a continuity with the situation at labour market entry. For men in the 1958 cohort, coming from a salariat background still retains at occupational maturity at least some of the advantage it had at entry so far as access to relatively high-paying occupations is concerned, while being of slight importance for men in the two other cohorts.

Figure 9: Predicted occupational earnings scores at occupational maturity by educational qualifications, social origins and cohort



Predicted scores are calculated under an OLS regression model including the following explanatory variables: number of occupations held up to maturity, first occupational score, educational qualifications, salariat background, education*salariat background, education*first occupational score. Number of occupations and first occupational score are evaluated at sample means.

Once more, then, there are no consistent indications of the operation of social forces making for secular change in the relationships between class origins, education and occupational attainment. The evidence would rather suggest that in Britain, over the historical period within which the early work histories of men in our three cohorts fall, it is effects specific to cohorts - i.e. in relation to the economic vicissitudes of this period - that have more importantly shaped their labour market experience. We end with a more detailed discussion of these issues in the form in which we raised them at the start.

7. Conclusions

We noted at the outset two, often largely implicit, assumptions in current research that tend to create an undue divergence between studies of intergenerational class mobility, on the one hand, and of intragenerational occupational mobility, on the other: (1) that a secular tendency exists for education, as a source of human capital, to become increasingly dominant in determining individuals' chances of intergenerational class mobility or immobility - and regardless of the part that may appear to be played by their worklife occupational trajectories; (2) that a secular tendency exists for the influence of individuals' class origins on their chances of worklife occupational mobility or immobility to be increasingly channelled via their educational attainment, so that other effects of class origins become of little importance. Given the accumulating evidence that these assumptions may be mistaken, our aim has been to subject them to further examination in the light of the experience of men in three British birth cohorts extending over the second half of the twentieth century. The main conclusions that we would draw from the analyses we have reported are the following.

First, educational qualifications would appear to be clearly more important than the other factors we consider as a determinant of men's occupational level at entry into the labour market and again at occupational maturity. This is the case whether we scale occupations according to their status or their average earnings, although qualifications appear to have generally stronger effects in regard to status than to earnings. However, we find no consistent evidence that the importance of qualifications is becoming greater over time. At entry, the status returns to qualifications do tend to increase across the cohorts for secondary and lower tertiary qualifications, but not for degrees; and the earnings returns give no indication of any trend over time. In the case of degrees, both status and earnings returns at entry are in fact highest for men in the 1946 cohort; and it is also with this cohort that the overall differentiating effect of qualifications on occupational level is greatest, whether using the status or the earnings scale. Further, at maturity, neither the status nor the earnings returns to qualifications show an increasing trend across the cohorts; and while the overall effect of qualifications in regard to earnings is greater for the 1970 cohort than for the two earlier ones, no comparable change shows up in regard to status.

Second, the independent effects of class origins on men's occupational level, while less strong than those of qualifications, remain generally significant at both entry and maturity. There are, moreover, no clear indications that these effects are tending to weaken. It is true that, as regards status, the effect of class origins on occupational level at entry is stronger for the 1946 cohort than for the two later ones; but this pattern is no longer seen at maturity, when the effects of class origins, or at least of coming from a salariat background, show no trend over the cohorts. As regards earnings, there is no trend in class origin effects at either entry or maturity. What is here of chief interest is that these effects prove to be generally weaker than when occupational level is measured in terms of status. This supports the argument made elsewhere (Bukodi, Dex and Goldthorpe, forthcoming) that the occupational earnings

hierarchy is more fluid or 'open' than the status hierarchy¹⁷, and in turn underlines the need to treat earnings and status mobility separately rather than in terms of some 'synthetic' socioeconomic status scale.

Third, while men's qualifications and class origins play a major part in determining the occupational level at which they enter the labour market and this level has itself a positive effect on the level they reach at maturity, features of their worklife experience still retain an independent importance. In particular, the more occupational changes that men make between entry and maturity, the higher their occupational level at this latter stage. In other words, and consistently with the occupational trajectories shown in Figure 1, it would appear that, in terms of status and earnings alike, upward worklife mobility continues to play a significant role in occupational attainment at maturity, even when controlling for qualifications and class origins. And we find no evidence that the importance of worklife mobility in this regard is declining.

Fourth, although our analyses do not reveal changes across our three cohorts that would be consistent with the idea of education playing a steadily increasing role in the occupational attainment process or in mediating the influence of class origins in this process, they do clearly point to the possibility of cohort-specific effects. Repeatedly, we find that the experience of men in the 1958 cohort differs from that of men in both the earlier and later cohorts. The early worklife histories of men in the 1958 cohort coincide with a period of severe economic difficulties, labour market restructuring and continuing high levels of unemployment. At entry to the labour market, adverse effects are then indicated, chiefly in regard to earnings. For men in this cohort earnings returns to all levels of qualification, and especially to higher levels, fall below those for men in either the 1946 or 1970 cohorts. At maturity, this disadvantage in regard to earnings largely persists and, moreover, at this stage secondary qualifications also bring lower status returns than for men in the other two cohorts. In other words, the effects of unfavourable labour market conditions in early working life would appear to be persistent and despite the fact that men in the 1958 cohort are also distinctive in making more occupational changes prior to achieving maturity - which in general, as we have noted, has a positive effect on occupational level attained¹⁸. Finally, class origin effects also differ in the case of the 1958 cohort. At entry, men in this cohort appear to benefit distinctively from having a salariat

¹⁷ It has been suggested to us that an alternative interpretation of our results would be that men from less advantaged - e.g. working-class - backgrounds are more inclined than those from more advantaged backgrounds to use whatever labour-market opportunities they may have in order to obtain high-pay in preference to high-status occupations. However, with the data available to us, we do not see a way of making a comparative evaluation of these two interpretations.

¹⁸ Bukodi (2010) shows, on the basis of a typology of occupational trajectories from labour market entry up to age 34, that men in the 1958 cohort are further distinctive in being more likely to have downward and less likely to have upward trajectories than men in the other two cohorts and also more likely to have 'unstable' trajectories, whether eventually upward or downward in their outcomes. Other studies based on the 1958 cohort have revealed adverse effects of the labour market conditions under which men in this cohort entered work (e.g. Gregg, 2001; Bell and Blanchflower, 2009) but these have focused specifically on 'scarring' by early unemployment - in regard to later employment and earnings prospects and job- and life-satisfaction and health - and have not involved cross-cohort comparisons.

background in that this helps to offset somewhat the relatively low earnings returns that they obtain from higher level-qualifications; and at maturity such an advantage is still apparent while being negligible for men in the two other cohorts.

In sum, the findings we have reported must further call into question the assumptions regarding secular change in processes of intergenerational class, or intragenerational occupational mobility that would appear to underlie, if only implicitly, much current research. The experience of men in three British birth cohorts, as they move from their class origins, through their educational careers, into the labour market and then to a stage of occupational maturity, would not appear to be greatly illuminated by being placed within a narrative of 'modernisation'. In many respects it is in fact the absence of change in the trajectories they follow, and in the apparent determinants of these trajectories, that is most notable. And where cross-cohort differences do show up, these would seem often better understood in the context not of the relatively benign transition from industrialism to post-industrialism but rather in that of what we can today readily recognise as the disruptive economic cycles endemic to capitalism.

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Appendix

Table A1: Distribution of jobs men ever held up to age 34 by broad levels of occupational status by cohort

Occupational level	Representative occupations	1946	1958	1970
1 (Top)	Professionals in health and education, lawyers business and financial professionals, journalists artists	9	13	14
2	Engineers, technologists, community and youth workers, computer analyst	17	16	17
3	Production managers, transport managers, Travel and flight attendants	12	13	16
4	Electricians, policemen, carpenters and joiners, glass and ceramics makers, bus and coach drivers	29	32	31
5 (Bottom)	Machine and plant operators, process workers, labourers, cleaners	32	27	22
Total		100	100	100

Table A2: Distribution of jobs men ever held up to age 34 by broad levels of occupational earnings by cohort

Occupational level	Representative occupations	1946	1958	1970
1 (Top)	Professionals in health and education education, lawyers, business professionals, engineers production managers	13	15	16
2	Journalists, scientific technicians, transport managers, electricians	24	20	25
3	Account clerks, carpenters, masons and bricklayers, machine and plant operators	25	26	22
4	Record clerks, glass and ceramics a makers, process workers, garage men	17	19	17
5	Bus and coach drivers, cooks, labourers, cleaners, porters	21	20	20
Total		100	100	100

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