Bad start: is there a way up?
Gender differences in the effect of initial occupation on early career mobility in Britain

Abstract

This paper aims to examine gender and cohort differences in life-course occupational mobility in Britain and examine the strength of the effects of career entry at transition from school to work on subsequent upward or downward mobility. Does a 'bad start' in working life typically result in being trapped at the bottom tier of the occupational hierarchy or can it represent a stepping-stone towards more rewarding positions? Are there any gender differences in the effects of low entry occupations on subsequent careers? If so, are these differences stable or changing over time? Using large-scale data from the National Child Development Study and the British Cohort Study, we investigate individuals' occupational careers between the ages of 16 and 34 using an occupational scale based on the hourly average earnings of full-time workers. Although women's and men's career patterns in Britain have become more similar over time, women face the greatest and growing hindrance to career advancement from the low quality entry jobs. Entering at the bottom of the occupational hierarchy is more likely to represents a trap for women, while for men it is rather a stepping-stone to more favourable positions.

Introduction and background

Recent studies reveal that the school-to-work transition has become more and more precarious in advanced societies (e.g. Mills and Blossfeld, 2005; Blossfeld *et al*., 2008). This is particularly evident in the highly flexible and deregulated British labour market, characterised by relatively weak employment protection and a great deal of 'job hopping' among young people trying to settle in the labour market. Most studies on early labour market careers in Britain are concerned either with the effects of relevant institutional settings - i.e. the education and training system, labour market regulations – as well as of educational expansion and structural changes in the labour demand on the patterns of employment dynamics, chiefly from a comparative perspective (e.g. Scherer, 2005; Gangl, 2002), or with the impact of non-optimal entry via temporary jobs on subsequent careers (e.g. Booth *et al.*, 2002; Giesecke and Gross, 2004; Gash, 2004; Schmelzer, 2008) or with the problem of 'over-education' at the early stage of employment histories (e.g. Brynin, 2002; Scherer, 2004). Relatively little is known about the possible gender differences in the patterns of labour market entry and the further development of careers. This study addresses these questions investigating gender differences in the impact of individuals' initial occupational position on their future career chances and risks, using large-scale data from two British birth cohort studies relating to people born in 1958 and 1970. More specifically, the paper focuses on the implications of taking up a position with *low occupational status*, 'bad entry', on rates of upward and downward job-to-job mobility.

There are two main theoretical approaches to this issue. The first derives from mainstream human capital theory. In this case, the central argument (e.g. Sicherman and Galor, 1990) is that part of the returns to education come in the form of a higher probability of occupational upgrading.

Relatively highly-educated employees may be temporarily observed in 'bad' jobs for which they seem to be overqualified; but these jobs in fact provide them with skills that will later enable them to move into higher level occupations. Labour market entry via such jobs can be rational for employees and also for employers. It can be regarded as entailing an apparent short-term mismatch, at the beginning of employment careers, but one which creates the basis for subsequent upward mobility. This argument can be labelled as the 'stepping-stone' hypothesis.

The second approach derives from 'labour market segmentation theory' (Doeringer and Piore, 1971). Employers are seen as having increasingly conflicting goals. They are forced to employ more and more workers in flexible positions, but also they need to invest in the maintenance and trust of their workforce. This leads to a segmentation of the labour market, into 'core' and 'periphery'. The core segment offers long-term, stable employment with structured and predictable career opportunities. But jobs on the periphery have lower skill requirements, lower wages, fewer career prospects, and higher risks of job loss and unemployment. Moreover, flows between the two segments of the labour market are limited, resulting in employees who enter 'bad' jobs on the periphery becoming stuck there. Peripheral jobs tend to be considered by potential employers as in themselves signals of a job applicant's lack of qualifications and skills. These jobs are not accompanied by the same opportunities for further (general or specific) training that could provide the human capital required for upward mobility (Goudswaard and Andries, 2002). In contrast to the stepping-stone hypothesis therefore, this theoretical approach offers the 'entrapment' hypothesis.

In the light of these two differing approaches, we pose two research questions. The first is: *Do bad entry jobs have implications for career development which differ by gender?* For example, could it be that the stepping-stone hypothesis is more applicable in the case of men's early

careers, but the entrapment hypothesis in the case of women's? Gender differences in the effect of initial placement on career advancement might arise in a number of ways.

Although women of recent generations are better educated than men in a number of advanced societies including Britain (see Makepeace *et al.*, 2003), those women entering low level occupational positions may still have lower qualifications than their male counterparts and/or fewer opportunities for further training in initial jobs (Escriche, 2007) and thus be less likely to achieve career advancement.

More recent cohorts of women in the UK show increased participation in part-time work over their early careers (Connolly and Gregory, 2008) which may lead to them acquiring less human capital than men as a result of a lower level of participation in on-the-job training.

A bad entry may influence individuals' own perceptions of their market value and discourage them from applying for better jobs and make them more likely to remain in the peripheral segment of the labour market. These 'discouraging' effects may be stronger for women than men through mechanisms such as 'psychological capital', found to generate differences in young women's and men's evaluations of their own academic abilities (Sullivan, 2006).

Women may be less concerned with rapid job promotion than men when they choose an occupation or a 'career path'. They may rather prefer having jobs which give them more opportunities to reconcile work and family commitments or have a more convenient geographic location or are more 'sociable' in character (Hakim, 2000). In this case we might expect to see women making fewer 'good' job changes and more 'bad' job changes, at least in terms of earnings or opportunities for further promotions.

Our second research question focuses on whether there are changes over time: *If gender differences in the consequences of bad entry jobs do exist, are these differences stable or widening or narrowing*? Gender differences may arise for at least two reasons.

First, the UK labour market over the last decades there are several indications of the position of women gradually improving relative to that of men. By the millennium, the employment rates of women had become very similar to those of men and the pay of women in full-time employment had risen substantially (Nickell, 2001). This was chiefly the result of women's levels of qualification rising faster than those of men. By the mid-nineties the proportion of women aged 25-34 with degrees and working in full-time jobs was in fact higher than for men (Nickell, 2001). Parallel to this, British men's labour market opportunities appear to have been worsening. The chance of a substantial decline in real pay increased from the beginning of 1980s through to the mid-1990s, irrespective of qualifications (Nickell *et al.*, 2002). Moreover, there is evidence that a growing proportion of recent generations of men, especially the less well educated, are facing high turbulence during their early labour market careers and an increasing risk of downward occupational mobility (Golsch, 2006b). Recent labour market developments could lead, therefore, to diminishing gender differences in the effects of initial occupational placements on career trajectories. In

Secondly, the feminized expansion of low-quality jobs may increase gender differences, over time, in the impact of first jobs on subsequent employment histories. Owing to the expansion of the services sector and also to technological change, all advanced societies appear to have experienced a large increase in demand *both* for highly qualified personnel *and* for workers in low-skilled and low-paid jobs. In other words, employment structures have tended to polarise. This tendency is already well-documented for the UK over the 1990s and many of the rapidly

growing low-level jobs are in fact highly feminized - e.g. care and education assistants, nursery nurses, hospital ward assistants (Goos and Manning, 2007; Eurofound, 2008). The chances of making career advancement from such jobs are likely to be low (e.g. Hultin, 2003).

A large number of studies have analysed occupational changes in Britain, but most of them have focused on specific sub-groups or specific aspects of mobility (see for example Harper (1995) on occupational mobility of males; Dalton and Kidd (1998) on relationship between different forms of human capital investments and occupational mobility; Heitmueller (2004) on job mobility patterns in England and Scotland; Joshi and Hinde (1993) on part-time work and occupational downgrading). Only a very few recent papers have examined gender differences in work-life occupational mobility. Tomkins and Twomey (2000) investigated the incentives and constraints upon aggregate movement between occupations, and concluded that men are still much more likely than women to move up on a pay based career ladder. But Dex *et al.* (2008) found that gender differences in career mobility have been decreasing in Britain. However, neither of these studies focused on the effect of the *occupational level* of entry position on subsequent occupational chances and risks.

The few studies to date that have examined the effect of the general level of initial occupation on career mobility have produced mixed findings. Nickell (1982) concluded that the best predictor of men's occupational position in later life, as measured by average hourly earnings, is position on first entry into the labour market. Golsch's (2006a, b) results also emphasise the importance of occupational level of entry jobs in contemporary Britain. She found that for recent cohorts, for both sexes, the higher the socio-economic status of entry jobs, the better the chance of further status gains and the lower the risk of status loss over the employment history. However, Jacobs (1999) while reporting that first occupational status explains a significant part of both women's

and men's status fifteen years later, also found important gender differences. In particular, for women, but not for men, the importance of entry position appeared to decline over the life-course relative to that of qualifications.

In sum, previous empirical findings do not give a clear picture of the impact of the occupational level of first jobs on mobility chances and risks in the course of individuals' working lives in modern Britain. In particular, in assessing the applicability of the stepping-stone and the entrapment scenarios rather little attention has been given to the possible gender differences in the effects of occupational status in first jobs and to the extent to which such differences may be either decreasing or increasing in the context of wider changes in the labour market. It is on these issues that we now focus.

Data and design

Ideally, to answer our research questions we need longitudinal data from more than one cohort[1]. For our present purposes, we use the data-set of the National Child Development Study (NCDS) in conjunction with that of the British Cohort Study (BCS70). The NCDS comprises data referring to all children born in Great Britain in one week in March 1958, which were collected at birth and then in seven further surveys at ages 7, 11, 16, 23, 33, 42, and 46. The BCS70 relates to all children born in Great Britain in one week in April 1970, for whom data were collected at birth and again in six further sweeps at ages 6, 10, 16, 26, 30, and 34. In both cases the original cohort comprised around 17 000 children. These data provide an excellent opportunity to examine whether or not consequences of a bad start on subsequent career trajectories have changed over time in Britain, as the two cohorts have entered the labour market under rather different economic, structural and technological circumstances.

Men and women in the 1958 cohort met fairly severe recessions early in their working lives. Unemployment and inflation were growing problems through the 1970s and early 1980s when this cohort left full-time education and started their careers and massive deindustrialisation also took place. But this was the first cohort of women who had the benefit of equal opportunities policies and legislation, as is reflected in the absence of any major sex differences in educational qualifications and in the high proportion of women in gainful employment. In contrast, the labour market was buoyant when the least qualified people of the 1970 cohort left full-time education at age 16. However, although unemployment came down rapidly in the late 1980s, it rose equally rapidly after 1990. This stimulated perceptions of insecurity more widely in society (Burchell, *et al.,* 2002). Unemployment gradually decreased again from 1993 but the perceived insecurity continued further bolstered by a high degree of deregulation, so-called flexibility, and intensification of work in the labour market (Dex and McCulloch, 1997; Burchell et al, 2002). As a result, the employment probabilities of new school leavers declined significantly in the late 1980s and the first half of the 1990s (OECD, 1998), and career-entry processes became longer and more likely to include short-term and part-time employment, periods of non-employment and further training (Taylor, 2000). At the same time, the proportion of school leavers with high levels of qualifications grew even more rapidly than before, especially for women.

Our basic concern here is to design analyses that will enable us first to make comparisons of the experience of life-course occupational mobility of women and men in the two cohorts; then, secondly, to examine how occupational position at labour market entry influences subsequent career mobility. Therefore, we use survey sweeps conducted at age 23 and 33 in the case of NCDS, and those conducted at age 26, 30 and 34 in the case of BCS70 to reconstruct cohort members' job histories between the ages of 16 and 33/34. The data-sets include recalled

information on each job respondents had held[2]: the timing of job changes recorded in months, the occupation in each job[3] and whether cohort members were employed full-time or part-time[4]. In the subsequent analyses we consider only 'significant' jobs: i.e. those that lasted at least 6 months and were taken up between the age when cohort members first left full-time education[5] and age 33/34. This is the most recent age for which we have data on both cohorts, but which can be assumed to imply a stage of 'occupational maturity' (Breen, 1994).

Given that we use several different sweeps of two longitudinal surveys, the problem of missing data emerges. Both the NCDS and the BCS70 have suffered considerable attrition of respondents across successive surveys as well as a non-negligible amount of item non-response. However, Hawkes and Plewis's (2006) examination of attrition and non-response found few significant predictors of non-random loss in the NCDS. This suggests that the data we use here are reasonably representative of the respective populations of each survey.

Since our main concern is with examining the chances of moving up or down the occupational hierarchy we first need to construct an occupational scale. This raises the problem of what one means by the quality of occupations. There is a wide range of attributes of occupations that may matter to people. Accordingly, there are a number of ways and methods to design an occupational ranking schema (see Goldthope and Hope, 1974, Treiman, 1977, Stewart *at al.*, 1980, Nickell, 1982, Ganzeboom and Treiman, 1996, Warren *et al.*, 1998, Chan and Goldthorpe, 2004). In this paper we use pay as the basis of ranking occupations since it is one of the most important attributes of occupational quality.

We first took the earnings data from the 2002 UK New Earnings Survey and ranked the 77 two-digit codes of occupations according to their mean hourly wage rates (full-time employees

excluding overtime)[6]. We then converted the rank into scores between 1 and 100, which therefore represent relative positions within the occupational distribution (full details are available from authors)[7]. The derivation of this scale was done in a gender-neutral manner since we used the combined occupational wage rates of both men and women as the basis of the ranking. However, one might still be concerned that applying a 'gender-neutral' scale is problematic since women and men are distributed unevenly across occupations, and also may have different pay within occupations. In order to check whether or not our 'gender-neutrality' assumption is met, we produced occupational scores for the two sexes separately in the same way as described above. Then, the scores for women and men were compared in a scatter plot. The results, not shown here, reveal that there is a remarkably high correlation (0.918) between women's and men's scores. Moreover, there are only a few occupational categories for which women's and men's scores appear to be markedly different. Child-care occupations, store clerks and administrative officers have somewhat lower scores on the men's scale than on the women's scale, while the reverse is the case for assembly line-workers, paper, plastic and related process operatives and metal working process operatives. In sum, these results give strong support to our occupational scale being largely gender-neutral.

Results

Extent of occupational mobility

In order to provide a general context for the analyses that follow, we first document the amounts of occupational mobility that women and men experienced over their early employment careers (Table 1). The figures of the table derive from the so-called 'cumulative spells table' in which each cell entry represents a job and these jobs are cross-classified by occupational levels (Halpin,

1992). The only difference between our table and a standard intra-generational mobility table is that while the latter cross-classifies respondents by their first and last occupations, ours takes all respondents' jobs into account, and cross-classifies job *j* by job *j+1*[8]. Thus, respondents with more job changes contribute more transitions to this cross-classification.

When defining occupational mobility, we use two approaches. In the first exercise, upward mobility is recorded if a job shift entails any increase in occupational score, i.e. when the score attached to job *j+1* is higher than that of job *j*. When the shift leads to any decrease in score, it is taken as downward mobility. In the second exercise we only consider significant mobility, defined as at least a 20-percentage-point increase or decrease in the occupational scores between two consecutive jobs (see Blossfeld *et al.*, 2006).

From the panel of 'all moves' in Table 1, a fairly substantial *decrease* in the amount of occupational mobility occurs between the two cohorts, especially for women. More individuals in the 1970 than in the 1958 cohort remained at the same occupational level if they changed jobs. However, for women this increase in occupational stability across cohorts was the net outcome of a ten percentage-point decrease in downward mobility together with a relatively steady rate of upward mobility. For men, the rate of downward mobility hardly changed between the two cohorts, while the amount of upward mobility decreases by five percentage-points. The second panel of Table 1, which describes occupational movements applying the '20-percentage-point rule', shows essentially the same pattern of results.

Overall, the findings of Table 1 suggest that women's and men's occupational mobility patterns in Britain have been converging in the most recent decades. There are a number of possible explanations for this trend. First, as noted above, the qualification gap between British women

and men has been narrowing. Second, marriage is occurring increasingly later in women's and men's lives, and having a child – which can still be considered as one of the most important limitations on women's employment opportunities - is strongly related to (delayed) marriage (Steele *et al.*, 2005). Third, the gap out of employment due to childbirth is getting progressively shorter (e.g. Macran *et al.*, 1996), and shorter breaks tend to help women retain their occupational level (McCulloch and Dex, 2001). Fourth, maternity leave has been extended to greater numbers of women. At the beginning of the nineties only approximately one half of economically active British women were entitled to take maternity leave (McRae, 1993). In 1994, maternity rights were extended to all women making it possible for a growing proportion of women to return to the job they held before childbirth (McKie *et al.*, 2001), thus maintaining their occupational status. Fifth, as noted, men's labour market opportunities have been worsening in many respects since the early eighties. Sixth, occupational mobility over the life-course is decreasing for women and men alike. The recruitment process to professional, administrative, and managerial positions, is now more often made directly among new graduates rather than through upward work-life mobility (Gershuny, 1993).

Staring out in a low level occupation

Figure 1 displays the distribution of women and men according to the levels of their first occupation, for the two cohorts separately. For this purpose we create, within our occupational scale, five broad levels, each covering approximately 20 per cent of the distribution of scores. Low quality jobs at labour market entry are more frequent for women than for men: almost one half of women are found in the two lowest levels of the occupational ranking. Moreover, the proportion of women with an entry occupation in the lowest level (catering occupations, sales assistants, hairdressers, beauticians and related occupations, etc.) has increased between the two

cohorts[9]. Also, there is a striking gender difference in the proportion of entrants at middling-level positions: men are clearly over-represented here. Finally, presumably as a consequence of technological changes and growing demands for highly qualified employees, the proportion of those with initial jobs in the highest levels of occupational distribution appears to have increased between the two cohorts, but somewhat more for men than for women.

In order to address the determinants of individuals' probability of finding their first significant employment in low level jobs, we take the lowest level at entry as forming the dichotomous dependent variable in a logistic regression model and focus on individuals' educational attainment and social origins[10] as potential determinants of a bad entry. The results (not shown here but available upon request), are much as might be expected.

Controlling for educational attainment, we find scarcely any significant effects of social origins on the probability of entering at the bottom level of the occupational hierarchy[11]. In contrast, the effects of education themselves are marked. Lower educational attainment is associated with a much greater risk of having one's first job in the lowest occupational level, especially in the case of women. For instance, in the 1970 cohort, having no qualifications or less than intermediate qualifications increased women's probabilities of entering the labour market via a bad job by 70 per cent – as compared to those with intermediate qualifications (O level or equivalent). The corresponding figure for males is somewhat smaller, 48 per cent. Likewise, individuals with a degree are less likely than those with only intermediate qualifications (O level) to find their first job in the lowest level. However, for men the magnitude of the coefficient is smaller than for women.

In order to investigate gender differences in the educational composition of those who entered the labour market via poor jobs, we pooled the data for women and men for each cohort, and included qualification-by-gender interactions in the regression model. The coefficients for the interaction terms between having a degree and being a woman were significant at the 10% level and negative in their sign for both cohorts. This suggests that women with a degree are somewhat less likely than men with the same qualification to be found at entry in the lowest level of occupational distribution. This points to the important conclusion that women with bad entry jobs appear to be more homogeneous and more dominated by the less well educated than is the case for men[12].

Consequences of a bad entry

We now consider the consequences of entry job for future occupational mobility. For this investigation, we take into account *all job moves* that men and women in our two birth cohorts have experienced up to age 34. An initial characterisation of individuals' occupational trajectories for those who entered via a lowest level occupation is displayed in Figure 2 using four categories: (1) stable (no move out of the lowest occupational level up to age 34); (2) steady upward mobility (moves consistently towards higher occupational levels); (3) counter mobility[13] (upward moves but followed by a return to the lowest occupational level by age 34); and (4) instability (upward and downward moves but not leading back to the lowest level). The proportions of those with 'stable' occupational trajectories are considerably higher for women than for men in both cohorts. This means that a non-negligible minority of women who had poor entry jobs did not move out subsequently, even for a short period, from the lowest levels of the occupational distribution. Moreover, among women the proportion of counter mobiles is also higher than among men, and more than a half of the women's counter mobility group are those who moved between jobs in

the bottom and next-to-bottom levels of our occupational scale. These findings point to clear gender differences in the consequences of bad entry jobs for later occupational careers.

In order to seek for the underlying causes, we now turn to event-history techniques. We model the hazard of upward and downward moves. By 'hazard' we mean the likelihood that an event - in this case, an upward or a downward occupational shift - occuring in a particular month. Upward (downward) mobility is defined as at least 20 percentage-point increase (decrease) on the occupational scale. Tables 2.1 and 2.2 report the effects of labour market entry via jobs at differing occupational levels on the hazard of upward and downward mobility, separately for women and men, and controlling for a range of individual characteristics[14]. A set of time-varying controls capture aspects of individuals' work experiences gained up to the point of entering their current jobs: linear and squared forms of cumulative amounts of work experience (measured in years) and the percentage of previous labour force experience spent in part-time employment. The models also include an age dummy indicating whether or not the respondent is older than 25 at the start of the job spell. Since previous research (e.g. Jacobs, 1999; Connolly and Gregory, 2005) suggests that individuals' mobility chances depend on their past occupational mobility histories, the models incorporate a set of time-varying dummy variables to characterise women's and men's occupational trajectories up to the point of entering their current jobs. The following categories are distinguished: no occupational change of greater than 20 percentage-points; at least one upward move, but no downward move; at least one downward move, no upward move; both kinds of move. We also include a time-varying measure for highest educational level attained by the time of entering current job. Finally, a set of covariates describe the current job held by the respondent: occupational level and a dummy for part-time employment[15]. The descriptive

statistics for the covariates used in the analysis can be found in the Appendix. The estimation is performed by piecewise exponential models (see Blossfeld and Rohwer, 2002)[16].

Occupational moves of either kind were found to be most probable when women and men had worked in their job for at least one but no more than two years. Then, negative duration dependence prevails: the longer the job spell, the lower the probability of an upward or downward occupational move. The coefficients for employment experience suggest that risks of downward mobility are higher during the first years of employment careers for both genders: the more work experience individuals accumulated, the lower their probability of moving downwards. However, while women's chances of moving upwards appear to be unaffected by their amount of work experience, men's probabilities of an upward move are clearly higher in the very early stages of their employment histories when they have not yet accumulated much experience. Men of the 1958 cohort who had a higher proportion of their employment careers in part-time jobs were more likely to move downwards but did not seem less likely to move upwards on the career ladder. However, in the case of the 1970 cohort, as for women in both cohorts, men who had more past experience in part-time jobs did not appear to be at greater risk of downward or upward mobility after controlling for other experiences.

It can also be seen that in the case of the 1958 cohort, age does not affect either women's or men's occupational mobility. However, for women in the 1970 cohort, a negative effect of age is visible, and any kind of move is more probable below age 25. Qualifications have a fairly systematic effect on the hazards of women's and men's occupational mobility. Overall, the higher the educational level attained, the more likely an individual is to move up on the occupational ladder. Likewise, higher levels of education generally appear to decrease the risk of downward mobility.

Women and men who experienced occupational shifts in either direction were more likely to move than those who had a stable occupational career, and especially in the case of the 1970 cohort. This is evidence for path dependence applying to both genders. The estimates also document a clear effect for current occupational level: the better the occupation, the lower the chances of upward and the higher the risk of downward occupational mobility. Further, holding a part-time job significantly decreases women's chances of upward mobility in both cohorts. At the same time, part-time posts make downward moves more probable, but only for the members of the 1958 cohort[17]. In the case of men, part-timers of the 1970 cohort face higher chances to move upwards, but they also have higher risks to move downwards, as compared to their counterparts in full-time posts.

However, in this paper, it is the effects of initial occupational position that are of primary interest. In the case of women, for the 1958 cohort, those whose entry jobs are in the fourth level of our occupational scale (e.g. secretaries, personal assistants or social welfare associate professionals) have the most opportunities to move up even further in the occupational hierarchy – controlling for other factors. But in the 1970 cohort such women have no better chances to experience upward shifts than those who entered the labour market in occupations in the third level. Also, a marked cohort difference exists in the chances of upward mobility for women with a first job in the lowest level of occupations. In the 1970 cohort the hazard of an upward move for those starting in jobs in the first level of the hierarchy is 25 per cent ($e^{-0.287}$ –1) lower than for those who entered the labour market in the third level. For the 1958 cohort the rates of upward mobility are rather similar for these two groups of women[18].

Figure 2 suggested that for a substantial proportion of women who entered the labour market via the lowest occupational level, if they manage to move upwards, their relatively improved position

might be rather transient. The relevant coefficients of Table 2.1 confirm this view. Being in the lowest occupational level at entry into the labour market does increase women's risk of downward mobility in the course of their early employment histories. The risk increased for women in the 1958 cohort by 20 per cent ($e^{0.184} - 1$) and by almost 40 per cent ($e^{0.330} - 1$) in the case of 1970 cohort – as compared to those whose initial job was in the third level. The significant positive coefficient for members of the 1970 cohort, who started in a job in the second level, can be taken as further evidence of the growing hindrance to career advancement that stems from low-level entry jobs[19]. In both cohorts alike, entering the labour market at the highest occupational level, makes later downward mobility much less probable, again underlining the crucial role of initial occupation in subsequent mobility chances and risks.

For men, as for women, a high-level entry job appears to 'protect' efficiently against the risk of downward mobility, and more so for those born in 1970 than in 1958[20]. Moreover, entering the labour market via a high quality job makes it more probable that men will experience further upward mobility over the early employment career. However, in contrast with women, men with low-level entry occupations do not appear to face great difficulties in moving up the occupational hierarchy in either cohort. In the 1958 cohort those who started their careers in the second occupational level are more likely than their counterparts in the third level to experience occupational mobility of any kind.

Having established a clear association between initial occupational position and the hazards of subsequent upward and downward mobility, a further question emerges as to whether or not this association varies by levels of qualification. One can expect for instance chances of upward moves and risks of downward moves for those with bad starts to vary by differing levels of qualification, and differently so for women and men. In other words, one can expect a joint effect

of initial occupation and education on career mobility. To examine this, we take a hypothetical person and use the appropriate model estimates to calculate the predicted probabilities of her or his being upwardly and downwardly mobile if her/his first job is in the bottom level of the occupational hierarchy and if she/he has differing levels of qualification (Figure 3). Other characteristics were set as 5 years of work experience, never had a part-time job, had at least one upward move up to the point of entering her/his current job, and holding a current job with the mean occupational score.

There is scarcely any gender difference in the hazard of upward mobility. However, a remarkable gender difference shows up, irrespective of level of qualification, in the likelihood of a downward move: it is much higher for our hypothetical woman than for a corresponding man. This indicates that although women with bad entry jobs would appear to have fairly similar chances to men to move up the occupational hierarchy, their relatively improved position tends to be transient, as they are more likely subsequently to make a downward shift than men, even if they are well educated.

We can also calculate the predicted hazards of upward and downward mobility for the same hypothetical person but now fixing her/his first occupation in the third level of our occupational scale (Figure 4). In this case, the hazard of upward mobility appears to be higher for our hypothetical woman than for a corresponding man, especially in the 1970 cohort and especially if she has some tertiary education. A woman with tertiary education in the 1970 cohort does not seem to be more likely to move downwards than a man with the same levels of qualification. This would suggest that, given a higher level entry job, a well-educated woman's chances to move upwards increase and that her qualifications are an effective protection against downward mobility.

Discussion and conclusions

This paper has investigated gender differences in the impact of low-level entry jobs on subsequent life-course occupational mobility in Britain, in the context of two alternative hypotheses about the implications of low entry, the stepping-stone or entrapment hypotheses. Our analyses show that an overwhelming majority of men who entered the labour market via low quality jobs not only got out of these positions with a relatively high probability but also managed to maintain their more advantaged occupational position over their early employment careers. For many male workers, therefore, initial employment in the lowest level of occupational hierarchy was a stepping-stone rather than a trap, and may indicate a period of investment in human capital or a period of 'experiment' in order to find the most suitable career path. However, for women, entering the labour market in a job in the lowest occupational level appears to be a major disadvantage, with negative consequences on their subsequent career advancement that cannot be balanced out over a longer period of time. Although women are able to get out of an initial low level job at a fairly similar rate to men with the same level of qualifications, their improved occupational position seems to be more transient. They are much more likely than men to experience subsequent downward mobility, in most cases back to their initial low occupational level. Moreover, even if women moved upwards on the occupational scale, a significant proportion of these shifts are quite 'short-distance', to the second lowest level of the hierarchy at most, so that women with low quality entry jobs tend to be hovering between the two bottom levels of the occupational hierarchy over their careers to a far greater extent than men. In summary, the empirical evidence for women suggests that starting their employment careers in the lowest level of occupational hierarchy is a 'trap' rather than a 'stepping-stone'.

We find evidence that gender differences in the effect of bad entry jobs on subsequent career chances have changed over time between the two cohorts we consider here. In the case of women the detrimental effects of starting a career in the lowest occupational level appear to be more pronounced for members of the 1970 cohort than of the 1958 cohort. Not only did female members of the 1970 cohort have higher proportions with bad initial jobs but also that their mobility chances out of these positions were clearly lower than those of the 1958 cohort. This suggests that the polarisation of women's employment and occupational structures intensified in the nineties and that this, together with growing insecurity in the labour market, led to a lower probability of career advancement out of the lowest occupational positions for women born in 1970 than for men.

British women's career opportunities improved a good deal in the 1980s and 1990s. This paper demonstrates that their occupational trajectories, at least up to age 34, have become more similar to those of men. However, considerable differences remain between the labour market experience of those who managed to begin their employment careers in fairly favourable occupational positions and those who entered the labour market in poor jobs. In general, our results would support the claim by Bihagen and Ohls (2006) that the focus of research on the top of the occupational hierarchy should be matched by an equal interest in gender inequalities at lower levels, and underlines the need to explore in greater depth the mechanisms that create and sustain these inequalities.

Notes

[1] Panel studies or cross-sectional studies containing retrospective data can be sources of over time analyses, but their sample sizes are often small, with shorter time periods covered and only relatively recent employment experiences of respondents can be derived.

[2] The job histories collected in NCDS and BCS70 recorded both between-employer changes and within-employer changes. We therefore capture within-employer changes that result in a change of occupation, but not between-employer changes that do not lead to occupational changes but are part of a single internal occupational career ladder.

[3] Across the cohort sweeps used in this paper, occupations were coded to changing official classifications (the so-called SOC codes). Thus, it was necessary to re-code occupations throughout the employment histories in a consistent way. In fact the only coding frame that could be used for this purpose is SOC 90, although we recognise that SOC90 is not as good as SOC 2000 for identifying and distinguishing between women's occupations.

[4] As we record job changes not employer changes, we detect changes of hours within jobs, or spells of leave, such as maternity leave if there was no change of employer.

[5] Students' vacation jobs are thereby excluded.

[6] One might be concerned that the occupational rank derived in this way may change over time. However, as Goos and Manning (2007) point out, there is a considerable stability in the occupational wage structure in Britain.

[7] We examined how the occupational scale we develop is related to two other scales that are widely used in sociological research, namely the SIOPS and the ISEI. The correlations between the three scales turned to be high, above .800 in all cases.

[8] It should be noted that there are no significant differences between the two cohorts in the hazard of job changes, and, in line with the results of other studies (e.g. Booth and Francesconi, 2000), the rates of job mobility are quite similar for men and women.

[9] One could assume that the higher percentage of women in the lowest occupational level in the 1970 cohort than in the 1958 one can be explained by a substantial increase in women's employment between the two cohorts. However, women's employment rates at early stages of the labour market career were in fact fairly similar in these two cohorts. 73 per cent of women of the 1970 cohort and 70 per cent of those in the 1958 cohort were employed at age 23 (Makepeace *et al*., 2003); the corresponding figures around age 30 were 74 per cent in the 1970 cohort and 68 per cent in the 1958 cohort (Woods *et al*., 2003).

[10] The NCDS age-11 survey contains information on the Socio-Economic Grouping (SEG) of the respondent's father. As regards the BCS70, the age-10 survey has corresponding information. From the SEGs, a good approximation to the Goldthorpe class schema can be derived (cf. Heath and McDonald, 1987).

[11] However, the effects of social origins are marked, especially for men in the 1970 cohort, on the probability of entering the labour market via jobs in the highest quintile of our scale: i.e. this probability is at 55 per cent greater for men of service class than of skilled working class origins.

[12] We also examined whether or not are there cohort differences in educational composition of those who entered the labour market via the lowest level of occupations. To this end, we pooled the data of the 1958 and 1970 cohorts, and included education*cohort interactions in the models. The interaction terms were not significant in any case.

[13] The term of counter-mobility was originally introduced by Girod *et al.* (1972) in relation of intergenerational mobility. In British context Goldthorpe (1987) found that people from advantaged social class backgrounds were often downwardly mobile in the early stages of their careers before returning to their father's social class later.

[14] Note that these analyses do not include respondents' first jobs, as our main interest is of the effects of the occupational level in the first job on later career mobility.

[15] We are aware of the fact that there are a number of further job-specific attributes that might be worth using when analysing occupational career mobility, such as the distinction between public and private sector (see for example Golsch, 2006a) or firm size (see for example Burchell, 1993). These variables are available in the retrospective job histories of the British Household Panel Survey (BHPS) but not in the cohort studies. However, we believe that it is on balance preferable to use the NCDS and BCS70 for examining occupational life-course mobility. First, for reasons mentioned above in the first note. Second, the cohort studies contain a wide range of variables on early childhood developments and social background, which could be used in future research to investigate more fully the underlying mechanism of the empirical regularities we establish in this paper.

[16] We performed these analyses with a Gamma mixture distribution to capture unobserved heterogeneity between individuals (see Blossfeld *et al.*, 2007). In all cases we found that including a mixing distribution is relevant and has significant effects on the coefficients of some of the covariates (details are available upon request).

[17] This may reflect a growing proportion of women's part-time employment in 'good' jobs (e.g. managerial and professional occupations) in recent years (Gregory and Connolly, 2008).

[18] In order to examine this problem in a more rigorous way, we pooled the data of the 1958 and 1970 cohorts, and included in the event-history model first occupational level*cohort interaction terms. The coefficient for the interaction term for the lowest level with a dummy of the 1970 cohort was significant (at level of $p < 0.05$) and negative in sign indicating that women with bad initial jobs in the 1970 cohort are much less likely than their counterparts in the 1958 cohort to experience upward mobility over their early careers.

[19] Following the same strategy, we included first occupational level*cohort interactions in the models. The coefficients for the interaction term for the lowest occupational level and a dummy of the 1970 cohort as well as that for the second level and the 1970 dummy were significant (at level of $p < 0.05$) and positive in sign.

[20] We pooled the two data-sets and included interaction terms between first occupation and cohorts. The coefficient for the interaction term for the highest level with a dummy of the 1970 cohort was significant (at level of $p < 0.05$) and negative in sign indicating that men with good first occupations in the 1970 cohort are much less likely than their counterparts in the 1958 cohort to experience downward mobility.

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Tables and figures

Table 1: The amount of occupational mobility between occupation *j* and occupation *j+1*

	Upward mobility	No/Lateral mobility	Downward mobility
All moves			
Women			
1958	26	44	30
1970	24	56	20
Men			
1958	30	48	22
1970	25	55	20
20-percentage-point moves			
Women			
1958	24	52	24
1970	22	63	15
Men			
1958	23	60	17
1970	19	67	14

Note: 1958 cohort: 17054 job shifts of 4121 women and 14848 job shifts of 3632 men are included.
1970 cohort: 13916 job shifts of 4070 women and 11255 job shifts of 3451 men are included.

Table 2.1: The effect of first occupational level on the hazard of occupational mobility until age 34 – women

	Cohort-1958				Cohort-1970			
	Upward		Downward		Upward		Downward	
Duration of job								
6-12 months	-3.916	**	-5.770	**	-3.944	**	-6.421	**
13-24 months	-3.600	**	-5.541	**	-3.580	**	-6.174	**
25-48 months	-3.885	**	-5.675	**	-3.759	**	-6.225	**
49-96 months	-4.022	**	-5.983	**	-3.908	**	-6.602	**
97 or more months	-4.301	**	-6.227	**	-4.149	**	-6.636	**
Work experience (in years)	-.017		-.048	**	-.028		-.054	**
Squared work experience	-.002		.000		.002		-.001	
% of work career in part-time jobs	-.152		-.044		-.120		.070	
Aged 25-34	.009		-.050		-.139	*	-.067	**
Occupational mobility								
no occupational mobility (ref.)								
only upward move(s)	.115		.282	**	.361	**	.443	**
only downward move(s)	.278	**	.140	*	.443	**	.165	
both	.397	**	.397	**	.602	**	.631	**
Education								
no qualification, less than O level [general elementary, basic vocational]	-.296	**	.238	**	-.244	**	.200	**
O level or equivalent (ref.) [intermediate qualifications]								
A level or equivalent [maturity certificate]	.277	**	-.271	**	.395	**	-.435	**
sub-degree [lower tertiary]	.209	**	-.666	**	.168		-.287	*
Degree [higher tertiary]	.668	**	-.927	**	.857	**	-.878	**
Occupational score – current job	-3.624	**	1.455	**	-3.912	**	1.358	**
Working part-time	-.262	**	.146	**	-.438	**	.086	
Levels of first occupational score								
1st (lowest)	-.070		.184	**	-.287	**	.330	**
2nd	.107		.091		-.083		.270	*
3rd (ref.)								
4th	.213	**	.086		.139		.049	
5th (highest)	.001		-.305	**	-.101		-.300	*
N of job-spells	12032				9624			
N of events	2619		2564		1712		1415	
Log-likelihood	-6872.714		-7266.215		-4790.953		-4538.062	

Note: Piecewise exponential models with a Gamma-distributed random variable.
The widely used CASMIN equivalents of educational levels are given in brackets (see Brauns and Steinmann, 1997).
** Effect significant at $p < 0.01$; * effect significant at $p < 0.05$ (robust standard errors are applied)

Table 2.2: The effect of first occupational level on the hazard of occupational mobility until age 34 – men

	Cohort-1958				Cohort-1970			
	Upward		Downward		Upward		Downward	
Duration of job								
6-12 months	-3.755	**	-6.327	**	-3.857	**	-6.515	**
13-24 months	-3.476	**	-6.280	**	-3.520	**	-6.233	**
25-48 months	-3.669	**	-6.668	**	-3.823	**	-6.555	**
49-96 months	-4.011	**	-7.358	**	-4.166	**	-7.026	**
97 or more months	-4.228	**	-7.752	**	-4.782	**	-7.553	**
Work experience (in years)	-.042	**	-.068	**	-.025	*	-.063	**
Squared work experience	-.000		.000		-.003		-.003	
% of work career in part-time jobs	.170		.453	*	.060		.109	
Aged 25-34	.053		-.096		-.097		.058	
Occupational mobility								
no occupational mobility (ref.)								
only upward move(s)	.181	*	.273	**	.304	**	.591	**
only downward move(s)	.469	**	.312	**	.493	**	.335	*
Both	.509	**	.601	**	.569	**	.745	**
Education								
no qualification, less than O level [general elementary, basic vocational]	-.246	**	.339	**	-.211	**	.317	**
O level or equivalent (ref.) [intermediate qualifications]								
A level or equivalent [maturity certificate]	.202	**	-.488	**	.333	**	-.412	**
sub-degree [lower tertiary]	.488	**	-.608	**	.402	*	-.394	*
Degree [higher tertiary]	.398	**	-.969	**	.622	**	-1.139	**
Occupational score – current job	-3.949	**	1.980	**	-3.974	**	1.416	**
Working part-time	-.073		.278		.435	**	.737	**
Levels of first occupational score								
1st (lowest)	.016		.182		-.093		.095	
2nd	.187	**	.180	*	-.035		.120	
3rd (ref.)								
4th	.127		-.022		.117		-.148	
5th (highest)	.293	**	-.253	*	.135	*	-.611	**
N of job-spells	10249				7607			
N of events	1992		1477		1264		897	
Log-likelihood	-5494.760		-4985.865		-3610.832		-3108.567	

Note: Piecewise exponential models with a Gamma-distributed random variable.
The widely used CASMIN equivalents of educational levels are given in brackets (see Brauns and Steinmann, 1997).
** Effect significant at $p < 0.01$; * effect significant at $p < 0.05$ (robust standard errors are applied)

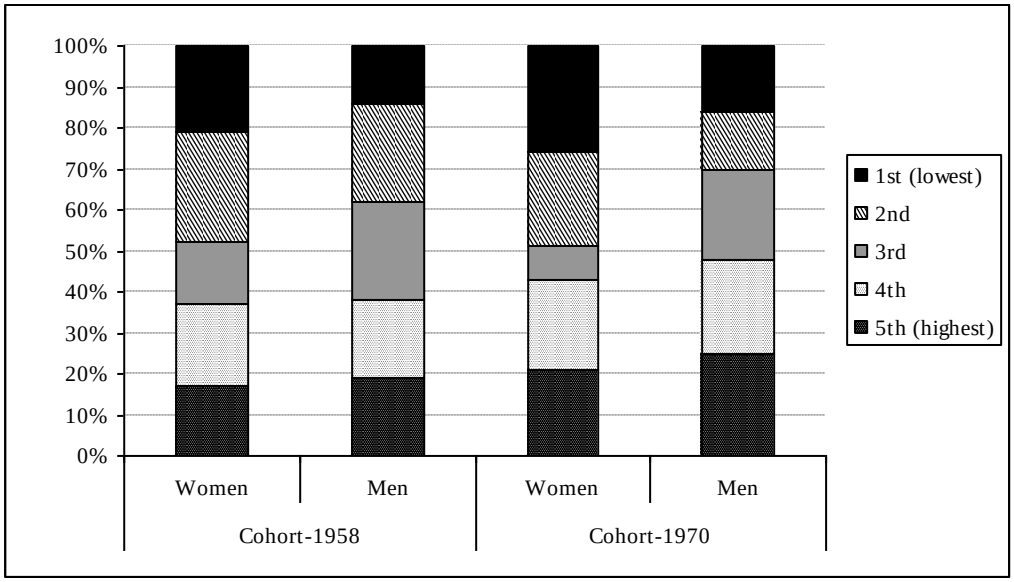

Figure 1: Distribution of individuals by their first occupational levels (%)

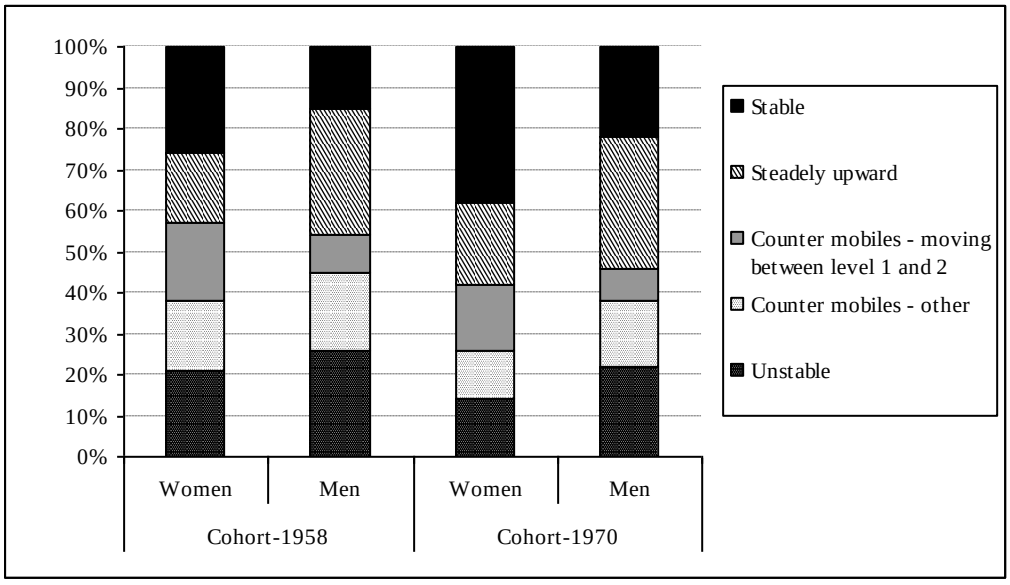

Figure 2: Distribution of individuals entering the labour market in the lowest occupational level by career type

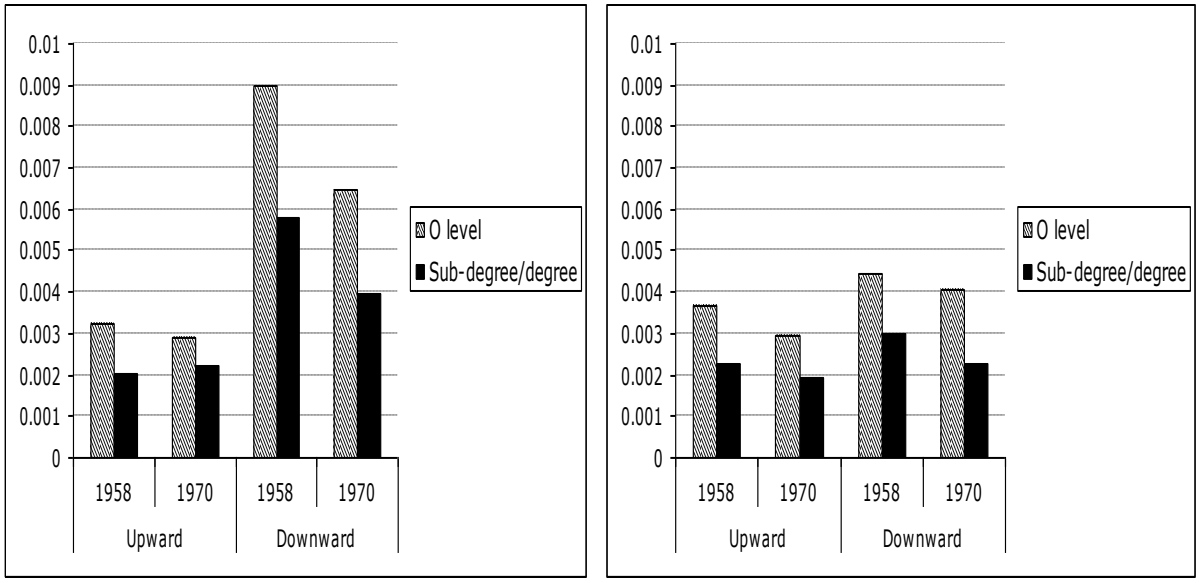

Figure 3: Predicted hazard of occupational mobility by qualifications for individuals with first job at the lowest occupational level

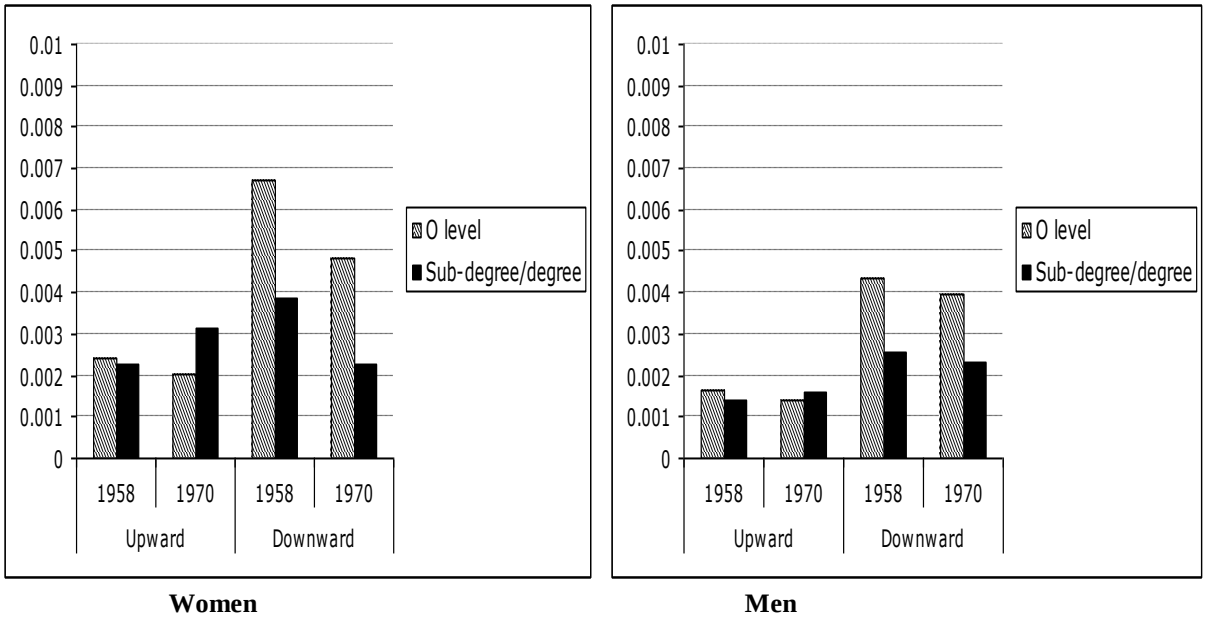

Figure 4: Predicted hazard of occupational mobility by qualifications for individuals with first job at the third occupational level

Note: The predicted hazards are calculated under a piecewise exponential model. Covariates are fixed as follows: 5 years of work experience, no part-time employment up to current job, current job: full-time employment with mean occupation score, past occupational mobility: only upward.

Appendix

Descriptive statistics for explanatory variables in the models of occupational mobility

	Women		Men	
	Cohort-58	Cohort-70	Cohort-58	Cohort-70
Means (standard deviations)				
Aged 25-34	.538 (.498)	.591 (.491)	.509 (.499)	.570 (.493)
Work experience (in years)	6.81 (4.38)	6.39 (4.13)	7.31 (4.47)	6.521 (4.10)
% of work career in part-time jobs	.109 (.223)	.128 (.259)	.018 (.102)	.035 (.127)
Occupational score – current job	.454 (.298)	.504 (.304)	.544 (.268)	.576 (.280)
Working part-time	.350 (.478)	.320 (.423)	.020 (.155)	.030 (.170)
Distributions				
Occupational mobility				
no occupational mobility	25.2	29.8	27.5	33.1
only upward	23.0	28.1	27.5	28.7
only downward	33.8	26.6	14.5	14.6
Both	18.0	15.6	30.4	23.6
Education				
less than O level	26.9	22.4	25.8	26.6
O level	39.2	41.6	33.4	36.9
A level or equivalent	11.1	12.6	19.4	12.1
sub-degree	13.6	4.7	10.1	4.4
degree	9.2	18.7	11.2	20.0