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OCCUPATIONAL CHANGE IN BRITAIN 1991-2000**

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# **Moving Down? Women's Part-time Work and Occupational Change in Britain 1991-2001**

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### *Abstract*

The UK's Equal Opportunities Commission has recently drawn attention to the 'hidden brain drain' when women working part-time are employed in jobs below their level of educational attainment and/or previous experience. These inferences were based on self-reporting. We give an objective and quantitative analysis of the nature of occupational change as women make the transition between full-time and part-time work.

In order to analyse down-grading we construct an occupational classification which supports a ranking of occupations by the average level of qualification of those employed there on a full-time basis. We note that the incidence (and by implication the availability) of part-time work differs across occupations, and that occupational concentration is more acute for part-time work. Using a large sample of panel observations over the period 1991-2001 we show that women moving from full- to part-time work are approximately twice as likely to move down as up the occupational ladder, while those moving from part-time back to full-time work are twice as likely to be moving up than down the ranking. These effects are particularly marked when a change of employer is involved.

Not all women are equally at risk of downgrading. It is particularly likely among women in management positions; over one-third of women in managerial or high-skilled clerical/administrative jobs downgrade when they move into part-time employment. But women in some occupations with higher specific skill requirements and where employees may have a stronger sense of vocation, notably teaching and nursing, are much less likely to experience downgrading. Nonetheless, 20% of teachers and nurses who change employer and switch into part-time work move downwards.

These findings indicate a loss of economic efficiency through the underutilisation of the skills of many of the women who work part-time.

In a recent report the Equal Opportunities Commission (2005) refers to the 'hidden brain drain' associated with part-time employment. The concentration of part-time work in the UK in low reward, low status jobs is extensively documented (Manning and Petrongolo, 2004; Grimshaw and Rubery, 2001; Blossfeld and Hakim, 1997; Hakim, 1998; and others). But the more insidious dimension is that women may be forced into lower skilled occupations where part-time employment opportunities are more readily available, in order to find the flexibility in hours of work that they seek. This hidden brain drain, where women working part-time are not employed to their full potential, poses a serious challenge for social and economic policy.

Part-time work by women has been a major source of employment growth in the UK over the past 30 years, and around 45 per cent of women now in work in the UK are working part-time. On a life-cycle perspective the role of part-time work is even greater. Among women aged 22-59 who were in work for at least five years between 1975 and 2001 34 percent only ever worked full-time, 13 percent only ever worked part-time while 53 percent moved between the two states. Combining these last two groups shows that a substantial majority of women work part-time at some stage of their adult careers. Much of this growth reflects the increasing role of part-time work as the route by which women combine labour market participation with home and family responsibilities particularly during the childcare years. In this context perceived inferior conditions including lower pay and shorter hours are not necessarily evidence of discrimination or disadvantage. Women may choose to accept lower labour market rewards in return for other benefits that they perceive in working part-time. However, if securing the advantages of shorter hours or flexibility in the timing of the working week(s) leads to women accepting jobs at a lower occupational level than if they were to continue in full-time work, the implied underutilization of the actual and potential human capital of a substantial fraction of the workforce raises significant issues of economic efficiency as well as gender equity.

The Equal Opportunities Commission identified the 'hidden brain drain' of part-time work through two sets of questions in a qualitative survey. Respondents were asked first whether they had previously held jobs which involved more supervision or management of staff, or needed a higher level of qualifications or skills than were required in their current job, and then more broadly whether they were working in jobs which did not use their latent potential (see Grant, Yeandle and Buckner, 2005). In this paper we focus on the first aspect, and provide an objective and quantitative measure of this by examining the nature of the occupational change associated with transitions between full- and part-time work. How far does the move to part-time status involve a change in occupation, particularly down-grading in terms of level of skill? Is a reverse movement back into full-time employment associated with upgrading in the skill level of the new occupation? We first analyse the extent to which the incidence (and by implication the availability) of part-time work differs across occupations, illustrating that occupational concentration is more acute in part-time work. We then examine the role of occupational change in transitions between full-time and part-time work. In order to analyse down-grading we construct a classification which supports a ranking of occupations by the average level of qualification of those employed there on a full-time basis. We also select six occupations

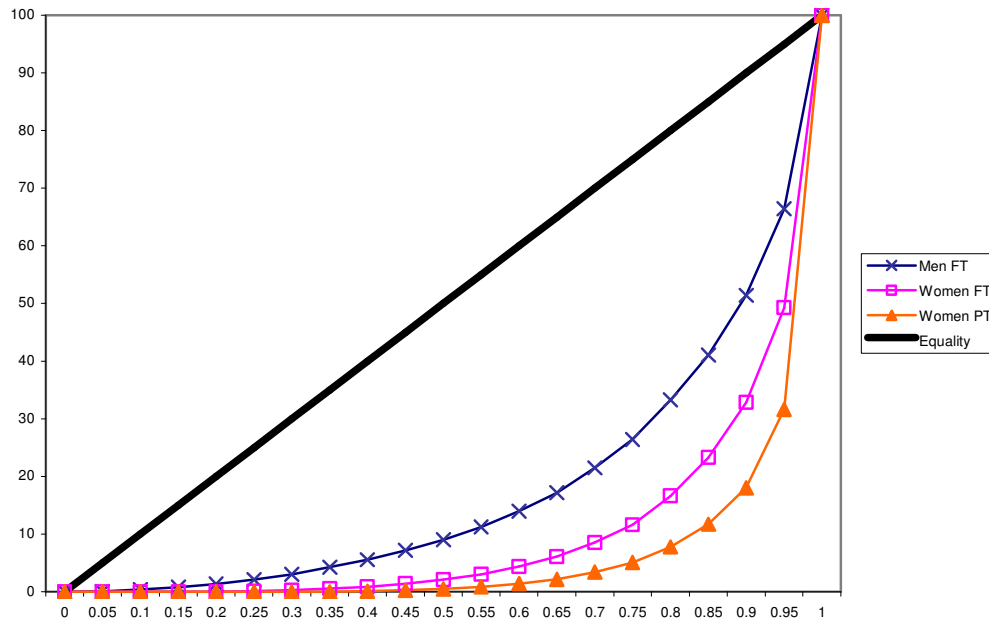
of particular importance for women – teaching and nursing for the more skilled, secretarial and clerical jobs representing jobs which require a good standard of general education and possibly some vocational training, and sales and cleaning jobs at the low-skill end. We examine their role in the transition patterns between full- and part-time work.

The structure of the paper is as follows. Section 2 documents the relative occupational concentration of women's employment, particularly in part-time work. Section 3 develops the occupational groupings which we use, and presents the skill ranking constructed from them. The dataset used is described in Section 4. In Section 5 we show transition matrices of the incidence of occupational downgrading or upgrading with switches between full- and part-time work. Section 6 analyses the determinants of occupational change in a multinomial logit framework, extended in Section 7 to the impact of the previous occupation. Section 8 assesses the severity of occupational downgrading, and looks at some key transition patterns. Section 9 concludes.

## **2. Occupational structures**

The greater occupational concentration of female, particularly part-time, jobs is confirmed on a range of standard measures. The Lorenz curves in Figure 1 are constructed from the 371 occupations at the Unit Group level of the Standard Occupational Classification (SOC90) ranked in ascending order of employment size. The least occupationally concentrated pattern of employment is for men in full-time work<sup>i</sup>. Female employment in full-time jobs is more concentrated, and part-time employment for women more concentrated still.

**Figure 1 Lorenz Curves of the Distribution of Employment Across Occupations:  
Men, and Women in Full- and Part-time Work**

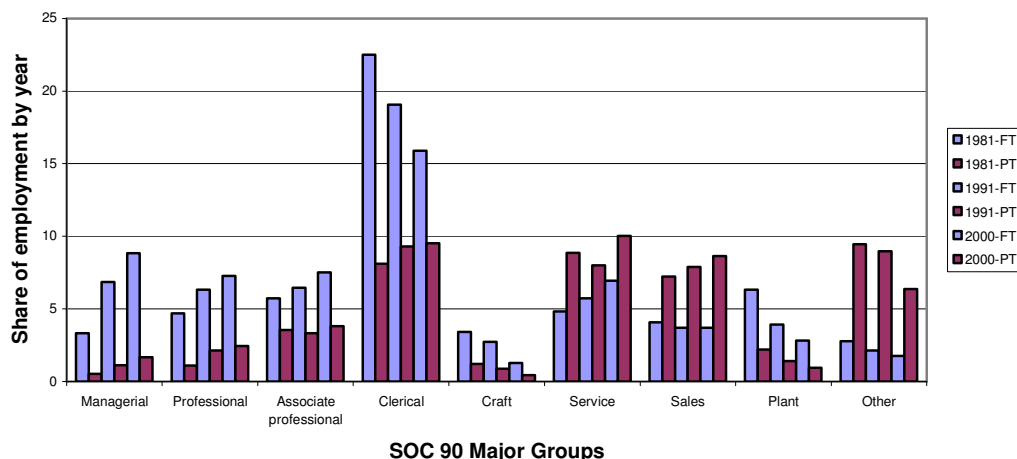


Source: Labour Force Survey, 2000.

In this sample (Labour Force Survey, 2000; sample size 36,000) male workers are present in all but three of the 371 occupations (the exceptions are midwives, beauticians, word processor operators), women working full-time are present in 290, and women working part-time in only 235. The five largest occupational groups for men employ 15 per cent of those in full-time work, against top-five figures of 23 per cent among women working full-time, and 38 per cent for women in part-time work. Similarly their top ten occupations employ 24 per cent of men in work, 37 per cent of women working full-time, and 53 per cent of women working part-time.<sup>ii</sup>

Focusing just on women, the pattern of occupational concentration differs markedly between full- and part-time work. Figure 2 shows that of the nine SOC Major Groups those which are conventionally regarded as the higher ranked occupations, and placed first in the standard listing – managerial, professional and associate professional – comprise predominantly full-time workers, while in lower rated occupations, such as service, sales and low-skill elementary jobs, women working part-time outnumber those working full-time.

**Figure 2 - Women's Full- and Part-time Employment by Major Occupation  
1981, 1991 and 2000**



Source: Labour Force Survey.

The concentration of part-time jobs in lower ranked occupations, typically with lower skill requirements, raises the issue of how far the women who choose to work part-time are themselves less well-qualified and so have more limited job options, or how far they are as well qualified as other women but their preference for part-time employment results in occupational downgrading and employment where their skills are under-utilised. In order to examine the extent to which the switch into part-time employment represents occupational downgrading we require an appropriate ranking of occupations.

### 3. The ranking of occupations by qualifications

Many studies have followed Nickell (1982) in ranking occupations on the basis of average pay (for example Stewart, 1983; Connolly, Micklewright and Nickell, 1994). Manning and Petrongolo (2004) in their analysis of the wage penalty associated with part-time work discuss occupational downgrading in terms of pay. Ranking by pay clearly has appeal; as well as being universally understood, it gives a cardinal measure and is easily implementable. However, it is based on remuneration being a full reflection of the individual's productivity in the job. Where part-time work involves the underutilization of skills the varying shares of part-timers within an occupation will distort its ranking. Similarly, the existence of a gender pay differential within occupations means that even a ranking based on full-time workers only will be affected by the varying share of women across occupations. An alternative approach is ranking by social status, bringing in a wider range of qualities of the job (Goldthorpe and Hope, 1974; Goldthorpe, 1987; Erikson and Goldthorpe, 1992; Evans, 1999; Sicherman and Galor, 1990). The indices of prestige constructed on these approaches (Goldthorpe, Duncan, Siegel; see Hauser and Featherman, 1977) have the advantages of a theoretical grounding in the sociological literature and some empirical success in explaining key life outcomes, such

as health and morbidity. Again, however, this basis for ranking at most weakly reflects qualifications and skills.

To address the issue of whether part-time work for women tends to imply a shift into jobs with lower skill requirements we need a ranking of occupations based upon the skills or qualifications appropriate to the job. Since this is not generally available we develop a direct measure of the skill level of occupational groups, and construct a ranking of occupations based on this. This allows us to identify occupational downgrading for the individual directly in terms of the skill level of alternative occupations.

The Standard Occupational Classification 1990 (SOC90) identifies occupations with reference to ‘the similarity of qualifications, training, skills and experience associated with competent performance of the work activities involved’, and to ‘the nature of these work activities’.<sup>iii</sup> This approach is appropriate for our purposes in being a classification of jobs, defined by their typical attributes, with individuals assigned to occupations on the basis of the job they hold. However the dual basis of the classification, conflating the skill level required with the nature of the job, means that SOC90 at any of its higher levels of aggregation only partially provides the occupational hierarchy by skills which we require. At its most aggregate level of the nine Major Groups, Major Group 1, Managers and Administrators, includes owner/managers of hairdressing salons along with top corporate managers while Major Group 7, Sales Occupations, includes relatively high-skill jobs such as buyers and brokers alongside shop assistants and checkout operators. Moving to the level of the 22 Sub-major Groups typically introduces further horizontal rather than vertical differentiation, for example by sub-dividing the classification of Professionals among Science, Health and Teaching.

We therefore construct a 15-occupation classification which retains the role of the nature of the work activities while being more closely delineated by the average level of qualification of those working there. The classification is constructed from groupings of the 371 Unit Groups. The main principles are that within occupational categories qualification levels should be similar, with work activities subdivided vertically where standard levels of qualification differ significantly across the Unit Groups involved.

Data on the level of qualifications held by individuals within each Unit Group of SOC90 are taken from the *Labour Force Survey* 2000. Since our concern is with adult women in employment our calculation of the average level of qualifications within the occupation is based only on the 22-59 age-group. In order to avoid any implications for the skill structure deriving from the role of part-time work within occupations the classification is benchmarked on the qualifications of men and women in full-time work.



The qualifications reported by individuals classified to each Unit Group within the LFS are converted to the standard eight-point scale:

0	no qualifications
1	sub-GCSE/O-level
2	GCSE/O-level or equivalent
3	A-level or equivalent
4	Nursing qualifications
5	HND or equivalent
6	Teaching qualifications
7	Degree level or above.

Individuals are attributed the highest level of qualification which they hold. The average level of qualification within the occupation at the Unit Group level ranges from 7 for barristers and veterinarians to less than 1 among cleaners and road-sweepers.

We construct a 15-occupation classification by aggregating Unit Groups on the basis of the nature of jobs combined with reasonable homogeneity in the level of qualifications of those employed there. The classification is given in Table 1. It departs from the SOC groupings in several respects. Three large and rather heterogeneous Major groups are sub-divided. Within Managers and Administrators ‘Corporate managers and administrators’ are distinguished from ‘Other managers’ where the latter feature occupations such as managers of restaurants and hairdressing salons. The large group of Clerical/secretarial jobs is divided between ‘Higher-level’ and ‘Lower-level clerical occupations’, where higher level includes civil service administrative/clerical officers, accounts clerks and cashiers, and the lower level clerks/typists and receptionist/telephonists. A category of ‘Higher-skill services’ is separated from Other personal services to recognize the higher levels of general education and further training and qualifications of, among others, the uniformed services and buyers and brokers. Their importance as jobs for women leads us to identify ‘Teachers’, ‘Nurses’ and ‘Cleaners’ as individual occupations, and also to distinguish ‘Caring services’, which include nursery staff and care attendants, separately from ‘Other personal services’.

A notable feature of our 15-occupational classification is that the professional occupations are ranked above the managerial categories, including corporate managers. This arises directly from the fact that entry into professional occupations is regulated on the basis of formal qualifications, reflected in the high average and low variance in qualification level there. For entry to managerial positions, on the other hand, formal qualifications may be a requirement, but equally may be replaced by experience and career progression in the job. This is reflected in the high variance as well as lower average level of qualifications in managerial occupations.

*Table 1: The 15-Occupation Classification, Ranked by Average Level of Qualification, Full-Time Adult Men and Women, 2000*

Rank	Occupation	No. of full-time adult workers	Mean qualification level	Standard deviation of qualification level
1.	Teachers	1947	6.6	1.1
2.	Other professionals	2888	5.7	2.0
3.	Nurses	760	4.7	1.5
4.	Other associate professionals	3320	4.5	2.2
5.	Corporate managers	5817	4.2	2.3
6.	Higher-skill services	1629	3.2	1.9
7.	Higher level clerical	2579	3.0	2.0
8.	Other managers	1472	2.8	1.9
9.	Skilled trades	4419	2.5	1.5
10.	Lower level clerical	2770	2.4	1.7
11.	Caring services	1167	2.3	1.6
12.	Other personal services	1170	2.1	1.7
13.	Sales assistants	825	2.0	1.8
14.	Other low skill occupations	5547	1.6	1.4
15.	Cleaners	246	1.1	1.4
	Total	36556	3.4	2.3

Source: Labour Force Survey 2000.

The full allocation of Unit Groups to the 15-occupation classification is given in Appendix 1, where key groups within each occupation are also identified.

The distribution of women's employment between full- and part-time work within these 15 occupations is given Table 2. This confirms even more sharply the relative location of full- as against part-time jobs in the occupational hierarchy. In all the higher-ranked occupations full-time employment predominates. Among corporate managers and professionals this is by a large margin. Among nurses and in clerical jobs the number of women working part-time is almost equal to the number working full-time. In all five of the occupations ranked lowest by qualifications, women working part-time are in the majority, with part-time work particularly dominant among sales assistants and cleaners.

*Table 2: Distribution of Women's Employment between Full- and Part-time Work by 15 Occupations, 2000.*

Ranked occupation	No. of women employed	Full-time (%)	Part-time (%)	Share of part-time
Teachers	1687	8.7	4.5	26.6
Other professionals	906	5.2	1.7	19.1
Nurses	1151	4.8	4.6	40.4
Other associate professionals	1847	9.3	5.2	27.4
Corporate managers	2198	13.1	3.4	15.6
Higher-skill services	619	3.2	1.6	26.0
Higher level clerical	3002	13.2	11.1	35.2
Other managers	572	3.5	0.9	14.4
Skilled trades	443	2.3	1.1	25.4
Lower level clerical	3293	14.2	12.6	37.4
Caring services	2712	7.6	15.8	63.2
Other personal services	1116	3.4	6.1	58.2
Sales assistants	2037	3.6	14.7	75.4
Other low skill occupations	1763	6.9	7.6	45.5
Cleaners	1097	1.0	9.1	86.8
Total	24443	100	100	42.4

Source: Labour Force Survey 2000.

#### **4. The NESPD survey**

The data used in our analysis comes from the New Earnings Survey Panel Dataset (NESPD) which allows us to track female employment on an annual basis over the years 1991 to 2001, the period over which occupations were classified on the basis of SOC 90.

The NESPD is the panel dataset generated from the sequential annual New Earnings Surveys (NES). The NES is a survey of the pay, hours of work, occupation and other employment details for a random sample of all employees drawn from individual National Insurance numbers. Since individuals retain their NI number for life and the same terminating digits are used to draw the sample in each year, the cross-sectional sampling frame automatically generates a panel; this forms the New Earnings Survey Panel Dataset (NESPD). The NESPD offers a number of major advantages for present purposes. The sample is very large, over 60,000 women each year. By sampling randomly on individual NI numbers it covers women at all stages of the life-cycle and in employment in all types and sizes of firms. The Statistics of Trade Act, under which the Survey is conducted, makes return of the Survey questionnaire compulsory, providing a

high response rate. The process of sample location, through employer PAYE returns to the tax authorities in each year, allows individuals who have been out of the Survey in any period, due to non-employment or a failure of sampling, to be re-identified in subsequent employment, minimizing cumulative attrition. In spite of these advantageous features, however, the NESPD has disadvantages. In particular, part-time workers are acknowledged to be under-sampled in the NES. The location of the sample through the employer's annual PAYE return means that employees falling below the PAYE tax threshold, who need not be included in their employer's return, may not be identified for the Survey. Those low-paid in terms of total earnings are most likely to be working part-time. In addition, at least a month elapses between the date at which the individuals for the NES sample are located and their employer identified from the PAYE returns, and the Survey pay week. Those changing employer in this interval are lost to the sample; even where there is a direct job-to-job move the previous employer does not have pay information for the relevant week, while the new employer cannot be identified. To the extent that part-time workers are more frequent job changers this becomes a further source of under-sampling. Moreover, as an administrative dataset drawn from payroll records, the NES contains only limited information on personal characteristics, in a typical year only the individual's sex, age and occupation. Important characteristics on which information is lacking are educational attainment and qualifications, as well as household circumstances which affect women's labour supply.<sup>iv</sup>

In the NES Survey the employer is asked to supply a job title for the employee, which is then coded into the SOC classification by the statistical agency from a detailed look-up list of job titles. In the NES the employer is asked to record the worker's contractual basic hours, and part-time work is defined as fewer than 30 hours per week in that job.

## 5. Occupational down/upgrading with change in employment status: transition matrices

Using the occupational ranking derived above Table 3 shows the occupational transitions and extent of occupational up/downgrading for adult women who remain in full- or part-time work and who move between these two employment states. The transition rates are annual averages over the period 1991-2001.

*Table 3: Occupational Transitions by Full- and Part-time Employment Status, NESPD 1991-2001; annual average percentages*

	Number	Occupational rank		
		Up	Same	Down
Remains in full-time employment	356,285	5.8	90.1	4.2
Remains in part-time employment	186,581	6.1	88.7	5.2
Switches from full- to part-time	30,802	11.8	69.1	19.1
Switches from part- to full-time	28,853	20.0	70.2	9.8
Total	602,521	6.9	87.6	5.5

Remaining in the same occupation in consecutive years is much the most common outcome. When occupational change occurs upgrading is marginally more frequent than downgrading, consistent with upwards career progression on average. Among those continuing in either full- or part-time employment the level of stability in occupational ranking is high, and equally frequent for both groups. Where there is a change in occupational level, upwards mobility is rather more frequent than downward movement, again for both groups. The major differences occur among those switching between full- and part-time status. For these women occupational stability overall is much lower. Most strikingly, the switch into part-time employment involves occupational downgrading relatively frequently (19%), and much more frequently than upgrading (12%). The converse also holds; women moving out of part-time into full-time work move upwards in occupational level much more frequently than downwards. This gives strong *prima facie* evidence of part-time work being associated with occupational downgrading, and involving underutilization of skills.

Previous studies (Manning and Petrongolo, 2004 for the UK; Altonji and Paxton, 1988 and 1992, for the US; Euwals, 2001, for the Netherlands) have reported that workers who wish to change hours of work are often forced to change their employer. In our sample 36% of those switching into part-time employment also change employer. As shown in Table 4, distinguishing stayers and movers significantly sharpens the differing experiences of the various groups.

*Table 4: Occupational Transitions by Stayers and Job Movers, Full- and Part-time Employment Status, NESPD 1991-2001; annual average percentages*

*Stayers*

		Occupational rank		
	Number	Up	Same	Down
Remains in full-time employment	309,793	2.7	95.3	2.0
Remains in part-time employment	160,860	3.0	94.5	2.6
Switches from full- to part-time	19,673	6.1	85.0	9.0
Switches from part- to full-time	19,101	9.2	85.9	4.9
Total	509,427	3.2	94.3	2.6

*Movers*

		Occupational rank		
	Number	Up	Same	Down
Remains in full-time employment	46,492	26.0	55.4	18.6
Remains in part-time employment	25,721	25.8	52.5	21.7
Switches from full- to part-time	11,129	22.0	41.0	37.0
Switches from part- to full-time	9,752	41.2	39.5	19.3
Total	93,094	27.1	51.2	21.8

Among stayers occupational stability is very high, and for women continuing in part-time work equally with those working full-time. The vast majority (85%) of those switching between full- and part-time status with their current employer do so at the same occupational level, although downgrading is more frequent with the switch into part-time work and upgrading more frequent with the return to full-time employment. Among movers, on the other hand, the degree of occupational change is very much greater. Just over half of those changing employer while continuing to work full- or part-time retain their occupational rank. Where occupational change occurs, upgrading is more frequently involved than downgrading. However, the most striking differences involve those who change employment status as well as employer. 37% of women who switch to part-time work and change employer at the same time move down the occupational ladder, although 22% move up. Switching into full-time work with a change of employer is associated with upgrading in 41% of cases and with downgrading in only 19%.

While striking, these differences in occupational mobility patterns in the transition matrices are ‘raw’ differences. The next section relates these to a wider range of potential determinants.

## **6. Occupational downgrading/upgrading with employment status: multinomial logit estimates**

How far are these transition rates, in particular occupational up and down-grading, attributable to the change in employment status, and how far are they influenced by the differing personal characteristics of those making the various moves? In Table 5 specification one estimates the direction of occupational change against only stayer/mover and employment status measures. This replicates the raw transitions reported in Table 4, now in multinomial logit form and with confidence intervals. For those who stay with the same employer, continuing in part-time work or switching between full- and part-time status all make occupational change more likely, relative to continuing in full-time work; the probability of downgrading is strongest with a switch to part-time work, and upgrading most likely on the switch into full-time work. All these effects are very strongly determined. Among movers, the probabilities of occupational movement, upwards and downwards, are much larger everywhere, and particularly in conjunction with a change in employment status. Again, the strongest single influence on downwards movement is the switch into part-time work, and the strongest upward influence the switch from part- to full-time work.

Specification two in Table 5 adds the personal characteristics available on our data: the woman’s age, time spent in full- and part-time work and tenure in her current job. The inclusion of these personal characteristics generally brings a marginal reduction in the impact of employment status and changes in it on the likelihood of occupational change, although these remain very well determined. The most striking feature is the small size of the effects of individual characteristics when compared with those of switching status or employer. This inference applies equally when age is specified in five-year bands rather

than quadratic, and when birth cohorts are included to allow for the growth of qualifications, the evolving distribution of occupations or changing attitudes towards work and family. The limited contribution of personal characteristics is illustrated in Figure 3, where the estimated probabilities from specification two evaluated at sample means closely match those from the raw transitions.

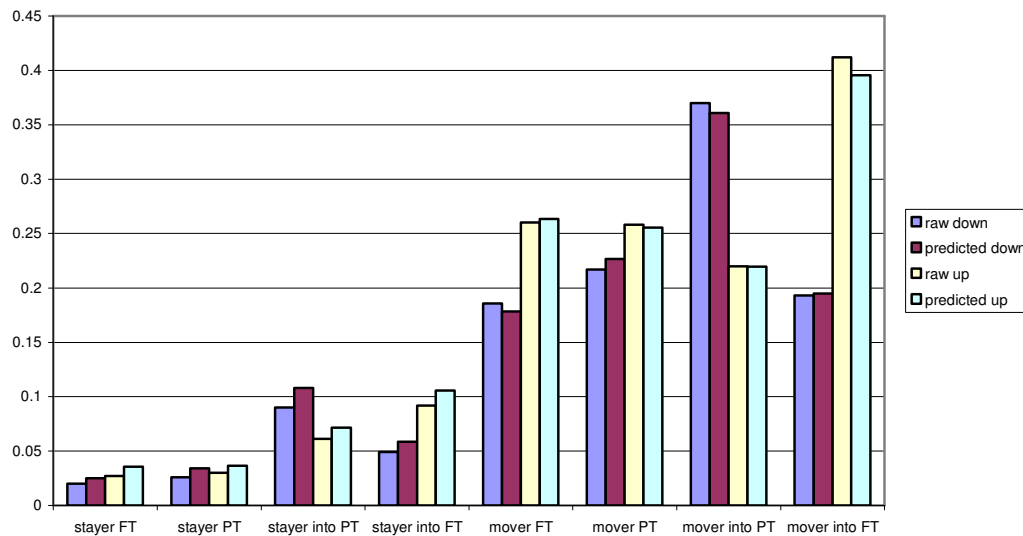
*Table 5 Multinomial Logit Regressions on Occupational Up/Downgrading including Stayer/Mover Status; Women aged 22-59; NESPD 1991- 2001*

	SPECIFICATION ONE		SPECIFICATION TWO	
	Up	Down	Up	Down
<i>Stayer</i>				
Remains in full-time employment	-	-	-	-
Remains in part- time employment	0.0949 (0.02)	0.2472 (0.02)	0.0398 (0.02)	0.3183 (0.03)
Switches into part- time employment	0.8932 (0.03)	1.5831 (0.03)	0.8328 (0.03)	1.5903 (0.03)
Switches into full- time employment	1.2975 (0.03)	0.9674 (0.04)	1.2032 (0.03)	0.9606 (0.04)
<i>Mover</i>				
Remains in full-time employment	2.7928 (0.02)	2.7568 (0.02)	2.5237 (0.02)	2.4793 (0.02)
Remains in part- time employment	2.8319 (0.02)	2.9605 (0.02)	2.5677 (0.03)	2.7935 (0.03)
Switches into part- time employment	2.9136 (0.03)	3.7370 (0.03)	2.6258 (0.03)	3.4687 (0.03)
Switches into full- time employment	3.5721 (0.03)	3.1221 (0.03)	3.2397 (0.03)	2.8767 (0.03)
Age	-	-	0.0445 (0.01)	0.0408 (0.01)
Age <sup>2</sup>	-	-	-0.0007 (0.00)	-0.0004 (0.00)
Years of full-time experience	-	-	-0.0439 (0.00)	-0.0109 (0.00)
Years of full-time experience <sup>2</sup>	-	-	0.0005 (0.00)	-0.0004 (0.00)
Years of part-time experience	-	-	-0.0365 (0.00)	-0.0620 (0.01)
Years of part-time experience <sup>2</sup>	-	-	0.0005 (0.00)	0.0019 (0.00)
Experience to 1975	-	-	0.0015 (0.00)	-0.0082 (0.00)
Tenure	-	-	-0.0421 (0.00)	-0.0534 (0.00)
Constant	-3.8293 (0.02)	-4.08673 (0.02)	-3.9191 (0.12)	-4.5114 (0.13)
	Number of obs = 599088		Number of obs = 599088	
	LR chi2(30) = 107491.4		LR chi2(44) = 111668.17	

	Prob > chi2 = 0	Prob > chi2 = 0
	Log likelihood = -223584.71	Log likelihood = -218761.79

'Same' ranking is the reference category. Standard errors are given in parentheses. All equations include time dummies.

**Figure 3 - Evaluated probabilities (specification two) compared with raw probabilities**



## 7. Occupational downgrading/upgrading: the role of previous occupation

The widely differing role of part-time jobs across occupations shown in Table 2 suggests that switching between full- and part-time work within the same occupation may be relatively easy in some jobs but difficult in others. In this section we aim to identify those occupations where changes of status can most effectively be made without loss of occupational rank.

For our 15 occupations Table 6 shows the average change in ranking experienced by women from each occupation when they switch between full- and part-time work.<sup>v</sup> Teaching and nursing stand out as occupations where the switch into part-time employment can successfully be made within the occupation; 89% of teachers and nurses who switch to part-time work do so while remaining in the profession.<sup>vi</sup> Among the lower-skilled occupations, jobs in the caring services, sales and cleaning also support the switch to part-time work. For all occupations in the upper part of the hierarchy the switch from part- to full-time work is more likely to bring occupational down-grading than up-grading. Downgrading is particularly high among women who held managerial jobs, or in skilled services and trades. One in three women who were corporate managers took a lower level job on switching to part-time work, as did more than half of those holding other managerial jobs and over 40% of those from skilled services or trades.



Opportunities for upgrading with the switch to part-time work are sparse, although effective at the very bottom of the skill ladder.

For those switching from part-time into full-time employment good opportunities to do so within the current occupation exist again for teachers and nurses, and also for other professionals. The opportunities for upgrading on the switch to full-time work are again sparse in the higher ranked occupations; in all cases the chances are poorer, often considerably so, than the risks of downgrading. Only for the lower ranked occupations does the switch to full-time work bring good opportunities for upgrading.

*Table 6: Occupational Transitions by Lagged Occupational Group, NESPD 1991-2001; percentages within occupation for given transition.*

Occupation in t-1	Switch into part-time employment			Switch into full-time employment		
	Up-graded	Same rank	Down-graded	Up-graded	Same rank	Down-graded
Teachers	0	89	11	0	87	13
Other professionals	3	72	25	3	81	16
Nurses	1	89	10	2	88	11
Other associate professionals	9	63	28	10	68	22
Corporate managers	10	54	36	8	73	20
High skilled services	10	50	40	13	54	33
Higher skilled clerical	6	66	28	10	73	18
Other managers	15	32	54	13	64	22
Skilled trades	4	49	47	5	77	18
Lower skilled clerical	15	67	18	19	75	5
Caring services	11	80	10	23	71	6
Other personal services	16	64	21	38	50	13
Sales	18	74	8	37	57	6
Other low skill occupations	32	58	10	29	69	2
Cleaners	23	77	0	42	58	0
Total	12	69	19	20	70	10

We measure the impact of this in three alternative specifications, adding to the multinomial logits respectively: a set of dummy variables for the occupation previously held (specification three), the share of part-time workers in the previous occupation (specification four) and a set of interaction terms between the mobility dummies and the share of part-time employment in the lagged occupation (specification five). Full results are given in Appendix 2. The results from each specification are similar. The role of the previous occupation, on each measure, is well determined. Previous employment in any of the higher-skill occupations works against occupational upgrading and towards

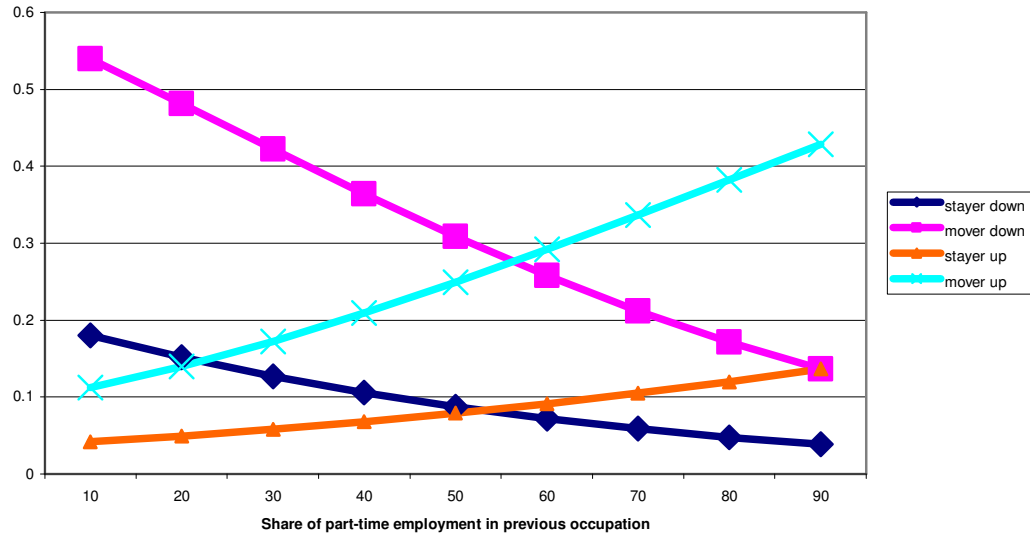
downgrading; for low-skilled occupations these effects are reversed. A higher share of part-time workers in the previous occupation increases the chance of upward occupational mobility and reduces the chance of downward movement. Previous occupation is significant in interaction with stayer/mover status. Most importantly, however, the inclusion of these additional variables has little impact on the main coefficients of interest – the impact of switching employment status for stayers and movers - on the probability of occupational change. Table 7 provides a comparison of these coefficients across all five specifications.

*Table 7: Comparison of Coefficients on those Changing Status across Specifications, NESPD 1991-2001*

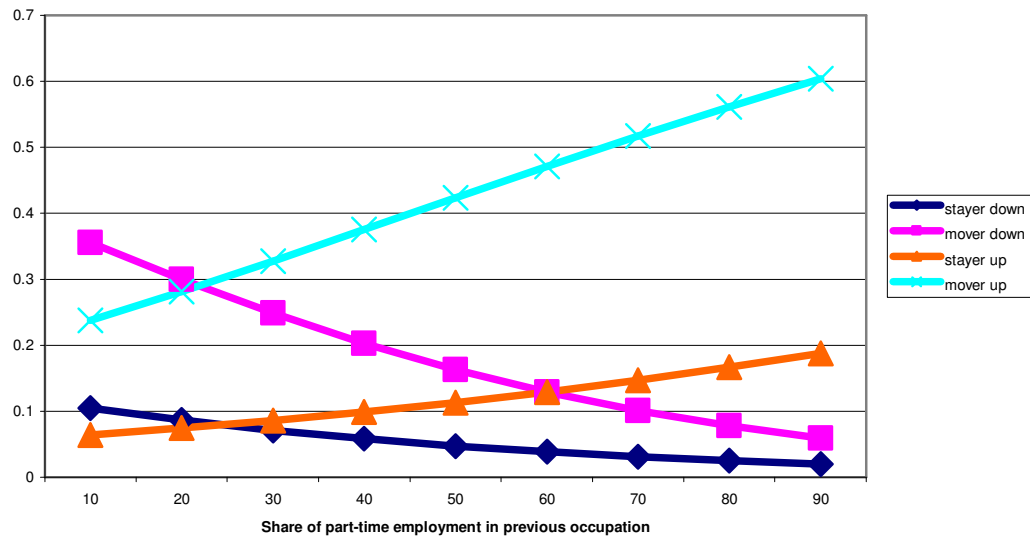
	One	Two	Three	Four	Five
<b><i>Down-graded</i></b>					
Stayer -switches into part- time employment	1.583	1.590	1.632	1.715	1.733
Stayer - switches into full- time employment	0.967	0.961	1.018	1.153	1.080
Mover -switches into part- time employment	3.737	3.469	3.528	3.718	3.724
Mover - switches into full- time employment	3.122	2.877	2.957	3.177	2.856
<b><i>Up-graded</i></b>					
Stayer -switches into part- time employment	0.893	0.833	0.795	0.801	1.222
Stayer - switches into full- time employment	1.298	1.203	1.153	1.128	1.294
Mover -switches into part- time employment	2.914	2.626	2.579	2.536	3.056
Mover - switches into full- time employment	3.572	3.240	3.175	3.206	3.405

The implied probabilities of occupational up/down-grading are illustrated against the share of part-time jobs in the previous occupation from specification four, in Figure 4a for the switch into part-time employment and in Figure 4b for the switch into full-time employment. Evaluation is at sample means.<sup>vii</sup> The likelihood of occupational downgrading is highest for those who switch into part-time employment while changing jobs from an occupation with a low share of part-time employment; the likelihood is much lower for those staying with their current employer, but is still highest when the occupation has a low share of part-time jobs. The likelihood of occupational up-grading is highest for those who switch into full-time employment, and change jobs away from the occupational groups where the share of part-time employment is high.

**Figure 4a Evaluated probabilities for those switching into part-time employment;  
specification four**



**Figure 4b Evaluated probabilities for those switching into full-time employment;  
specification four**



## 8. Occupational downgrading: how severe is it, and who goes where?

To give further colour to the analysis this section first examines the severity of downgrading, in terms of the number of steps down the ranking which are typically involved. It then summarises who goes where with occupational change.

The degree of movement down or up the occupational ranking is extensive and diverse, as shown in Appendix 3. We focus here on a key group: women switching into part-time work and experiencing downgrading. Their original occupations, the median change in ranking and their new occupation are shown in Table 8. The median loss of ranking overall is 4 for stayers and 3 for movers, so in both groups half of the women who experience downgrading on the switch to part-time work move at least 3 steps down the occupational ranking. The extent of the loss of ranking is sensitive to the original occupation, and is greater for the higher-skilled. Among teachers switching to part-time work and no longer continuing as teachers, the median change is 6 steps down to a higher-skill clerical job for those remaining with their employer, and 9 steps down to a lower-skill clerical job for those changing employer. Similarly nurses leaving the profession move a median 8 places down the ranking, to caring services. Given that both teachers and nurses are extremely well placed to continue within these professions on a part-time basis, this steep downgrading arguably signals the exit of those least well matched to the occupation. Corporate managers, however, frequently experience downgrading on the switch to part-time work, and women doing so move a median of 5 places down to lower clerical jobs. Overall, the extent of downgrading with the move to part-time work is substantial for all except the very low-skill jobs, and broadly similar and to similar destinations for stayers and movers.

*Table 8 Changes in Median Occupational Ranking for those Switching to Part-Time Employment and Experiencing Downgrading, NESPD 1991-2001*

	<i>Stayers</i>		<i>Movers</i>	
<i>Previous occupation</i>	<i>Median</i>	<i>New occupation</i>	<i>Median</i>	<i>New occupation</i>
Teachers	-6	Higher skill clerical	-9	Lower skill clerical
Other professionals	-3	Corporate managers	-5	Higher skill clerical
Nurses	-8	Caring service	-8	Caring service
Other associate professionals	-6	Other managerial	-6.5	Lower skill clerical caring services
Corporate managers	-5	Lower skill clerical	-5	Lower skill clerical
High skilled services	-4	Lower skill clerical	-4	Lower skill clerical
Higher skilled clerical	-4	Caring service	-4	Caring service
Other managers	-5	Sales	-5	Sales
Skilled trades	-4	Sales	-4	Sales
Lower skilled clerical	-3	Sales	-3	Sales
Caring services	-4	Cleaners	-2	Sales
Other personal service	-2	Other low	-2	Other low skill
Sales	-1	Other low	-1	Other low skill
Other low skill occupations	-1	Cleaners	-1	Cleaners
Cleaners				
Total	-4		-3	

The patterns of transitions between occupations are very complex and diverse. Appendix 3 shows them for six major occupations for women. However, for those switching to part-time work two somewhat different forms of downgrading can be identified. The first may be described as ‘vertical’ down-grading where women continue to work in the same field but at a lower level – teachers and nurses taking part-time posts as educational or nursing assistants, salon managers continuing as hairdressers, office managers moving to more routine clerical jobs. In these instances the same core skills continue to be applied but without the administrative or managerial responsibilities. The second type is ‘unrelated’ down-grading, where the new occupation does not utilise the core skills of the previous job, for example when teachers, nurses or accounts clerks move into sales jobs. The two types of downgrading seem to occur in roughly equal proportions. Overall, among women switching into part-time employment the proportions are 10% and 11% respectively. However, among nurses, with their occupation-specific skills, vertical downgrading is more common, involving 15.5% of those switching to part-time work against 6.1 downgrading to unrelated occupations.

## **9. Conclusions**

Part-time work is an important form of employment. Its expansion accounts for much of the growth in employment in the UK over the last thirty years. The flexibility of hours has facilitated employment amongst workers of all ages, supporting academic study amongst the young, winding down into retirement amongst older workers and most importantly allowing women to combine work with responsibilities in the home. Most studies of part-time employment have examined the characteristics of workers and the jobs that they do, in a static context, concluding that the jobs are of low status, poorly paid and that the workers themselves have lower level of human capital, are less well qualified and have lower levels of experience. Our paper adds to this literature by considering part-time employment in the context of occupational movement.

Our primary interest is in the extent to which a move into part-time employment is associated with a movement down the occupational ladder, implying an underutilisation of skills. To address this issue of occupational downgrading we develop a categorisation of 15 occupational groups based on educational attainment and qualifications. In doing so, we formalise the skill requirements of an occupational group and directly model occupational downgrading in terms of skill.

We find that when controlling for productive characteristics such as age, experience in full- and part-time work and job tenure, a movement into part-time employment is associated with occupational downgrading and a move into full-time employment with upgrading. Occupational change is in general much more likely amongst those moving between employers. The likelihood of down or upgrading is even greater when women simultaneously switch employment status and change employer.

Not all women are equally at risk of downgrading. Some in occupations with higher specific skill requirements and where employees may have a stronger sense of vocation – teachers and nurses – are much less likely to experience occupational downgrading. Nonetheless, 20% of teachers and nurses who change employer and switch into part-time work experience downward mobility. These rates indicate an underutilisation of skill in occupations that are known to be characterised by skill shortages and where – in nursing in particular - moves have been made introduce more flexible contracts and to accommodate the needs of women seeking part-time employment. Elsewhere, particularly in high skill employment, women seeking part-time work are much more likely to downgrade; over one-third of women in managerial or high-skilled clerical jobs downgrade when they move into part-time employment. Availability of part-time employment opportunities is clearly an issue, prompting the EOC (2005) to call for employers across the board to adopt a wider range of flexible working practices which would enable women in particular to work to their potential.

Occupational change occurs for a number of reasons and is not only associated with changes in employment status. However, our results show that even when we control for other types of mobility and productive characteristics, downgrading is much more likely when women switch into part-time employment and that upgrading is more likely when the reverse occurs. This indicates a loss of economic efficiency through the underutilisation of the skills of many of the women who work part-time.

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## Appendix 1

### The 15-Occupation Classification

	Title	Constituent Occupations
1	Corporate managers & administrators	Unit Groups 100-139, 150-155, 169-170, 176-177, 190-199 Average qualification 3.0-4.9 General managers and administrators in national and local government and large organizations; production, marketing, personnel and computing systems managers; bank and travel agency managers; civil service executive officers; uniformed services officers.
2	Other managers	Unit Groups 140-142, 160, 171-175, 178-179 Average qualification 2.7-2.9 Hotel and accommodation, restaurant and catering, and hairdressing managers; service industry managers, including retailing.
3	Teachers	Unit Groups 230-239 Average qualification 6.3-6.8 Higher education, secondary, primary and special education teachers; education officers.
4	Other professionals	Unit Groups 200-224, 240-293 Average qualification 5.2-7.0 Medical practitioners; scientists and engineers; solicitors; certified accountants; management and business consultants; librarians; social workers.
5	Nurses	Unit Groups 340-341 Average qualification 4.7-5.2 Nurses; midwives.
6	Other associate professionals	Unit Groups 300-332, 342-399 Average qualification 3.5-6.0 Laboratory and medical technicians; computer analysts; physio- and occupational therapists; financial analysts; personnel, welfare and training officers; matrons; authors; designers.
7	Higher level clerical jobs	Unit Groups 400-411, 420-421, 490-491 Average qualification 2.7-3.4 Civil service and local government administrative/clerical officers; accounts and records clerks; cashiers; library assistants; computer officers
8	Lower level clerical jobs	Unit Groups 412, 430, 440-463 Average qualification 2.1-2.6 Clerk/typists; stores clerks; medical and legal secretaries; word processor operators; receptionists; telephonists.



9	Higher-skill services	Unit Groups 600-613, 700-719, 790-792 Average qualification 2.5-3.5 Police officers (sergeant and below); buyers; sales representatives; merchandisers.
10	Skilled trades	Unit Groups 500-599 Average qualification 1.4-3.2 Sewing machinists; printing trades
11	Caring services	Unit Groups 640-659 Average qualification 1.9-2.9 Nursing assistants; ambulance staff; dental nurses; care attendants; nursery nurses; educational assistants; child minders; playgroup leaders and assistant.
12	Other personal services	Unit Groups 614-631, 660-699 Average qualification 1.4-2.6 Chefs and cooks; waiters; bar staff; travel attendants; hairdressers; housekeepers (non-domestic); dry cleaners.
13	Sales assistants	Unit Groups 720-732 Average qualification 1.5-2.1 Sales assistants; checkout operators; petrol pump attendants.
14	Other low-skill jobs	Unit Groups 800-899, 900-957, 959-999 Average qualification 1.2-2.2 Food processing operatives; electronic components assemblers; packers and bottlers; postal workers; drivers; catering assistants; shelf fillers.
15	Cleaners	Unit Groups 958 Average qualification 1.2 Domestic and office cleaners.

## Appendix 2

**Specification Three: Multinomial Logit Regressions on Occupational Up/Downgrading controlling for previous occupational group; Women aged 22-59, NESPD 1991-2001**

	UP	DOWN
Stayer - remains in full-time employment	-	-
Stayer - remains in part- time employment	-0.1636 (0.02)	0.5853 (0.03)
Stayer -switches into part- time employment	0.8005 (0.0)	1.7154 (0.03)
Stayer - switches into full- time employment	1.1284 (0.03)	1.1532 (0.04)
Mover – remains in full-time employment	2.5827 (0.02)	2.4741 (0.02)
Mover - remains in part- time employment	2.3409 (0.03)	3.2362 (0.03)
Mover -switches into part- time employment	2.5357 (0.03)	3.7175 (0.03)
Mover - switches into full- time employment	3.2059 (0.03)	3.1774 (0.04)
Age	0.0701 (0.01)	0.0334 (0.01)
Age <sup>2</sup>	-0.0011 (0.00)	-0.0001 (0.00)
Years of full-time experience	-0.0074 (0.00)	-0.0524 (0.00)
Full-time experience <sup>2</sup>	-0.0003 (0.00)	0.0008 (0.00)
Years of part-time experience	-0.0390 (0.00)	-0.0365 (0.01)
Part-time experience <sup>2</sup>	0.0010 (0.00)	0.0002 (0.00)
Experience to 1975	0.0061 (0.00)	-0.0136 (0.00)
Tenure	-0.0425 (0.00)	-0.0501 (0.00)
Corporate managers	-1.0218 (0.03)	1.3844 (0.03)
Other managers	-0.0754 (0.04)	1.6310 (0.04)
Teachers	-	0.0992 (0.03)
Other professional	-2.5063 (0.08)	1.4910 (0.03)
Nurses	-3.0532 (0.08)	0.4907 (0.03)
Other associate professionals	-0.8672 (0.03)	1.5011 (0.03)
High-skill clerical	-0.4331 (0.02)	1.2021 (0.02)
Low-skill clerical	-	-
High-skill services	-0.1509 (0.04)	1.6951 (0.04)

Skilled trades	-0.9958 (0.05)	1.6047 (0.04)
Caring services	-0.0416 (0.02)	0.2136 (0.03)
Other services	0.3060 (0.03)	0.9472 (0.03)
Sales	0.1286 (0.02)	-0.4019 (0.04)
Other low-skill occupations	0.3836 (0.02)	-0.4866 (0.04)
Cleaners	0.7164 (0.02)	(-)
Constant	-4.1498 (0.13)	-5.2244 (0.14)
	Number of obs = 599088	
	LR chi2(74) = 146497.86	
	Prob > chi2 = 0	
	Log likelihood = -201346.95	

***Specifications Four and Five: Multinomial Logit Regressions on Occupational Up/Downgrading controlling for share of part-time employment in previous occupation; Women aged 22-59, NESPD 1991-2001***

	SPECIFICATION FOUR		SPECIFICATION FIVE	
	Up	Down	Up	Down
Stayer - remains in full-time employment	-	-	-	-
Stayer - remains in part- time employment	-0.0519 (0.02)	0.4243 (0.03)	0.2436 (0.04)	0.4537 (0.04)
Stayer -switches into part- time employment	0.7948 (0.03)	1.6317 (0.03)	1.2219 (0.06)	1.7326 (0.06)
Stayer - switches into full- time employment	1.1528 (0.03)	1.0179 (0.04)	1.2936 (0.06)	1.0795 (0.07)
Mover – remains in full-time employment	2.5221 (0.02)	2.4837 (0.02)	2.7731 (0.03)	2.5773 (0.04)
Mover - remains in part- time employment	2.4629 (0.03)	2.9178 (0.03)	3.0351 (0.04)	3.0069 (0.05)
Mover -switches into part- time employment	2.5785 (0.03)	3.5283 (0.03)	3.0563 (0.05)	3.7238 (0.05)
Mover - switches into full- time employment	3.1752 (0.03)	2.9566 (0.03)	3.4046 (0.05)	2.8557 (0.06)
Age	0.0462 (0.01)	0.0371 (0.01)	0.0486 (0.01)	0.0368 (0.01)
Age <sup>2</sup>	-0.0007 (0.00)	-0.0003 (0.00)	-0.0007 (0.00)	-0.0003 (0.00)
Years of full-time experience	-0.0323 (0.00)	-0.0229 (0.00)	-0.0355 (0.00)	-0.0233 (0.00)
Full-time experience <sup>2</sup>	0.0002 (0.00)	-0.0001 (0.00)	0.0004 (0.00)	-0.0001 (0.00)
Years of part-time experience	-0.0514 (0.00)	-0.0434 (0.01)	-0.0513 (0.00)	-0.0434 (0.01)
Part-time experience <sup>2</sup>	0.0012 (0.00)	0.0011 (0.00)	0.0013 (0.00)	0.0011 (0.00)
Experience to 1975	0.0004 (0.00)	-0.0066 (0.00)	0.0012 (0.00)	-0.0067 (0.00)
Tenure	-0.0434 (0.00)	-0.0513 (0.00)	-0.0441 (0.00)	-0.0513 (0.00)
Share of part-time jobs in lagged occupation	1.4017 (0.03)	-1.9907 (0.04)	2.0802 (0.05)	-1.8789 (0.08)
Interactions of share of part-time jobs with:				
Stayer - remains in full-time employment	-	-	-	-
Stayer - remains in part- time employment	-	-	-0.7602 (0.08)	-0.0999 (0.11)
Stayer -switches into part- time employment	-	-	-1.0897 (0.14)	-0.3081 (0.16)
Stayer - switches into full- time employment	-	-	-0.4260 (0.12)	-0.1960 (0.19)
Mover – remains in full-time employment	-	-	-0.6702 (0.08)	-0.3169 (0.11)
Mover - remains in part- time employment	-	-	-1.3605 (0.08)	-0.2190 (0.11)
Mover -switches into part- time employment	-	-	-1.2673	-0.5782

			(0.12)	(0.14)
Mover - switches into full- time	-	-	-0.6112 (0.11)	0.2763 (0.15)
Constant	-4.5435 (0.13)	-3.7217 (0.14)	-4.8394 (0.13)	-3.7485 (0.14)
	Number of obs = 599088		Number of obs = 599088	
	LR chi2(48) = 117354.29		LR chi2(62) = 117738.76	
	Prob > chi2 = 0		Prob > chi2 = 0	
	Log likelihood = - 215918.74		Log likelihood = -215726.5	

### Appendix 3

#### *Distribution of Changes in Ranking for those Experiencing Downgrading*

	Mean	Median	Max	Min	Variance	5%	10%	25%	75%	90%	95%	N
Teachers	-6.5	-6	-14	-1	13.6	-13	-11	-10	-3	-2	-1	1677
Other professionals	-4.4	-3	-13	-1	8.0	-10	-9	-5	-2	-2	-2	2163
Nurses	-6.6	-8	-12	-1	7.8	-10	-8	-8	-7	-1	-1	1891
Other associate professionals	-4.4	-3	-11	-1	8.9	-10	-9	-7	-1	-1	-1	3562
Corporate managers	-4.0	-5	-10	-1	4.7	-8	-7	-5	-2	-2	-1	3742
High skilled services	-4.2	-4	-9	-1	5.2	-8	-7	-6	-2	-1	-1	1462
Higher skilled clerical	-3.7	-3	-8	-1	2.0	-7	-6	-4	-3	-3	-3	6861
Other managers	-4.0	-4	-7	-1	2.3	-6	-6	-5	-2	-2	-2	1165
Skilled trades	-3.9	-5	-6	-1	2.7	-6	-6	-5	-2	-1	-1	1536
Lower skilled clerical	-2.8	-3	-5	-1	1.6	-5	-4	-4	-2	-1	-1	2907
Caring services	-2.7	-3	-4	-1	1.2	-4	-4	-4	-2	-2	-1	2203
Other personal service	-1.9	-2	-3	-1	0.6	-3	-3	-3	-1	-1	-1	1939
Sales	-1.3	-1	-2	-1	0.2	-2	-2	-2	-1	-1	-1	1311
Other low skill occupations	-1.0	-1	-1	-1	0.0	-1	-1	-1	-1	-1	-1	984
Cleaners												
Total	-3.8	-3	-1	-14	6.0	-8	-8	-5	-2	-1	-1	33403

#### *Distribution of Changes in Ranking for those Experiencing Upgrading*

	Mean	Median	Max	Min	Variance	5%	10%	25%	75%	90%	95%	N
Teachers												
Other professionals	1.0	1	1	1		1	1	1	1	1	1	146
Nurses	1.7	2	2	1	0.2	2	2	2	1	1	1	170
Other associate professionals	2.2	2	3	1	0.4	3	3	3	2	1	1	1180
Corporate managers	2.0	1	4	1	1.3	4	4	3	1	1	1	1303
High skilled services	1.5	1	5	1	1.1	4	3	2	1	1	1	827
Higher skilled clerical	2.7	2	6	1	1.6	5	5	3	2	2	1	4701

Other managers	2.9	3	7	1	2.0	6	4	3	2	1	1	771
Skilled trades	3.9	4	8	1	3.8	7	7	5	2	2	1	420
Lower skilled clerical	4.1	3	9	1	2.6	8	6	5	3	3	3	9557
Caring services	6.1	7	10	1	8.3	10	9	8	4	1	1	3875
Other personal service	4.3	4	11	1	8.6	11	8	6	2	1	1	3348
Sales	4.7	4	12	1	7.9	10	9	6	3	1	1	6772
Other low skill occupations	4.1	3	13	1	8.9	10	9	5	2	1	1	6624
Cleaners	4.1	4	14	1	8.8	11	8	5	2	1	1	4208
Total	4.0	3	14	1	6.7	9	8	5	2	1	1	43902

*Occupational Transitions for Movers: Selected High-skill Occupations; NESPD 1991-2001*

	teacher in t-1				nurse in t-1				high-skill clerical in t-1			
rank15	ft to ft	pt to pt	ft to pt	pt to ft	ft to ft	pt to pt	Ft to pt	pt to ft	ft to ft	pt to pt	ft to pt	pt to ft
<b>Teachers</b>	<b>89.3</b>	<b>76.6</b>	<b>79.5</b>	<b>70.3</b>	1.1	1.3	2.1	1.5	0.6	1.9	1.5	2.8
Other professionals	1.4	0.9	1.8	4.7	0.9	0.3	0.4	2.1	2.8	0.6	0.8	2.8
Nurses	0.1	0.5	0.4	0.8	<b>83.3</b>	<b>77.2</b>	<b>78.4</b>	<b>74.1</b>	0.2	0.4	0.4	0.7
Other associate Professional	2.8	4.6	2.5	5.4	3.0	1.8	2.1	3.3	4.7	2.8	3.1	4.5
Corporate managers	2.9	1.1	1.1	3.9	3.2	0.3	0.6	2.3	16.2	5.0	2.9	10.1
High skilled services	0.2	0.2	0.1	1.3	0.7	0.3	0.1	0.7	2.1	1.0	1.5	1.0
Higher skilled Clerical	0.7	2.9	2.7	3.6	0.6	0.9	0.7	1.5	<b>49.0</b>	<b>47.7</b>	<b>34.1</b>	<b>37.5</b>
Other managers	0.1	0	0.3	0.4	0.4	0.2	0.4	1.0	0.8	0.2	0.1	1.0
Skilled trades	0.2	0.3	0.1	0.1	0.0	0.1	0.1	0.5	0.5	0.3	0.3	1.2
Lower skilled Clerical	1.0	3.3	2.9	4.9	0.8	2.2	0.8	2.6	19.8	22.1	25.2	26.5
Caring services	0.6	5.0	4.9	1.9	5.5	13.1	10.9	8.7	0.7	5.1	5.9	3.9
Other personal Service	0.1	1.4	0.7	0.7	0.1	0.3	1.0	0.7	0.8	1.7	3.5	2.5
Sales	0.1	1.3	1.8	0.7	0.1	0.7	1.3	0.3	1.0	7.4	12.7	2.3
Other low skill Occupations	0.3	1.4	0.8	1.1	0.3	0.8	0.3	0.7	0.9	2.2	5.0	2.8
Cleaners	0.1	0.6	0.4	0.1	0.1	0.5	0.8	0.2	0.1	1.7	3.1	0.3
Total	2,116	1,530	730	720	2,287	1,193	722	609	8,431	2,461	1,433	888
<b>Up</b>	-	-	-	-	2.0	1.7	2.5	3.6	26.5	11.7	10.1	22.0
<b>Down</b>	10.7	23.4	20.6	29.71	14.7	21.1	19.1	22.3	24.5	40.6	55.8	40.5



*Occupational Transitions for Movers: Selected Low-skill Occupations; NESPD 1991-2001*

	low-skill clerical in t-1				sales in t-1				cleaner in t-1			
rank15	ft to ft	pt to pt	ft to pt	pt to ft	ft to ft	pt to pt	ft to pt	pt to ft	ft to ft	pt to pt	ft to pt	pt to ft
<b>Teachers</b>	0.6	2.1	1.9	1.8	0.4	0.5	0.9	4.6	0.2	0.5	0.0	1.2
Other professionals	1.2	0.7	0.6	2.2	0.4	0.2	0.7	1.3	1.1	0.4	0.6	2.1
Nurses	0.3	0.8	0.5	0.8	0.2	0.4	0.1	1.0	1.3	0.5	0.0	1.3
Other associate Professional	5.1	2.7	2.0	5.1	3.1	1.0	0.9	3.7	2.3	1.4	0.3	4.4
Corporate managers	11.5	2.9	3.5	7.2	3.8	0.4	0.4	3.7	2.7	0.4	1.2	2.8
High skilled services	2.6	1.8	1.6	3.4	4.5	1.0	2.9	2.6	1.1	0.5	0.3	1.1
Higher skilled Clerical	15.2	15.8	13.4	16.3	7.4	4.4	4.8	11.5	2.0	2.2	1.8	4.6
Other managers	1.6	0.3	0.3	1.3	12.2	0.7	1.3	5.1	2.3	0.2	0.3	0.8
Skilled trades	0.7	0.3	0.4	1.0	1.6	0.5	0.4	3.0	2.0	0.6	0.6	4.8
Lower skilled Clerical	<b>55.8</b>	<b>51.3</b>	<b>43.3</b>	<b>49.6</b>	13.4	7.7	9.2	16.3	5.7	4.0	3.0	11.0
Caring services	0.9	5.6	7.3	2.9	2.4	6.0	7.3	6.2	17.1	13.2	14.2	13.7
Other personal Service	0.9	2.1	5.0	1.8	3.0	3.5	6.4	4.0	8.4	5.7	8.3	8.7
Sales	1.7	7.7	13.2	3.5	<b>40.1</b>	<b>63.2</b>	<b>50.9</b>	<b>26.4</b>	2.9	8.5	8.9	5.2
Other low skill Occupations	1.6	3.7	4.2	2.8	6.6	6.3	7.2	9.4	13.8	10.6	11.5	16.9
Cleaners	0.3	2.3	3.1	0.4	0.9	4.4	6.7	1.4	<b>37.3</b>	<b>51.3</b>	<b>49.1</b>	<b>21.4</b>
Total	9,531	2,917	2,001	1,422	2,082	4,781	765	1,343	560	2,960	338	747
<b>Up</b>	38.9	27.3	23.8	39.0	52.4	26.2	35.3	62.9	62.7	48.8	50.9	78.6
<b>Down</b>	5.4	21.4	32.8	11.4	7.5	10.7	13.9	10.8	-	-	-	-

<sup>i</sup> Only full-time employment for men is illustrated since the numbers working part-time are small and concentrated towards the extremes of the age range.

<sup>ii</sup> The top occupations also differ. The top five for men are goods vehicle drivers; sales managers; production managers; fitters; storekeepers; for women working full-time general clerks; accounts clerks; general secretarial; nurses; primary teachers; and for women working part-time sales assistants; cleaners; care assistants; general clerks; nurses.

<sup>iii</sup> The Standard Occupational Classification is described in full in OPCS (1990), volumes 1-3.

<sup>iv</sup> We derive essentially similar results when we replicate the analysis using the British Household Panel Study (BHPS), which contains a much richer set of personal and household characteristics but on a much smaller sample. We therefore report only the more robust results from the larger NESPD sample.

<sup>v</sup> Table 6 extends the 'switchers' rows of Table 3 to an occupational basis.

<sup>vi</sup> For results for women with teaching and nursing qualifications using the SOC2000 classification and focused on pay see Manning and Petrongolo (2004).

<sup>vii</sup> The sample means are for a woman at age 37.4 with 6.9 years of experience in full-time employment, 3.1 years of experience in part-time employment, 5 years of work experience prior to 1975 and current job tenure of 4.7 years.

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