LOOKING FOR A JOB: IS THERE ANY HOMOGENEITY AMONG THOSE NOT SEEKING WORK?

Authors Name

Elisabetta Marzano

Institute for Social and Economic Research

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Institute for Social and Economic Research
University of Essex
Wivenhoe Park
Colchester
Essex
CO4 3SQ UK
Telephone: +44 (0) 1206 872957
Fax: +44 (0) 1206 873151
E-mail: iser@essex.ac.uk
Website: http://www.iser.essex.ac.uk

ABSTRACT

In this work we focus on the British labour force, using data from the BHPS (British Household Panel Survey). The goal is to examine whether there are statistically significant differences between the unemployed and those out of the labour force in the transition rate into employment. Using logistic regression for a pooled cross section time series sample we are able to define 4 different groups: *Seeking Out of Work*, *Attached Out of Work*, *Unemployed Not Seeking*, and *Voluntary Out of Work*. We find that these groups are characterised by very different transition rates into employment, which cannot be explained simply by the active search for a job

1. Introduction

The labour market status of individuals has received much attention in the literature. In particular the distinction between unemployed and out of labour force has substantive implications for many topics in classical labour economics, such as the Beveridge curve, the Philips curve, and the matching function. Of course, it is also an important subject for policy makers, and the empirical analysis of labour force status has attracted a great deal of interest - see for example Denton (1973), Flinn and Heckman (1982, 1983), Tano (1991), Jones and Riddell (1999).

In this work we focus on the British labour force, using data from the BHPS (British Household Panel Survey). The goal is to examine whether there are statistically significant differences between the unemployed and those out of the labour force in their transition rate into employment. We use logistic regression for a pooled cross section time series sample to test for the existence of fundamentally different subgroups of people that are currently out of work.

2. The data

The data used in this research are from BHPS, a multi-purpose study whose unique value resides in the fact that:

- it follows the same representative sample of individuals - the panel - over a period of years;
- it is household-based, interviewing every adult member of sampled households;
- it contains sufficient cases for meaningful analysis of certain groups such as the unemployed and economically inactive;
- it allows for linkage of data both from other surveys and from local area statistics.

The Wave 1 (1991) panel consists of some 5,500 households and 10,300 individuals drawn from 250 local authority districts in Great Britain. In the most recent available Wave, 11 (2001), the total sample size is up to 18,869 respondents in 10,632 households.[1]

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[1] This includes the original sample plus booster samples from the European Household Community Panel Survey (ECHP), Scotland, Wales and Northern Ireland. In my analysis, I have tested for whether individuals in the booster samples behave differently than original sample members, and this is consistently rejected.

In the present study each yearly sample is the sum of individuals that are unemployed or out of labour force at time t-1 which are also interviewed at the subsequent wave at time t. This may cause some biases resulting from the exit of some people from the sample. To examine this possibility, the subsequent table compares the main characteristics of individuals present in the sample with those of individuals interviewed at time t which were not present in the subsequent wave, reported in parenthesis.

Table 1 Sample characteristics and missing observations

Year	N	Male	Median age	Married	High degree	Would like job	Searching for job
1991	1533	0.318	47	0.695	0.048	0.328	0.145
	(212)	(0.330)	(51)	(0.670)	(0.047)	(0.349)	(0.118)
1992	1295	0.231	49	0.704	0.093	0.309	0.135
	(197)	(0.406)	(44)	(0.589)	(0.045)	(0.234)	(0.350)
1993	1568	0.339	47	0.677	0.096	0.300	0.121
	(145)	(0.407)	(44)	(0.483)	(0.097)	(0.262)	(0.166)
1994	1515	0.341	47	0.681	0.096	0.263	0.129
	(143)	(0.406)	(44)	(0.511)	(0.112)	(0.259)	(0.203)
1995	1480	0.329	48	0.685	0.101	0.262	0.110
	(77)	(0.481)	(44)	(0.571)	(0.136)	(0.169)	(0.130)
1996	1459	0.319	48	0.681	0.097	0.235	0.101
	(97)	(0.485)	(36)	(0.443)	(0.184)	(0.186)	(0.175)
1997	1791	0.317	48	0.641	0.099	0.256	0.091
	(137)	(0.475)	(45)	(0.445)	(0.117)	(0.234)	(0.146)
1998	1711	0.317	49	0.645	0.117	0.224	0.082
	(138)	(0.428)	(44)	(0.413)	(0.132)	(0.210)	(0.109)
1999	2582	0.335	50	0.633	0.120	0.179	0.071
	(249)	(0.486)	(45)	(0.494)	(0.134)	(0.169)	(0.108)
2000	2523	0.325	50	0.627	0.125	0.182	0.060
	(200)	(0.365)	(47)	(0.565)	(0.114)	(0.170)	(0.110)
Average	17457	0.317	48	0.667	0.099	0.254	0.105
	(1595)	(0.427)	(44)	(0.518)	(0.112)	(0.224)	(0.162)

The conclusion that we draw from table 1 is that there are some differences in the composition of people present in the sample and those lost because of sample attrition. The main possible difficulty is related to people active in searching for a job. Actually, the percentage of individuals looking for a job in the sample is, on average, 10.45% while among people lost due to sample attrition this percentage rises to 16.15%, and this gap is statistically significant[2].

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[2] Considering the results of the econometric analysis, which confirm the standard literature about the role of searching, we think, ex post, that this bias doesn't invalidate our analysis.

It is worth noting that the BHPS sample has been enlarged since wave 7, in particular:

- From Wave Seven (1997) the BHPS began providing data for the United Kingdom European Community Household Panel (ECHP). As part of this, it incorporated a sub-sample of the original UKECHP, including all households still responding in Northern Ireland, and a 'low-income' sample of the Great Britain panel.

- A major development at Wave 9 was the recruitment of two additional samples to the BHPS in Scotland and Wales.

- At wave 11 a substantial new sample in Northern Ireland, the Northern Ireland Household Panel Survey (NIHPS) was added.

Since the size and the composition of the yearly samples have changed over time, we have used logistic regression to test for the significance of being an original sample member in the analysis. The coefficient on this variable is always statistically insignificant, indicating that introducing the additional samples does not bias the results in any way.

3. Classification of labour force

The classification into labour force status is particularly important for our purposes. The BHPS offers a standard range of labour force categories, which are based on subjective classification by the individual. Each respondent is asked to classify himself into a labour force status, measured in variable JBSTAT. However, if we compare the results of the subjective classification with the answers to the question about the time devoted to job search during the last week (wJULK1), we get the impression that some individuals are misclassified. For example, some people who consider themselves as out of labour force (family care and retired, in the most of cases) have been searching for a job (S*eeking*) or, at least, they declare that they would like to have a paid job (*Attached*). On the contrary, some people who classify themselves as unemployed have not looked for a job during last week.

Table 2 presents the composition of the labour force that is the starting point of our analysis. The distinction between unemployed and out of labour force is based on the self-declaration (wJBSTAT). We report only people aged more than 25 and less than 66 that are also present in the subsequent wave.

Table 2: Labour Force Composition

Year	Unemployed			Out of the Labour Force			
	Searching	No search	Total	Would like job	Searching	Neither like nor search	Total
1991	163	130	293	407	59	774	1240
1992	159	137	296	400	56	839	1295
1993	135	171	306	379	55	828	1262
1994	144	138	282	324	52	857	1233
1995	116	125	241	325	47	867	1239
1996	107	124	231	288	40	900	1228
1997	115	124	239	398	48	1106	1552
1998	95	119	214	335	45	1117	1497
1999	135	210	345	401	48	1788	2237
2000	110	213	323	401	42	1757	2200
Total	1273	1262	2770	3603	481	9840	14983

Following this evidence, we categorise non-working individuals in the sample into one of the following groups:

1. *Attached out of work*: These are defined as individuals who classify themselves as out of the labour force, but would like to have a job. To define this group of people, we use the BHPS question, "Although you are not looking for paid work at the moment, would you like to have a regular paid job even if only for a few hours a week?". People who answer affirmatively to the question and have been previously classified as out of labour force, are included in the group of attached out of work.

2. *Seeking out of work*: These are defined as individuals that are currently not working but which looked for a job in the last week. To distinguish this group of people, we use the BHPS question, "Have you looked for any kind of paid work in the last week, that is the 7 days ending yesterday?". Respondents are people who did no paid work last week and do not have a job that were away from.

3. *Not Seeking unemployed*: These are defined as individuals who classify themselves as unemployed in wJBSTAT but that did not actively search for work in the previous week. We distinguish this group of people using the question "Have you looked for any kind of paid work in the last week, that is the 7 days ending yesterday?".

4. *Voluntary Out of work*: These are defined as individuals that are not currently working, classify themselves as out of the labour force, and neither look for nor want a paid job.

3.1 Gender composition

It is interesting to look at the gender composition of these groups, as shown in the subsequent table for the pooled sample.

Table 3: Gender Composition

	Absolute			Percentage		
	male	Female	all	male	Female	all
OUT seeking	69	201	270	25.56	74.4	100
Unemployed Seeking	485	193	678	71.53	28.47	100
OUT attached	570	1578	2148	26.54	73.46	100
OUT not seeking nor attached	2107	5428	7535	27.96	72.04	100
Unemployed not Seeking	513	402	915	56.07	43.93	100

There is a strong prevalence of women, 74%, among people searching for a job but declaring themselves as out of the labour force (OUT seeking). This is due to the high percentage of women in family care. Almost the same proportion of women are in the group *Attached Out of Work* (OUT attached). This is due again to the presence of women devoted to family care. The proportions are almost exactly reversed when considering the seeking unemployed, the majority of which are men. Women also form the majority of people who do not want a job (OUT not seeking nor attached), a group that could be classified as *Voluntarily Out of Work*.

From this table, we can see that some women present in the sample and that are caring for a family still desire/need to have a job. As we will see later, they are also quite able in finding a job, compared to men.

3.2 Attached Out of Work

We next look at the composition of the group of A*ttached Out of Work* (that is individuals who claim to be economically inactive yet would like to have a job) and at its evolution over time. Figure 1 illustrates the temporal path of this group. The composition of the attached out of work individuals is shown for each wave of the survey.
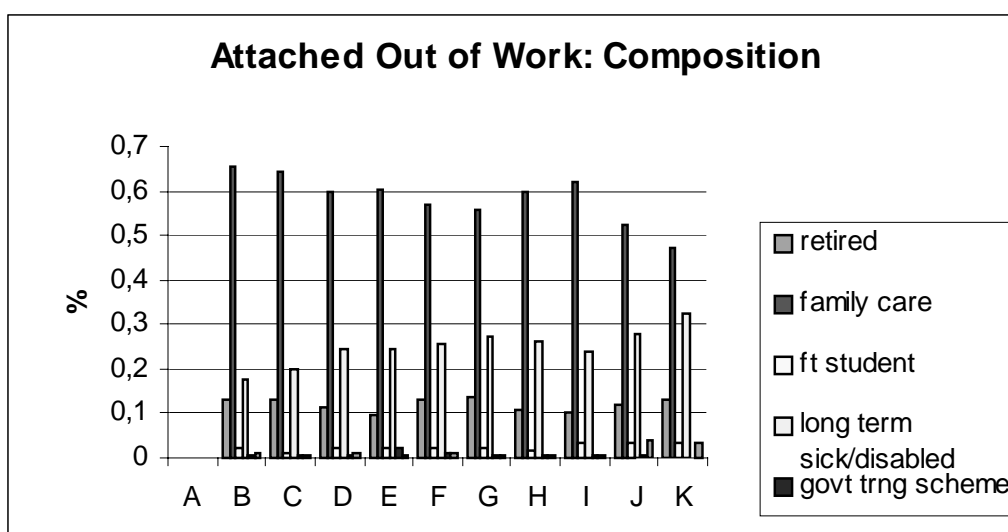
Attached Out of Work: Composition

Figure 1

This shows that individuals in family care are the single largest group in percentage terms, covering more than one half of the whole group, even though their importance have fallen during recent years. The long term sick or disabled is the only group which grows during the whole period of the survey, while retired people are quite stable in their relative importance. The large proportion of this group that are in family care again indicates some possible gender implications in the decision to enter into the active labour market. But, these implications are quite unexpected.

If we look at table 4, we can see that among the attached out of labour force at t-1, a larger proportion of women than men within each labour force status are subsequently employed at t.

Table 4: Attached out of work: Labour market status by sex and category

Attached out of work and:	Women*	Men*	Total*
Retired	0,051	0,081	0,063
Family care	0,194	0,100	0,190
Student, school	0,389	0,214	0,333
Long term sick, disabled	0,043	0,034	0,037
Gvt trng scheme	0,500	0,316	0,379
Other	0,187	0,167	0,180
All categories	0,164	0,064	0,138

 * digit reported are the values registered for the pooled sample

This, of course, doesn't change the fact that they experience a very low transition rate compared to people who are currently looking for a job. In the next section data concerning empirical transition probabilities is described.

4. Empirical transition rates

The first step in the study of transition rates into the employment status among different labour force groups is the analysis of empirical transitions. In table 5 we report the observed transition rates using both our proposed definitions for the subgroups, in the first row, and the self-classified labour market status, reported in the second row. The first 4 columns of the tables show the observed transition probabilities for individuals who classify themselves as out of the labour force, while the last three columns consider people who declare to be unemployed.

At a first glance it seems that our hypothesis about the four different groups is confirmed. The data clearly show how big are the differences, in terms of observed transition rates, inside each one of the two macro-aggregations based on the self-classification. Actually, people that classify themselves as out of labour force experience, in the pooled sample, transition probabilities which go from a minimum of 9% to a maximum of 43% (third and fifth columns). For individuals declaring to be unemployed, we see that the active search of a job results in a gap of almost 20 percentage points – increasing the transition rate from 25 to 45% in the pooled sample.

Table 5: Empirical transition rate into employment at t by employment status at t-1

Year	All Out of Labour Force	OLF not attached	OLF attached	OLF seeking	Unemp seeking	Unemp not seeking	Unemp all
1992	0.102	0.096	0.116	0.424	0.423	0.208	0.328
1993	0.117	0.120	0.113	0.411	0.371	0.204	0.294
1994	0.113	0.096	0.150	0.455	0.333	0.298	0.314
1995	0.119	0.112	0.139	0.269	0.465	0.261	0.365
1996	0.102	0.088	0.142	0.426	0.422	0.224	0.320
1997	0.097	0.085	0.135	0.425	0.486	0.258	0.364
1998	0.101	0.088	0.138	0.438	0.409	0.355	0.381
1999	0.108	0.087	0.182	0.333	0.442	0.244	0.332
2000	0.110	0.094	0.180	0.396	0.459	0.219	0.313
2001	0.102	0.096	0.127	0.595	0.500	0.258	0.341
All	0.104	0.091	0.151	0.433	0.453	0.256	0.340

The main conclusions that we can derive thus far are that:

1. Self classification can be highly misleading;

2. Searching is the best way to get a job, and empirical figures show that active searching makes the difference;

3. Among not searching people there are several different subgroups, which experience different transition rates.

5. Econometric analysis

In this section we prove, using statistical tools, the hypotheses that formed the conclusions of the preceding section. Our analysis will be developed using multinomial logit models, and a pooled cross section-time series sample. The three possible outcomes we use as a dependent variables are: not employed, employed with temporary job, and employed with permanent job. The reference category in the analyses is the first one, not employed.

5.1 The role of the searching

The empirical transition rates suggest that searching is very important and unsurprisingly greatly improves the chances of getting a job. We therefore use a very restricted sample, composed of only people who classify themselves as either unemployed or out of the labour market and who declared to have looked for a job in the week preceding the interview (question wJULK1). We estimated the transition probability for the pooled sample using a multinomial logit model in which the three possible outcomes were: not employed, employed with temporary job, and employed with permanent job. The regressors are age, sex, race, marital status, education, lowest weekly pay acceptable, the number of years since the last job, several dummies for the presence of children in the household, and a dummy for being classified as unemployed (table 6 appendix). We have also repeated the regression separately for men and women (tables 7-8 appendix). The goodness of fit of the model, calculated by the pseudo R2, is always quite low, ranging from 7 to 10%.

In each regressions the dummy for unemployed is never significant, confirming that people looking for a job cannot be distinguished by their answer to the question wJBSTAT. The only exception is in the regression for men only, in which the dummy indicates that the risk ratio of being in permanent job relative to non-employed is

significantly higher for unemployed men compared to out of labour force men. The coefficients on the other variables, when significant, have the expected sign:

- age, the length of non-employment, the presence of young children in the household, all have a negative impact on the relative risk of employment (either temporary or permanent),

- the level of education, the marital status and the presence of older children seem to have a positive effect on the relative risk of employment (either temporary or permanent).

One very interesting result is that the variable standing for the reservation wage, when significant, is always positive – indicating that non-employed individuals with a higher reservation wage are more likely to enter work. This could be explained by the hypothesis that higher qualifications imply a higher reservation wage, but it is an open issue.

The effect of gender is somewhat surprising, as it implies a negative impact on the relative risk of being in permanent job for men. This result cannot be immediately extended to the probability of getting a permanent job, because in multinomial logit models the sign of estimated coefficients do not reflect the direction of change in individual probabilities. If we look at the results of the two separate regressions for men and women, we see that the resulting equations are quite different. In particular, for temporary jobs:

- men experience a higher relative probability of employment the higher is their reservation wage and the lower is the period of inactivity, while the presence of children teenagers seem to affect negatively their chance to get a job

- as to women, their relative chance to get a temporary job is not affected by the reservation wage, but they too are disadvantaged if experiencing long period of inactivity. Young children are a constraint for women looking for a temporary job, while the presence of older children, as well as the fact of being married, has a positive effect on the relative probability to find a job.

When we consider permanent jobs, there are some different results:

- for men the relative probability to find a job is negatively affected by age, while it is no longer affected by the presence of children in the household. What is very interesting is the positive coefficient estimated for the dummy which control for

people declaring to be unemployed; it implies that among people who looks for a job, men declaring to be unemployed are advantaged compared to men declaring to be out of labour force

- as to women, the relative probability to find a permanent job is only affected by the length of not employment and by the marital status, while the presence of children is no longer significant.

5.2 The role of attached out of the labour market

In the first stage of this analysis, we ascertain if individuals defined as being attached out of work are a specific and autonomous group, or if they can be merged with some of the others categories. First of all, we test, using the same process as previously, and as sample only people who classify themselves as out of the labour force, if attached people behave differently in relation to their transition rate into employment. The results shown in table 9 suggest that there is some possible ambiguity, because *Attached* people seem to be different from other *Out Of Labour Force* only in their transition rate into permanent jobs. Also, the sign of the coefficient on the gender dummy implies that women have an advantage relative to men in finding a job. If we analyse this further by running separate regressions for women and men, we find that women who would like to have a job (*Attached*) experience a higher relative transition ratio into permanent jobs while *Attached* men do not behave differently to the other people out of labour force, as shown in tables 10-11.

In a second step we compare *Seeking* and *Attached* people. We use a sample which hold people looking for a job as well as people not searching but keen to have a paid job. The regression is estimated using a multinomial logit model similar to that used for seeking people; the only difference is the inclusion of a dummy which control for people who declare to have looked for a job. The results clearly show (table 12) that the two groups, Attached and Seeking, are significantly different. In particular, the coefficient on the *seeking* dummy is always highly significant and positive. It implies that the relative risk of employment is always higher for people who actively search for a job compared to people who would like to have a paid job but are not actively searching. The fit of the model, measured by the pseudo R2 is 0.13, and the impact of the other coefficients is similar to that in the model estimated using just those seeking

work described previously. Some differences are related to gender and marital status, whose signs are opposite compared to tables 6-8 (seeking people); but we think that these differences are not very reliable, because in this regression we put together very different people.

Next we compare attached people to those classified as unemployed but not actively seeking work using the same multinomial logit model (table 13). Among the regressors, we drop out the variable which approximate the reservation wage, because the relative question only applies to people which either look for or would like to have a paid job. The difference between the two groups is always statistically significant, indicating that individuals classified as attached out of the labour force face a lower relative risk of employment than the non-seeking unemployed.

Finally, having ascertained the uniqueness of the group of attached people, and due to the particular gender composition of this group, we decided to further analyse this subgroup, to verify, in particular, the presence of significant gender differences. We use a multinomial logit model with three possible outcome: not employed, employed in temporary jobs and employed in permanent jobs. The regressors are age, sex, race, marital status, education, lowest weekly pay acceptable, the number of years since the last job and several dummies for the presence of children in the household. As we are dealing with a multinomial logistic regression, the dependent variable is expressed in form of risk ratio, the reference outcome being the not employment.

When we use the whole sample, in other words, men and women together,(table 14), men always have a lower relative risk of employment than women, although it is significant only for permanent jobs. When we run separate regressions for men and women (tables 15, 16), the resulting coefficients are quite different for the two groups, and in particular for the transition rate into temporary work:
- Age is negative for women and not significant for men
- Race is not significant
- Marital status is not significant for men while it is significant and positive for women
- The coefficients on the education terms are positive, but higher for men

- The coefficients for duration in non-employment are negative, and, again, higher for men

- The coefficient for the presence of children in the household are not significant

For the transition rate into permanent jobs we find that:

- Age is negative and almost identical for both women and men

- Race is not important for women, while, surprisingly, it is negative for men; it implies that white people have a lower relative transition rates into permanent work than ethnic minorities

- Marital status is not significant for men while it is significant and positive for women

- The coefficients on education are not significant

- The coefficients for duration in non-employment are negative, and, again, higher for men

- The coefficient for the presence of children in the household are not significant for men while they are significant and negative for women

5.3 The not seeking unemployed

As we have seen, not all people who declare themselves as unemployed are actively looking for a job. Furthermore, among those who declared to not have looked for a job there are some that would like to have a paid job. In section 4 we described the empirical transition probabilities, which suggest that the group of non-seeking unemployed have different characteristics compared to the others groups. This evidence has also been confirmed with regard to the attached out of work, as shown in table 13. Now we want to examine whether there is a statistically significant difference between the unemployed who are actively searching for work and those that are not actively looking for a job. In table 17 in the appendix we summarise the results of the regression for the whole group of the unemployed, with a variable indicating whether the individual is seeking work. Again we find that the coefficient on the searching for work variable is always positive and significant, indicating that the unemployed who are actively seeking work have a higher probability of subsequent employment than those who are not actively searching.

6. Conclusions

The main goal of this paper was to identify and test differences between individuals that are out of work. We distinguish 4 different groups using data from the BHPS: *Seeking Out of Work*, A*ttached Out of Work*, U*nemployed Not Seeking*, and V*oluntary Out of Work*. We find that these groups are characterised by very different transition rates into employment, which are very strongly determined by actively searching for a job. This initial result simply confirms a well known and widespread concept, adopted at an international level by the ILO definition of unemployment.

What is very interesting is that there are also many differences among all the other non-searching people, which need to be better explained. In particular, people who do not look for a job, while declaring to be unemployed, experience relatively high transition rates – 25% in the pooled sample - compared to the other non searching categories – 9% for Voluntary Out of Work and 15% for Attached in the pooled sample. It suggests the existence of a privileged channel to employment for these people, unknown to the others, which is worth to better investigate. Attached Out of Work, nonetheless, are a very interesting group, mostly for its gender composition. Women devoted to family care, who do not look for a job, are able, in some way, to get a job, and they experience always transitions rate bigger than men which are in their same situation. It is a second channel to employment which need to be better understood. Even though it is not the end of this study, we have highlighted some of the characteristics of people that, although not searching for a job, have quite high probability of entering employment. Some interesting hints for future research are suggested by gender composition of all the different groups. This work can be extended by using more complex statistical tools, such as panel data analysis techniques, and in particular duration models, which allow time-varying covariates, such as household formation and dissolution and the birth of a child, to enter the model explicitly.

Table 6: Multinomial logit estimates for labour market status at t given out of work and seeking a job at t-1

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	-0.090	-1.90	-0.033	-4.74
Male	-0.063	-1.69	-0.605	-4.13
White	0.081	0.24	0.362	1.36
Lowest weekly pay accepted	0.003	2.81	0.001	1.12
Years since last job	-0.181	-5.07	-0.162	-7.55
Married	0.138	0.73	0.273	2.05
Higher level QF	0.573	2.27	-0.039	-0.18
Child aged 0-2	-0.887	-2.29	-0.305	-1.21
Child aged 3-4	-0.397	-1.11	0.031	0.13
Child aged 5-11	-0.563	-1.81	0.101	0.51
Child aged 12-15	-0.621	-1.91	0.203	0.97
child aged 16-18	0.478	1.07	0.318	0.94
Number of children	0.461	1.64	-0.135	-0.73
1992	-0.618	-1.73	-0.126	-0.49
1993	-0.307	-0.91	-0.471	-1.76
1994	-0.473	-1.32	-0.448	-1.64
1995	-0.522	-1.44	-0.127	-0.48
1996	-0.330	-0.89	-0.091	-0.33
1998	-0.432	-1.11	0.055	0.19
1999	-0.511	-1.29	-0.147	-0.51
2000	-0.749	-1.92	0.034	0.12
2001	0.089	0.24	0.201	0.7
Unemployed	-0.102	-0.46	0.133	0.84
Constant	-0.336	-0.56	0.926	2.05

N=1652;LR chi2(46)=222.95;Prob>chi2=0.0000;Log likel. = -425.5429;
Pseudo R2 = 0.0725

Reference category is remaining out of work.

Table 7: Multinomial logit estimates for labour market status at t given out of work and seeking a job at t-1: Men

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	-0.018	-1.54	-0.032	-3.50
White	-0.316	-0.72	-0.036	-0.10
Lowest weekly pay accepted	0.004	2.97	0.002	1.88
Years since last job	-0.280	-4.66	-0.325	-7.12
Married	-0.159	-0.63	0.046	0.24
Higher level QF	0.493	1.51	-0.014	-0.05
Child aged 0-2	-0.506	-1.07	-0.062	-0.18
Child aged 3-4	-0.406	-0.87	0.277	0.81
Child aged 5-11	-0.538	-1.35	0.156	0.56
Child aged 12-15	-0.954	-2.13	0.257	0.87
child aged 16-18	-0.235	-0.30	0.380	0.84
Number of children	0.356	0.99	-0.322	-1.24
1992	-0.516	-1.13	0.047	0.13
1993	-0.275	-0.64	-0.500	-1.34
1994	-0.507	-1.08	-0.353	-0.93
1995	-0.170	-0.38	0.163	0.44
1996	-0.594	-1.11	0.267	0.69
1997	0.495	1.06	0.546	1.36
1998	-0.258	-0.51	0.349	0.88
1999	-0.442	-0.85	0.381	0.96
2000	-0.710	-1.41	0.221	0.59
Unemployed	0.102	0.28	0.713	2.28
Constant	-0.304	-0.37	0.155	0.23

N=1023; LR chi2(46)=205.34;Prob>chi2=0.0000;Log likel. = -831.90489;
Pseudo R2 = 0.1099

Reference category is remaining out of work.

Table 8: Multinomial logit estimates for labour market status at t given out of work and seeking a job at t-1: Women

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	0.000	0.00	-0.021	-1.73
White	0.582	0.96	0.609	1.50
Lowest weekly pay accepted	0.003	1.29	-0.001	-0.38
Years since last job	-0.123	-2.88	-0.100	-4.27
Married	0.670	2.18	0.527	2.61
Higher level QF	0.728	1.75	-0.036	-0.10
Child aged 0-2	-1.603	-2.07	-0.378	-0.89
Child aged 3-4	-0.239	-0.39	-0.082	-0.21
Child aged 5-11	-0.516	-0.93	0.127	0.39
Child aged 12-15	-0.253	-0.47	0.317	0.95
child aged 16-18	1.445	2.25	0.760	1.33
Number of children	0.690	1.39	0.049	0.16
1992	-0.297	-0.45	0.333	0.75
1993	0.288	0.46	0.446	0.99
1994	0.276	0.44	0.355	0.77
1995	-0.714	-0.99	0.294	0.66
1996	0.589	0.98	0.506	1.10
1998	-0.106	-0.16	0.253	0.53
1999	-0.009	-0.01	0.622	1.34
2000	-0.295	-0.44	0.720	1.60
2001	0.994	1.56	1.441	3.02
Unemployed	0.147	0.46	0.251	1.15
Constant	-2.910	-2.42	-0.795	-1.00

N=629; LR chi2(44)=100.15;Prob>chi2=0.0000;Log likel. = -546.3468;
Pseudo R2 = 0.0840

Reference category is remaining out of work.

Table 9: Multinomial logit estimates for labour market status at t given out of work at t-1

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Male	-0.144	-0.86	-0.774	-5.88
White	-0.190	-0.64	0.464	2.99
Age	-0.037	-4.95	-0.063	-12.60
Number of children	0.113	1.67	0.064	1.52
Higher level QF	0.554	3.11	0.121	0.90
Years since last job	-0.105	-6.38	-0.092	-9.38
Married	0.146	0.98	0.106	1.16
1993	0.234	0.57	0.351	1.42
1994	0.117	0.28	0.636	2.62
1995	0.041	0.10	0.548	2.22
1996	0.096	0.23	0.441	1.77
1997	-0.160	-0.37	0.339	1.34
1998	-0.431	-1.05	0.410	1.86
1999	-0.447	-1.02	0.557	2.30
2000	-0.188	-0.52	0.344	1.68
2001	-0.284	-0.69	0.568	2.46
Attached	0.100	0.70	0.395	4.61
Constant	-1.612	-3.04	-0.108	-0.34

N=11989;LR chi2(44)=910.66;Prob>chi2=0.0000;Log likel. = -3356.5652;
Pseudo R2 = 0.1194

Reference category is remaining out of work.

Table 10: Multinomial logit estimates for labour market status at t given out of work at t-1: Women

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
White	-0.072	-0.22	0.593	3.58
Age	-0.030	-3.34	-0.060	-10.88
Number of children	0.167	2.14	0.072	1.57
Higher level QF	0.356	1.65	-0.020	-0.13
Years since last job	-0.093	-5.53	-0.084	-8.54
Married	0.421	2.39	0.165	1.69
1992	-0.201	-0.43	-0.673	-2.55
1993	0.268	0.91	-0.168	-0.81
1994	0.124	0.40	0.122	0.61
1995	0.027	0.09	0.110	0.54
1997	-0.343	-0.99	-0.210	-0.97
1998	-0.728	-1.96	-0.109	-0.54
1999	-0.467	-1.35	0.033	0.16
2000	-0.077	-0.25	-0.235	-1.15
2001	-0.666	-1.97	0.097	0.52
Attached	0.200	1.27	0.448	4.93
Constant	-2.184	-4.23	0.187	0.61

N=8756;LR chi2(44)=680.23;Prob>chi2=0.0000;Log likel. = -2797.0221;
Pseudo R2 = 0.1084

Reference category is remaining out of work.

Table 11: Multinomial logit estimates for labour market status at t given out of work at t-1: Men

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
White	-0.564	-0.79	-0.274	-0.61
Age	-0.033	-2.44	-0.070	-5.70
Number of children	0.095	0.63	0.113	0.99
Higher level QF	1.102	3.28	0.762	2.39
Years since last job	-0.249	-4.21	-0.247	-4.82
Married	-0.843	-2.58	-0.232	-0.80
1993	-0.989	-0.94	-0.648	-0.89
1994	-0.679	-0.66	-0.377	-0.54
1995	-0.556	-0.54	-1.241	-1.48
1996	-0.174	-0.18	-1.241	-1.57
1997	-0.059	-0.06	-0.360	-0.50
1998	-0.060	-0.07	-0.461	-0.71
1999	-0.937	-0.88	-0.220	-0.32
2000	-1.753	-1.65	-0.230	-0.38
2001	-0.049	-0.05	-0.757	-1.10
Attached	-0.328	-0.96	0.029	0.11
Constant	-0.428	-0.38	1.271	1.54

N=3233;LR chi2(44)=189.69;Prob>chi2=0.0000;Log likel. = -519.1832;
Pseudo R2 = 0.1545

Reference category is remaining out of work.

Table 12: Multinomial logit estimates for labour market status at t given out of work but attached or seeking at t-1

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	-0.031	-4.14	-0.040	-7.58
Lowest weekly pay accepted	-0.427	-2.82	-0.708	-6.50
White	0.338	1.13	0.146	0.76
Male	0.002	2.09	0.000	0.72
Married	-0.128	-6.42	-0.136	-10.77
Higher level QF	0.314	2.23	0.322	3.40
Years since last job	0.857	4.43	0.057	0.33
Child aged 0-2	-0.457	-1.75	-0.304	-1.77
Child aged 3-4	-0.324	-1.29	-0.147	-0.89
Child aged 5-11	-0.196	-0.93	0.067	0.49
Child aged 12-15	-0.240	-1.05	0.215	1.46
child aged 16-18	0.474	1.39	0.427	1.81
Number of children	0.181	0.92	-0.033	-0.26
1992	-0.374	-1.21	-0.303	-1.64
1993	0.178	0.63	-0.587	-3.04
1994	0.196	0.68	-0.344	-1.81
1995	-0.120	-0.39	-0.224	-1.18
1996	0.219	0.74	-0.262	-1.33
1998	0.410	1.38	-0.256	-1.24
1999	-0.053	-0.17	-0.083	-0.44
2000	0.160	0.55	-0.007	-0.04
2001	0.261	0.88	-0.059	-0.31
Seeking	1.180	8.06	1.390	14.00
Constant	-1.812	-3.60	0.193	0.58

N=4476;Log likel. = -2765.8053;Pseudo R2 = 0.1331

Reference category is remaining out of work.

Table 13: Multinomial logit estimates for labour market status at t given attached or unemployed not seeking work at t-1

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	-0.026	-3.19	-0.046	-7.69
Male	-0.313	-1.91	-0.582	-4.87
White	-0.167	-0.58	-0.060	-0.29
Married	-0.104	-5.90	-0.140	-10.67
Higher level QF	0.062	0.41	0.430	4.05
Years since last job	0.982	4.42	0.140	0.68
Child aged 0-2	-0.104	-0.52	-0.171	-1.36
Child aged 3-4	0.117	0.63	-0.299	-2.30
Number of children	0.009	0.13	0.094	1.98
1992	-0.774	-2.29	-0.004	-0.02
1993	-0.374	-1.24	-0.185	-0.78
1994	0.078	0.28	0.288	1.29
1995	-0.193	-0.63	0.276	1.20
1996	-0.057	-0.18	0.107	0.43
1998	-0.304	-0.97	0.438	1.96
1999	-0.454	-1.33	0.571	2.54
2000	-0.028	-0.10	0.266	1.19
2001	-0.482	-1.56	0.297	1.35
Attached	-0.629	-3.92	-0.604	-5.29
Constant	-0.458	-0.91	0.638	1.73

N=4865;Log likel. = -2347.9733;Pseudo R2 = 0.1007

Reference category is remaining out of work.

Table 14: Multinomial logit estimates for labour market status at t given non-working but attached to the labour market at t-1

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	-0.050	-3.85	-0.040	-4.71
Male	-0.440	-1.54	-1.100	-4.84
White	1.210	1.66	-0.160	-0.58
Lowest weekly pay accepted	0.000	-0.41	0.000	-0.47
Years since last job	-0.090	-3.83	-0.120	-7.41
Married	0.460	2.04	0.380	2.68
Higher level QF	1.360	4.41	0.090	0.31
Child aged 0-2	0.000	0.00	-0.290	-1.26
Child aged 3-4	-0.190	-0.53	-0.300	-1.32
Child aged 5-11	0.220	0.73	0.020	0.13
Child aged 12-15	0.300	0.90	0.230	1.11
child aged 16-18	0.270	0.50	0.560	1.70
Number of children	-0.230	-0.78	0.080	0.43
1992	-0.870	-1.51	-0.620	-2.30
1993	0.220	0.49	-0.820	-2.90
1994	0.520	1.20	-0.300	-1.16
1995	-0.190	-0.38	-0.410	-1.50
1996	0.440	0.99	-0.530	-1.87
1997	0.510	1.10	-0.630	-2.01
1998	-0.140	-0.28	-0.280	-1.11
2000	0.670	1.57	-0.170	-0.67
2001	0.010	0.02	-0.330	-1.23
Constant	-2.000	-2.00	0.620	1.18

N=2824;Log likel. = -1304.5371;Pseudo R2 = 0.1031

Table 15: Multinomial logit estimates for labour market status at t given non-working but attached to the labour market at t-1: Women

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	-0.040	-2.34	-0.030	-3.70
White	1.820	1.78	0.070	0.22
Lowest weekly pay accepted	0.000	-0.08	0.000	-1.05
Years since last job	-0.090	-3.53	-0.110	-6.67
Married	0.710	2.73	0.390	2.65
Higher level QF	1.060	2.77	0.280	0.91
Child aged 0-2	-0.300	-1.12	-0.390	-2.32
Child aged 3-4	-0.410	-1.55	-0.490	-2.95
Number of children	0.130	1.11	0.200	2.82
1992	-1.310	-2.40	-0.250	-0.82
1993	-0.320	-0.76	-0.450	-1.39
1994	0.000	0.01	0.210	0.71
1995	-0.830	-1.62	0.120	0.40
1997	0.040	0.08	-0.260	-0.72
1998	-0.930	-1.82	0.210	0.69
1999	-0.550	-1.15	0.510	1.75
2000	0.120	0.31	0.270	0.90
2001	-1.280	-2.15	0.060	0.19
Constant	-2.950	-2.31	-0.340	-0.61

N=2109;Log likel. = -1110.2826;Pseudo R2 = 0.0842

Table 16: Multinomial logit estimates for labour market status at t given non-working but attached to the labour market at t-1: Men

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	-0.037	-1.57	-0.051	-2.24
White	0.353	0.26	-1.971	-2.36
Lowest weekly pay accepted	0.001	0.46	0.002	1.16
Years since last job	-0.176	-1.93	-0.348	-3.39
Married	-0.583	-1.00	0.344	0.69
Higher level QF	1.943	3.14	-38.674	0.00
Child aged 0-2	1.469	1.60	0.204	0.24
Child aged 3-4	-36.882	0.00	0.783	1.02
Number of children	-0.585	-1.38	-0.243	-0.98
1992	-36.879	0.00	0.458	0.53
1993	-0.414	-0.28	0.234	0.26
1994	-0.035	-0.03	-0.469	-0.47
1995	-0.082	-0.06	-1.259	-1.02
1996	-0.329	-0.23	-1.034	-0.84
1998	0.770	0.63	0.062	0.07
1999	-0.256	-0.17	0.188	0.19
2000	0.505	0.42	0.015	0.02
2001	0.887	0.78	0.485	0.58
Constant	-1.497	-0.76	1.852	1.20

N=715;Log likel. = -165.3873;Pseudo R2 = 0.2072

Table 17: Multinomial logit estimates for labour market status at t given unemployed but not seeking at t-1

Variable at t-1	Temporary job		Permanent job	
	Coef.	t-stat	Coef.	t-stat
Age	-0.020	-2.11	-0.040	-6.47
Male	-0.140	-1.03	-0.350	-3.69
White	-0.300	-1.22	0.140	0.70
Years since last job	-0.200	-7.53	-0.190	-10.92
Married	-0.120	-0.81	0.270	2.60
Higher level QF	0.650	3.29	0.080	0.48
Child aged 0-2	-0.230	-1.09	-0.210	-1.47
Child aged 3-4	0.250	1.32	-0.140	-0.94
Number of children	-0.020	-0.23	-0.010	-0.14
1992	0.050	0.15	-0.210	-0.99
1993	0.090	0.28	-0.530	-2.42
1994	0.330	1.05	-0.270	-1.23
1995	0.230	0.72	-0.050	-0.23
1996	0.310	0.94	-0.210	-0.92
1997	0.500	1.52	-0.050	-0.23
1998	0.350	1.03	0.150	0.68
2000	-0.180	-0.54	-0.120	-0.56
2001	0.460	1.44	0.170	0.77
Seeking	0.660	4.67	0.830	8.06
Constant	-1.000	-2.11	0.510	1.45

N=3016;Log likel. = --2260.0676;Pseudo R2 = 0.1085

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