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Crowding out Public Service Motivation.*

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Abstract

Employing workers with Public Service Motivation (PSM) has been proposed as a means of improving performance in the public sector. There is, however, no conclusive evidence showing PSM among individuals. In this paper we attempt to firstly find evidence of PSM by investigating why people change jobs from the private to the public sector. Secondly we attempt to identify factors that crowd out PSM and thus hinder individuals with PSM from joining the public sector.

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1 Introduction

Hiring individuals with Public Service Motivation (PSM) is often proposed as a way to improve public sector performance and to overcome incentive problems in the public sector. In this paper we attempt to find evidence of PSM and to investigate whether extrinsic rewards crowd out PSM.

The concept of PSM has its roots in the public administration literature where it is broadly defined as "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions" (Perry, 1996). This predisposition is determined by environmental factors, such as parental modelling or socialization within organizations. It reflects three categories of motives: rational, norm-based and affective. Rational motives are present when individuals want to participate in policy-making to pursue their political agenda, or when individuals commit to a public program because they personally identify with it. Norm-based motives are generated by a desire to pursue the public interest; they include patriotism, civic duty and a sense of loyalty to the government. Affective motives refer to behaviour motivated by emotional responses to different social contexts and are characterized by a desire to help others.

The presence of PSM generates a number of implications. If values and sentiments associated with the public sector are attractive to individuals with PSM, hiring these individuals will help to overcome incentive problems in the public sector. Agents who care about the output will have less incentive to shirk in the public sector than in the private sector.[1] This is because public sector managers cannot commit to increase other factors of production to maintain output if an agent shirks effort, whereas private sector managers can, due to the profit motive (Francois, 2001).[2] Further, hiring individuals with PSM will increase organizational efficiency in the public sector as better

[1] See Francois and Vlassopoulos (2007) for a survey on role of pro-social motivation in overcoming incentive problems in the provision of public goods.

[2] Individuals are more willing to donate labour in the public sector because the public sector can credibly commit not to expropriate labour (see Grout and Yong; 2003 and Grout and Schnedler; 2006). Gregg, Grout, Ratcliffe, Smith and Windmeijer (2008) find that workers in the non-profit sector donate significantly more labour than workers in the private sectors.

matching of agents and principals with similar preferences reduces the need for high-powered incentives (Besley and Ghatak, 2005). In fact the use of high powered incentives may have adverse effects on public-sector performance. As shown by Benabou and Tirole (2006), monetary incentives decrease the reputational value of pro-social actions and thus reduce the overall utility from pro-social behaviour. Extrinsic rewards may then crowd out PSM: whilst higher wages increase the probability of filling a job vacancy, they decrease the expected average quality of job applicants because less motivated workers are induced to apply (Delfgaauw and Dur; 2007).[3]

Conclusive empirical evidence of PSM amongst public-sector workers is however yet to be found. Some empirical research into PSM is discussed in the public administration literature: Brewer and Selden (1998) find evidence of PSM amongst whistle-blowers, but their sample comprises only public sector employees, thus they do not compare public sector workers with workers in other sectors. Crewson (1997) and Dilulio (1994) show that workers in the public sector report higher satisfaction with the intrinsic characteristics of work than workers in the private sector. These studies however do not show whether it is the public sector that causes individuals to derive greater satisfaction from the intrinsic characteristics of their work or rather it is individuals who derive greater satisfaction from the intrinsic characteristics of public-sector work who are drawn to the public sector.

Further, the empirical literature on the crowding-out effect of monetary incentives has not considered the effect of extrinsic rewards on public sector workers.[4] Frey, Oberholzer-Gee, and Eichenberger (1996) and Frey and Oberholzer-Gee (1997) show that people are less likely to accept that "Not In My Backyard" (NIMBY) projects are undertaken in their own town when they are offered a monetary compensation. In an experimental study, Gneezy and Rustichini (2000a) show that individuals exert less effort when a small monetary compensation is offered than when no compensation is offered. In Gneezy and Rustichini (2000b) the introduction of a fine to parents who

[3] Crowding out of workers with PSM has also been attributed to unmotivated workers being attracted to the public sector (see Delfgaauw and Dur; 2008).

[4] In his seminal paper, Titmuss (1970) argued that monetary compensation undermines civic duty so that the introduction of monetary compensation would result in blood of lower quality being collected.

are late in collecting their children from school increases the rate of parents arriving late.[5]

In this paper, we use data from the British Household Panel Survey (BHPS) to investigate whether PSM can explain individuals' propensity to move into public sector jobs. To proxy the utility derived from extrinsic aspects of the job we use workers' self-reported satisfaction with pay, satisfaction with job security and satisfaction with working hours. We consider satisfaction with work itself as a proxy for intrinsic rewards.[6] Using predicted differentials for these variables, we estimate transition probabilities from the private into the public sector.

Our results show that the higher the predicted satisfaction with the work itself in the public sector, the higher the probability that an individual will make the transition from the private to the public sector. Instead, higher predicted satisfaction with the extrinsic characteristics does not raise the probability of transition. These results imply that individuals are drawn to the public sector by the intrinsic characteristics of working in the public sector rather than the extrinsic benefits, which is consistent with the existence of PSM evidence. Further, extrinsic rewards crowd out PSM, in that, higher predicted satisfaction differentials with the extrinsic characteristics of the job (i.e. satisfaction with hours of work, satisfaction with job security, and satisfaction with pay) decrease the likelihood of individuals moving into the public sector. We find similar results by investigating transitions into different occupational classifications and into different sub-sectors of the public sector.

The paper also offers some of the first evidence on public sector rents based on domain satisfaction measures, thus contributing to a growing literature on public sector rents using subjective well-being measures (see e.g. Luechinger, Meier, and Stutzer, 2005; Clark and Senik, 2005; and Clark.

[5] See Frey and Jegen (2001) for a survey of the literature on crowding out and in of intrinsic motivation.

[6] The use of self-reported satisfaction data has been validated by several researchers. For example, it has been shown that job satisfaction predicts future quits (Freeman, 1978; Clark et al. 1998), it is negatively correlated with absenteeism (Clegg, 1983) and that it is positively correlated with productivity (Mangione and Quinn, 1975). See Diener (2000) for a review.

2004). Earlier studies on public sector rents focused mainly on wage differentials (see e.g. Bender 1998).

The rest of the paper is organized as follows. Section 2 provides the theoretical foundation of our empirical analysis and it derives the predictions. Section 3 discusses the empirical methodology whilst section 4 presents the empirical results. Section 5 concludes with some policy recommendations.

2 Theoretical Foundations

We draw from Benabou and Tirole (2006) (hereafter BT) for the simple theoretical framework.[7] We consider the behavior of agents who choose to move from the private to the public sector. a_k denotes the level of pro-social activities undertaken by each agent in sector k at cost c_k and y_k denotes the (vector of) extrinsic rewards (such as, higher wages, greater job security and better working hours) enjoyed by agents working in sector k. $k = P, G$, where $k = P$ denotes the private sector and $k = G$ denotes the public sector. More pro-social activities are carried out in the public sector; for simplicity and without loss of generality we let $a_G = 1$ and $a_P = 0$. The sector in which an agent works, the sectorial level of pro-social activities a_k and the extrinsic rewards y_k are publicly observable.

Agents differ in their intrinsic valuation for prosocial activities and in their valuation for extrinsic rewards. These valuations are perfectly negatively correlated.[8] An agent's type is then defined by the intrinsic value $\omega_i \in [0, \overline{\omega}]$ that he attaches to carrying out 1 unit of pro-social activities; $\overline{\omega} - \omega_i$ is the value he attaches to 1 unit of extrinsic rewards. ω_i is a random variable with density function $f(\omega_i)$. Agents have reputational concerns and wish to appear pro-social/altruistic. The value of reputation depends linearly on the posterior belief $E(\omega_i|k, y_k)$ of the agent's type ω_i, given sector k in which the agent works and the extrinsic rewards y_k he enjoys. The utility of agent i

[7] See also Benabou and Tirole (2003).

[8] This is for simplicity. The model can easily be extended to cover the general case discussed in BT.

from working in sector k is

$$U_{i,k} = (\omega_i - c_k)a_k + (\overline{\omega} - \omega_i)\, y_k + \mu E_k(\omega_i|k, y_k),$$

where $\mu \in [0,1]$ is the weight on reputational concerns.

There are two periods. In period 1 nature draws the agent type that is unobservable; agents then randomly choose between the private and the public sector. In period 2, agents privately observe ω_i and choose whether to remain in the sector they are in, or to move to the other sector. Let $\hat{y} \equiv y_G - y_P > 0$, then the agents who by the end of period 2 will be in the public sector are those for whom $U_{i,G} \geq U_{i,P}$, that is with

$$\omega_i \geq \tilde{\omega}_i \equiv \frac{c_G - \hat{y} - \mu R}{1 - \hat{y}}, \tag{1}$$

where

$$R \equiv E(\omega_i|G, y_G) - E(\omega_i|P, y_P), \tag{2}$$

denotes the reputational gain from working in the public sector. Half of the agents with high intrinsic motivation, $\omega_i \geq \tilde{\omega}_i$, will thus be moving from the private to the public sector.

The posterior belief at the end of period 2 of the level of pro-social motivation of an agent in the public sector is

$$\begin{aligned} E(\omega_i|G, y_G) &= \frac{\int_{\tilde{\omega}_i(\hat{y})}^{\overline{\omega}} \omega_i f(\omega_i) d\omega_i}{\rho\,(\hat{y})}, \\ \text{with } \frac{\partial E(\omega_i|G, y_G)}{\partial \hat{y}} &= -\frac{f(\tilde{\omega}_i) \int_{\tilde{\omega}_i}^{\overline{\omega}} (\omega_i - \tilde{\omega}_i)\, d\omega_i}{\rho^2} \frac{\partial \tilde{\omega}_i\,(\hat{y})}{\partial \hat{y}} < 0. \end{aligned} \tag{3}$$

where $\rho = \int_{\tilde{\omega}_i}^{\overline{\omega}} f(\omega_i) d\omega_i$ is the fraction ρ of agents who will work in the public sector by the end of period 2. As $\hat{y}$ increases, more agents with low pro-social motivation ω_i are attracted to the public sector and the 'honour' of working in the public sector decreases. The posterior belief about the level of pro-social motivation of an agent in the private sector is

$$\begin{aligned} E_P(\omega_i|P, y_P) &= \frac{\int_0^{\tilde{\omega}_i(\hat{y})} \omega_i f(\omega_i) d\omega_i}{1 - \rho\,(\hat{y})} \\ \text{with } \frac{\partial E(\omega_i|P, y_P)}{\partial \hat{y}} &= \frac{f(\tilde{\omega}_i) \int_0^{\tilde{\omega}_i} (\tilde{\omega}_i - \omega_i)\, d\omega_i}{(1-\rho)^2} \frac{\partial \tilde{\omega}_i\,(\hat{y})}{\partial \hat{y}} > 0. \end{aligned} \tag{4}$$

As $\hat{y}$ increases, more agents with low pro-social motivation are attracted to the public sector and the stigma of working in the private sector decreases.[9] Using (3) and (4) we obtain

$$\frac{\partial R}{\partial \hat{y}} = f(\tilde{\omega}_i)\left(\frac{\int_0^{\tilde{\omega}_i}(\tilde{\omega}_i - \omega_i)\,d\omega_i}{(1-\rho)^2} + \frac{\int_{\tilde{\omega}_i}^{\overline{\omega}}(\omega_i - \tilde{\omega}_i)\,d\omega_i}{\rho^2}\right)\frac{\partial \tilde{\omega}_i(\hat{y})}{\partial \hat{y}} < 0,$$

This is the "imagine spoiling effect of rewards" emphasized by BT: higher extrinsic rewards reduce the reputational gain R from joining the public sector. It follows that

$$\frac{d\tilde{\omega}_i(\hat{y})}{d\hat{y}_i} = \frac{\partial \tilde{\omega}_i(\hat{y})}{\partial \hat{y}} - \frac{\mu}{1-\hat{y}}\frac{\partial R}{\partial \hat{y}} \gtreqless 0.$$

Higher extrinsic rewards in the public sector generate two opposite effects. On the one hand, they increase transition to the public sector by attracting agents who wish to enjoy these higher rewards; on the other hand they reduce transition by lowering the reputational gain R from joining the public sector. When the weight μ on reputational concerns is sufficiently high, extrinsic rewards crowd out intrinsic motivation.

3 Methodology and Data

We use data from the first fourteen waves of the British Household Panel Survey (BHPS) covering the period 1991-2004. The BHPS is a longitudinal survey of approximately 10,000 individuals in 5,500 households per year, providing a rich source of information of demographic and labour market characteristics, as well as information on individuals' subjective evaluation of their jobs and their economic situation. Restricting the sample to full-time workers between the ages of 16 and 65 results in 37384 and 25728 person-year observations for men and women respectively. Crucially, the

[9] Note that, because of the reputational effect, the (marginal) "total" value of extrinsic rewards of people in the public sector is lower than the one of those in the private sector

$$\frac{dU_{i,G}}{dy_{i,G}} = (1-\omega_i) + \mu\frac{\partial E(\omega_i|\alpha_G, y_{i,G})}{\partial \Delta} < (1-\omega_i) < (1-\omega_i) + \mu\frac{\partial E(\omega_i|\alpha_P, y_{i,P})}{\partial \Delta} = \frac{dU_{i,P}}{dy_{i,P}}$$

panel nature of the data allows us to identify, during the sample period, 747 transitions from the private to the public sector, all initiated by the workers themselves voluntarily (i.e. quits), with no intervening unemployment or inactivity spells.

In order to explore whether such transitions are driven or explained by PSM, we classify job attributes observed prior to and after each transition as intrinsic or as extrinsic. To make such a distinction operational, we consider wages, job tenure and hours of work to be extrinsic rewards, while the nature of the work itself to be an intrinsic reward. We take the view that individuals have a predetermined level of PSM, which is the result of environmental factors, such as parental modelling and socialization within social groups that individuals interact with or are part of. Because it is difficult to measure individuals' motives directly, we proxy such motives by using self-reported domain job satisfaction scores. Following the theoretical model in Section 2, we expect that satisfaction with intrinsic rewards is positively correlated with the probability of transition into the public sector. In contrast, due to reputational effects, satisfaction with extrinsic rewards should have little or even negative influence on individuals' decision to seek employment in the public sector.

More formally, the probability that individual i makes the transition into the public sector can be written as

$$\Pr(M_{it}^{G} = 1) = \Pr[\beta' X_{i,t-1}^{P} + \varepsilon_{it} > 0] \tag{5}$$

In (5), M_{it}^{G} is an observed indicator variable taking the value 1 if an individual i moves into the public sector at time t and 0 otherwise. The vector $X_{i,t-1}^{P}$ represents individual and labour market characteristics at time $t-1$, the year prior to making the transition. It includes expected earnings differentials between the public and the private sector as well as expected satisfaction differentials for the various extrinsic and intrinsic job attributes under consideration.[10] ε_{it} is a random error term.

Earnings in both private and public sector employment are observed only

[10] These are the $\omega_i (a_G - a_P)$ and $(1 - \omega_i)(y_G - y_P)$ and $\omega_i (a_G - a_P)$ in the theoretical model.

for those in private employment and public employment respectively, and they are censored at zero. Because of this, we estimate standard Mincer-type earnings functions corrected for selectivity bias. We use these estimates to calculate the expected earnings differential between the public and private sector $\hat{y}_{it}$ for each individual in our sample, irrespective of current status. These expected earnings differentials are used when estimating equation (5), the transition into the public sector equation. In a similar fashion, we estimate differentials for satisfaction with pay $\hat{s}_{it(PAY)} = \hat{S}^G_{it(PAY)} - \hat{S}^P_{it(PAY)}$, satisfaction with job security $\hat{s}_{it(SEC)} = \hat{S}^G_{it(SEC)} - \hat{S}^P_{it(SEC)}$, satisfaction with hours worked $\hat{s}_{it(HOURS)} = \hat{S}^G_{it(HOURS)} - \hat{S}^P_{it(HOURS)}$, and satisfaction with the work itself (an intrinsic reward) $\hat{s}_{it(WORK)} = \hat{S}^G_{it(WORK)} - \hat{S}^P_{it(WORK)}$ between the public and private sectors. These predicted domain satisfaction differentials enter as additional regressors in the transition equation (5), which is written as,

$$\Pr(M^G_{it} = 1) = \alpha_0 + \alpha_1 \hat{y}_{it} + \alpha_2 \hat{s}_{it(PAY)} + \alpha_3 \hat{s}_{it(SEC)} + \alpha_4 \hat{s}_{it(HOURS)} + \alpha_5 \hat{s}_{it(WORK)} + \beta' X^P_{i,t-1} + \varepsilon_{it} \tag{6}$$

The main hypothesis that PSM increases the probability of transition into the public sector implies a positive and significant coefficient α_5. If extrinsic rewards exert little or no influence on individuals' decision to become public sector employees, then the coefficients α_1 to α_4 will be statistically insignificant. Negative and statistically significant coefficients α_1 to α_4 are consistent with the crowding out hypothesis, whereby extrinsic rewards mitigate an individual's utility from the intrinsic rewards associated with the transition into the public sector.

4 Results

We begin by presenting summary statistics for the real wage, job and the four domains of job satisfaction.

[Insert Table 1 here.]

The table above shows that on average wages are significantly higher in the public sector than in the private sector, for both men and women. Satisfaction with pay is also higher in the public sector than in the private sector. We find similar results with the number of hours worked and job tenure: on average people work fewer hours and stay in jobs longer in the public sector.[11] In addition, our results show that individuals in the public sector are more satisfied with job security and with the number of hours they work than individuals in the private sector. Average satisfaction with the work itself is significantly higher in the public sector than in the private sector.

We now examine the results that make use of observed transition into the public sector. Table 2 below gives the probit estimations for transition from the private to the public sector.

[Insert Table 2 here]

There is strong evidence for our main hypothesis: people are more likely to move to public sector if they expect to enjoy greater satisfaction with the work itself in the public sector. Further, higher predicted satisfaction with pay in the public sector will reduce the probability of moving to the public sector, thus providing evidence of the image spoiling effect of monetary rewards in the public sector. The satisfaction with job security differential is insignificant. This provides evidence that individuals are not more likely to join the public service out of a desire to derive greater utility from job security. There is strong evidence that higher (predicted) utility with the number of hours worked in the public sector reduces an individual's probability of joining the public sector. Thus, the results of the predicted satisfaction with pay and working hours differentials are consistent with the crowding out hypothesis, whereby extrinsic rewards mitigate an individual's utility from the intrinsic rewards associated with the transition into the public sector.

This grouping of results shows that people join the public sector mainly because it offers individuals with PSM the opportunity to carry out pro-social activities. Higher wages or better extrinsic rewards are not the driving

[11] This is consistent with previous studies. See e.g. Rama (1999) and Bender (1998)

force behind the transition. In fact, our results show that higher extrinsic rewards in the public sector crowd out PSM in the public service, i.e. make it less likely for individuals who are public service motivated to join the public sector.

We now examine transition into different occupational groupings in the public sector at the one digit (or Major Group) level using the Standard Occupational Classification 1990 (SOC 1990). The major group is a grouping of broad occupational categories which is useful in comparing occupations that have similar qualifications, training, skills, and experience. Table 3 gives the results.

[Insert Table 3 here]

Once more we find strong evidence for our main hypothesis, the predicted satisfaction with work itself differential significantly increases the probability of making the transition to the public sector. This shows that individuals with high levels of PSM are more likely to move to the public sector. There is also evidence of PSM being crowded out by extrinsic rewards. For most occupations, either the predicted satisfaction with pay or satisfaction with working hours are negative and significant. Exceptions are individuals moving into management and administration or are becoming plant and machine operatives in the public sector. In both these types of occupation we find no evidence to support the hypothesis that higher satisfaction with the work itself in the public sector increases the likelihood of moving to the public sector as the predicted satisfaction with work differential is insignificant.

Next, we divide the public sector into different sub-sectors, these being central government, local government and public corporations. There are important differences in these organizational structures that may impact how attractive these sub-sectors are to individuals with PSM. These differences for example manifest themselves in some sub-sectors providing less opportunity for individuals with PSM to carry out their motivations. Central governments and public sector corporations are more likely to succumb to pressure from unions and employees than local government. Wages and other pecuniary and non pecuniary benefits have been shown to be higher in cen-

tral government and public sector corporations. We expect higher wages and non pecuniary benefits to reduce the likelihood of a public sector motivated individual moving into these sub-sectors of the public sector. Table 4 below gives the results for probit estimations for transition probability into the different sub-sectors.

[Insert Table 4 here]

The results show that the probability of transition into all sub-sectors is significantly positively related to the satisfaction differential with work itself. However, the probability of transition is significantly reduced by the predicted satisfaction with pay differential for both transition into central government and the NHS and Higher Education. The probability of transition is also significantly reduced by the predicted satisfaction with working hours differential for transition into the NHS and Higher Education. This implies that the higher predicted satisfaction with wages and better working hours, enjoyed in central government and public sector corporations, reduces the utility of moving into these sub-sectors for individuals.[12] Grouped together, the results show that individuals are more likely to move into these different sub-sectors of government if they are public service motivated.

5 Conclusion and Policy Recommendations

Our results show that higher wages, satisfaction with pay, job security and working hours in the public sector are either insignificant in influencing the probability of transition to the public sector or reduce this probability. Instead, higher satisfaction with the intrinsic characteristics of work in the public sector increases the probability of transition to the public sector. Individuals are more likely to move due to higher satisfaction with the work itself in the public sector, as the public sector provides greater opportunity

[12] The wage differential being significant and positive for women moving into local government can be partially explained by the fact the wage differential between the private and public sector is greatest for women.

for these individuals to carry out their public service motivation. This grouping of results provides strong evidence of PSM and suggests that extrinsic rewards may crowd out intrinsic motivation.

These results suggest that from an efficiency point of view, the public sector should lower wages and other extrinsic rewards for two reasons. Firstly, high wages in the public sector deter individuals with PSM from entering the public sector as high wages decrease their utility from this pro-social move because they are perceived to be "greedy". Therefore lower wages and other extrinsic rewards allow for better matching as individuals with PSM will be more willing to work in the public sector. Secondly, a reduction in wages and other extrinsic rewards will reduce problems of adverse selection in hiring new workers for the public sector. High wages in the public sector will also attract individuals who do not have PSM. These individuals require higher powered incentives to perform the same task compared to individuals with high levels of PSM and therefore are more costly than individuals with PSM. By offering lower wages the public sector will attract a higher proportion of individuals with PSM.

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Table 1. Means for Real Wages, Overall Job Satisfaction and the Domains of Job Satisfaction.

	Public	***Private***	***All***	***T-stat on Sector Difference***
Real Wage				
All	1647 (16627)	1501 (43650)	1541 (60277)	15.40***
Women	1497 (9663)	1137 (15241)	1277 (24904)	33.55***
Men	1855 (6964)	1696 (28409)	1727 (35373)	10.55***
Hours Worked				
All	37.04 (17402)	39.44 (46533)	38.78 (63935)	-41.20***
Women	35.83 (10126)	37.09 (16127)	36.60 (26253)	-17.79***
Men	38.72 (7276)	40.30 (30406)	40.30 (37682)	-22.02***
Job Tenure				
All	5.59 (16770)	4.17 (44143)	4.56 (60913)	25.44***
Women	4.99 (9796)	3.45 (15556)	4.04 (25352)	22.02***
Men	6.42 (6974)	4.56 (28587)	4.93 (35561)	21.25***
Satisfaction with Pay				
All	4.75 (16621)	4.73 (43608)	4.73 (60229)	1.30*
Women	4.83 (9657)	4.75 (15226)	4.78 (24883)	4.00***
Men	4.63 (6964)	4.72 (28382)	4.70 (35346)	-4.23***
Satisfaction with Job Security				
All	5.45 (16606)	5.27 (43520)	5.32 (60126)	12.64***
Women	5.55 (9649)	5.42 (15194)	5.47 (24843)	6.54***
Men	5.31 (6957)	5.19 (28326)	5.21 (35283)	5.77***
Satisfaction with the work itself				
All	5.48 (16621)	5.38 (43618)	5.41 (60239)	7.75***
Women	5.55 (9659)	5.43 (15234)	5.48 (24893)	6.67***
Men	5.39 (6962)	5.36 (28384)	5.36 (35346)	1.45*
Satisfaction with hours worked				
All	5.15 (16620)	5.05 (43625)	5.08 (60245)	8.15***
Women	5.14 (9659)	5.18 (15233)	5.17 (24892)	-2.06**
Men	5.17 (6961)	4.97 (28392)	5.01 (35353)	10.01***

The number of observations are given in brackets (). *** indicates significance at a 1% confidence level, ** indicates significance at a 5% confidence level, and * indicates significance at a 10% confidence level.

Table 2. Probit results for transition from Private to Public Sector
Dependent Variable: Transition to Public Sector

	All (Full-time)	*Men (Full-time)*	*Women (Full-time)*
$\hat{y}_{it}$	-0.700 (0.252)	-0.597 (0.506)	-1.285 (0.127)
$\hat{s}_{it(PAY)}$	-0.309* (0.051)	-0.188** (0.411)	-0.337 (0.137)
$\hat{s}_{it(SEC)}$	0.163 (0.249)	0.248 (0.244)	0.038 (0.844)
$\hat{s}_{it(WORK)}$	1.320*** (0.000)	1.564*** (0.000)	1.235*** (0.001)
$\hat{s}_{it(HOURS)}$	-1.041*** (0.000)	-0.844** (0.016)	-1.350*** (0.000)
Employer offers Pension (t)	0.486*** (0.000)	0.371** (0.046)	0.539*** (0.004)
Age	-0.001 (0.832)	0.002 (0.625)	0.001 (0.786)
Pension (t-1)	-0.259*** (0.000)	-0.222*** (0.000)	-0.279*** (0.000)
Trade Union Member	0.107** (0.041)	-0.020 (0.789)	0.279*** (0.000)
Married	-0.163** (0.010)	-0.214** (0.021)	-0.189** (0.032)
Living as Couple	-0.052 (0.413)	-0.094 (0.322)	-0.083 (0.349)
Widowed	-0.473* (0.059)	-0.507 (0.204)	-0.668** (0.041)
Divorced	0.191** (0.050)	0.228 (0.126)	0.031 (0.815)
Higher Level Edu	-0.074 (0.245)	-0.197** (0.024)	0.128 (0.191)
Medium Level Edu	0.031 (0.570)	0.003 (0.973)	0.065 (0.443)
Health Problems	0.027 (0.729)	0.005 (0.964)	0.051 (0.663)
No. of Children	0.040 (0.106)	0.053 (0.111)	0.091** (0.019)
Renter	0.189*** (0.000)	0.232*** (0.002)	0.139* (0.088)
Medium Firm	-0.085* (0.070)	-0.076 (0.261)	-0.073 (0.279)
Large Firm	-0.166*** (0.001)	-0.056 (0.446)	-0.254*** (0.001)
Regional Dummies	Yes	Yes	Yes
Constant	-3.590*** (0.000)	-3.906*** (0.000)	-3.368*** (0.000)
Observations	35861	23460	12401
Pseudo R^2	0.074	0.070	0.104

The p values are given in brackets (). *** indicates significance at a 1% confidence level, ** indicates significance at a 5% confidence level, and * indicates significance at a 10% confidence level.

Table 3. Probit results for transition from Private to Public Sector into jobs grouped according to the Standard Occupational Classification (1990) (Major Groups)
Dependent Variable: Transition to Public Sector Occupation

	All (Full-time)	*Men (Full-time)*	*Women (Full-time)*
	Group 1	**Group 2**	**Group 3**
$\hat{y}_{it}$	-3.397* (0.058)	-0.325 (0.816)	-0.676 (0.594)
$\hat{s}_{it(PAY)}$	0.082 (0.876)	-0.038 (0.919)	-0.291 (0.379)
$\hat{s}_{it(SEC)}$	-0.444 (0.312)	0.121 (0.712)	0.416 (0.139)
$\hat{s}_{it(WORK)}$	0.177 (0.827)	1.000* (0.097)	1.281** (0.012)
$\hat{s}_{it(HOURS)}$	-1.824*** (0.008)	-1.107** (0.041)	-1.022** (0.030)
Transitions	50	101	120
Observations	24816	35152	35861
	Group 4	**Group 6**	**Group 8**
$\hat{y}_{it}$	-0.264 (0.804)	-0.311 (0.792)	0.587 (0.766)
$\hat{s}_{it(PAY)}$	-0.807*** (0.003)	-0.047 (0.880)	-0.153 (0.776)
$\hat{s}_{it(SEC)}$	0.127 (0.604)	0.005 (0.984)	0.041 (0.934)
$\hat{s}_{it(WORK)}$	1.101** (0.013)	0.912* (0.064)	0.458 (0.588)
$\hat{s}_{it(HOURS)}$	-0.972** (0.021)	-0.796* (0.072)	-0.414 (0.610)
Transitions	169	140	37
Observations	35861	35861	27298
	Group 9		
$\hat{y}_{it}$	-1.346 (0.366)		
$\hat{s}_{it(PAY)}$	0.292 (0.440)		
$\hat{s}_{it(SEC)}$	0.140 (0.689)		
$\hat{s}_{it(WORK)}$	1.708*** (0.005)		
$\hat{s}_{it(HOURS)}$	-0.477 (-0.418)		
Transitions	90		
Observations	34366		

The p values are given in brackets (). *** indicates significance at a 1% confidence level, ** indicates significance at a 5% confidence level, and * indicates significance at a 10% confidence level. Group 1 (Managers and Administrators), Group 2 (Professional Occupations), Group 3 (Associate Professional and Technical Occupations), Group 4 (Clerical and Secretarial Occupations), Group 6 (Personal and Protective Service Occupations), Group 8 (Plant and Machine Operatives), Group 9 (Other Occupations).

Table 4. Probit results for transition into jobs in Central and Local Government, and the NHS or Higher with satisfaction Domains.

	All (Full-time)	*Men (Full-time)*	*Women (Full-time)*
Transition into Central Government			
$\hat{y}_{it}$	-0.429 (0.698)	0.266 (0.870)	-0.937 (0.552)
$\hat{s}_{it(PAY)}$	-0.372 (0.210)	-0.131 (0.749)	-0.672 (0.133)
$\hat{s}_{it(SEC)}$	0.270 (0.295)	0.360 (0.336)	0.213 (0.554)
$\hat{s}_{it(WORK)}$	1.182** (0.015)	1.090 (0.122)	1.394** (0.050)
$\hat{s}_{it(HOURS)}$	-0.772* (0.069)	-0.242 (0.695)	-1.353** (0.023)
Transitions	141	77	64
Observations	35636	21992	11898
Transition into Local Government			
$\hat{y}_{it}$	-0.679 (0.448)	-0.863 (0.508)	-0.843 (0.498)
$\hat{s}_{it(PAY)}$	0.384 (0.105)	0.193 (0.572)	0.674** (0.050)
$\hat{s}_{it(SEC)}$	-0.239 (0.258)	-0.039 (0.899)	-0.511* (0.084)
$\hat{s}_{it(WORK)}$	1.301*** (0.001)	1.514*** (0.005)	1.314** (0.013)
$\hat{s}_{it(HOURS)}$	-0.879** (0.012)	-0.793 (0.118)	-1.111** (0.023)
Transitions	275	119	156
Observations	35636	23018	12273
Transition into NHS or Higher Education			
$\hat{y}_{it}$	-0.953 (0.325)	-2.181 (0.236)	-1.447 (0.224)
$\hat{s}_{it(PAY)}$	-0.897*** (0.000)	-0.393 (0.371)	-0.970*** (0.002)
$\hat{s}_{it(SEC)}$	0.341 (0.114)	0.097 (0.821)	0.373 (0.153)
$\hat{s}_{it(WORK)}$	0.773** (0.050)	1.286* (0.088)	0.791 (0.103)
$\hat{s}_{it(HOURS)}$	-1.204*** (0.001)	-1.605** (0.022)	-1.270*** (0.005)
Transitions	228	59	169
Observations	35861	21604	12401

The p values are given in brackets (). *** indicates significance at a 1% confidence level, ** indicates significance at a 5% confidence level, and * indicates significance at a 10% confidence level.