

# The Good Life: Comparing Job Quality Between the Private, Public and Voluntary Sectors<sup>1</sup>

**Alasdair Rutherford<sup>2</sup>**  
**Department of Economics**  
**University of Stirling**

*Are jobs in the nonprofit sectors “good jobs”? We examine job satisfaction and attitudinal data from the Workplace Employment Relations Survey (WERS) to estimate sector differences in unobserved job quality between the private, public and voluntary sectors. We find evidence of lower job quality in the public sector, while the voluntary sector is more similar to the private sector in some dimensions and the public sector in others. Voluntary sector jobs appear of similar quality to the private sector when examined in the economy as a whole. However, when jobs are compared within the Health & Social Work industries, voluntary sector jobs appear significantly lower quality than the private sector.*

JEL Codes: J28; J45; J81; L31

## **Introduction**

Are jobs in the nonprofit sectors “good jobs”? The mission-motivated, nonprofit voluntary sector is seen as attracting workers who share the organisations’ goals, and gain a warm-glow utility as part of their compensation. Analysis of sector wage differences finds mixed evidence of voluntary sector wage discounts, and in key industries voluntary organisations pay a premium above the private sector. But these empirical studies examine worker data, and are not able to control for unobserved job heterogeneity. To the extent that there are systematic differences in job characteristics between sectors, this will bias estimates of sector differences. The difficulty is in controlling for differences in the product market, and in quality produced by the organisations. In the health and social work industries quality can be difficult to measure and even observe. In particular, private sector care providers may engage in cream-skimming, where motivated by profit they provide services to the “easiest” cases. In the voluntary sector, with a significant mission motivation, organisations may engage in the opposite, helping those most in need and who are most “difficult” to provide services to.

---

<sup>1</sup> Working Paper (2009). This version: October 2009. This work was supported by the Economic and Social Research Council (ESRC). Please contact the author before citing this work.

<sup>2</sup> Division of Economics, University of Stirling, Cottrell 3X10, Stirling, Scotland FK9 4LA  
Tel: +44 (0)1786 467 488 Email: ar34 at stir.ac.uk Web: <http://acrutherford.blogspot.com>

In this paper we undertake an empirical analysis of several dimensions of attitudinal data to examine differences in “job quality” between the sectors. Within economics, job quality is usually equated with measures of wages, hours of work, and job security. There is also a small but growing economic literature examining subjective job satisfaction measures. We suggest that while these aspects are important, the analysis can be extended to other wider subjective measures that can capture other dimensions of job quality which workers experience. In particular, we examine measures of job-related stress to identify sector differences in the experience of carrying out a job.

We adopt a comparative approach: instead of trying to quantify a measure of actual job quality we measure comparisons between the three sectors.

## **Job Satisfaction and Job Quality**

### **The economics of job satisfaction**

The value of so-called “subjective variables” such as job satisfaction is a matter of debate amongst economists, despite their wide use in other social sciences. Freeman (1978) described them as measuring “... ‘what people say’ rather than ‘what people do’.”, but went on to argue that these variables contain useful information for predicting and understanding behaviour. More recently there has been a resurgence in interest in measures of “happiness” and its relation to income (Blanchflower & Oswald, 2004).

Job satisfaction is a subjective variable that is often collected in surveys of workers, usually as a categorical variable on a multi-point scale. This is of interest to labour economists, who assume that reported satisfaction reflects the utility received from the job. This can be modelled as:

$$u = u(Ind, Job, Org)$$

### **Job satisfaction and the Voluntary Sector**

There are two main economic explanations for the existence of nonprofit organisations. Firstly, the non-distribution of profits constraint facing nonprofits gives them a competitive advantage in providing services where quality is difficult to contract over, as the main incentive to exploit information asymmetry for profit is removed (Hansmann, 1980). Secondly, their nonprofit status and mission allows them to harness the motivation of individuals to donate labour to achieving a common goal (Rose-Ackerman, 1996).

If workers are motivated through receiving utility from performing their job, then we would expect to see higher levels of job satisfaction reported after controlling for

other characteristics of the individual, organisation and job. This allows us to investigate the ‘warm glow’ theory (Andreoni, 1990) of motivated workers.

Theories of ‘warm glow’ motivation predict that the extra utility of working in the voluntary sector will lead to a negative compensating differential, or lower wages, in this sector (Besley & Ghatak, 2005). However, the theory of nonprofit organisations suggests that they have a competitive advantage in providing quality that is difficult to measure. The potential to use efficiency wages, or a wage premium, to motivate workers in these types of jobs (Akerlof & Yellen, 1986) means that concrete predictions about whether wages in the voluntary sector will be higher or lower are difficult to make. Indeed, the empirical evidence is unclear (Leete, 2001), finding wage discounts, premia or little significant difference, depending on industry.

Little empirical work has been carried out to examine potential sector differences in job satisfaction. Benz (2005) undertook one of the first analyses, using data from the National Longitudinal Study of Youth (NLSY) for the US and the British Household Panel Survey (BHPS) for the UK. He compared workers in the private for-profit sector with workers in the private nonprofit sector by estimating binary and ordered logit job satisfaction equations to control for worker and job characteristics. Benz found evidence of higher levels of job satisfaction in the nonprofit sector. He also narrowed his sample to “professional services” workers, a category which the majority of nonprofit workers fell into. Here Benz found smaller but still significant positive satisfaction effects for nonprofit workers.

### **The Economics of Job Quality**

Clark (2001) estimates quit equations in the BHPS to test the significance of a range of measures of job satisfaction for quits. He shows that the magnitude of the effect these different aspects are very similar to the importance ranking of job characteristics reported by workers. He argues that these subjective measures have both predictive power and are supported by both what people say and what people do.<sup>3</sup>

Levy-Garboua et al (2007) shows that a worker’s propensity to stay in their current job is related to the residual of a job satisfaction equation, and is significant in the quit equation.

Clark (2005) examines changing job quality across seven OECD countries, arguing that income and hours alone are insufficient to describe overall job quality. He finds that despite rising wages and falling hours during the 1990’s, job satisfaction has been steady or declining. Clark suggests that this can be explained by increasing hard work and job-related stress.

---

<sup>3</sup> “To the extent that much academic research has focussed exclusively on pay and hours, labour economics may be missing out on some of the most important variables in explaining labour market behaviour” quoted from (Clark, 2001), page 237

## Hypothesis

Our assertion in this paper is that the voluntary sector ‘warm glow’ need not be expressed through the characteristics usually associated with job quality in economics: namely wages and hours. Instead, workers committed to a cause could undertake tasks that are less pleasant, more stressful or requiring more effort than an equivalent job in a non-mission organisation. Our hypothesis is that a significant sector difference in key job characteristics will remain even after controlling for worker, job and organisational characteristics traditionally used to explain job quality.

## The Dataset

### Descriptive Statistics

This paper uses the UK Workforce Employment Relations Survey 2004 (WERS), the fifth in a series of surveys aiming to provide a nationally representative account of the state of employment relations and working life inside British workplaces. WERS is an employer-employee linked survey of organisations.

Organisation in Sample by Sector	Whole Workforce (Percentage of Sample)	Health & Social Work Sub-Sample (Percentage of Sub-Sample )
Private	1,147 (67.3%)	80 (29.5%)
Public	480 (28.2%)	150 (55.4%)
Voluntary	78 (4.5%)	41 (15.1%)
<b>TOTAL</b>	<b>1,705</b>	<b>271</b>

Figure 1: Employers in Sample by Sector

Figure 1 above shows the breakdown by sector of organisations in both the whole sample and the Health & Social Work sub-sample. Although voluntary organisations make up only 4% of the whole sample, over 50% of them operate in the HSW industries, and so voluntary organisations make up nearly 14% of the sub-sample.

Organisation in Sample by Sector	Whole Workforce (Percentage of Sample)	Health & Social Work (Percentage of Sub-Sample )
Private	10,798 (63.3%)	666 (24.9%)
Public	5,439 (31.9%)	1,599 (59.8%)
Voluntary	821 (4.8%)	408 (15.3%)
<b>TOTAL</b>	<b>17,058</b>	<b>2,673</b>

Figure 2: Employees in Sample by Sector

Figure 2 above shows the breakdown by sector of employees in both the whole sample and the Health & Social Work sub-sample. Although voluntary sector workers make up only 5% of the whole sample, over 50% of them work in the HSW industries, and so voluntary organisations make up over 15% of the sub-sample.

We examine four groups of worker-reported subjective measure of job quality.

- Characteristics of the Job
- Organisational Attitudes
- Workers' Job-Related Stress
- Satisfaction with the Job

Within these categories we examine 23 individual worker questions. Figure 3 below shows the mean and standard deviation by sector for each of the questions examined in this paper. The full text of each question is detailed in the relevant section of this paper.

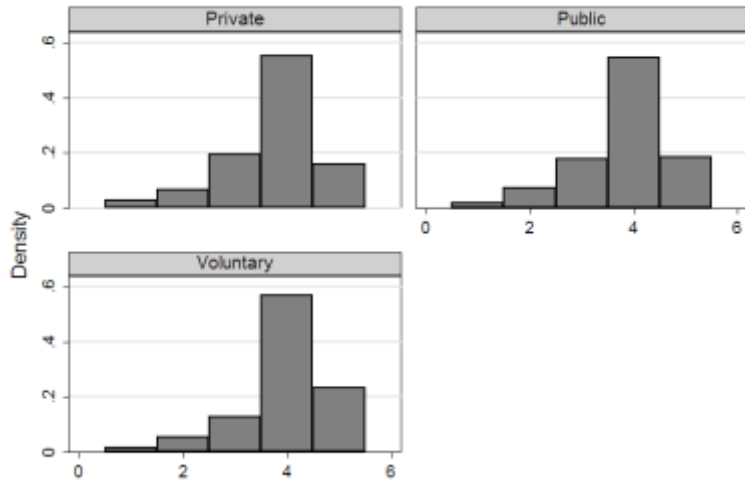
Variable	Private		Public		Voluntary	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<b>workhard</b>	3.93	0.82	4.08	0.82	3.96	0.88
<b>enoughtime</b>	3.16	1.05	3.50	1.09	3.18	1.08
<b>jobsecure</b>	3.59	1.05	3.64	1.08	3.78	0.98
<b>worry</b>	2.62	1.14	2.84	1.17	2.74	1.13
<b>influence_pace</b>	4.02	0.99	3.92	0.98	4.05	0.96
<b>influence_how</b>	4.33	0.82	4.26	0.81	4.41	0.75
<b>satisf_ach~e</b>	3.72	0.93	3.80	0.93	3.98	0.89
<b>satisf_init</b>	3.80	0.93	3.79	0.92	3.94	0.85
<b>satisf_inf~e</b>	3.56	0.95	3.48	0.94	3.64	0.87
<b>satisf_train</b>	3.27	1.09	3.34	1.05	3.51	1.01
<b>satisf_pay</b>	2.89	1.12	2.82	1.10	2.95	1.09
<b>satisf_job~c</b>	3.53	1.01	3.59	1.01	3.72	0.90
<b>satisf_work</b>	3.74	0.90	3.80	0.89	3.95	0.84
<b>stress_tense</b>	2.72	0.97	2.79	0.93	2.66	0.95
<b>stress_calm</b>	2.86	1.05	2.79	1.02	2.98	1.05
<b>stress_relaxed</b>	2.62	1.10	2.54	1.06	2.72	1.09
<b>stress_worry</b>	2.40	0.98	2.53	0.94	2.45	0.94
<b>stress_uneasy</b>	2.19	1.00	2.28	0.99	2.11	0.98
<b>stress_content</b>	2.98	1.07	2.96	1.05	3.24	1.03
<b>sharevalues</b>	3.47	0.91	3.64	0.89	3.81	0.88
<b>loyalty</b>	3.76	0.96	3.81	0.90	3.99	0.82
<b>pride</b>	3.64	1.00	3.64	1.00	3.95	0.91
<b>mgt_relations</b>	3.60	1.05	3.55	1.02	3.70	0.97

Figure 3: Summary Statistics

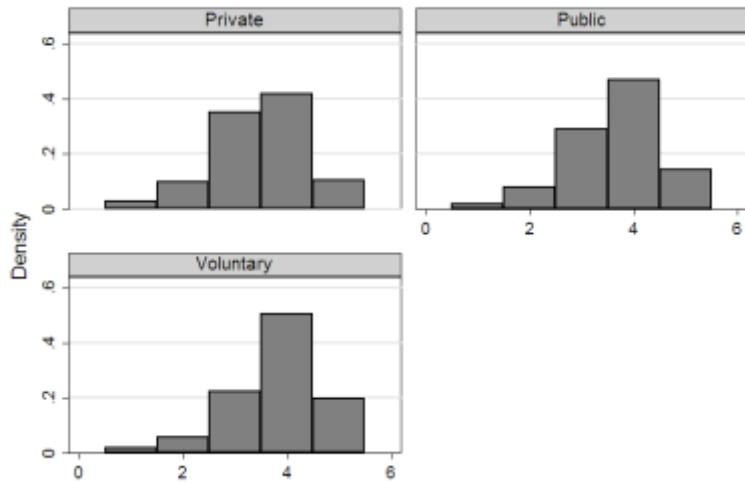
As the questions are responses to categorical questions, the distribution of responses is also important. Space does not permit a full descriptive analysis of each question,

but three key questions are shown in Figure 4 below as histograms of the responses to three of the questions, by sector.

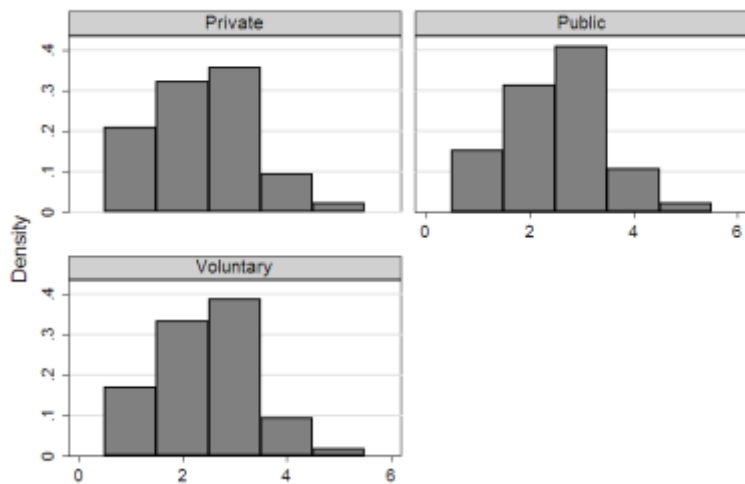
In Figure 4 (a) we can see that a greater proportion of workers in the voluntary and public sectors strongly agree that they are satisfied with their work. In Figure 4 (b) we can see that workers in the voluntary sector are most likely to agree that they share the values of their organisation, while workers in the private sector are least likely to agree. Figure 4 (c) shows that workers in the public and voluntary sectors are more likely report that they have spent more time being worried about their jobs than those in the private sector.



(a) How Satisfied are you with the work itself?



(b) To what extent do you agree with the statement "I share many of the values of my organisation"?



(c) Thinking of the past few weeks, how much of the time has your job made you feel worried?

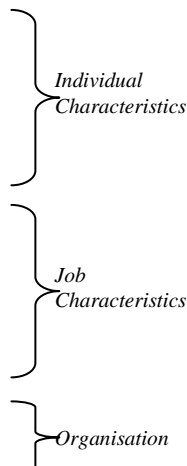
Figure 4: Histograms of responses by sector to Job Satisfaction, Organisational values, and Job-related Worry

## Estimating the Model

Sector differences are estimated in multivariate ordered logit equations with sector dummies, controlling for worker characteristics including gender, age, ethnicity, work hours, job status, organisation size, and tenure.

$$\Pr(Y_i = x_j) = \alpha + \beta_1 \cdot Ind_i + \beta_2 \cdot Job_i + \beta_3 \cdot Org_i + \beta_4 \cdot y_i + e_i$$

The explanatory variables used in the analysis of workers responses were:

- Age (age of employee in years)
  - Sex
  - Education (Highest Qualification)
  - Ethnicity
  - Job tenure (length of time with current employer)
  - Total hours (weekly hours)
  - Job status (Permanent or temporary)
  - Sector (Private / Public / Voluntary)
- 
- The variables are grouped into three categories:
- Individual Characteristics:** Age, Sex, Education (Highest Qualification), Ethnicity
  - Job Characteristics:** Job tenure (length of time with current employer), Total hours (weekly hours), Job status (Permanent or temporary)
  - Organisation:** Sector (Private / Public / Voluntary)

The regression is estimated with robust standard errors to account for fact that up to 25 workers are drawn from each employer, creating clusters by organisation.

Analysis of this data in a cross-sectional dataset means that problems of sample selection have not been directly tackled. However, Clark (Clark, 2001) argued that his analysis of job satisfaction attitudinal data showed that cross-sectional responses were a good predictor of future behaviour, justifying its analysis even in cross-section.

The results of the estimations are reported in the four groups outlined above.

## Characteristics of the Job

Figure 5 below shows the estimation results for the job characteristics questions in the whole workforce, and the Health & Social Work industries sub-sample.

Workers are responding to the following questions:

Do you agree or disagree with the following statements about your job?

*(Strongly Agree / Agree / Neither Agree or Disagree / Disagree / Strongly Disagree)*

- (1) My job requires that I work very hard
- (2) I never have enough time to get my work done
- (3) I feel my job is secure in this workplace



(4) I worry a lot about my work outside working hours

In general, how much influence do you have over the following?

*(A lot / Some / A little / None)*

(5) The pace at which you work

(6) How you do your work

### **Whole Workforce**

In the Whole Workforce sample, workers in the public sector are significantly more likely to agree that their job requires them to work hard, they don't have enough time to get their work done, and they worry about their work outside working hours. They are also significantly less likely to agree that they have influence over the pace and how they do their work. Voluntary sector workers report only that they have less influence over the pace of their work, but this is significant only at the 10% level. Perhaps surprisingly, there are no significant sector differences in perceptions of job security in either sector.

There is a very significant gender and industry difference, with workers who are female or in the HSW industries more likely to agree with all the statements. As the voluntary sector is predominantly female and located in the HSW industries, this accounts for much of the apparent sector differences in the descriptive statistics.

### **Health & Social Work Industries**

In the HSW sample, public sector workers report similar answers to the whole workforce sample, but are also less likely to agree that their job is secure. Voluntary sector workers are significantly more likely than private sector workers to report that they worry a lot about work outside of working hours. Voluntary sector workers also report less influence over the pace of their work, and are less likely to feel that their job is secure.

Whole Workforce						
	(1) workhard	(2) enoughtime	(3) jobsecure	(4) worry	(5) influence_pace	(6) influence_how
main						
Public Sector	0.282 (0.0717) <sup>***</sup>	0.549 (0.0717) <sup>***</sup>	-0.0936 (0.0740)	0.209 (0.0590) <sup>***</sup>	-0.347 (0.0598) <sup>***</sup>	-0.435 (0.0610) <sup>***</sup>
Voluntary Sector	-0.0212 (0.105)	0.0826 (0.107)	-0.0669 (0.112)	0.109 (0.0853)	-0.153 (0.0860) <sup>*</sup>	-0.0793 (0.0847)
sex	0.445 (0.0371) <sup>***</sup>	0.232 (0.0367) <sup>***</sup>	0.176 (0.0392) <sup>***</sup>	0.231 (0.0356) <sup>***</sup>	0.0910 (0.0361) <sup>**</sup>	0.0835 (0.0368) <sup>**</sup>
Health & S.W.	0.411 (0.0919) <sup>***</sup>	0.0609 (0.0907)	0.902 (0.102) <sup>***</sup>	0.273 (0.0733) <sup>***</sup>	0.289 (0.0794) <sup>***</sup>	0.369 (0.0832) <sup>***</sup>
<i>N</i>	17058	17058	17058	17058	17058	17058
pseudo <i>R</i> <sup>2</sup>	0.037	0.049	0.031	0.032	0.008	0.021

Health & Social Work Industries						
	(1) workhard	(2) enoughtime	(3) jobsecure	(4) worry	(5) influence_pace	(6) influence_how
main						
Public Sector	0.269 (0.112) <sup>**</sup>	0.606 (0.126) <sup>***</sup>	-0.407 (0.118) <sup>***</sup>	0.210 (0.0953) <sup>**</sup>	-0.491 (0.107) <sup>***</sup>	-0.457 (0.118) <sup>***</sup>
Voluntary Sector	0.211 (0.136)	0.167 (0.150)	-0.335 (0.152) <sup>**</sup>	0.253 (0.118) <sup>**</sup>	-0.301 (0.130) <sup>**</sup>	-0.177 (0.147)
sex	0.458 (0.108) <sup>***</sup>	0.147 (0.116)	0.374 (0.121) <sup>***</sup>	0.207 (0.104) <sup>**</sup>	0.0924 (0.0966)	0.283 (0.0990) <sup>***</sup>
<i>N</i>	2673	2673	2673	2673	2673	2673
pseudo <i>R</i> <sup>2</sup>	0.035	0.050	0.030	0.033	0.009	0.019

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Additional explanatory variables in regression include: age, tenure, education, working hours, job status, qualifications, ethnicity and industry.

Figure 5: Characteristics of the Job

## **Organisational Attitudes**

Workers are responding to the following questions:

To what extent do you agree or disagree with the following statements about working here?

*(Strongly Agree / Agree / Neither Agree or Disagree / Disagree / Strongly Disagree)*

(1) I share many of the values of my organisation

(2) I feel loyal to my organisation

(3) I am proud to tell people who I work for

(4) In general, how would you describe relations between managers and employees here?

*(Very good / Good / Neither good nor poor / Poor / Very poor)*

Figure 6 shows the results of the Organisation Characteristics equation estimates.

## **Whole Workforce**

In the Whole Workforce sample, public sector workers are less likely to agree that they feel loyal to their employer, that they are proud to tell others who they work for, and that relationships with managers are poorer than in the private sector. Surprisingly, there is no significant difference from the private sector in sharing the values of their employer.

There is little difference between the private and voluntary sectors, with most of the sector variation explained by gender and industry differences. Voluntary sector workers are less likely to report good relations between employees and management.

Being female is again strongly positively correlated with all characteristics. Workers in the HSW industries are also more likely across all sectors to report sharing values, feeling loyal, taking pride in their employer, and having good relations between managers and employees.

## **Health & Social Work Industries**

In the HSW sample, public sector workers are less likely to agree that they share values, feel less loyal, and are not proud to tell people who they work for compared to those in the private sector. They are also significantly likely to rate the relationship between management and employees as being worse than the other sectors.

Voluntary sector workers are not significantly different from private sector workers in responding to any of the questions.

Whole Workforce				
	(1)	(2)	(3)	(4)
	sharevalues	loyalty	pride	relations
main				
Public Sector	-0.121 (0.0759)	-0.246 (0.0682) <sup>***</sup>	-0.291 (0.0697) <sup>***</sup>	-0.357 (0.0791) <sup>***</sup>
Voluntary Sector	0.192 (0.131)	-0.00128 (0.110)	0.0812 (0.107)	-0.293 (0.117) <sup>**</sup>
sex	0.0712 (0.0368) <sup>*</sup>	0.280 (0.0366) <sup>***</sup>	0.206 (0.0367) <sup>***</sup>	0.187 (0.0391) <sup>***</sup>
Health & S.W.	0.721 (0.0978) <sup>***</sup>	0.495 (0.0917) <sup>***</sup>	0.594 (0.0960) <sup>***</sup>	0.700 (0.103) <sup>***</sup>
<i>N</i>	17058	17058	17058	17058
pseudo <i>R</i> <sup>2</sup>	0.031	0.019	0.020	0.024

Health & Social Work Industries				
	(1)	(2)	(3)	(4)
	sharevalues	loyalty	pride	relations
main				
Public Sector	-0.763 (0.130) <sup>***</sup>	-0.761 (0.129) <sup>***</sup>	-0.680 (0.129) <sup>***</sup>	-0.778 (0.139) <sup>***</sup>
Voluntary Sector	0.0615 (0.174)	-0.0961 (0.179)	0.0999 (0.173)	-0.215 (0.180)
sex	0.0757 (0.106)	0.373 (0.106) <sup>***</sup>	0.240 (0.103) <sup>**</sup>	0.164 (0.117)
<i>N</i>	2673	2673	2673	2673
pseudo <i>R</i> <sup>2</sup>	0.035	0.028	0.022	0.027

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Additional explanatory variables in regression include: age, tenure, education, working hours, job status, qualifications, ethnicity and industry.

Figure 6: Organisational Attitudes

## **Workers' Job-Related Stress**

Workers are responding to the following questions:

Thinking of the past few weeks, how much of the time has your job made you feel each of the following?

*(All of the time / Most of the time / Some of the time / Occasionally / Never )*

- (1) Tense
- (2) Calm
- (3) Relaxed
- (4) Worried
- (5) Uneasy
- (6) Content

Figure 7 shows the results of the Attitude equation estimates.

### **Whole Workforce**

In the Whole Workforce sample, public sector workers reported spending more time feeling tense, less calm, less relaxed, more worried, more uneasy, and less content than those in the private sector. All these coefficients are significant at the 1% level. Voluntary sector workers differ from private only in reporting that they spent more time worrying about their jobs and less feeling relaxed.

Female workers are also more likely to report feeling tense and worried, and less feeling calm and relaxed.

### **Health & Social Work Industries**

In the HSW sample, public sector workers again reported spending more time feeling tense, less calm, less relaxed, more worried, more uneasy and less content than those in the private sector. Voluntary sector workers are more tense, less calm, less relaxed, and more worried than those in the private sector. Female workers report spending more time feeling tense, and less content.

Whole Workforce						
	(1)	(2)	(3)	(4)	(5)	(6)
	stress_tense	stress_calm	stress_relaxed	stress_worry	stress_uneasy	stress_content
main						
Public Sector	0.255 (0.0629) <sup>***</sup>	-0.296 (0.0602) <sup>***</sup>	-0.355 (0.0556) <sup>***</sup>	0.233 (0.0567) <sup>***</sup>	0.220 (0.0538) <sup>***</sup>	-0.329 (0.0592) <sup>***</sup>
Voluntary Sector	0.0535 (0.0921)	-0.0962 (0.0853)	-0.168 (0.0832) <sup>**</sup>	0.141 (0.0831) <sup>*</sup>	-0.0324 (0.0805)	-0.0203 (0.0920)
sex	0.241 (0.0350) <sup>***</sup>	-0.0923 (0.0347) <sup>***</sup>	-0.0976 (0.0341) <sup>***</sup>	0.269 (0.0349) <sup>***</sup>	0.0221 (0.0346)	0.0493 (0.0352)
Health & S.W.	0.0294 (0.0781)	0.318 (0.0743) <sup>***</sup>	0.442 (0.0725) <sup>***</sup>	0.218 (0.0757) <sup>***</sup>	0.0753 (0.0701)	0.567 (0.0792) <sup>***</sup>
<i>N</i>	17058	17058	17058	17058	17058	17058
pseudo <i>R</i> <sup>2</sup>	0.023	0.018	0.018	0.028	0.019	0.015

Health & Social Work Industries						
	(1)	(2)	(3)	(4)	(5)	(6)
	stress_tense	stress_calm	stress_relaxed	stress_worry	stress_uneasy	stress_content
main						
Public Sector	0.535 (0.105) <sup>***</sup>	-0.578 (0.0982) <sup>***</sup>	-0.582 (0.0982) <sup>***</sup>	0.507 (0.106) <sup>***</sup>	0.386 (0.0931) <sup>***</sup>	-0.646 (0.0983) <sup>***</sup>
Voluntary Sector	0.207 (0.118) <sup>*</sup>	-0.221 (0.122) <sup>*</sup>	-0.229 (0.119) <sup>*</sup>	0.357 (0.129) <sup>***</sup>	-0.0388 (0.127)	-0.0808 (0.132)
sex	0.196 (0.0951) <sup>**</sup>	0.0648 (0.101)	-0.0344 (0.0973)	0.0935 (0.107)	-0.108 (0.104)	0.245 (0.0991) <sup>**</sup>
<i>N</i>	2673	2673	2673	2673	2673	2673
pseudo <i>R</i> <sup>2</sup>	0.037	0.026	0.028	0.035	0.025	0.025

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Additional explanatory variables in regression include: age, tenure, education, working hours, job status, qualifications, ethnicity and industry.

Figure 7: Workers' Job-Related Stress in the Health & Social Work Industries

## **Job Satisfaction**

Workers are responding to the following questions:

How satisfied are you with the following aspects of your job?

*(Very satisfied / satisfied / Neither satisfied or dissatisfied / Dissatisfied / Very dissatisfied)*

- (1) The sense of achievement you get from your work
- (2) The scope for using your own initiative
- (3) The amount of influence you have over your job
- (4) The training you receive
- (5) The amount of pay you receive
- (6) Your job security
- (7) The work itself

Figure 8 shows the results of the job satisfaction equation estimates.

## **Whole Workforce**

In the Whole Workforce sample, public sector workers differ from the private sector in being significantly less satisfied over all seven measures, with all but job security significant at the 1% level. Voluntary sector workers reported being less satisfied than private sector workers in scope for initiative, influence over their job, and the work itself. The remaining coefficients are also negative, but are not statistically significant. Female workers are significantly more likely to report being satisfied along all the dimensions of job satisfaction. Working in the HSW industries is significantly positively correlated with all the dimensions except satisfaction with pay.

## **Health & Social Work Industries**

The HSW sample is very similar, and public sector workers are again significantly less satisfied than those in the private sector across all dimensions. All the voluntary sector coefficients are again negative, but only satisfaction with job security is statistically significant.

Gender differences now play a less significant role, with female workers more likely to report higher levels of job satisfaction with achievement, influence, training and the work itself.

Whole Workforce

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	satisf_achieve	satisf_init	satisf_influence	satisf_train	satisf_pay	satisf_jobsec	satisf_work
main							
Public Sector	-0.332 (0.0640) <sup>***</sup>	-0.404 (0.0628) <sup>***</sup>	-0.438 (0.0616) <sup>***</sup>	-0.193 (0.0703) <sup>***</sup>	-0.200 (0.0650) <sup>***</sup>	-0.122 (0.0739) <sup>*</sup>	-0.381 (0.0624) <sup>***</sup>
Voluntary Sector	-0.128 (0.105)	-0.229 (0.0966) <sup>**</sup>	-0.210 (0.0926) <sup>**</sup>	-0.0453 (0.112)	-0.0250 (0.105)	-0.0596 (0.104)	-0.223 (0.102) <sup>**</sup>
sex	0.176 (0.0373) <sup>***</sup>	0.0725 (0.0374) <sup>*</sup>	0.0977 (0.0374) <sup>***</sup>	0.208 (0.0379) <sup>***</sup>	0.0949 (0.0365) <sup>***</sup>	0.144 (0.0402) <sup>***</sup>	0.235 (0.0376) <sup>***</sup>
Health & S.W.	0.992 (0.0838) <sup>***</sup>	0.788 (0.0800) <sup>***</sup>	0.526 (0.0792) <sup>***</sup>	0.829 (0.0935) <sup>***</sup>	-0.00109 (0.0894)	0.897 (0.107) <sup>***</sup>	0.897 (0.0835) <sup>***</sup>
<i>N</i>	17058	17058	17058	17058	17058	17058	17058
pseudo <i>R</i> <sup>2</sup>	0.024	0.017	0.013	0.014	0.012	0.029	0.023

Health & Social Work Industries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	satisf_achieve	satisf_init	satisf_influence	satisf_train	satisf_pay	satisf_jobsec	satisf_work
main							
Public Sector	-0.694 (0.100) <sup>***</sup>	-0.607 (0.104) <sup>***</sup>	-0.705 (0.0999) <sup>***</sup>	-0.680 (0.121) <sup>***</sup>	-0.304 (0.123) <sup>**</sup>	-0.425 (0.119) <sup>***</sup>	-0.753 (0.108) <sup>***</sup>
Voluntary Sector	-0.0718 (0.146)	-0.197 (0.141)	-0.219 (0.140)	-0.191 (0.153)	-0.0548 (0.163)	-0.316 (0.155) <sup>**</sup>	-0.169 (0.140)
sex	0.212 (0.123) <sup>*</sup>	0.109 (0.108)	0.156 (0.120)	0.512 (0.114) <sup>***</sup>	0.110 (0.105)	0.397 (0.118) <sup>***</sup>	0.258 (0.108) <sup>**</sup>
<i>N</i>	2673	2673	2673	2673	2673	2673	2673
pseudo <i>R</i> <sup>2</sup>	0.019	0.017	0.018	0.023	0.018	0.033	0.026

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Additional explanatory variables in regression include: age, tenure, education, working hours, job status, qualifications, ethnicity and industry.

Figure 8: Job Satisfaction in the Health & Social Work Industries



## Evaluating Job Quality in the Voluntary Sector

Analysis of the job characteristics suggests that both public and voluntary sector workers feel under more pressure in their jobs with greater levels of job-related stress, particularly in the HSW industries.

Figure 9 summarises the findings for the Whole Workforce sample.

	<b>Public Sector</b>	<b>Voluntary Sector</b>
<b>Experience of the Job</b>	Under pressure, and less autonomy	Little difference, some evidence of less influence over work
<b>Organisational Attitudes</b>	Less likely to feel loyal, proud or report good relations with management	Little significant difference, but poorer relations with management
<b>Job-Related Stress</b>	More tense, worried and uneasy, and less calm, relaxed, and content	More worried and less relaxed
<b>Satisfaction</b>	Less satisfied across all measures	Less satisfied, significantly with autonomy and the work itself

*Figure 9: Job Quality in the Whole Workforce, compared to the Private Sector*

In the expressed attitudes, voluntary sector workers were more worried, but many of the measures were not significantly worse than the private sector. It is perhaps surprising that the voluntary sector appears more similar to the private than the public sector.

This analysis has highlighted the significant effect that both industry and gender has on these measures of job quality. Female workers, and workers in the HSW industries, report higher job satisfaction across almost all the measures, and are more likely to report loyalty, pride and the sharing of employers' values in the organisational attitudes questions. The high proportion of female workers in the public and voluntary sectors, and the concentration of these sectors in the HSW industries, account for most of the variation in answers to these questions. It is after controlling for industry and gender that the analysis suggests that conditions are worse in the not-for-profit sectors. The second stage of analysis, focussing on the HSW sub-sample, explores this further by attempting to compare similar organisations with one industry classification, across the three sectors.

Figure 10 summarises the findings for the HSW industries sub-sample. They suggest that for both the public and voluntary sectors jobs are significantly more stressful than those in the private sector.

	<b>Public Sector</b>	<b>Voluntary Sector</b>
<b>Experience of the Job</b>	Under pressure, less job security and lower autonomy	Concerns about job security, with some evidence of lower autonomy
<b>Organisational Attitudes</b>	Less likely report loyalty and pride; less happy with management relations	No significant differences
<b>Job-Related Stress</b>	More tense, worried and uneasy, and less calm, relaxed, and content	More tense, and worried, and less calm, and relaxed
<b>Satisfaction</b>	Less satisfied in all dimensions	Less satisfied with job security, other coefficients negative but insignificant

*Figure 10: Job Quality in the Health & Social Work industries*

To be clear on what this is suggesting: average levels of job quality are higher in the health and social work industries, compared to the rest of the economy. However, within this industry, workers in the public and voluntary organisations report experiencing lower job quality. The high concentration of voluntary organisations in these industries means that overall descriptive statistics show high job quality in the nonprofit sectors. However, analysis within these industries identifies a sector difference that suggests jobs in the nonprofit sectors are lower quality in some measures.

## **Conclusion**

It should be noted that these findings are mainly descriptive, and subject to the limitations of a cross-sectional dataset with potential for sector-selection. However, they do paint a strong quantitative picture of more stressful job experiences that supports the existing qualitative research on job quality, particularly within the HSW industries.

We should be clear about what this finding implies. It does not suggest necessarily that there is a market failure, as long as employees have the freedom to move between jobs in different sectors. In fact, this finding could lend some support to a warm-glow motivation explanation. If identical workers choose between identical jobs, where only the sector differs, the fact that some workers choose the nonprofit sector with higher reported stress levels suggests that there must be some compensation for this. A warm-glow utility from working in a mission-oriented organisation could provide this compensation.

The findings from the organisational attitudes questions create a problem for this explanation however. We would reasonably expect that mission-motivated workers would answer more positively about sharing their employers' values, loyalty, and pride in their employer. The descriptive differences found in these questions are instead almost completely explained by industry and gender, rather than by the sector.

## References

- Akerlof, G. A. & Yellen, J. L. (1986), *Efficiency wage models of the labor market* Cambridge U.P, Cambridge.
- Andreoni, J. (1990) "Impure Altruism and Donations to Public-Goods - A Theory of Warm-Glow Giving", *Economic Journal*, vol. 100, no. 401, pp. 464-477.
- Benz, M. (2005) "Not for the profit, but for the satisfaction? Evidence on worker well-being in non-profit firms", *Kyklos*, vol. 58, no. 2, pp. 155-176.
- Besley, T. & Ghatak, M. (2005) "Competition and incentives with motivated agents", *American Economic Review*, vol. 95, no. 3, pp. 616-636.
- Blanchflower, D. G. & Oswald, A. J. (2004) "Well-being over time in Britain and the USA", *Journal of Public Economics*, vol. 88, no. 7-8, pp. 1359-1386.
- Clark, A. E. (2001) "What really matters in a job? Hedonic measurement using quit data", *Labour Economics*, vol. 8, no. 2, pp. 223-242.
- Clark, A. E. (2005) "Your money or your life: Changing job quality in OECD countries", *British Journal of Industrial Relations*, vol. 43, no. 3, pp. 377-400.
- Freeman, R. B. (1978), *Job Satisfaction as an Economic Variable*, no. w0225 edn, National Bureau of Economic Research, Cambridge, Mass.
- Hansmann, H. B. (1980) "The Role of Nonprofit Enterprise", *Yale Law Journal*, vol. 89, no. 5, pp. 835-901.
- Leete, L. (2001) "Whither the nonprofit wage differential? Estimates from the 1990 census", *Journal of Labor Economics*, vol. 19, no. 1, pp. 136-170.
- Levy-Garboua, L., Montmarquette, C., & Simonnet, V. (2007) "Job satisfaction and quits", *Labour Economics*, vol. 14, no. 2, pp. 251-268.
- Rose-Ackerman, S. (1996) "Altruism, nonprofits, and economic theory", *Journal of Economic Literature*, vol. 34, no. 2, pp. 701-728.