

New 'flexible' forms of work and individuals' job satisfaction

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Abstract

An important part of the empirical studies on job satisfaction examines what the impact of the structural changes in the labour market would be on individuals' job satisfaction. Following these market changes, there was an increasing focus of public policy on "flexible" labour-market practices such as part-time employment, overtime, contracts of temporary duration, etc. These flexible practices and especially the wide-spread introduction of part-time jobs raised concerns that the quality of part-time jobs may be inferior to that of full-time jobs with bad working conditions, precarious employment relationships, lower pay and limited career prospects. In this article, we study the relationship between part-time work and job satisfaction more closely, making a distinction between voluntary and involuntary part-time work. The results from this study show that, all other things being equal, part-time jobs are segmented in Greece in the sense that involuntary part-time workers are less satisfied, and voluntary part-time workers are more satisfied. Furthermore, the majority of women turn to low-prestige part-time jobs, which reduces their job satisfaction significantly.

Keywords: Overall Job satisfaction; Gender differences; part-time job

JEL classifications: J28, J16

Introduction

Following the changes in the labor market in the last decade, there was an increasing focus of public policy on "flexible" labour-market practices such as the creation of part-time jobs in OECD countries. These types of jobs tend to offer more flexibility than full-time jobs because the mean number of hours dedicated to work is considerably less. A part-time job permits the employee to work on an hourly basis, generally less than 36 hours per week. Part-time jobs are flexible because in many cases the employee can determine the days or the hours to work and it provides a means of combining domestic and market production, whilst maintaining workforce skills or experience for the future.

However, the widespread incidence of part-time jobs in some countries (21,8% of workers in EU-27 were employed in part-time jobs; European Commission, 2008) raised concerns that the quality of part-time jobs may be inferior to full-time jobs with bad working conditions,

precarious employment relationships, lower pay¹ and limited career prospects. Employees and in particular men who are employed in part-time jobs are at much higher risk of unemployment or inactivity than those in full-time jobs. Furthermore, the Employment Outlook of the OECD (2005), reports that hourly earnings in part-time jobs are lower than in full-time jobs. Women and young workers have the highest percentage of involuntary part-time jobs - those who declare that they would like to work more hours but cannot find such jobs - compared to men (OECD, 2001) and more than two thirds of those involuntarily occupied in part-time work are in low quality jobs (European Commission, 2001). Therefore, it has been questioned whether or not part-time jobs are merely a palliative for those people unable to obtain a full-time job, or if they serve as a political strategy to cover the incapacity of governments to provide the grounds for employment generation (O'Connell and Gash, 2003). This highlights the importance of an examination of the effects and the consequences of these new 'flexible' forms of work on individuals' job satisfaction.

Thus, when studying the effect of working hours on job satisfaction, actual working hours should be related to desired hours. When actual working hours are equal to desired hours, then part-time arrangements would imply higher job utility. As noted earlier, a large percentage of those who work part-time would have preferred to have full-time jobs. In such a case, involuntary part-time contracting would imply a lower level of utility. Hence, the part-time job market can be based on the hypothesis that some employees voluntarily choose part time jobs while others choose part time jobs because they are unable to find a full-time job (Westergard-Nielsen, 2004). In this case, the utility derived from work for those in voluntary part-time jobs will be different from those in involuntary part-time jobs.

Additionally, job satisfaction of part-time workers may be different between men and women. As argued by Akerlof and Kranton (2000), society norms affect the gender division of labor. Thus, it could be that men may be happier in full-time work and women in part-time job, since both are adopting behavior dictated by social norms. Booth and van de Ours (2008) test this assumption empirically by examining the preferences between the two gender for full time and part-time jobs. They found, in line with the gender identity hypothesis, that part-time women are more satisfied with their hours of work compared to full-time women and men are happier in full-time work, since "both are adopting modes of behavior dictated by social custom" (p. 6). Additionally Bender et al (2006) found that women are happier than men when they can reconcile between work and domestic activities.

An alternative theory which tries to explain gender differences in working hours is based on Becker's specialization hypothesis (1965). An empirical prediction of the specialization model is that women who specialize in home production will be more satisfied with a part-time arrangement compared to men who specialize in market work. Thus, this specific study investigates the relationship between voluntary and involuntary part-time jobs on women's and men's job satisfaction.

¹ The report of Employment in Europe (2002) found that the impact of part-time work on hourly earnings reveals country specific effects. In Austria, Belgium, France and the Mediterranean countries, there is a positive relationship, in The Netherlands, Ireland, Denmark and Finland, there is no relationship between these two variables, and in the UK, a negative relationship exists.

Part-time jobs in Greece

In Greece, until 2008 part-time work represented a small part of the labour market (10%) among EU countries (Employment in Europe, 2008). Moreover, despite conscious efforts (e.g. legislative provisions) made by the Greek government aimed at providing more incentives for holding part-time jobs (Sabethai, 2000), there is no evidence of a growing percentage over time. The low prevalence of part-time employment in Greece is mainly related to factors such as the following: the concentration of a significant proportion of employment in micro enterprises, which seldom take on part-time workers; the short duration of part-time employment contracts, which makes such contracts more precarious; and the low level of pay for part-time work. It is possible that the limited number of part-time jobs in Greece is due to the high level of non-wage labour costs and more specifically the administrative burdens associated with hiring. These burdens might discourage hiring two part-time employees in favour of a single full-time employee (Nicolitsas, 2006).

Women have the biggest percentage of part-time jobs (9.1%), compared to only 2.2% for men. The corresponding figure for the EU-15 is 37% (which means that one third of women employees are in part-time jobs)². This difference may be partly due to the much higher share of self-employed women in Greece compared to the EU-15. Yet, this proportion remains low, which is particularly worrisome in a country that has one of the lowest (though growing) participation rates of female employees in the EU-15. Furthermore, according to Ioakimoglou and Soumeli (2002) part-time employment in Greece is directly interwoven with low pay, low skilled jobs, limited prospects of career development, low social benefits and partial insurance coverage, which also entails low pension rights. For these reasons, and also due to remaining perceptions of institutional deficits from the past, which make Greeks more likely to believe that part-time workers are less protected than full-time workers, employee representatives are very suspicious of part-time work (Gavroglou, 2003). Moreover, Greece presents the highest transitions rates in the EU-15 from part-time work into inactivity and, in contrast with the other European countries, in which the percentage of involuntary part-time work has decreased slightly, involuntary part-time work has increased (42% of the total part-time jobs are involuntary : Employment in Europe, 2008).

The empirical model

Measurement of subjective questions- The measure of Job satisfaction

One of the most difficult issues that arise from the analysis of job satisfaction or life satisfaction is the measurement of these concepts. Happiness research uses subjective measures which are based on respondents' opinions about their own situation. The subjective questions are quite similar across surveys, asking for an overall evaluation of overall well-being, job satisfaction, health, family conditions, etc. In many questionnaires, people are asked simple questions such as:

² Nicolitsas, 2006

"How satisfied are you with your job, health, life, etc."

The answers are ranked according to a numerical scale; for example the European Community Household Panel (ECHP) scale (which is also used in this article) ranges from 1 (completely dissatisfied) to 6 (completely satisfied). Other surveys use slightly different wording for the question and some use a different number of points on the satisfaction scales, but they are all broadly trying to capture an individual's self-evaluation of his or her own well-being at that moment.

Satisfaction as identified by any of these measures is indicative of a variety of observable behaviors. For example, a group of psychologists, Sandvik et al (1993) find that one-time self-reported life satisfaction, experience-sampling method (ESM)³ measures of life satisfaction, reports by friends and relatives, and people's memories of positive versus negative life events show a moderate to strong positive correlation. People who say they are happy are perceived by others as being happy. In short, it seems that what the psychologists call subjective well-being is a real phenomenon. Furthermore, subjective questions present social-non market-interaction, which is not adjusted by price movements, such as preference interdependence or social learning (Senik, 2005). Individuals are supposed to be the best judges of their own situation; they evaluate their level of subjective well-being with regard to their expectations about the future, their past experience or in comparison with others. Since overall subjective satisfaction is the reflection of observable behaviors and an individual's weighting in his or her mind of all aspects of life then the former should serve as empirical proxy for the overall well-being.

As subjective questions are based on individuals' judgments, it needs to be checked that individuals are able and willing to give meaningful answers to those questions. Thus, the utilization of subjective questions requires that two assumptions be accepted: interpersonal comparability and cardinality (Ferrer-i-Carbonell and Frijters, 2004). The first condition is that people have a very similar understanding of concepts such as satisfaction, happiness or job satisfaction. The idea that individuals who evaluate their well-being with the same numerical rating feel equally well has been widely accepted in psychology. Generally, it is found that happy people are rated as happy by friends and family (Kahneman et al, 1997) while self-reported happiness scores are correlated with various physiological and neurological phenomena, e.g., the amount of smiling or frowning (happy people smile more often and are less likely to commit suicide; Sandvik et al, 1993). Interestingly enough, Van Praag (1991) has also shown that individuals belonging to the same language community translate verbal evaluation such as "good" or "bad" into similar numerical figures in a context-free framework.

³ The experience-sampling method (ESM) assesses respondents' subjective well-being (SWB) at random times usually over a period of one to four weeks. This response might give an indication of a person's average level of SWB that is not affected by daily or weekly mood swings. Because ESM can be very expensive when a large sample is required, recent studies have begun to use the Day Reconstruction Method (DRM), created by Daniel Kahneman and others as an alternative method. Volunteers in DRM studies are asked to record their activities during the day along with what they were feeling while performing them.

The second condition is that the difference of a sequence of verbal labels is the same for all people in the sample. For example if one answers '5' and a second '10', the second respondent is twice as happy as the first one. Schwartz and Strack (1999) found that people interpret a sequence of verbal labels as a cardinal question in the same way as they interpret weights in the supermarket in a cardinal sense. Additionally, the differences between satisfaction responses correspond to a situation where respondents try to maximize the information they give in the questionnaire (Praag Van, 1991). Yet, many economists are very reluctant to measure subjective utility as cardinal and thus a big part of this literature concentrates not on comparing the absolute value of well-being but rather on identifying the determinants of well-being. In this case, the cardinality hypothesis is not necessary. This assumption implies that the subjective data can be treated ordinally, so that being more highly rated on the well-being scale simply reflects higher well-being. However, ordinal or cardinal treatment of satisfaction score does not affect the results significantly, as all coefficients change in the same direction and the indifference curves are similar (Ferrer-i- Carbonell and Frijters, 2004).

The methodology

The methodology employed to estimate subjective job satisfaction is to run regressions that relate the job satisfaction to part-time jobs and a number of personal and other job characteristics. Job satisfaction is an ordered categorical variable, which means that respondents can only express their responses on a non-linear scale. Therefore, the researcher does not know the respondent's exact feeling but only the interval to which she/he belongs, and, for this reason, it is assumed that job satisfaction is a latent variable that is not directly observable.

In an ordered probit model, the latent probability of reporting a job satisfaction level JS^* is:

$$JS = \Phi^{-1}(JS^*) = \beta X + e \quad e | X \sim Normal(0,1)$$

where X

is a vector of exogenous personal and work related characteristics, β is a vector of coefficients to be estimated, and e indicates the error term. Assuming that $\mu_1 < \mu_2 < \dots < \mu_j$ where μ_1, \dots, μ_j are the cutoff points for the latent variable

$$JS^* = \begin{cases} 0, & \text{if } JS^* \leq \mu_1 \\ 1, & \text{if } \mu_1 \leq JS^* \leq \mu_2 \\ \dots \\ j, & \text{if } JS^* > \mu_j \end{cases}$$

the parameters β and μ can be estimated by maximum likelihood. For each individual i , the log-likelihood is

$$l_i(\beta, \mu) = 1[y_i = 0] \log[\Phi(a_1 - x_i \beta)] + 1[y_i = 1] \log[\Phi(a_2 - x_i \beta) - \Phi(a_1 - x_i \beta)] + \dots + 1[y_i = j] \log[1 - \Phi(a_j - x_i \beta)]$$

However, it has been suggested (as noted earlier) that via an appropriate utility transformation, cardinality of job satisfaction can be assumed. The continuous version of the job satisfaction variable relies on the idea that any translation of ordered variables into numbers which preserves the rank-order of the values will yield qualitatively similar results. The method that uses the conditional mean is called the Probit Ordinary Least Squares (POLS) approach (Praag Van and Ferrer-i-Cardonell, 2004).

According to this method, the unknown true value of job satisfaction, JS^* , may approximate by its conditional mean \bar{JS} (see Maddala, 1983, p.366)

$$\begin{aligned} \bar{JS} &= E(\tilde{JS} \leq \mu_{i-1}) = \frac{-n(\mu_{i-1})}{N(\mu_{i-1})} && \text{if JS}=1 \\ \bar{JS} &= E(\mu_{i-1} < \tilde{JS} < \mu_i) = \frac{n(\mu_{i-1}) - n(\mu_i)}{N(\mu_i) - N(\mu_{i-1})} && \text{if } 1 < \text{JS} < 6 \\ \bar{JS} &= E(\tilde{JS} \geq \mu_i) = \frac{n(\mu_i)}{1 - N(\mu_i)} && \text{if JS}=6 \end{aligned}$$

where $n(\cdot)$ and $N(\cdot)$ are the standard normal density and distribution functions.

Additionally, the longitudinal dimension of the data is exploited in two ways. First, we estimate a fixed effects model uses within-group variations and has the advantage of leaving out all the time invariant unobserved heterogeneity, even when this is correlated with the observed variables estimated by individual random effects by controlling for time fixed effects through a set of year dummy variables.

The fixed effect model has the following form:

$$y_{it} = X_{it}\beta + \alpha_i + e_{it}$$

where i is the individual, t is the year of observations, and α_i are the individual effects that vary across individuals but remain constant across time.

Secondly, a random effects model which uses both within- and between-group variations and thus also allows for time invariant independent variables is used. The random effects estimator allows the inclusion of explanatory variables that do not change across time, such as gender, race or education.

The random effect model is:

$$y_{it} = X_{it}\beta + \alpha_i + e_{it}$$

where the individual random effect, α_i is likely to be correlated with some, if not all the explanatory variables, X_{it} .

Hence, in the empirical analysis which follows we compare an ordered latent response model (ordered probit model) where the individual fixed effects (time-invariant unobserved factors) are not taken into

account satisfactorily, with a cardinal estimator of job satisfaction where it has been possible to control individual effects, which can take the form of either fixed or random effects.

The dataset

The current study is based on job satisfaction data from European Community Household Panel (ECHP). This is a yearly panel of the EU-15 countries carried out by the Statistical Office of the European Communities (Eurostat) in cooperation with the National Statistical Office of each country. The ECHP is one of the most valuable data sets for studying job satisfaction over time (from 1994 to 2001). It contains a considerable amount of information on the personal, human capital and employment characteristics, which is essential in order to study job satisfaction and, in addition, the panel nature of the data allows us to control unobservable individual heterogeneity. For this article, the 8 waves (from 1994 to 2001) are used for the Greek sample, including more than 19,000 observations. These observations correspond to 4,900 individuals who have been, on average, a little less than 4 years on the panel. The sample is further restricted to individuals between 18 and 65 years of age and those in paid employment working at least 15 hours per week.

Reported job satisfaction is based on the question "*How satisfied are you with your work or main activity?*" Responses range on a scale of 1 "completely dissatisfied" to 6 "completely satisfied."

The dataset permits us to make a distinction between voluntary and involuntary part-time work in order to detect whether or not significant differences in job satisfaction exist among voluntarily and involuntarily part-time workers in Greece. The interest group consists of all employees, normally working, i.e. more than 15 hours in paid employment. The distinction between voluntary and involuntary part-time work is implemented for the Greek sub-sample of the ECHP according to a variable defining the reasons that an employee does not work full-time. The workers who reply that they "want but cannot find a full-time job", "illness or disability" or "other reasons" are grouped as involuntary part-time workers. In contrast, those who reply that they "don't want a full-time job", that they are "undergoing education or training", or that they are "doing housework or raising children" are considered to be voluntary part-time workers.

Descriptive statistics

As is clear from Table 1 in the Appendix, part-time workers in Greece are primarily involuntary (3.5% versus 0.8% voluntary). Part-time workers are found among women, who are mainly involuntary part-time workers (5.2% versus 1.8%), or those who work in the agricultural sector (13%). Part-timers (mainly involuntary) are also found among higher educated workers and surprisingly among workers in high-skilled occupations (such as managers and professionals). Moreover, workers who are single are most likely to be employed in part-time jobs. Part-time jobs are almost equally distributed across age groups.

It is also shown that full-time employees in Greece enjoy higher levels of job satisfaction than involuntary part-time workers. Job satisfaction is 3.7 for full-timers (on a 1 to 6 scale), compared to 2.5 for involuntary part-timers. Voluntary part-time workers (3.6)

seem to be as satisfied as the full-timers. If we now compare job satisfaction of voluntary and involuntary part-timers within the sample of part-timers, it is found again that the mean satisfaction of involuntary part-time workers is lower (3.44) compared to that of voluntary part-time workers (3.94).

Econometric results

Table 2 in the Appendix, reports the results obtained from the estimation of the job satisfaction employing both the random and the fixed effects estimators using the Probit-Ordinary Least Squares (POLS) method. The conditional mean is utilized in order to transform the job satisfaction variable, into a continuous one.

These models will also be replicated separately for men and women employees. Such a distinction would provide information related to whether the social norms and specialization play an important role in affecting the gender division of labor; that is women prefer working part-time to full-time in order to combine housework and labour market production, and men are the main providers of the household.

However, it is quite likely that there is self-selection into part-time work and hence workers are not randomly allocated across jobs of varying working hours arrangements. This suggests that some workers may choose part-time jobs because they provide flexibility for people who are heavily involved in activities outside the labour market, such as child care and education, act as an entry point to full-time jobs and allow the semi-retired to earn an income and continue to utilize their human capital. However, the above argument assumes that part-time job is voluntary, whereas as we just explained part-time job in Greece is mostly involuntary. Even though it is not unreasonable to assume that in the Greek case the issue of self-selection is a negligible one, we try to correct this. Usually, the literature do not examine this issue as it is quite difficult to find reasonable variables explaining the choice of working hours arrangements, but at the same time, they are also not correlated with job satisfaction. Since the variables 'number of children' and the interaction variable 'female * number of children under 12 years of age' are insignificant in the job satisfaction equation, they are likely to constitute good instruments. However, a statistical test⁴ was undertaken which indicates that these variables are not adequate for identifying the selection equations, and therefore we limit the analysis to single-equation estimates. Additionally, it may be the case that an unobserved personal trait, say "the taste for a good life" or something similar, affect both job satisfaction and the self-selecting into voluntarily working part-time. If there is an omitted variables problem, and this omitted variable is constant over time for a given individual, a fixed-effects model will take care of that problem (Model 2).

In these models, the parameters of interest are the dummy variables for involuntary and voluntary part-time jobs. The parameter estimate for involuntary part-time is negative and significant for the whole sample and holds for all the estimated models whether POLS with random

⁴ In our model, the Sargan test, which tests the joint null hypothesis that the model is correctly specified and that the instruments used are valid, is rejected.

and fixed effects or Ordered probit. A significantly positive coefficient is found with respect to voluntary part-time work for the whole sample. All other things being equal, involuntary part-time workers in Greece are therefore less satisfied, compared to full-timers, while those who voluntarily take up part-time work are more satisfied. This is an important finding with obvious implications for achieving the Lisbon targets on employment growth, as it highlights the importance of making part-time jobs attractive in the spirit of the EU Directives for Temporary and Part-time work. In other words, to ensure that workers under different working time arrangements enjoy a pension plan, bonuses, security and stability, sickness benefits, and decent pay.

However, the above evidence seems to hide some clear differences between men and women. Firstly, it is found that the effect of voluntary part-time work is greater for men, which probably reflects the fact that voluntary part-time men workers are more likely to have chosen such a working time arrangement. This result is in contrast with the Becker's specialization hypothesis, which assumes that the working arrangements in a household will be characterized by specialization of labor, whereby women engage in home work and men in market sector work. Secondly, taking into account individual fixed effects reveals a difference between men and women⁵. In Greece it is found that women who involuntarily take part-time jobs are less satisfied. One possible explanation could be that men see part-time jobs as a hope for full-time employment while women perceive this as a more permanent condition with a little hope for change. This is in line with the results of a European Survey (1998)⁶ which indicate that 66% of married couples in Greece with a child younger than 6 years of age prefer a work pattern that involves full-time employment by both spouses, while only 11% of the couples prefer full-time employment for the husband and part-time employment for the wife. This is not surprising given the fact that the cost of living in Greece has increased significantly and households are in need of more than one salary for their support; thus women have turned to such part-time jobs, which are often intrinsically unsatisfying and dead-end. It is indicated that women are often given preference over men in recruitment to these relatively new 'flexible' forms of employment because employers regard women as being 'obedient' and 'accommodating' (Paniniotis and Stavroulakis, 1997).

Conclusions

The above analysis focused on the study of the relationship between part-time work and job satisfaction more closely, which also highlights the crucial distinction between voluntary and involuntary part-time work. While involuntary workers are found to be less satisfied than full-timers, those who take up part-time work voluntarily seem to be the most satisfied of all groups. This finding is particularly important for Greece since, part-time work is limited and to a large extent involuntary. In addition, since involuntary

⁵ This difference indicates that the results are sensitive with respect to the assumptions one makes about time-invariants unobservable and not if one assumes cardinality or ordinality of job satisfaction.

⁶ European Foundation for the Improvement of Living and Working Conditions (1998).

part-time work are generally related to extreme worker dissatisfaction, it becomes clear that emphasis should be put on making these contractual forms function as stepping stones for reintegrating individuals into high-quality employment. Policy makers should address involuntary part-time dissatisfaction by considering that workers under different contract status enjoy similar rights and protection. For example access to good working conditions, appropriate protection against discrimination or unfair dismissal, decent pay, and the right to transfer acquired social rights in the case of job mobility (European Commission, 2003b, p.14). At the same time, the positive result of voluntarily part-time employment should be recognized and facilitate through appropriate contractual forms. This can be achieved by focusing on increasing the share of voluntary part-time work as well as by introducing more flexibility in permanent contracts and more security in fixed-term ones.

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Appendices

Table 1: Distribution of employees across demographics, by part-time/full-time status

Variables		Full-Time	Part-Time	
			Involuntary	Voluntary
Job satisfaction (mean, sd)		3.72 (1.20)	2.52 (1.52)	3.6(1.23)
Gender				
	Females	93	5.2	1.8
	Males	97.3	2.4	0.3
Sector				
	Public	94.52	4.77	0.71
	Private	95.72	3.31	0.97
Education				
	High	93	6	1
	Middle	97	2.2	0.8
	Low	95.4	3.8	0.6
Industry				
	Agriculture	87.5	11.7	0.7
	Manufacturing	97.8	1.9	0.2
	Services	94.2	4.5	1.1
Female with children under 12 years of age				
	Yes	93.1	4.42	2.39
	No	96.1	3	0.90
Cohabiting/married				
	Yes	96.7	2.4	0.7
	No	95.4	3.7	0.7
Occupation				
	Manager/Professional	89	9.4	1.5
	Intermediate	97.2	1.8	0.8
	Blue-collar	96.2	3.0	0.6
Total Percent		95.50	3.48	0.77
Total Number		19,105	697	154

Table 2: The effect of part-time jobs on job satisfaction for the whole sample and by gender

	ALL		MALE		FEMALE	
	1	2	3	4	5	6
<i>Cardinal job Satisfaction</i>						
	Coef.	t	Coef.	T	Coef.	t
POLS Random effects-Model 1						
Involuntary Part-Time	-0.182	-5.07***	-0.139	-2.63***	-0.209	-4.22***
Voluntary Part-Time	0.244	3.47***	0.388	2.56**	0.196	2.42**
POLS fixed effects-						

Model 2

Involuntary Part-Time	-0.104	-2.60***	-0.059	-0.99	-0.145	-2.62***
Voluntary Part-Time	0.180	2.16***	0.283	1.64	0.138	1.44

*Ordinal job
satisfaction***Ordered probit with averages-Model 3**

Involuntary Part-Time	-0.244	-4.64***	-0.205	-2.64***	-0.268	-3.74***
Voluntary Part- Time	0.362	3.55***	0.555	2.52***	0.298	2.54**

*=significant at 10% level; **=significant at 5% level; ***=significant at 1% level

The controls for the above models contain age, a female dummy variable, a marriage dummy variable, a children dummy variable, two educational dummy variables, an immigrant dummy variable, a dummy variable with value 1 for those self-assessing their own health as being "good" or "very good, log gross monthly wage, hours of work (total number of hours - including paid overtime - in main job or business), job tenure (3 dummy variables), a dummy variable identifying if a worker has two jobs, a dummy variable identifying private sector employees, two occupational dummy variables, six industry dummy variables, as well as seven year dummy variables.