

Does Job Switching Lead to Greater Satisfaction? Evidence from South Korea

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July 1, 2007

Abstract

Rationality suggests that people, when faced with choices, choose one that provides them with greatest utility. When making a career choice, a worker should move to a new job if the new job provides him with greater utility than the old one. The paper examines whether job switching would actually increase workers' well-being as measured subjectively by overall life satisfaction, overall job satisfaction, and satisfaction with various aspects of a job, such as wages, working hours, and job stability. As other studies of subjective well-being, the possibility of self-selection or reverse causality from satisfaction to job switching must be considered. Two methods are used here. First, the panel structure of the Korean Labor and Income Panel Study from 1998 to 2003 allows me to account for individual effects using a fixed-effects logit model. Second, in a two-stage instrumental-variable estimator, each worker's decision to quit is instrumented in the second stage by the predicted propensity to quit from the first stage. A comparison between the fixed-effect logit model and a simple pooled regression shows that job satisfaction might be largely determined by each individual's inherent satisfaction. The two-stage estimator confirms such result: workers with higher propensity to quit have lower job satisfaction.

I. Introduction

Subjective measures of well-being, which are based on level of happiness and satisfaction expressed by people, have increasingly gained interests among researchers in recent years. Apart from overall happiness or overall satisfaction with life, people are usually asked to rate their satisfaction with several domains of life. The four domains with which satisfaction is proved important in explaining overall happiness are financial situation, family life, work, and health (Cantril 1965 and Cummins 1996). These four domains, in turn, are viewed as being influenced by such objective life circumstances as employment status, marital status, and health status. Satisfaction with work or job satisfaction can be further decomposed into satisfaction with many aspects of a job, for example, pay, work hours, job security, and relationship with the employer.

In the realm of work, much has been done on examining the effects of unemployment, union membership, and employment in public sector on satisfaction with life in general, with job in particular, and satisfaction with various aspects of a job. Posing as a common problem in such studies is the possibility of reverse causality. For instance, it is easy to predict that the unemployed may be less satisfied than the employed, but it is also possible that inherently unhappy or dissatisfied persons are less desirables as employees and more likely to be jobless. Similarly, dissatisfied workers who would like to bargain for better pays and working conditions are more likely to join unions, and more easily satisfied workers are more likely to work in the public sector, which is considered less competitive and more secure.

Exploiting the panel nature of the German Socio-Economic Panel (GSOEP) by allowing individual fixed effects, Winkelmann and Winkelmann (1998) find that

unemployment – particularly involuntary unemployment – has a negative impact on satisfaction, which confirms the study done by Clark and Oswald (1994) using one cross section of the British Household Panel Study (BHPS). Tightly controlling for working conditions in two cross-sectional samples of workers, Gordon and Denisi (1995) conclude that union membership is not associated with less satisfaction or higher quit rates among a public-sector union a northeastern U.S. state and the faculty union at Rutgers University. Using two-stage estimator, Bender and Sloane (1998) show that, in most cases, less satisfied workers are self-selected into joining unions and, after correcting for such selection, union membership is not associated with job satisfaction. In contrast, Heywood et al. (2002), with longitudinal data from BHPS, find that union membership is associated with reduced job satisfaction and reduced satisfaction with the boss even after controlling for individual fixed effects, although it does not reduce satisfaction with pay. In contrast, sorting of more satisfied persons into the public sector is found be strong in the same study. The positive effect of being employed in the public sector on job satisfaction disappears after controlling for the individual fixed effects.

Little work, however, has been done on the effect of job switching on satisfaction. Faced with an option to switch job, rationality suggests that a worker do so when the new job could provide him with greater well-being, so job switching should lead to greater satisfaction. In other words, job switching should improve matching of the worker's work preference and his job, such that it should lead to greater welfare for the worker. On the other hand, if intrinsically dissatisfied workers are more likely to switch jobs, then job switching will not lead to greater satisfaction reported by workers. The most comprehensive study of this kind is Akerlof et al (1988), which theorizes and empirically

analyzes the effect of job switching on quits and job satisfaction in the U.S. labor market. Intrinsic dissatisfaction among quitters is found in the U.S. labor market as quitters report less satisfaction than workers who stayed at the same jobs. Greater dissatisfaction is associated with higher probabilities of quitting. In turn, quitters, especially those who quits for dissatisfaction with wages or dissatisfaction other job-related reasons than wage, have higher probabilities of attaining greater job satisfaction.

The paper is organized as follows. In the next section, I introduce the data from KLIPS and discuss basic patterns of satisfaction and labor force. Theoretical and corresponding econometric models are introduced in Section III. Two methods are considered as solutions to the problem of reverse causality. First, thanks to the panel structure of the Korean Labor Income Panel Study (KLIPS), individual effects can be accounted for using a fixed-effects logit model. Alternatively, the act of quitting can be instrumented in the second stage by each worker's propensity to quit predicted in the first stage. Section IV presents the results. Section V concludes.

II. Data

KLIPS is South Korea's only labor-related panel survey. The survey first began in 1998, and the most recently released data is the seventh wave completed in 2004.¹ Analyses in this paper are, however, limited to the period in which data on job satisfaction is available – from 2000 to 2003. The survey is conducted annually on a sample of 5,000 households. Besides the household survey, all members of the 5,000 households annually complete a personal survey that inquires about their demographic characteristics and professional life in details. Not only are they asked about their

¹ Data are released in late 2006, and I have not had an opportunity to obtain them.

employment history and characteristics of each employment, such as working hours and welfare programs, but they are also asked how satisfied they are with the following items: wages, job stability content of work, work environment, working hours, possibility of personal development, communication or personal relationship, fairness of promotion, welfare program, and the overall job. Outside the work domain, they are also asked to rate their satisfaction with: household income, leisure life, housing environment, family relations, relations with relatives, social network, and their overall life. All satisfaction ratings are given on an ordinal scale from 1 to 5, with one being very satisfied, three being neutral, and five being very dissatisfied. For simpler interpretation, the scale is reversed in this paper so that a larger number represents greater satisfaction.

As seen in Table 1, people are more than neutrally satisfied with most aspects of their life. Wage, the welfare program at the company they work for, household income, and leisure are the four aspects that people are on average less than neutrally satisfied with throughout the four survey waves of interest. This pattern is particularly interesting as, in economics, it is believed that economic agents maximize their well-being subject to a trade-off between income and leisure in their budget constraint. If dissatisfaction with both of these aspects implies that people have enough of neither, then it might also imply that people would like their constraint to be less restricted.

Samples I use to investigate the impact of job-switching on job satisfaction only include currently-employed wage workers. The unemployed and the self-employed are excluded for different reasons. The unemployed, not being in a job, may recall incorrectly their satisfaction with past employment. The self-employed are largely business owners whose decisions to switch jobs are influenced by factors wholly different

from those of wage workers. Figure 1 compares satisfaction ratings of wage workers who decide to move (switch3=1; right panel) to the ratings reported by those who decide to stay (switch3=0; left panel). Most people report that they feel neutral about their jobs, while few report they are very dissatisfied or very satisfied. Compared to job-stayers, a smaller fraction of job-switchers reports that they are satisfied with their job, and a higher fraction of them feels neutral or dissatisfied about their job. The same is true for wage satisfaction but the differences between job-switchers and stayers are less obvious. The fact that movers are less satisfied than stayers might reflect inherent dissatisfaction among movers themselves.

III. Model

In studying well-being, a natural step would be to formulate a utility function. Economists tend to formulate an individual's utility function with pecuniary measures, such as income and consumption, and objective circumstances, for example, employment status and work hours.

An individual's utility from working, measured by job satisfaction, at time t is defined as:

$$U_t = U(y_t, i_t, j_t(q_t)) \quad (1)$$

where y is income; i represents a set of individual characteristics, such as family life, health status, and marital status; j represents a set of job characteristics faced by an individual at time t . What job characteristics would be faced by an individual at time t depends on her job-switching decision q .

However, instead of writing an individual's utility function exclusively in terms of objective measures, I consider also including subjective measures. Krueger and Schkade (2007) shows that social interactions in workplace can substantially higher levels of satisfaction reported by workers, which, in our data, could be reflected in satisfaction with personal relationship and satisfaction with social network. Kahneman et al. (1986) shows that people have strong preference for happiness, implying that satisfaction with fairness in workplace could have significant bearing on job satisfaction. Emphasizing on pecuniary gains from job switching, Akerlof et al (1988) find that a worker's choice to switch jobs earns him not only better pecuniary rewards, such as an increase in earnings, job security, or fringe benefits, but more satisfactory non-pecuniary job characteristics, which include, but not limited to, ability to do the work, feeling that work is important, interesting work, working conditions, supervision, and company policy. These improvements in job characteristics could be difficult to measure objectively. An alternative would be to use satisfaction variables regarding these aspects of work. These satisfaction variables are available in KLIPS. With these subjective measures, the utility function can be written as:

$$U_t = U(y_t, i_t, j_t(q_t), s(q_t)) \quad (2)$$

where s represents sets of satisfaction variables, which are also affected by the individual's job switching decision in the past period. Job satisfaction is, in turn, part of total utility, measured by life satisfaction (LS),

$$LS_t = LS(U_t, k_t(i_t, r_t)), \quad (3)$$

where k represents utility gained from other domains of life, such as family life and health. Note that k is also a function of i , the set of characteristics that affect utility from

working, and r , the set of characteristics, circumstances, or satisfaction measures that are unrelated to working. Equations (1) and (2) are estimated in this paper.

The problem of reverse causality arises when a person's utility U_t influences his decision to switch jobs q_t – a dissatisfied person is more likely to switch jobs than a more contented counterpart. In dealing with reverse causality, two methods are proposed. First, the panel structure of KLIPS allows me to control for individual fixed effects, which account for individual personality, intrinsic satisfaction, and other unobserved time-invariant individual characteristics. Since job satisfaction is measured on an ordinal scale, ordered probit or logit models would be appropriate techniques. However, such advantage is limited to cross-sectional data. No ready formulation is available for panel data when the dependent variable is ordinal and either fixed-effects or random-effects model is needed to control for individual effects. Redefining job satisfaction variable as a binary variable would allow us to make use of a well-developed framework of limited dependent variable panel models. Crouchley (1995) proves that results do not depend on the choice of the cutoff point. Chamberlain (1980) proposes conditional likelihood function for the fixed-effects logit model with a binary dependent variable. Unlike the traditional joint likelihood function, the maximum likelihood estimator based on the conditional likelihood function is consistent when the panel data involves a large number of cross-section units but cover only short time periods. In particular, consider the underlying model:

$$U_{it} = \alpha_i + X_{it}\beta + \varepsilon_{it} \quad (4)$$

where U_{it} is an index of job satisfaction; α_i is an individual fixed effect; and X_{it} is a vector of all explanatory variables, including i , j , and s . Define:

$$V_{it} = 1 \text{ if } U_{it} > c \quad (5)$$

$$V_{it} = 0 \text{ otherwise}$$

For ε_{it} independently logistic,

$$P(V_{it}=1 \mid X_{it}, \alpha_i) = \frac{\exp(\alpha_i + x_{it}\beta)}{1 + \exp(\alpha_i + x_{it}\beta)} \quad (6)$$

Conditional on $v_i = \sum_t V_{it}$,

$$P(V_{i1}, V_{i2}, \dots, V_{iT} \mid X_{it}, \alpha_i, v_i) = \frac{\prod_{t=1}^T \exp(X'_{it}\beta V_{it})}{\sum_{d \in D_i} \prod_{t=1}^T \exp(X'_{it}\beta d_t)}$$

where D_i is the set of all possible combinations of v_i .

Alternatively, the problem of reverse causality can be corrected by the two-stage instrumental-variable estimator. The two-stage instrumental variable estimator may even be superior to the fixed-effects model because, unlike the fixed-effects model, it does not eliminate time-invariant variables from the model. In particular, individual effects on quitting can be controlled in the first stage by estimating the propensity to quit.

$$q_t = Q(z_t, u_t)$$

where z is a set of variables that influence an individual's choice to switch jobs, and u is an error term. The predicted propensity to quit is then used in the second-stage outcome equation instead of the observed decision to quit. According to the well-known exclusion restriction and given that there is one variable that needs to be instrumented for, there must be at least one variable that appears in the selection equation but not in the outcome equations (1) and (2), so that the model can be identified.

If satisfaction is partly determined by personality, then past satisfaction can be an instrument for current satisfaction and, hence, a person's decision to quit. Responses to survey questions on whether the individual is happy with the company he is working for, and whether he would like to continue on his job, and particularly with this company can be indicative of the individual's propensity to quit his job. Under an assumption that an individual quits his job in search for a better welfare program and that an individual gains satisfaction only when he actually *receives* the benefits, regardless of whether the company provides them, variables on whether the company *provides* the benefits could be used as instruments to the decision to quit.

IV. Results

Since a fixed-effects logit model can be readily used with a binary variable, but not ordered limited variable, job satisfaction is dichotomized. In Table 2, where the results of fixed-effects logit models are shown, job satisfaction is coded as one when an individual reports more than neutral feeling about their work; it is zero otherwise. Positive coefficients imply that the variable increases the probability that workers better-than-neutral feelings about their work. Regardless of whether objective variables or subjective variables are used, job-switching appears to have a negative effect on job satisfaction. The effect, however, disappears once the individual fixed-effects are controlled for. Such disappearance supports the hypothesis that job-movers are inherently dissatisfied to begin with. The coefficients on the decision in equation (3), in which objective circumstances serve as explanatory variables, and in equation (4), in which subjective measures serve as explanatory variables, are very close and both

significant. Such similarity validates subjective measures as qualified determinants of an individual's well-being.

The same is true for a dummy variable for living in Seoul and working for a private company. True to stereotypes, urban people may be more ambitious, more demanding, and hence, more dissatisfied with themselves. A negative effect of working with a private company on job satisfaction disappears after controlling for individual fixed effects, implying that private-sector workers are inherently dissatisfied. This is consistent with the finding in Luechinger et al. (2006). Workers in public sector in Germany are more satisfied with their work, and feel that helping people is more important and having a successful career is less important than do private-sector workers. Higher ambition and less willingness to help people among private-sector workers could imply that they are more difficult to please.

Variables that are significant and consistent in sign between the pooled regression and the fixed-effects model are experience, monthly earnings, and weekly work hours. Greater satisfaction among more experienced workers could reflect the possibility that workers with longer tenure work in higher positions, receive better employment contracts, or are exposed to better working conditions. As expected, longer work hours make people less satisfied, and the higher are monthly earnings, the more satisfied a worker is with his work.

Nobody has moved out of the manufacturing sector or changed their occupation from professionals, unskilled service, or manufacturing hard labor during the period under investigation. Therefore, these variables drop out from the fixed effects model. The pooled regression, however, shows that workers in the manufacturing sector tend to

be less satisfied. On the other hand, professionals, classified as those who work as in science, computer-related fields, architecture, engineering, medicine, teaching, finance, and law, are more satisfied. The result is not surprising, since these professions involve better-educated and better paid workers. However, the contrast between the manufacturing workers and the professionals remain even after controlling for education and monthly earnings themselves. The remaining difference might be explained by the difference in working conditions, for professionals are less exposed to hard labor or polluted workplace.

As expected, when satisfaction variables are used in place of variables of objective circumstances, satisfaction with all aspects of job contribute positively to overall job satisfaction in both models. It is noteworthy that the size of the coefficients is smaller when individual fixed effects are accounted for. If controlling for individual fixed-effects is like controlling for individual personality, then personality is a major determinant of job satisfaction. Once personality is controlled for, satisfaction with smaller aspects of job matters much less.

Dissatisfaction due to high ambition can also be observed when satisfaction variables are used as explanatory variables. Workers are asked to rate how much skill they have learned from the job and how useful the skill is, with one representing more skill learned and more useful it is. In the pooled regression, the negative coefficients on these two variables imply that the less skill the worker learns and the less useful the skill is, the less satisfied he is. It is possible that these people are less satisfied with the quantity and the quality of the skill learned simply because they are more ambitious. If

this is true, the negative effects should disappear in the individual fixed-effects model, which they actually do.

Results from the two-stage instrumental-variable estimator are reported in Tables 3 and 4. As expected, older workers are less likely to switch jobs. Feelings towards the company reported from last period do not perform too well at predicting the propensity to switch jobs, although they have correct signs when significant. People who felt happy with the company in the last period are less likely to switch jobs, while those who gave low probability of continuing the job are more likely to switch jobs by next period. Interestingly, having union at work in the last period makes it more likely for workers to switch jobs in the next period. A few welfare-provision variables are significant, and tend to have wrong signs. The negative coefficients imply that, when the company provides benefits, workers are less likely to switch jobs. For this reason, I choose to have model (2) in Table 3 as my first-stage equation.

The second-stage equation is estimated with as an ordered logit model and, so that the coefficients can be easily interpreted, as a simple linear regression model. The negative coefficients on the decision to switch confirm the results from the fixed-effects logit model. Workers with higher propensity to quit are less satisfied with their work. Korean men are less satisfied with their work, confirming what Clark (1997) finds for British men.

When satisfaction variables are included, they are always significant, regardless of whether objective circumstances are also included in the equation. When satisfaction variables are not included as explanatory variables, the number of work hours has a negative impact on job satisfaction while monthly earnings have a positive impact. After

age appears significant in the decision equation, it is no longer significant in the satisfaction equation. Like the result from the fixed-effects logit model, being a professional brings more satisfaction to workers even after education is controlled for, while being a laborer in the manufacturing sector reduces job satisfaction.

V. Conclusion

A panel of work history and individual characteristics has allowed me to investigate whether job-switching improves job satisfaction. The fixed-effects logit model shows that switching jobs does not necessarily lead to greater job satisfaction. Once individual fixed effects are controlled for, the negative effect disappears. The two-stage instrumental variable estimator confirms that people with greater propensity to switch jobs are less satisfied. Both methods support the hypothesis that workers who decide to switch jobs are those who are inherently dissatisfied to begin with.

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Table 1: Summary Statistics of Satisfaction Variables

Variable	Observations	Mean	Standard Deviation	Min	Max
Waves 3-6 (2000-2003)					
<i>Job-related</i>					
Overall job	9566	3.148352	0.624666	1	5
Wage	9593	2.736005	0.763128	1	5
Job stability	9585	3.244422	0.715865	1	5
Job content	9578	3.323801	0.696468	1	5
Work environment	9588	3.162553	0.720522	1	5
Work hours	9586	3.032887	0.798199	1	5
Personal development at work	9584	3.051395	0.72165	1	5
Personal relationship at work	9580	3.347768	0.632404	1	5
Fairness of promotion	9507	3.029768	0.619704	1	5
Welfare program	9523	2.870831	0.743309	1	5
<i>Others</i>					
Life	9574	3.246799	0.586443	1	5
Household income	9590	2.790686	0.719315	1	5
Leisure	9591	2.886514	0.751642	1	5
Housing environment	9591	3.242178	0.732107	1	5
Family relations	9590	3.686321	0.611191	1	5
Relations with relatives	9592	3.466449	0.619444	1	5
Social network	9591	3.472625	0.595417	1	5
Wave 3 (2000)					
<i>Job-related</i>					
Overall job	2448	3.138985	0.650805	1	5
Wage	2451	2.686984	0.770132	1	5
Job stability	2451	3.230363	0.752539	1	5
Job content	2451	3.317585	0.713884	1	5
Work environment	2449	3.121926	0.760278	1	5
Work hours	2450	2.985	0.80644	1	5
Personal development at work	2447	3.0307	0.748079	1	5
Personal relationship at work	2450	3.386806	0.635011	1	5
Fairness of promotion	2430	3.070534	0.664936	1	5
Welfare program	2434	2.885179	0.776174	1	5
<i>Others</i>					
Life	2450	3.205854	0.581816	1	5
Household income	2449	2.730733	0.717032	1	5
Leisure	2451	2.786874	0.780262	1	5
Housing environment	2451	3.180799	0.713082	1	5
Family relations	2450	3.685883	0.605428	1	5
Relations with relatives	2451	3.472635	0.623451	1	5
Social network	2451	3.487358	0.584229	1	5

Variable	Observations	Mean	Standard Deviation	Min	Max
Wave 4 (2001)					
<i>Job-related</i>					
Overall job	2402	3.099025	0.631727	1	5
Wage	2407	2.715907	0.779744	1	5
Job stability	2403	3.17511	0.728644	1	5
Job content	2403	3.263584	0.695462	1	5
Work environment	2407	3.114564	0.717212	1	5
Work hours	2407	2.972028	0.790305	1	5
Personal development at work	2406	2.989456	0.70959	1	5
Personal relationship at work	2402	3.342145	0.640817	1	5
Fairness of promotion	2373	2.989011	0.625471	1	5
Welfare program	2379	2.811014	0.747809	1	5
<i>Others</i>					
Life	2390	3.205508	0.588983	1	5
Household income	2406	2.754733	0.719774	1	5
Leisure	2406	2.844963	0.729335	1	5
Housing environment	2406	3.202727	0.732202	1	5
Family relations	2405	3.639432	0.613958	1	5
Relations with relatives	2406	3.439736	0.626278	1	5
Social network	2406	3.436059	0.593382	1	5
Wave 5 (2002)					
<i>Job-related</i>					
Overall job	2303	3.162794	0.582167	1	5
Wage	2312	2.804753	0.731622	1	5
Job stability	2308	3.275497	0.677657	1	5
Job content	2303	3.345888	0.685268	1	5
Work environment	2311	3.197501	0.695007	1	5
Work hours	2308	3.072059	0.775703	1	5
Personal development at work	2309	3.064091	0.707434	1	5
Personal relationship at work	2308	3.309822	0.603712	1	5
Fairness of promotion	2295	3.024462	0.580704	1	5
Welfare program	2300	2.905526	0.691848	1	5
<i>Others</i>					
Life	2311	3.231551	0.56286	1	5
Household income	2311	2.824951	0.701217	1	5
Leisure	2311	2.932502	0.720894	1	5
Housing environment	2312	3.263719	0.727378	1	5
Family relations	2312	3.687206	0.608875	2	5
Relations with relatives	2312	3.463868	0.617308	1	5
Social network	2312	3.460932	0.600378	1	5

Variable	Observations	Mean	Standard Deviation	Min	Max
Wave 6 (2003)					
<i>Job-related</i>					
Overall job	2454	3.178828	0.624183	1	5
Wage	2464	2.726668	0.765699	1	5
Job stability	2464	3.286265	0.70069	1	5
Job content	2462	3.340552	0.69107	1	5
Work environment	2462	3.19014	0.70628	1	5
Work hours	2462	3.080227	0.809069	1	5
Personal development at work	2463	3.081243	0.714972	1	5
Personal relationship at work	2461	3.330847	0.64725	1	5
Fairness of promotion	2450	3.02337	0.610137	1	5
Welfare program	2451	2.862765	0.751983	1	5
<i>Others</i>					
Life	2463	3.319286	0.603593	1	5
Household income	2465	2.824034	0.735265	1	5
Leisure	2464	2.942796	0.766301	1	5
Housing environment	2463	3.307625	0.748794	1	5
Family relations	2464	3.722621	0.617586	1	5
Relations with relatives	2464	3.477765	0.610991	1	5
Social network	2463	3.488532	0.601334	1	5

Table 2: Fixed-effects logit models, with binary job satisfaction variable.
(Job satisfaction = 1 if people report more than neutral feeling about their job.)

	Job satisfaction			
	Fixed-effects logit		Pooled Regression; No fixed-effects	
	(1)	(2)	(3)	(4)
Job-switching (=1 if move)	0.026543 [0.883]	-0.170555 [0.478]	-0.035989 [0.048]*	-0.03184 [0.014]*
<i>Demographic</i>				
gender (=1 if male)			-0.087015 [0.000]**	
age	-15.147354 [0.994]		-0.236778 [0.124]	
educ	15.181311 [0.994]		0.246238 [0.110]	
<i>Sector & Occupation</i>				
manufacturing			-0.033428 [0.003]**	
professionals			0.094881 [0.000]**	
unskilled service			-0.000092 [0.997]	
manufacturing labor			-0.015481 [0.708]	
<i>Household Character</i>				
hhsz			-0.009931 [0.016]*	
seoul	-0.280971 [0.529]		-0.046524 [0.000]**	
hhinc			-0.000003 [0.590]	
<i>Job Characteristics</i>				
work hours per week	-0.012562 [0.004]**		-0.002737 [0.000]**	
monthly earnings	0.006641 [0.000]**		0.001281 [0.000]**	
private company	-0.225253 [0.269]		-0.108585 [0.000]**	
union at work	0.101385 [0.484]		0.009868 [0.401]	
experience	14.903291 [0.994]		0.227416 [0.140]	
experiencesq	0.004668 [0.000]**		0.000175 [0.000]**	

	Job satisfaction			
	Fixed-effects logit		Pooled Regression; No fixed-effects	
<i>Satisfaction</i>				
wage		0.513773 [0.000]**		0.077356 [0.000]**
job stability		0.704207 [0.000]**		0.063707 [0.000]**
job content		1.048461 [0.000]**		0.088216 [0.000]**
work environment		0.41867 [0.000]**		0.062274 [0.000]**
work hours		0.454236 [0.000]**		0.039835 [0.000]**
personal development		0.550445 [0.000]**		0.065418 [0.000]**
personal relationship		0.985692 [0.000]**		0.113912 [0.000]**
fairness		0.488657 [0.000]**		0.03868 [0.000]**
welfare		0.774389 [0.000]**		0.048684 [0.000]**
<i>Skill utilization</i>				
how education match job		0.179874 [0.553]		-0.02729 [0.083]+
how skill match job		0.286049 [0.311]		-0.00099 [0.950]
how much skill learned		-0.05865 [0.655]		-0.02795 [0.000]**
whether skill learn useful		0.021947 [0.948]		-0.08306 [0.000]**
Constant			1.771186 [0.056]+	-1.40029 [0.000]**
Pseudo R-squared	0.038	0.589		
Observations	2729	3536	7608	9472
R-squared			0.152	0.447
Chi-squared	76.406	1544.134		
LR	-966.157	-538.496		

Robust p values in brackets

+ significant at 10%; * significant at 5%; ** significant at 1%

Table 3: First-stage logit equation of the two-stage estimator
Decision to switch jobs = 1 if worker moves

	Decision to switch jobs		
	(1)	(2)	(3)
<i>Demographic</i>			
age	-0.04746 [0.000]**	-0.06498 [0.000]**	-0.01872 [0.000]**
educ	-0.00852 [0.839]	-0.09284 [0.003]**	0.016771 [0.355]
seoul	0.064392 [0.796]	0.112197 [0.577]	-0.05425 [0.631]
<i>Factors from last period</i>			
union at work from last period	0.58274 [0.071]+	0.086369 [0.005]**	
good company in last period	0.119057 [0.556]	0.086369 [0.918]	
happy with the company in last period	-0.39551 [0.047]*	-0.43655 [0.562]	
whether to continue the job from last period	-0.03052 [0.871]	-0.01658 [0.005]**	
<i>Welfare program provided</i>			
dinner expenses	0.337154 [0.179]		0.094303 [0.411]
tuition assistance	-1.93939 [0.004]**		-1.32556 [0.000]**
house loans	-0.07379 [0.921]		-0.83517 [0.006]**
fund for internal welfare program	-0.34269 [0.674]		0.342655 [0.228]
congratulations and condolences	-0.83416 [0.008]**		-0.16769 [0.225]
vacation expenses	0.330947 [0.231]		0.085257 [0.490]
childcare	0.147113 [0.877]		-0.39234 [0.295]
bounty on savings	1.863134 [0.077]+		0.086135 [0.900]
life insurance	0.160677 [0.794]		0.178696 [0.557]
legal retirement allowance	-0.80745 [0.002]**		-0.31968 [0.004]**
sick leave	-0.30915 [0.302]		-0.12085 [0.359]
Constant	1.315874 [0.175]	2.723337 [0.000]**	-1.24758 [0.001]**
Observations	1285	1695	5562
Pseudo R-squared	0.146	0.062	0.067
Chi ²	72.058	57.406	137.851
LR	-348.543	-533.936	-1688

Robust p-value in bracket; + significant at 10%; * significant at 5%; ** significant at 1%

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Table 4: Second-stage equation of the two-stage estimator
 Dependent variable = overall job satisfaction scaled from 1 to 5.

	Ordered logit			OLS		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Decision to switch</i> Pr(switch3)	-4.65715 [0.047]*	-11.2376 [0.000]**	-2.69303 [0.011]*	-0.75477 [0.016]*	-2.83242 [0.000]**	-0.34199 [0.017]*
<i>Demographics</i>						
male	-0.11203 [0.576]	-0.57083 [0.000]**		-0.01297 [0.606]	-0.14427 [0.000]**	
educ		0.047489 [0.215]		-0.00533 [0.398]	0.00000 [.]	
age	-0.07891 [0.114]	-0.13513 [0.000]**		-0.00661 [0.116]	-0.02135 [0.036]*	
<i>Sector & Occupation</i>						
manufacturing	0.110745 [0.540]	-0.02047 [0.879]		0.022862 [0.328]	-0.00679 [0.848]	
professionals	0.34795 [0.264]	0.524356 [0.012]*		0.037672 [0.341]	0.126408 [0.021]*	
unskilled_service	0.325516 [0.309]	0.02743 [0.922]		0.03072 [0.477]	-0.00168 [0.982]	
manu_labor	-0.29481 [0.669]	-0.6617 [0.062]+		-0.04563 [0.621]	-0.1669 [0.071]+	
<i>Household characteristics</i>						
hhsiz	0.094739 [0.143]	0.024309 [0.623]		0.014285 [0.088]+	0.00904 [0.507]	
hhinc	0.013451 [0.069]+	0.018464 [0.006]**		0.001694 [0.079]+	0.003235 [0.146]	
seoul	0.102406 [0.563]	-0.05529 [0.679]		0.020325 [0.396]	-0.0124 [0.718]	
<i>Job characteristics</i>						
work hours per week	0.007246 [0.292]	-0.0206 [0.000]**		0.000627 [0.475]	-0.00521 [0.000]**	
monthly earnings	0.001425 [0.205]	0.006248 [0.000]**		0.000133 [0.322]	0.001673 [0.000]**	
private company	0.374003 [0.098]+	-0.21224 [0.317]		0.044203 [0.172]	-0.05409 [0.354]	
union at work	-0.07581 [0.685]	-0.07305 [0.630]		-0.01198 [0.637]	-0.02806 [0.487]	
experience	0.031223 [0.512]	0.000000 [.]		0.000000 [.]	-0.01453 [0.153]	
experiencesq	0.000647 [0.224]	0.001572 [0.000]**		0.000075 [0.266]	0.000435 [0.000]**	

	Ordered logit			OLS		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Satisfaction</i>						
wage	0.76402 [0.000]**		0.778341 [0.000]**	0.098544 [0.000]**		0.10205 [0.000]**
job stability	0.677033 [0.000]**		0.720491 [0.000]**	0.095073 [0.000]**		0.106723 [0.000]**
job content	0.816993 [0.000]**		0.895896 [0.000]**	0.10968 [0.000]**		0.121687 [0.000]**
work environment	0.692759 [0.000]**		0.585472 [0.000]**	0.092049 [0.000]**		0.082629 [0.000]**
work hours	0.621018 [0.000]**		0.615271 [0.000]**	0.081137 [0.000]**		0.087117 [0.000]**
personal development	0.809982 [0.000]**		0.837008 [0.000]**	0.123405 [0.000]**		0.133324 [0.000]**
personal relationship	1.081199 [0.000]**		0.971587 [0.000]**	0.161901 [0.000]**		0.154488 [0.000]**
fairness	0.61065 [0.000]**		0.505269 [0.003]**	0.093023 [0.001]**		0.07739 [0.004]**
welfare	0.712969 [0.000]**		0.703928 [0.000]**	0.093136 [0.000]**		0.094444 [0.000]**
<i>Skill utilization</i>						
how education match job	-0.0991 [0.846]		0.012582 [0.977]	-0.00018 [0.998]		0.010148 [0.855]
how skill match job	0.331436 [0.567]		0.248765 [0.612]	0.03354 [0.604]		0.028426 [0.625]
how much skill learned	-0.17471 [0.316]		-0.10859 [0.491]	-0.02341 [0.304]		-0.01666 [0.438]
whether skill learn useful	0.079194 [0.846]		0.110295 [0.780]	0.012574 [0.819]		0.015627 [0.772]
cut1:Constant	9.520834 [0.000]**	-10.8513 [0.000]**	10.16431 [0.000]**			
cut2:Constant	15.83665 [0.000]**	-7.73314 [0.000]**	16.34894 [0.000]**			
cut3:Constant	22.90853 [0.000]**	-3.92889 [0.000]**	23.14465 [0.000]**			
cut4:Constant	30.45232 [0.000]**	0.475707 [0.671]	30.44698 [0.000]**			
Constant				0.324882 [0.174]	4.387316 [0.000]**	0.12925 [0.303]
Observations	1531	1546	1673	1531	1546	1673
Pseudo R-squared	0.552	0.141	0.533	0.661	0.225	0.647
Chi ²	502.627	316.945	527.373			
LR	-648.097	-1252.57	-737.109			

Robust p values in brackets

+ significant at 10%; * significant at 5%; ** significant at 1%

Figure 1: Job satisfaction by job-switching decision

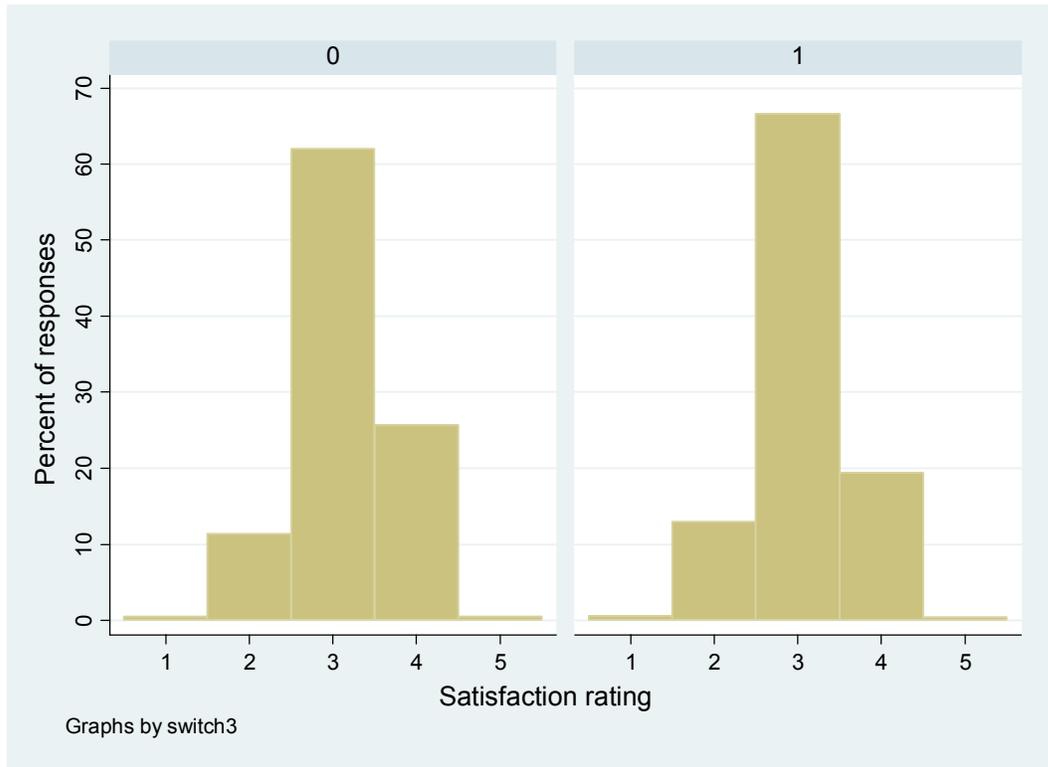


Figure 2: Wage satisfaction by job-switching decision

