Does Employment Security Influence Organizational Hiring Success?

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Abstract

Even with the economy's sluggish state, firms, particularly in manufacturing, may have difficulty hiring qualified workers. To identify one part of this problem, we first present hypotheses connecting a firm's employment security practices and hiring success. We then use a small but richly-detailed survey data set containing information on human resource management practices and hiring success in U.S. manufacturing firms. Using estimators appropriate to the complex survey design we employ, we find, principally, that a firm's explicit long-term employment commitments and its use of temporary workers to buffer regular employees against layoffs are consistently and positively related to the percent of employment offers made to external applicants for regular core jobs that were accepted.

Key words: hiring, recruiting, employment security, human resource management practices

1. Introduction

Reports in the popular and business press suggest that many U.S. firms, particularly in manufacturing, are experiencing difficulty recruiting new hires, notwithstanding the sluggishness of the expansion following the "Great Recession," and continuing high unemployment rates (see, e.g., Davidson, 2012; Society for Human Resource Management, 2013; Whitehouse, 2010; Whoriskey, 2012). While factory managers attribute hiring difficulties to a shortage of qualified workers, many analysts have suggested that the alleged skills-gap is a mirage–arguing instead that employers could attract the new hires they need if they increased pay and other job attributes that are attractive to workers (Davidson, 2012; Whitehouse, 2010).

Although the current economic expansion has focused attention on contemporaneous hiring challenges, periodic widespread concern over difficulty in hiring has occurred during other periods of expansion in both the U.S. and other countries. Despite such concern, there has been remarkably little empirical research on the determinants of a firm's hiring success or failure. The lack of organizational research on this topic contrasts sharply with the extensive body of research at the individual-level, examining how job and firm attributes influence the attractiveness of jobs to prospective applicants (e.g., Boswell, Roehling, LePine, and Moynihan, 2003; Chapman, Uggerslev, Carroll, Piasentin, and Jones, 2005; Lievens and Highhouse, 2003). We view organization-level research and the related research at the individual-level as complements. Organization-level research has the potential to be particularly useful in identifying factors that are within the control of firms, such as specific employment practices and policies, that can enhance their success in attracting workers, controlling for external labor market conditions.

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Do a firm's human resource management (HRM) practices pertaining to the terms and conditions of employment influence its success (versus failure) in attractingnew employees?Our review of the literature identified only a handful of prior studies addressing this question using private-sector, organizational-level data (Backes-Gellner and Tuor, 2010, Haskell and Martin, 1993 and 2001; Holzer, 1994; Williams and Dreher, 1992); as well as a related study using data on federal sector job applications (Krueger, 1988). We add to this body of literature.

Prior studies using U.S. organizational data have focused on the effects of compensation (Krueger, 1988; Williams and Dreher, 1992), training (Williams and Dreher, 1992), advancement opportunities (Williams and Dreher, 1992), and recruitment methods (Williams and Dreher, 1992) on hiring success or difficulty. Similar studies using data on organizations in the United Kingdom examined the effects of HRM practices related to wage levels and training on the degree of difficulty the firm faced in hiring (Haskel and Martin, 1993 and 2001). A recent study of German firms investigated the effects of a variety of HRM practiceson recruiting success, including practices related to training, works councils, regular shop floor meetings, and compensation. What distinguishes our research from all of these prior studies is that we focus on the relationship between HRM practices that enhance employees' employment securityanda firm's hiring success, while controlling for other key job attributes, as well as for labor-market conditions. To our knowledge, this study also is the first to investigate relationships between HRM practices and hiring success using data on U.S. manufacturing firms, a sector in which hiring difficulty may be particularly acute (e.g., Society for Human Resource Management, 2013).

Specifically, we investigate the effects of several HRM practices that employers can use to provide their incumbent workers with employment security on two measures of the employing organization's success in attracting new hires: the (natural log of the)average number of qualified applicants for each job and the acceptance rate for job offers. Our empirical analyses use a relatively small data base of manufacturing firms, but one that has richly-detailed information about the HRM practices of those firms.

2. Conceptual Framework and Focal Hypotheses

Noe, Hollenbeck, Gerhart, and Wright (2013) observe that employment security, advancement opportunities, and compensation are the primary job attributes influencing the attractiveness of a job opening to potential employees. The attractiveness to workers of these three job attributes is supported by a large multi-national study that found that employment security, career advancement opportunities, and compensation were key determinants of job satisfaction (Sousa-Poza and Sousa-Poza, 2000). We focus on investigating the relationship between several specific HRM practices that enhance employment securityand hiring success. In general, we expect firms that have HRM practices that enhance employees' employment security will have a competitive advantage in attracting new hires over those that do not. This may be particularly true in manufacturing, because the visibility in recent decades of layoffs and plant closings due to the outsourcing of manufacturing jobs overseas may have saddled U.S. manufacturing firms with a reputation of providing insecure jobs. As the C.E.O. of a metal-fabricating company noted in describing his recruiting efforts at a high-school career fair, whenstudents expressedinterest in a manufacturing career, "the parents came over and asked: 'Are you going to outsource? Move the jobs to China?'" (Davidson, 2012).

What HRM practices are likely to provide credible signals to prospective employees that a firm is committed to providing its employees a high level of employment security? Some employers adopt a formal no-layoff policy or make explicit pledges of employment security to their employees. Such explicit policies or pledges are likely to be fairly strong signals to workers of an employer's commitment to provide employment security.

Even in the absence of explicit policies or pledges, however, an employer's commitment to providing employment security is likely to be inferred if the firm engages in other HRM practices that are designed to diminish the need for layoffs. Layoffs are a mechanism for reducing labor inputs in response to downturns in demand. However, some firms use substitute mechanisms for reducing labor inputs when demand for their product dips; these substitutesenable the firms to avoid or minimize layoffs. One such substitute is to retain employees when demand declines, but reduce their work hours, a practice that is sometimes referred to as "work sharing." Another substitute for layoffs is to use subcontracting or temporary workers to buffer regular employees against layoffs (see, e.g., Abraham 1988; Gramm & Schnell, 2001).

The overall hiring process offers qualified potential employees in a firm's external labor market two decision points. The first decision point is when a member of the external labor market chooses whether or not to apply for a position with the firm. The firm's recruiting goal at this stage is not simply to generate a large number of applicants, because a large pool of unqualified applicants will impose substantial expense in the process of selection (Noe*et al.*, 2013). Rather, the firm's goal is to generate a large number of *qualified* applicants. Thus, the number of qualified applicants is a firm-level indicator of hiring success at this employee decision point. The second decision point is when an applicant who has received an employment offer must decide whether or not to accept the offer. Thus, the percent of employment offers that are accepted is a firm-level indicator of hiring success at this decision point.

The foregoing discussion suggests the following four hypotheses:

Hypothesis 1. An explicit commitment to long-term employment (LTE) in the form of a no-layoff policy or pledge of employment security will be positively related to hiring success.

Hypothesis 2. Firms that use "work-sharing" to avoid layoffs will have greater hiring success than firms that do not.

Hypothesis 3. Firms that use temporary workers to buffer employees against layoffs will have greater hiring success than firms that do not.

Hypothesis 4. Firms that use the withdrawal of subcontracting arrangements to avoid layoffs will have greater hiring success than firms that do not.

3. Data and Methodology

3.1Unit of Analysis and Data

HRM practices frequently differ across sub-units and job classifications within a firm (Becker &Gerhart, 1996; Lepak& Snell, 1999; Tsiu, *et al.*, 1997). For these reasons, our unit of analysis is HRM practices for members in a particular job, specifically, for core-job employees in the organizational business unit to which an establishment belongs. Core-job employees are defined as the largest group of nonmanagerial employees who are involved in making the business unit's primary product and are not considered contingent, short-term contract, or temporary workers. Inour sample, core jobs involve work in production, assembly, or scrap processing.

We selected our sample from the population of private sector establishments in manufacturing and scrap processing industries in a Southern U.S. state. Our sampling process selected 100 percent of the high-technology establishments in the population and a 50 percent random sample of the non-high-technology establishments in the population. We classified an establishment as high-technology if its SIC code was identified by Hadlock, Hecker, and Gannon (1991) as a Level I or Level II high-technology industry. We sent a mail survey to the highest level human resource manager in each establishment soliciting detailed information about HRM practices and recruiting outcomes for core-job employees in the business unit to which the establishment belonged in the most recent fiscal year, which for our sample ended between late-1993 and early-1996. Non-respondents to the initial mailing were contacted again by mail twice. Additional details about the sampling and survey methods employed are available from the authors upon request.

The resulting sample consisted of 112 business units. The samples used our empirical analyses aresmaller becausewe dropped observations with missing values for variables used in our models; these missing values occurred because some respondents did not reply to some of the specific survey questions used to create one or more of the variables we needed. The data correspond to a period of economic expansion between the March-1991 trough of the recession beginning in 1990 and the next peak in March 2001 (National Bureau of Economic Research, 2011).

The response rate to our survey was 28.43 percent, which is similar to those obtained in other mail surveys seeking similar breadth of information on HRM practices and outcomes (e.g., Delery& Doty 1996; Huselid 1995). Our response rate was lower in the non-high technology subsample (23.8 percent) than in the high-technology subsample (37.98 percent).Although the data set is small and of limited geographic scope, its rich detail provides the information required to test our hypotheses with a parsimonious set of control variables. The sampling process has implications for the choice of estimation techniques, which we discuss below in the "Estimation Techniques" subsection. We conducted comparisons of respondents and non-respondents with respect to traits observed for both groups.

Results of conducting two-sample difference-of-means tests indicate that: (1) the average number of employees in the establishment is not significantly different for respondent and non-respondent subsamples, and (2) the proportion of establishments engaged in durable goods manufacturing is not significantly different for the respondent and non-respondent subsamples.

3.2 Measures of Hiring Success

Our empirical analyses include two dependent variables measuring hiring success. The first, the *ln(average number qualified applicants),*captures the firm's success in attracting qualified applicants at the application stage of the hiring process. This variable is defined as the natural log of the average number of qualified external applicants that the firm gets for a single core-job opening. The larger the pool of qualified applicants, the more selective managers can be in their hiring choices (Williams and Dreher, 1992).The second dependent variable, the *percent of offers accepted*, is defined as the percent of the employment offers that were made to external applicants for regular core-jobs that were accepted; it measures success at the acceptance stage of the hiring process. The estimated mean and linearized standard errors (S.E.), using the sample of 82 observations for which we observe both dependent variables and all of the right-hand-side variables in our models, are 2.06 (S.E. = 0.15) for the *ln(average number qualified applicants)*, and 88.94 (S.E. = 2.18) for the *percent of offers accepted*.

3.3 Explanatory and Control Variables

Our small sample necessitates a parsimonious set of control variables. We include controls for other terms and conditions of employment and for labor market conditions that are likely to influence a firm's success in hiring. Descriptive statistics for the right-hand-side variables are reported in Table 1.

3.3.1 Employment Security Measures

In order to test hypotheses 1 through 4, each of our empirical models includes four dummy variables to measure the firm's use of practices that provide employment security for regular core employees.Each of them corresponds to the hypothesis number above: (1) *explicit LTE commitment*, (2) *work-sharing*, (3) *buffers with temporaries*, and (4) *withdraws subcontracting*. Table 1 defines these measures in greater detail and reports their descriptive statistics.

3.3.2 Control Variables

Other than employment security, two key job characteristics that the extant literature suggests will influence an individual's attraction to a job are efficiency compensation (also called a "lead compensation strategy") and opportunities for training and advancement (Boswell, *et al.*, 2003;Noe*et al., 2013)*. Efficiency compensation is paying compensation levels above the market rate; we capture this with the variable, *above average compensation*. The variable, *job ladders*, captures the availability of advancement opportunities for core-job workers in the firm.The variable, *teams or job rotation*, proxies employer-provided training.Under job rotation,a worker can be rotated from one job to another; in self-managing or semi-autonomous teams, the team to which a worker is assigned is responsible for many tasks as well as for responsibilities that are typically done by first-line supervisors in more traditional job designs. Thus, both of these job designs are likely to be associated with higher levels of firm-provided training than job designs in which each worker is assigned to a single job. Note, however, that these two types of job design also are likely to be associated with lower monotony, which may also be an attractive feature to many workers. Finally, because the terms and conditions of employment for unionized workers are determined through collective bargaining with the union, rather than being determined unilaterally by the employer, we include an indicator variable to control for *union representation.* Although union representation may reflect a variety of attributes that differ from nonunion firms, most union contracts provide job security in the form of clauses protecting individuals from unjust dismissal.

We include the variables, *high school degree required*, *some college required*, and *unemployment rate*, to control for labor-market conditions. While all of the firms in our sample are recruiting to fill blue-collar jobs in manufacturing or scrap metal processing, the minimum educational requirements differ across firms. Minimum educational requirements, in turn, determine the labor market from which the employer will recruit to fill job openings. The two indicator variables, *high school degree required* and *some college required* control for the labor market, as defined by minimum educational requirements, from which the firm is recruiting; the omitted category is having less than a high-school education.

The *unemployment rate* controls for labor-market tightness; when the unemployment rate is low, we expect it to be more difficult for firms to attract and hire employees. Data to create the variable, *unemployment rate*, were obtained from the U.S. Bureau of Labor Statistics (2013) Local Area Unemployment Statistics (LAU) and merged with the survey data base. One caveat regarding this variable warrants mention. Specifically, for respondents in our sample reporting just one facility, we know the county in which that facility is located, and use the unemployment rate for that county. However, for respondents in our sample reporting multiple facilities in their business unit, although we know that one facility in the business unit is in a given county, we do not know the location of the other facilities. For these observations, we used the state-wide unemployment rate, which may imperfectly proxy labor market tightness for that organization.

3.4 Estimation Techniques

For each dependent variable, we select a regression estimator that is appropriate to the way in which the dependent variable is measured. Additionally, we use estimation techniques that account for our complex sampling design. We use a linear regression estimator in our models for *ln(average number qualified applicants*). The linear regression estimator assumes that the dependent variable is continuous and normally distributed. If these assumptions are violated, its use may result in biased or inefficient estimation of coefficients and standard errors. Therefore, we use a two-limit tobitestimator to estimate our models forthe dependent variable, *percent of offers accepted*, becausethis dependent variable is truncated on the left and on the right of its distribution.

As a result of two features of our sampling design—the use of a sampling procedure that selected a higher percentage of establishments from the high-technology subpopulation than from the non-high-technology subpopulation, andthe unequal response rates in the high-technology and non-high-technology subsamples—our data were not produced by simple random sampling. This, in turn, has implications for the choice of estimation techniques. Specifically, using estimation techniques that assume a simple random sample (i.e., that the observations are independent and identically distributed) with data produced by our sampling design could result in incorrect point and variance estimates, leading to incorrect statistical inferences. To obtain unbiased point and variance estimates, we use statistical estimators that use weights to adjust for both the unequal selection probabilities and differential response rates from the high-technology and non-high-technology samples to estimate all descriptive statistics, as well as the coefficient and variance estimates in the regression and tobit models reported in this paper. These techniques lead to consistent point and variance estimates.

4. Results

Model 1 in Table 2 reports regression results for *ln(average number qualified applicants)* using the sample of 88 observations for which we observe all of the variables in the model. Similarly, Model 3 reports tobit regression results for *percent of offers accepted* using the sample of 86 observations for which we observe all of the variables in that model. Some respondents to our survey provided information on the average number of qualified applicants but not on the percent of offers accepted, or vice versa. For this reason, our sample sizes for Models 1 and 3 differ. As a result, if a given explanatory variable has a positive effect on one dependent variable and a negative effect on the other in Models 1 and 3, we cannot rule out the different sample compositions as a possible explanation for the differential results. To examine whether our findings are robust to the differing sample compositions, we estimate a second model for each dependent variable, using only those 82 observations for which we observe both dependent variables as well as all explanatory and control variables in the model. These results are reported in Model 2 for *ln(average number qualified applicants)* and Model 4 for *percent of offers accepted*. The F-statistics are significant for all models except Model 4, indicating that the model as a whole is significant for the Model 1, 2, and 3 specifications. For the dependent variable, *percent of offers accepted*, the estimated effects of individual explanatory variables are robust across Models 3 and 4. However, for the dependent variable, *ln(average number qualified applicants)*, although the sign for each explanatory variable is the same in both Models 1 and 2, several of the explanatory variables that have coefficients that are statistically significant in Model 1 no longer have significant coefficients in Model 2; we will discuss these discrepancies below.

In Model 1, the coefficients for two of our measures of employment security, *reduces work hours* and *withdraws subcontracting*, are positive and significant. However, in Model 2, which uses the smaller sample, the coefficients associated with *reduces work hours*and *withdraws subcontracting*remain positive, but are smaller in magnitude and no longer significant. Neither *explicit LTE commitment* nor *buffers with temporaries* are significant in either Model 1 or Model 2. Thus, when we use *ln(average number qualified applicants)* as our measure of hiring success, we do not consistently find support for Hypotheses 2 and 4 across all Models, and find no support for Hypotheses 1 and 3.

Consistent with Hypotheses 1 and 3, when we use *percent of offers accepted* as our measure of hiring success, the coefficients associated with both *explicit LTE contract* and *buffers with temporaries* are positive and significant in both Models 3 and 4. Neither *reduces work hours* nor *withdraws subcontracting*, however,has a significant effect on *percent of offers accepted*. Thus, we fail to find support for Hypotheses 2 and 4.

The only one of our control variables measuring other attractive job traits that performs as predicted is *teams or job rotation* in Models 1 and 2, suggesting that the *ln(average number qualified applicants)* is significantly higher in firms that have self-managing teams or job rotation than in firms that do not. Neither the *above average compensation* nor *job ladders* are significant in either *ln(average number qualified applicants)* model.The coefficients associated with both *above average compensation* and*teams or job rotation* are unexpectedly negative and significant in both *percent of offers accepted* models. The variable, *job ladders*, is not significantly related to the *ln(average number qualified applicants).*

The coefficients associated with *union representation* are consistently positive, but significant only in the Model-1 *ln(average number qualified applicants)* specification. The *unemployment rate* is not significantly related to either dependent variable. The coefficients associated with *high school degree required* are positive and significant in all specifications, and the coefficients associated with *some college required* are consistently positive and significant in Models 1, 3, and 4. For each model, we also tested the null hypothesis that the coefficient associated with *high school degree required*equaled the coefficient associated with *some college required.* We calculate an F-statistic using the Adjusted Wald test of the null hypothesis that the coefficients associated with *high school degree required* and with *some college required* are equal. This F-statistic was significant only in Model 4 ($F_{1,80}$ = 3.58, Prob> F = 0.06). Taken together, these findings suggest the following: (1) firms that require high-school degrees have higher numbers of applicants and higher acceptance rates for their job offers than firms that are willing to hire employees without high-school degrees, and (2) firms that require some college have higher numbers of qualified applicants than those that are willing to hire employees without high school degrees. Although somewhat less conclusive, we also find evidence that firms that require some college have higher job offer acceptance rates than those that require high-school degrees.

5. Conclusions and Recommendations

The primary purpose of this paper is to investigate whether HRM practices that enhance employment security for employees enhance hiring success. Our empirical analyses use data on HRM practices and hiring success for core jobs in a sample of manufacturing and scrap-metal processing establishments in a Southeastern U.S. state. We use two dependent variables to measure hiring success: *ln(average number qualified applicants)* and the *percent of offers accepted*. Our focal explanatory variables are dummy variables measuring the use of four different HRM practices that contribute to the employment security of incumbent employees: (1) offering a formal no lay-off policy or pledge of employment security, which we refer to as an explicit LTE commitment; (2) the practice of reducing work hours to avoid layoffs; (3) the practice of using temporary workers to buffer regular employees against layoffs; and (4) the practice of withdrawing subcontracting to buffer regular employees against layoffs.

Our key findings relate to the relationship between HRM practices that enhance employment security and our measures of hiring success. Our results suggest that two of the employment-security practices, explicit LTE commitments and the use of temporary workers to buffer regular employees against layoffs, are consistently and positively related to the *percent of offers accepted*, but are not significantly related to our other measure of hiring success, the *ln(average number qualified applicants)*.

It is natural to ask why the findings for these two job-security measures differ across dependent variables. We suspect it is because potential employees making the decision to apply have less information about these practices than those who have already applied for and have received a job offer. The latter group is likely to have undergone one or more interviews with the firm making the job offer, during which they received more information about the firm's HRM practices than is readily available to potential employees at the application stage of the job-search process. Firms certainly have an incentive to highlight attractive features of jobs to individuals who are being considered as serious job candidates.

We also found some evidence that reducing hours to avoid layoffs and withdrawing subcontracting to avoid layoffs are positively related to *ln(average number qualified applicants)*; however, these relationship were not statistically significant in all specifications.

Some additional insight was also gained from the significant results on the control variables,*high school degree required* and *some college required*. Our findings suggest that firms that have a high-school degree requirementget a larger pool of more qualified applicants and higher applicant acceptance rates of job offers than firms that will hire employees with less than a high-school degree. Similarly, firms that require some college have larger pools of qualified applicants and higher job-offer acceptance rates than do firms that do not require high-school degree and higher job-offer acceptance rates than firms that require a high-school degree. These differences may simply reflect intrinsic differences in the labor markets for workers with different levels of education. Higher education requirements for blue-collar jobs may be viewed by job seekers as a signal both that the firm is more selective in its screening and that the firm offers other attractive job and organizational features, thereby attracting more qualified applicants and generating higher job-offer acceptance rates. If this is the case, the higher education requirements may facilitate more efficient recruiting and selection processes resulting in better matches between applicants and jobs.

Our study does have some limitations, which should be taken into account in interpreting our results. These limitations also suggest worthwhile directions for future research. Although our data provide richly-detailed information about hiring-success outcomes and HRM practices that we hypothesized would influence such success for the firms in our sample, the sample size is somewhat small and limited in geographic scope, industry, and occupational coverage. Future research would benefit from the use of samples containing similarly detailed information but larger in size and more national in scope; studies focusing on different occupations and industries, and samples of firms in other countries would also be fruitful directions for future research. Larger samples also would permit the use of a less parsimonious set of control variables. In particular, replications that could control separately for advancement opportunities and a more direct measure of training opportunities would be beneficial. Finally, because our dependent and explanatory variables are measured at the same point in time, simultaneity bias may exist. Larger samples would facilitate the estimation of models that correct for simultaneity bias.

For these reasons, our study should be regarded as exploratory. The relationships that we observe are intriguing and of practical value to managers seeking to understand the effects of their choices pertaining to employment security practices on their ability to attract potential employees. They warrant further investigation. We believe our work provides a new way to think about, as well as a template for, such future work.

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Table 1. Right-Hand-Side Variable Names and Definitions

Variable Name:	Variable Definition:	Mean (S.D.)
explicit LTE commitment	Indicator variable = 1 if the firm adopted a formal policy of avoiding lay-offs for, or offered a pledge of employment securityto, core employees and f= 0 otherwise	0.2587 (0.0546)
reduces work hours	Indicator variable = 1 if the firm reduces core-job employees' work hours to avoid layoffs; otherwise = 0	0.6119 (0.0595)
buffers with temporaries	Indicator variable = 1 if the business unit uses temporary workers to avoid layoffs of core-job employees and = 0 otherwise.	0.4986 (0 .0622)
withdraws subcontracting	Indicator variable = 1 if the business unit withdraws subcontracting to avoid layoffs of core-job employees and = 0 otherwise.	0.2735 (0.0537)
Above average compensation	Indicator variable = 1 if the compensation package for core employees is above average compared to compensation for similar employees of other firms in the geographic area; = 0 otherwise.	0.4568 (0.0612)
Job ladders (hrb3)	Indicator variable = 1 if the business unit has clear job ladders or career paths for employees in core jobs and = 0 otherwise.	0.4986 (0.0621)
Teams or job rotation	Indicator variable = 1 if core employees are rotated from one job to another or if core employees work as members of a self-managing or semi-autonomous work teams that are responsible for many tasks; and = 0 otherwise.	0.3423 (0.0577)
Union representation	Indicator variable = 1 if at least some core employees are represented by a union; = 0 other otherwise.	0.3693 (0 .0605)
High school degree required	Indicator variable = 1 if there is a high school degree requirement to be hired into an entry-level core job and = 0 otherwise.	0.5512 (0.0620)
Some college required	Indicator variable = 1 if there is a requirement that hires into an entry-level core job have some college and = 0 otherwise.	0.0498 (0.0213)
Unemployment rate	Average unemployment rate (not seasonally adjusted) in the most recently ended fiscal year. (For single-facility business units, the unemployment rate for the county in which the facility is located is used; for multiple-facility business units, the state unemployment rate is used.	5.9722 (0.2182)

Notes: Means and linearized standard errors (S.E.) are estimated using the "svy: mean" procedure in Stata12, which accounts for the complex sampling design used to gather our data. Thesample and population sizes upon which these estimates are based are 82 and 489.061, respectively, and correspond to the set of observations for which both dependent variables as well as all right-hand-side variables are observed, which are the observations used to estimate models 2 and 4 in Table 3.The omitted category for the dummy variables, *high school degree required* and *some college required*, is that individuals can be hired into an entry-level core job with less than a high school degree.

Table 2. Regression and Tobit Results

Employment security practice measures:	Regression Results: *ln(average number qualified applicants)*		Tobit Results: *percent of offers accepted*	
	Model 1	Model 2	Model 3	Model 4
explicit LTE commitment	0.0907	0.0637373	17.9138***	14.7993***
	(0.2916)	(0.3097)	(5.7794)	(5.1122)
reduces work hours	0.4289*	0.4146	5.3328	7.3293
	(0.2460)	(0 .2731)	(5.7262)	(5.4436)
buffers with temporaries	-0.0599	-0.0842	11.3611*	11.8218*
	(0.2175)	(0 .2300)	(6.2864)	(6.1224)
withdraws subcontracting	0.4986*	0 .4524	-10.1468	-5.1258
	(0.3025)	(0 .3188)	(8.5329)	(8.4098)
Control variables:				
Above average compensation	0.2132	0.2059	-11.4729*	-12.7743**
	(0. 2597)	(0 .2935)	(6.2303)	(5.9165)
Job ladders	0.3154	0.2643	6.7397	4.0125
	(0.2204)	(0 .2642)	(05.2034)	(4.8581)
Teams or job rotation	0.6072**	0.6403**	-10.1342*	-9.7601*
	(0.2577)	(0.2842)	(5.4584)	(5.1400)
Union representation	0.4398*	0.4409	.6504	2.0257
	(0.248)	(0.2743)	(05.989)	(5.7371)
High school degree required	0.9089***	0.9713***	13.0354**	9.4822*
	(0.2493)	(0 .2675)	(5.7432)	(5.4261)
Some college required	0.6685*	0.5872	25.7133**	27.9760***
	(03588)	(0 .3715)	(11.5298)	(10.4395)
Unemployment rate	-0.0641	-0.0721	1.9040	2.3074
	(0.0620)	(0 .0630)	(1.7333)	(1.6418)
Constant	0.8988*	0.9705*	67.6305***	67.3810***
	(0.5250)	(0 .5561)	(12.0285)	(11.6174)
N	88	82	86	82
Population size	522.67	489.06	511.47	20.6655
F-statistic	$F_{11,76} = 3.04$***	$F_{11,70} = 3.01$***	$F_{11,74} = 1.72$*	$F_{11,70} = 1.64$
R-squared	0.39	0.38	–	
Sigma			21.8777***	20.6655***
Left-censored observations			0	0
Right-censored observations			25	25

*significant at 10% level, ** significant at 5% level, ***significant at 1% level
All models use estimation techniques that account for the sampling design.