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DO WORKERS FACE CONSTRAINTS TO SORTING STRATEGICALLY FOR EMPLOYER SPONSORED INSURANCE OFFERS?

Linda J. Blumberg
Senior Research Associate
Health Policy Center
The Urban Institute
2100 M Street, N.W.
Washington, DC 20037
Tel: 202-261-5769
Fax: 202-223-1149
LBlumber@ui.urban.org

Maria Cancian
Director, Institute for Research on Poverty
and Professor, Schools of Public Affairs and Social Work
University of Wisconsin
1180 Observatory Drive
Madison, WI 53711
Tel: 608-265-9037
Fax: 608-265-3233
mcancian@wisc.edu

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Economic Research Initiative on the Uninsured
University of Michigan
555 South Forest Street, 3rd Floor
Ann Arbor, MI 49104-2531

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Abstract

This analysis investigates the extent to which particular labor markets provide individuals the flexibility to choose their preferred mix of wages and health insurance. In addition, we use labor-market-specific evidence to identify constraints on the affordability of insurance that may explain why only a few employers in certain sectors offer such insurance. We find substantial differences in the availability of ESI offers by region, especially among those in low-offer labor markets. Substantial portions of workers without offers may face a minimum wage constraint, and many workers without offers may also face limited options because of their short job tenure.

Section 1.
Introduction

We explore a fundamental assumption implicit in the economic analysis of health insurance coverage: that in choosing jobs, workers are freely able to make strategic choices concerning their desired combination of wages and employer-sponsored health insurance (hereafter ESI). This assumption has been largely untested. Empirical evidence supports the notion that health insurance concerns affect job mobility (Gruber 2000), but we do not really understand the extent of variation in workers' ability to access the compensation package they would like. If a significant share of workers finds it difficult to do so, predictions of the potential response to new subsidies, or to other reform proposals intended to increase insurance coverage, may in fact be inaccurate.

This analysis investigates the extent to which particular labor markets provide individuals the flexibility to choose their preferred compensation package. In addition, we use labor-market-specific evidence to identify constraints on the affordability of insurance that may explain why only a few employers in certain sectors offer such insurance. Certainly, workers' preferences rather than market imperfections might be responsible for this low rate; thus we recognize that the evidence we present suggests, but does not prove, that constraints exist. In addition, the evidence demonstrates the need for further research that can more precisely distinguish between preferences and constraints.

How many workers have a choice of jobs with and without employer-sponsored health insurance?

Economists generally model ESI offers as the outcome of worker preferences for in-kind benefits relative to wages. This implies that the labor market offers workers their

choice of a job with the preferred combination of wages and benefits from a continuum of options. However, actual labor markets may offer some types of workers more options than others, perhaps because in those job markets workers' preferences are heavily concentrated in one direction, leaving little flexibility for the minority with different preferences. For example, low-wage workers in certain markets in some geographic locations may find it difficult to find a job with an offer, regardless of their preferences for insurance.

We hypothesize (consistent with the theory in Blumberg and Nichols 2004) that workers can be categorized into three groups: those who would find it difficult to obtain an offer from any employer (low-offer workers), those who would find it difficult not to have an employer's offer of insurance with a job (high-offer workers), and those who face substantial opportunities for employment with and without offers of insurance (mixed-offer workers). This analysis assesses how workers with particular characteristics and occupations are distributed across these three groups.

Section 2 describes the data used for the analyses. Section 3 describes our approach to estimating the probability that workers in different labor markets will receive an ESI offer. Section 4 presents empirical evidence suggesting that there are constraints facing workers who are looking for offers of ESI. Section 5 provides conclusions and policy implications.

Section 2.
Data

This analysis uses data from a merged file of the February and March Current Population Surveys (CPS). The 2001 March CPS collected respondent information from the year 2000 and the 2001 February CPS Contingent Worker Supplement collected February 2001 health insurance coverage and offer information from workers. Every two years between 1995 and 2001, the CPS fielded a February Contingent Worker Supplement (CWS) which included data on a nationally representative sample of workers and their employment characteristics, including whether their current employer offered health insurance and what the worker's health insurance coverage was at the time of the interview. The February file does not, however, include data on the health insurance coverage of non-workers (adults or children), nor does it include information on wages. The March survey includes the health insurance coverage of all individuals (workers and non-workers, adults and children), but does not include information on employer offers. The March survey also contains detailed data on firm size and on earnings, wages, and individual and family income not available from the February survey. To have the benefit of both sets of variables, the February and March files are merged to develop the analytical file for this analysis, resulting in a sample of 83,896 households.[1]

Re-weighting the Merged Feb/March CPS file. Because groups of workers and their families are dropped during the merging process, our merged CPS file might not be nationally representative using the weights supplied by CPS. We re-weight our merged CPS data using a regression-based method that results in a weighted sample that reflects the population represented in the March CPS.[2] Following all of these adjustments, the

merged February/March file comprises 32,052 workers and 31,621 non-workers (including children), a total sample size of 63,673.[3] As will be made clear below, these analyses focus almost entirely on the workers in this merged data set.

Section 3.
Estimation of the Probability That a Worker will Receive an ESI Offer

Our first objective is to assess how workers with particular characteristics and occupations are distributed across the three groups of low-offer, high-offer, and mixed-offer workers.

Computing the Predicted Probability of Offer for Each Worker

We estimate the probability that each adult worker (aged 18 or older) in the merged CPS data file has an ESI offer. For this purpose, individuals are defined as having an offer if they work for an employer that sponsors an ESI plan and are eligible for enrollment in that plan. The probability of an offer is estimated as a function of the worker's education, gender, race/ethnicity, citizenship status, occupation, metropolitan area of residence, census region of residence, and an index of state per capita health expenditures in the state of residence. These explanatory variables were chosen because they are unlikely to be manipulated in order to obtain a health insurance offer, i.e., they are characteristics whose values can reasonably be assumed to be exogenous to the decision to choose a job that includes an ESI offer. We exclude explanatory variables that may reflect strategic job sorting, including firm size and part-time status.

The results of the probit are available upon request. Education was highly significant: those with less than a high school education and those with some college (but no diploma) have a lower probability of an ESI offer than those with a high school diploma. College graduates are significantly more likely to have an offer than high school graduates. There is no discernable difference in the probability that a Hispanic or a white

worker receives an offer, but black workers are more likely than white workers to have an offer. This last finding is inconsistent with other estimates of the probability that an individual will receive an ESI offer (e.g., Davidoff, Blumberg, and Nichols 2003). The difference reflects our focus on the probability of an ESI offer in the individual's particular labor market (defined by the exogeneous variables included in the probit), rather than the probability that a worker will receive an ESI offer given the full range of individual and job characteristics.[4] As expected, noncitizens are significantly less likely to have an offer than citizens. Metropolitan residents are more likely than nonmetropolitan residents to have an offer.

We also find significant differences by region. We compute an index of 1998 per capita health expenditures using state-level data posted on the web site of the Centers for Medicare and Medicaid Services (CMS),[5] setting per capita expenditures in Iowa as 1.0 (Iowa is approximately at the national average), and computing the remaining state index values by dividing their per capita personal expenditures by those in Iowa. As expected, the probability of offer declines significantly as the expenditure index rises.

We include 45 detailed occupation categories. Occupations associated with a particularly low probability of an ESI offer (holding other factors constant) are clustered in the service, agricultural, and construction categories--for example, household service, food service, personal service, sales and retail, farm workers and managers, and construction workers. Those in professional occupations, including scientists, computer operators, public administrators, and engineers, have high probabilities of an ESI offer. In general these results are in the expected directions – for example, low-skilled jobs tend to

be associated with lower probabilities of an ESI offer.

Using these probit results, we compute a predicted probability of an ESI offer for each individual worker in the sample. The results are shown in Figure 1. The values range from 2.1 percent to 99.3 percent. The median value is 84.2 percent.

Categorizing Workers by their Probability of Offer

In addition to using the full distribution of predicted probability of ESI offer, we also divide workers into three labor market categories. The low-offer category (approximately 8 percent of workers) is defined as being in a labor market in which the predicted probability of offer is below 50 percent; the average predicted probability for this group is 39 percent. Approximately 8 percent of workers are in the low offer category. The mixed-offer category (about 46 percent of workers) includes those in labor markets with a predicted probability of offer between 50 and 85 percent. The high-offer group (approximately 46 percent of the sample of workers) include those in labor markets with a predicted probability of offer in excess of 85 percent.

Table 1 provides descriptive statistics on low, mixed, and high-offer workers, showing how workers within each offer category are distributed across a particular attribute (e.g., firm size). The differences are striking. The mean predicted probability of offer in high-offer labor markets is 91 percent, compared to 73 percent in mixed-offer markets, and only 39 percent in low-offer markets. Among low-offer workers, 25 percent are employed by the smallest firms, those with fewer than 10 workers. The largest firms (with 500 workers or more) employ a much larger share of high-offer than of low-offer workers (57 percent versus 35 percent). Thus our results show that larger firms are

significantly more likely to offer ESI to their workers than are small firms— a distribution that is consistent with expectations— even though firm size is not controlled for in the offer equation.

Table 1 also shows that almost three-quarters of low-offer workers are in two occupations: general service and sales (50 percent and 23 percent, respectively, from panel 3), and that these two occupations comprise only minor percentages of workers in the mixed-offer and high-offer labor markets. The mixed-offer group has a more even distribution of occupations, but roughly half of the labor market consists of administrative support, service, and precision production, craft, and repair occupations. More than half of workers in high-offer labor markets, in contrast, are in executive, administrative, managerial, and professional specialty occupations.

Although industry is not a variable included in the model, expected patterns again emerged in the analysis (Table 1, panel 4). Workers in low-offer labor markets are more likely than others to work in low-offer industries such as retail trade, construction, agriculture, and services, and less likely to work in relatively high offer industries such as mining/manufacturing, finance/insurance/real estate, public administration, and wholesale trade.

Other characteristics tell a similar story. Workers in high-offer labor markets are significantly more likely to be in the highest income category. About 64 percent had college degrees, compared to only 18 percent of those in mixed-offer and 2 percent of those in low-offer markets. More than half of those in low-offer markets did not receive a high school diploma. Low-offer workers are also less likely to be white, married, or

employed full-time than their high-offer counterparts. They are also less likely to be citizens. Women comprise a majority of the low-offer and mixed-offer labor markets, men a majority of workers in high-offer markets.

Section 4.
Empirical Evidence that Suggests Constraints on Workers' ESI Opportunities

The variable extent to which workers have access to ESI offers is open to multiple interpretations. Although measuring that variation is a first step toward identifying whether workers are constrained in obtaining their preferred ESI opportunities, the implications for policy depend on whether this variation is inconsistent with differences in workers' preferences. If, for instance, ESI offer rates in a particular labor market are low because high proportions of workers in this market prefer wages over ESI, then those low offer rates are not evidence of constraints but are instead manifestations of preferences.

It is, however, very difficult to distinguish preferences from constraints because survey data do not explicitly address the attitudes and preferences of respondents. Because workers in low-offer labor markets are of particular policy interest, we present a series of empirical results that suggest they do face constraints. We examine four possible sources of variation: geographic constraints, minimum wage constraints on employers, length of job tenure, and financial constraints on workers.

Geographic Variation in Probability of Offer

How do the offer rates of workers who live in areas with traditionally high rates compare to those of similar workers in areas with traditionally low rates? Assuming that individuals generally do not move for health insurance offers and that preferences do not vary systematically by region, any differences will reflect constraints on opportunities.

The probit results indicate that geographic area of residence affects the probability

of an offer, even when we control for other labor market characteristics and the relative price of medical care. Workers in the South Atlantic division of states have the highest probability of an ESI offer. Workers in the Mountain and Pacific divisions have the lowest probability of an offer (all else equal); the West South Central division and the Middle Atlantic and West North Central divisions fall between these two extremes. Living in a nonmetropolitan area also significantly reduces the probability of obtaining an offer.

A few examples demonstrate how these variations manifest themselves. Table 2 shows the predicted probabilities of offer for three prototypical workers in two regions: the Pacific Region, with low ESI offer rates, and New England, with high ESI offer rates. Consider, first, the predicted probability of an ESI offer for a Hispanic woman who has not completed high school and who works in food service, a low-offer labor market. If this worker lives in the Pacific region, her probability of obtaining an ESI offer would be 37 percent in a metropolitan area and only 33 percent in a nonmetropolitan area, a relative drop of 11 percent. If, however, the same worker resides within the New England division of states, her probability of an offer would be 50 percent in a metropolitan area and 46 percent in a nonmetropolitan area. In other words, the predicted likelihood of receiving a health insurance offer for a worker of this type varies by more than 50 percent from one geographic area to another.

For workers in labor markets in which ESI offers are more likely, the geographic differential shrinks. Our second prototypical worker, facing a mixed-offer market, is a white, female, high school graduate who works in administrative support. Table 2, row 2

shows that the relative difference between what this type of worker receives in metropolitan New England and what she receives in a non-metropolitan area in a Pacific state is about 11 percent.

Third, we consider a worker in a labor market that has a high likelihood of offer, such as a white male college graduate working as an executive, administrator, or manager. Here the difference in the probability of an offer across geographic locations is absolutely and relatively quite small; between metropolitan New England and the nonmetropolitan Pacific states, it is only 3 percent.[6] These results suggest that the potential constraints are largest for workers in labor markets characterized by low rates of ESI offer and that they diminish in size as the ESI offer rate of the labor market increases. We obtained similar results by estimating separate probit regressions for workers in low-, mixed-, and high-offer labor markets. These alternative regressions allow the relationships between labor market characteristics and the probability of an offer to vary according to the offer category of the workers. The consistent results indicate that the findings reported above are not simply an artifact of the coefficients on the geographic variables being held fixed across high- and low-offer labor markets.

Minimum Wage Constraints

There is evidence that workers pay for at least a substantial portion of their employers' contributions to health insurance through reduced wages (Blumberg 1999; Gruber 2000; Gruber and Krueger 1991; Eberts and Stone 1985; Woodbury 1983). We therefore examine very low offer rate labor markets for indicators of constraints on the ability of workers to obtain an offer. If such a market contains, for example, a high

concentration of low-wage workers, an employer would be unable to pass employer-sponsored insurance costs to workers regardless of workers' preferences. Low-wage workers, for our purpose here, are defined as those with wages within an average insurance premium's distance from the minimum wage. Eliminating the minimum wage would not necessarily increase health insurance coverage substantially, however. Evidence of a prominent minimum wage constraint would also strongly indicate that affordability is a constraint, given that the minimum wage provides a minimal level of income.[7] If workers without offers do not earn enough to allow the employer to reduce wages to compensate for the cost of ESI, they might not be able to obtain a job with an offer even if they desired one.

For each worker without a current ESI offer, we compare earnings, annualized to full-time-equivalent levels, to the applicable annualized minimum wage.[8] The difference between the two is then compared to the average employer contribution to ESI, as published from the Medical Expenditure Panel Survey – Insurance component (MEPS-IC) data.[9] Within each offer category (low, mixed, high) we then compute the share of workers without offers whose full-time-equivalent earnings did not exceed the minimum wage by at least the average employer contribution to ESI.

Table 3 shows the proportion of workers without offers, and the share of these whose full-time-equivalent earnings over the minimum wage would be insufficient to cover the employer share of an ESI offer. Overall, 21.5 percent of workers do not have an ESI offer, and of these, 31 percent face a minimum wage constraint. But the proportion constrained by wages varies considerably by labor market, implying a significant

constraint in the compensation options available to workers in both the low-offer and the mixed-offer labor markets.

To represent the possibility that low-wage workers would prefer and could better afford a benefit package with a lower actuarial value, we repeated these calculations using a lower than average employer premium contribution— 75 percent of the national average--and obtained similar results.

Short Job Tenure

Job tenure is highly correlated with the probability of receiving an ESI offer. Employers with high-turnover workforces are less likely to offer coverage to their employees, and workers who have held a job for less than a year in firms that do sponsor health plans may not be eligible for those plans. The administrative costs to employers of providing coverage in a high-turnover workplace may be a strong disincentive to offering ESI. Workers who know they will not be long in a particular job may prefer wages to health insurance for a variety of reasons (Nichols et al. 1997).

Table 4 shows that roughly one-third of workers without ESI offers have short job tenure, compared to only 14 percent of workers with offers. Table 4 (column 3) also shows that the proportion of workers without ESI offers who have job tenure of under one year varied fairly modestly from low-offer to high-offer labor markets, ranging from 37 to 28 percent.[10] The significant share of short-term workers without ESI offers suggests the presence of another important constraint. Finally, we note that the low-offer labor market is also characterized by higher worker turnover overall— twice that of the high-offer market (Table 4, column 1).

Table 5 shows the share of workers in each labor market who faced at least one of the short job tenure and minimum wage constraints. These two constraints alone affect roughly two-thirds of the workers without offers in the low-offer labor markets, and almost half of those in the mixed-offer labor markets.[11]

Financial Constraints and Worker Heterogeneity

It is difficult to clearly identify income levels at which health insurance should be "affordable." Individuals whose income and family characteristics are similar may make quite different decisions about purchasing health insurance or taking a job with an ESI offer attached. Understanding the heterogeneous nature of workers within specific labor markets is important for determining the extent to which particular reforms may increase insurance coverage. For example, a reform that affects the purchasing power, and thus demand for insurance, of 5 percent of a labor market has very different implications from one that affects 50 percent of a labor market. And employers who do not offer health insurance today are more likely to offer it in the future if a large share of their workers change their preferences or if constraints on the purchase of ESI are removed. Thus we assess the extent to which subsidies targeted by total family income would affect different percentages of the workforces in labor markets with low offer rates.

Policy makers tend to focus on the poor (those with incomes at or below the federal poverty level) and the near poor (those with incomes at or below 150 percent of the federal poverty level) when discussing subsidization aimed at expanding ESI. Given that the poverty level for a family of 4 in 2004 is less than $19,000, it is not difficult to imagine that hardships might result from inability to purchase other necessities of daily

living if wages are traded off for health insurance within this group.

Table 6 shows the share of workers in each labor market category with family incomes that fell at or below 100 percent and 150 percent of the poverty level. These figures provide a rough indicator of the financial hardship that might result if workers were to absorb premiums for ESI. In low-offer labor markets, 22 percent of workers without offers are poor, and 37 percent have incomes below 150 percent of poverty. Even in the high-offer markets 11 percent of workers without offers have incomes below 150 percent of poverty.

The figures in table 6 are also informative for the development of subsidization strategies intended to expand coverage. If subsidies are considered a tool to lower the price of health insurance to workers, thereby increasing demand for insurance and leading more employers to offer ESI, subsidies that are too narrowly targeted should be of some concern. If subsidies are made available to workers with incomes below 150 percent of poverty, for example, only a minority of workers without offers would be subsidized, even in the low-offer markets. If the preferences of the majority without offers are unchanged by the subsidies, they may be insufficient to create enough demand for employers to change their decisions to offer ESI, that is, if we assume that employers act as agents for their employees with heterogeneous preferences.

Section 5.
Conclusions

Do workers have a choice? Can they act strategically to acquire the wage and benefit package that is optimal for them? When we observe workers without ESI, it is difficult to be certain whether the lack of an offer reflects workers' preferences for another form of compensation (for example, higher wages), or their inability to find a job with an offer. In this paper we find evidence suggesting that workers in some labor markets face a constrained set of choices when searching for their preferred mix of wages and benefits.

We find, first, substantial differences in the availability of ESI offers by region, especially among those in low-offer labor markets. Substantial portions of workers without offers may face a minimum wage constraint—that is, their full-time-equivalent earnings over the minimum wage may not be sufficient to cover the employer share of ESI costs. The minimum wage constraint implies that subsidies focusing only on the worker's share of premiums (particularly those with significant requirements for employer contributions) may be insufficient to change the decision of employers not to offer ESI, because they cannot recapture their share of the cost from wages.

Many workers without offers may also face limited options because of their short job tenure. The tenure issue has implications for the efficiency of ESI in low-offer labor markets. It is both costly and inefficient to provide insurance coverage to high-turnover workers.[12]

Both these issues highlight the potential advantages of purchasing pools where employers can make pretax contributions for coverage when employing a particular

worker and the worker can maintain coverage there even when changing employers (see for example, Holahan, Nichols, and Blumberg 2001).

The heterogeneous characteristics and preferences of workers without ESI offers suggest the difficulty of increasing employer offers of ESI by offering employers tax or other incentives. Employers must respond to this heterogeneity with blunt tools (offer or no offer, and a single or very limited number of benefit packages). Our description of the incomes of workers in jobs without ESI offers suggest that subsidies directed only to the lowest-income workers may be ineffective in increasing demand sufficiently that employers will change their decisions about offering ESI.

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Notes

[1] CPS participants are interviewed for four consecutive months, excluded for eight months, then included for an additional four months. Approximately one-quarter of the sample will not be in the survey in the next month (i.e., are in an outgoing rotation group). Those working units who are in one sample but not in the other are dropped from the file used for our analysis. In addition, because the CPS is a survey of households, not individuals, a family living in a particular location might be replaced with a completely different family in the next month (e.g., a family sells their house and another family moves in). In such cases, the entire household is dropped from the file. Additional groups of workers were excluded because information on critical variables was missing. The most important of these groups are those individuals who are working in one month, but not the other-- those working in March, but not in February are missing information on offer and current health insurance coverage; those working in February, but not in March are missing information on firm size, income, and wages.

[2]The process involves three steps. First, we estimate a probit equation on workers and their families from the entire March CPS. The dependent variable is an indicator for whether the individual is in the merged February/March file. The independent variables are demographics, including age, sex, race, annual wages, family status, work status, education, region and coverage status and some interactions of these variables. Second, we use this probit equation to predict a probability of inclusion for each individual in the merged file. Third, we invert the predicted probability for each individual in the merged CPS file and multiply it by his/her March CPS weight. This approach will place more weight on an individual who is not being adequately represented in the merged file, and less weight on an individual who might be over-represented in the merged file relative to the March CPS. For a simplified example, assume that ethnicity is the only characteristic included in the probit equation, instead of the array actually used. If a Hispanic worker has a 0.5 probability of being in the merged file (i.e., the March CPS reports 12% Hispanic workers but the merged file only has 6%), we would apply a weight adjustment of 2 to each Hispanic worker so that the merged file would have the right number of weighted Hispanic workers. The reweighting regression results for workers can be seen in Table 3.2.1.1 of Blumberg et al. 2003. We also reweight our nonworkers using a similar approach so that our merged CPS file is representative of the entire U.S. population. After completion of the re-weighting process, we delete any elderly individuals from the file who do not have a worker in their health insurance unit or who do not report having ESI.

[3] Comparison of individual demographics and insurance coverage between the merged CPS file and the March CPS is presented in Section 3.5. of Blumberg et al. 2003.

[4] For example, our set of explanatory variables excludes firm size and part-time status, as well as the individual's health status.

[5] 1998 is the most recent year available for state-specific estimates.

[6] If, however, the comparison across geographic areas was presented in terms of the probability of not having an offer (1 minus the probability of offer) the relative difference would be quite large for the high offer worker.

[7]Even for an individual working full time, full year, minimum wage employment provides about $10,700 per year—just over the federal poverty threshold for a single individual with no children ($9,573).

[8] The state minimum wage was used for those residing in states with a minimum wage exceeding the federal one. For all others, the federal minimum wage was used.

[9] http://www.meps.ahrq.gov/Data_Pub/IC_Tables.htm. We use employer contributions for single (as opposed to family premiums).

[10]The proportion of workers with short job tenure is sensitive to the definition used. For example, whereas 32 percent of workers without an ESI offer reported working in the current job for less than a year, 43 percent reported working one year or less (i.e., 11 percent reported working one year).

[11] A minority (27%) of these workers without offers identified as constrained either by minimum wage or by short tenure are employed in firms which offer coverage to some other workers. Depending upon how the costs of benefits are in practice passed back to wages, these workers may already have had their wages reduced to some extent, reflecting a portion of the costs of coverage provided to their coworkers.

[12] Administrative costs become a more important factor in ESI costs for high-turnover workers. ESI may thus be an inefficient approach, given the reduced ability to maintain relationships with providers (as

workers move between managed care plans), and to maintain continuity of care. In addition, the demand for coverage is lower among high-turnover workers, because they perceive health insurance as a longer term benefit, with low expected benefits in the near term.

Figure 1
Distribution of Predicted Probability of ESI Offer

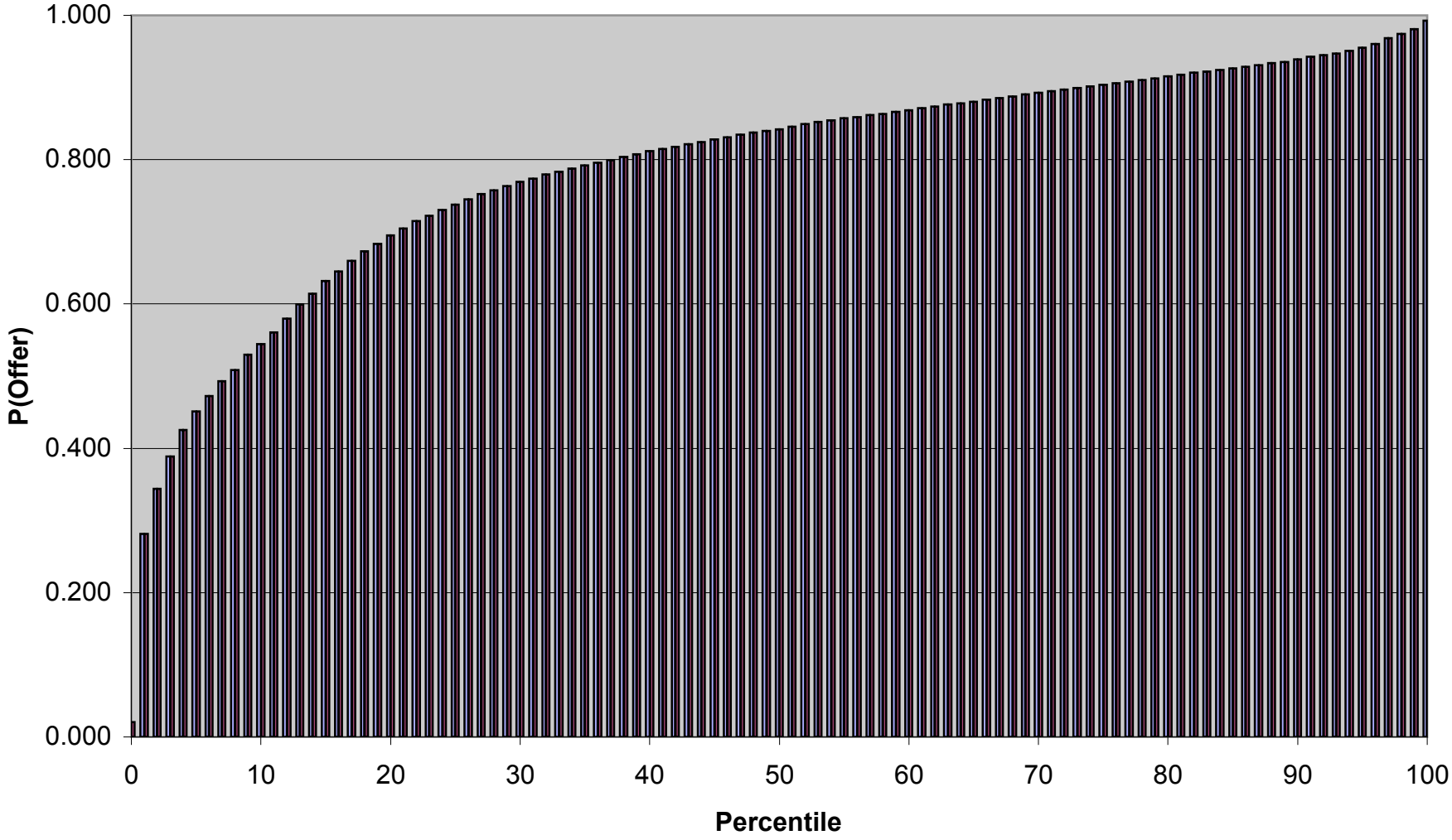

Table 1
Descriptive Characteristics of Individuals in Low, Medium, and High Offer Categories, Column Percents

	Low Offer	Mixed Offer	High Offer
N	2,068	12,566	13,325
Offer Rate	38.7	73.2	90.9
Firm Size			
Less than 10	24.5	13.3	7.0
10-24	16.2	10.5	6.9
25-99	15.4	14.7	12.6
100-499	9.1	15.3	16.0
500+	34.8	46.3	57.4
Occupation			
Exec., Admin., and Manag.	0.0	3.6	28.6
Professional Specialty	0.1	11.2	25.1
Technicians and Related Support	0.0	3.2	4.9
Sales	22.6	11.4	8.1
Admin. Support, including Clerical	0.1	23.4	10.1
Private Household Services	3.9	0.0	0.0
Protective Service	0.0	0.4	4.0
Other Service	50.0	12.9	0.1
Precision Production, Craft, and Repair	8.0	13.4	9.1
Machine Operators, Assemblers, and Inspectors	0.0	5.2	7.7
Transportation and Material Moving	1.2	7.2	2.2
Handlers, Equip. Cleaners, etc.	6.5	6.9	0.1
Farming, Forestry, and Fishing	7.5	1.4	0.0
Industry (NAICS)			
Mining/Manufacturing	2.4	12.4	21.3
Retail Trade	20.0	13.4	7.1
FIRE	1.0	7.5	7.5
Wholesale	1.2	3.7	4.8
Transportation	1.5	6.6	5.4
Construction	10.2	7.9	2.7
Agriculture	4.0	0.9	0.2
Services	59.3	44.6	42.7
Public Administration	0.4	3.0	8.4
Income Relative to Poverty			
<100%	17.7	6.2	1.4
100-199%	32.2	17.8	6.5
200-399%	31.9	37.3	27.1
400%+	18.2	38.7	65.1
Family Type			
Married	40.1	52.1	63.7
Has Kids (in HIU)	49.9	44.4	45.4
Full-time Worker	64.5	82.7	93.0
Race and Ethnicity			
White	48.8	70.4	78.4
Black	7.1	12.4	11.8
Hispanic	38.5	13.1	4.5
Other	5.6	4.0	5.3
Education			
No High School	55.5	13.9	0.3
High School	24.1	40.3	22.9
Some College	18.7	27.6	13.1
College+	1.7	18.2	63.7
Sex			
Male	39.3	44.3	61.1
Female	60.7	55.7	38.9
Citizenship Status			
All Native Born Citizens	62.7	87.5	91.6
All Non-Citizens	32.8	8.2	2.8
All Naturalized Citizens	4.5	4.3	5.6
Hispanic, Citizen	9.9	6.8	3.3
Hispanic, Non-Citizen	25.8	4.3	0.3
Hispanic, Naturalized Citizen	2.8	2.0	0.9
Metro Status			
Metro	79.1	79.7	86.1
Non-Metro	20.9	20.3	13.9

Notes:

1) Data source: Merged file of February and March 2001 CPS.

2) Sample includes workers aged 18-64.

3) Low offer labor markets are those with probability of offer below .5, mixed offer are those with probability of offer between .5 and .85, and high offer are those exceeding .85.

Table 2

Predicted Probability of Offer for Each Typical Case, by Region and Metro Status

	Pacific Region		New England Region	
	Metro	*Non-Metro*	*Metro*	*Non-Metro*
Low Offer Hispanic female, less than high school education, food service worker	37.0%	33.0%	50.0%	45.8%
Mixed Offer White female, high school graduate, administrative support worker	85.4%	82.8%	91.7%	89.9%
High Offer White male, college graduate, works as executive/administrator/manager	95.9%	94.9%	98.1%	97.5%

Notes:

1) Data source: Merged file of February and March 2001 CPS.
2) Sample includes workers aged 18-64.

Table 3

Share of Workers Without Offers Facing Minimum Wage Constraint

	Share of Workers Without Offers	Share of Workers Without Offers Who Face a Minimum Wage Constraint
Overall	21.5%	31.3%
Low Offer	61.3%	51.0%
Mixed Offer	26.8%	28.7%
High Offer	9.1%	15.0%

Notes:

1) Data source: Merged file of February and March 2001 CPS.

2) Sample includes workers aged 18-64.

3) Low offer labor markets are those with probability of offer below .5, mixed offer are those with probability of offer between .5 and .85, and high offer are those with probability of offer exceeding .85.

Table 4

Job Tenure Rates, by Offer Status and and Labor Market Type

	Short Job Tenure (<1 Year)		
	All Workers	*With Offer*	*Without Offer*
Overall	17.83%	14.05%	32.33%
Low Offer	30.64%	21.38%	36.59%
Mixed Offer	19.53%	15.25%	31.85%
High Offer	13.88%	12.54%	28.32%

Notes:

1) Data source: Merged file of February and March 2001 CPS.

2) Sample includes workers aged 18-64.

3) Low offer labor markets are those with probability of offer below .5, mixed offer are those with probability of offer between .5 and .85, and high offer are those with probability of offer exceeding .85.

Table 5

Share of Workers with Short Job Tenure (< 1 Year) and/or Minimum Wage Constraint by Offer Status and Labor Market

	All Workers	Workers With Offer	Workers Without Offer
Overall	25.5%	18.8%	51.2%
Low Offer	57.2%	42.3%	66.8%
Mixed Offer	29.1%	22.1%	49.0%
High Offer	16.3%	14.4%	37.5%

Notes:

1) Data source: Merged file of February and March 2001 CPS.

2) Sample includes workers aged 18-64.

3) Low offer labor markets are those with probability of offer below .5, mixed offer are those with probability of offer between .5 and .85, and high offer are those with probability of offer exceeding .85.

Table 6
Poverty Rates, by Offer Status and and Labor Market Type

	<=100% Poverty			<=150% Poverty		
	All Workers	*With Offer*	*Without Offer*	*All Workers*	*With Offer*	*Without Offer*
Overall	4.92%	2.69%	13.08%	10.76%	7.03%	24.43%
Low Offer	17.68%	11.03%	21.88%	32.16%	24.23%	37.16%
Mixed Offer	6.21%	4.04%	12.13%	13.94%	10.39%	23.62%
High Offer	1.37%	0.98%	5.24%	3.82%	3.06%	11.43%

Notes:

1) Data source: Merged file of February and March 2001 CPS.

2) Sample includes workers aged 18-64.

3) Low offer labor markets are those with probability of offer below .5, mixed offer are those with probability of offer between .5 and .85, and high offer are those with probability of offer exceeding .85.

Appendix Table
Available Upon Request
Probit of Probability that Worker Receives an ESI Offer

offer	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
no high school	-0.454	0.037	-12.41	0.000	-0.526	-0.382
some college	-0.087	0.029	-2.96	0.003	-0.145	-0.029
college graduate	0.265	0.031	8.44	0.000	0.204	0.327
female	-0.171	0.025	-6.76	0.000	-0.220	-0.121
black	0.083	0.039	2.14	0.032	0.007	0.159
hispanic	-0.024	0.049	-0.50	0.617	-0.121	0.072
other race	0.064	0.059	1.09	0.275	-0.051	0.180
non-citizen	-0.310	0.062	-4.98	0.000	-0.432	-0.188
naturalized citizen	0.065	0.070	0.92	0.355	-0.072	0.202
hispanic non-citizen	-0.011	0.095	-0.12	0.905	-0.198	0.175
hispanic naturalized citizen	-0.013	0.122	-0.10	0.917	-0.252	0.227
non metro	-0.108	0.028	-3.89	0.000	-0.162	-0.053
region 1	0.089	0.052	1.70	0.089	-0.013	0.191
region 2	-0.087	0.043	-2.03	0.042	-0.172	-0.003
region 3	-0.053	0.037	-1.45	0.148	-0.126	0.019
region 4	-0.073	0.044	-1.64	0.100	-0.159	0.014
region 6	-0.025	0.052	-0.48	0.632	-0.127	0.077
region 7	-0.161	0.046	-3.51	0.000	-0.251	-0.071
region 8	-0.228	0.051	-4.44	0.000	-0.328	-0.127
region 9	-0.243	0.043	-5.62	0.000	-0.328	-0.158
cost index	-0.343	0.139	-2.47	0.013	-0.615	-0.071
public administration	0.598	0.183	3.27	0.001	0.240	0.957
management	0.013	0.069	0.19	0.848	-0.122	0.148
engineer	0.432	0.135	3.20	0.001	0.167	0.696
math/computer scientist	0.292	0.122	2.39	0.017	0.052	0.531
natural scientist	0.712	0.254	2.80	0.005	0.213	1.211
health diagnosing	-0.054	0.177	-0.31	0.760	-0.402	0.293
health assessment and treatment	-0.043	0.081	-0.53	0.595	-0.201	0.115
university teacher	-0.245	0.115	-2.13	0.033	-0.470	-0.019
other teacher	-0.351	0.060	-5.80	0.000	-0.469	-0.232
lawyer/judge	-0.138	0.171	-0.81	0.420	-0.473	0.198
other professional	-0.422	0.065	-6.53	0.000	-0.549	-0.296
health technician	-0.240	0.094	-2.54	0.011	-0.424	-0.055
engineering/science technician	-0.328	0.110	-2.99	0.003	-0.543	-0.113
other technician	0.088	0.126	0.70	0.486	-0.160	0.336
sales supervisor	-0.105	0.072	-1.47	0.143	-0.246	0.036
sales rep, finance and business	-0.488	0.082	-5.92	0.000	-0.649	-0.326
sales rep, commodities except retail	0.150	0.122	1.22	0.221	-0.090	0.389
sales worker, retail and personal services	-1.061	0.057	-18.76	0.000	-1.172	-0.950
other sales	-0.665	0.305	-2.18	0.029	-1.263	-0.067
administrative support supervisor	0.442	0.174	2.54	0.011	0.101	0.783
computer equipment operator	0.677	0.257	2.63	0.009	0.172	1.182
secretary	-0.302	0.071	-4.23	0.000	-0.441	-0.162
financial records processing	-0.287	0.085	-3.37	0.001	-0.453	-0.120
mail/message distribution	-0.008	0.137	-0.06	0.952	-0.277	0.260
other administrative support	-0.252	0.051	-4.92	0.000	-0.352	-0.152
household services	-2.229	0.234	-9.54	0.000	-2.687	-1.771
protective services	0.066	0.096	0.69	0.488	-0.121	0.254
food services	-1.158	0.060	-19.21	0.000	-1.276	-1.040
health services	-0.584	0.078	-7.52	0.000	-0.736	-0.432
cleaning services	-0.566	0.076	-7.42	0.000	-0.716	-0.417
personal services	-1.156	0.077	-15.04	0.000	-1.307	-1.006
mechanic/repairer	-0.259	0.070	-3.73	0.000	-0.396	-0.123
construction trades	-0.794	0.063	-12.68	0.000	-0.916	-0.671
other precision production	0.082	0.075	1.08	0.279	-0.066	0.229
machine operator, except precision	-0.037	0.069	-0.54	0.591	-0.173	0.099
fabricator/assembler/inspector/sampler	0.033	0.088	0.38	0.705	-0.139	0.206
motor operator	-0.541	0.068	-7.97	0.000	-0.674	-0.408
other transportation	0.175	0.123	1.42	0.155	-0.066	0.417
construction laborer	-0.946	0.148	-6.41	0.000	-1.235	-0.657
freight/stock/material handler	-0.618	0.087	-7.10	0.000	-0.788	-0.447
other handler/laborer	-0.622	0.088	-7.04	0.000	-0.795	-0.449
farm operator/manager	-0.924	0.287	-3.22	0.001	-1.486	-0.362
farm worker	-0.991	0.101	-9.81	0.000	-1.189	-0.793
forestry and fishing	-0.208	0.444	-0.47	0.639	-1.078	0.662
_cons	1.720	0.150	11.45	0.000	1.425	2.014

Notes:

1) Data source: Merged file of February and March 2001 CPS.
2) Sample includes workers age 18-64.
3) Executives/administrators/managers, excluding public is the excluded occupation
4) "Cost Index" is the state per capita personal health expenditures in the state of residence relative to that in Iowa (Iowa has roughly the national average on this measure).
5) Region 1 (New England Division) ME,NH,VT,MA,RI,CT ;
6) Region 2 (Middle Atlantic Division) NJ,NY,PN ;
7) Region 3 (East, North Central Division) OH,IN,IL,MI,WI ;
8) Region 4 (West, North Central Division) MN,IA,MO,ND,SD,NE,KS ;
9) Region 5 (South Atlantic Division) DE,MD,DC,VA,WV,WV,NC,SC,GA,FL ;
10) Region 6 (East, South Central Division) KY,TN,AL,MS ;
11) Region 7 (West, South Central Division) AR,LA,OK,TX ;
12) Region 8 (Mountain Division) MT,ID,WY,CO,NM,AZ,UT,NV ;
13) Region 9 (Pacific Division) WA,OR,CA,AK,HI ;