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BAD JOBS IN AMERICA:

**STANDARD AND NONSTANDARD EMPLOYMENT RELATIONS
AND JOB QUALITY IN THE UNITED STATES***

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ABSTRACT

The prevalence of nonstandard jobs is a matter of concern if, as many assume, such jobs are bad. This paper examines the relationship between nonstandard employment (on-call work and day labor, temporary-agency employment, employment with contract companies, independent contracting, other self-employment, and part-time employment in "conventional" jobs) and exposure to "bad" job characteristics, using data from the 1995 Current Population Survey (CPS). Of workers age 18 and over, 31 percent are in some type of nonstandard employment. To assess the link between type of employment relationship and bad jobs, we conceptualize "bad jobs" as those with low pay and without access to health insurance and pension benefits. About one in seven jobs in the U.S. is bad on these three dimensions. Nonstandard employment strongly increases workers' exposure to bad job characteristics, net of controls for workers' personal characteristics, family status, occupation, and industry.

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A recurring theme in the sociology and economics of industrial societies is the problem of marginalized workers in bad jobs (e.g., Marx 1967; Morse 1969; Gordon 1972). In the late 1960s and early 1970s, institutional economists drew attention to issues of bad jobs by proposing that the labor market was divided into a primary segment comprised of "good" jobs and a secondary segment comprised of "bad" jobs (Bluestone 1970; Piore 1971; Doeringer and Piore 197; Harrison 1972; Kalleberg and Sørensen 1979). Recent reports of the growth of "contingent" (Freedman 1985; Polivka and Nardone 1989; Barker and Christensen 1998), "externalized" (Pfeffer and Baron 1988), and nonstandard employment (Casey 1991; Blank 1998) again draw attention to bad jobs.

Underlying concern with nonstandard work arrangements are claims that they are growing rapidly and are worse for workers than regular full-time jobs (Callaghan and Hartmann 1991; Appelbaum 1992; but see Blank 1998). Whether the growth of nonstandard employment is problematic depends on the quality of nonstandard jobs. Some have suggested that nonstandard arrangements benefit both employers and workers (Belous 1989). The flexibility inherent in many types of nonstandard work allows employers to cut labor costs during slack times, and employers can screen nonstandard workers before hiring them permanently, thus reducing recruitment and training expenses (Houseman 1997). Workers also benefit insofar as nonstandard jobs let them control their

schedule, sample a variety of jobs, and have more time for other activities (Belous 1989; Polivka and Nardone 1989).

To the extent that nonstandard jobs pay poorly, lack health insurance and pension benefits, are of uncertain duration, and lack the protections that unions and labor laws afford, they are problematic for workers (Mishel and Bernstein 1994; Ferber and Waldfogel 1996; Kalleberg et al. 1997). Whether, on balance, nonstandard work primarily benefits or harms workers is a matter of both debate and considerable research. We advance this debate by recasting the question from the prevalence of nonstandard jobs—which have been taken as a proxy for marginal jobs—to the link between these arrangements and the quality of jobs.

There is nothing new about either bad jobs or nonstandard employment relations. Marginal and irregular work and nonstandard employment relations were common among the laboring classes in industrial countries in the 19th century. Until the end of the Great Depression, most jobs were insecure and wages were unstable (Jacoby 1985). Among the working classes, pensions and health insurance were almost unheard of before the 1930s, and benefits were contingent on workers' docility, rather than entitlements (Edwards 1979). Laws enacted during the 1930s dramatically increased the number of workers whose jobs provided a living wage, employment security, and benefits (Dobbin et al. 1988). Workers' right to bargain collectively, along with increased government control over working conditions and employment practices, restricted employers' power over the terms of employment. Thus, by the 1940s, the ratio of good to bad jobs had increased

sharply (Edwards 1979; Jacoby 1985).

Although regular full-time jobs were the norm by the 1950s, neither nonstandard work arrangements nor bad jobs had disappeared. Employers continued to rely on a peripheral workforce to contain labor costs and as a buffer protecting the jobs of "permanent" employees (Morse 1969; Szymanski 1976; Harrison 1994). In fact, the growth of "good" jobs that are covered by collective bargaining and federal labor-protection laws made the "badness" of peripheral jobs even more striking. The question of the link between employment structures and bad jobs remains, however. We address it in this paper.

To examine the relationship between nonstandard employment and "bad" jobs, we used data from the February 1995 Current Population Survey's (CPS) Supplement on Contingent Work (U.S. Bureau of the Census 1996).¹ The CPS is a monthly household

1. The February 1995 CPS sample collected data for 106,632 civilian adults of whom the CPS selected 69,002 for the Contingent Work Supplement (CWS). Our analyses are based on the main jobs of the 56,827 respondents who were employed and over age 17. The estimates in Tables 2 to 4 and the Appendix have been weighted to represent the U.S. population, using weights provided by the Bureau of Labor Statistics.

The CPS collects earnings data from respondents in rotations 4 and 8. Earnings data were also collected for most of the nonstandard workers in the CWS. We constructed an earnings sample of all 21,399 persons over 17 with earnings data, and

survey of Americans. The 1995 supplement on contingent and alternative work arrangements provides the first systematic data on nonstandard employment in the U.S.

This paper has three parts. First, we outline the dimensions of standard and nonstandard work arrangements. We then identify three dimensions of job quality and discuss why nonstandard jobs are especially likely to have bad characteristics. Finally, we estimate the effects of nonstandard employment on employment in jobs with more or fewer bad characteristics.

STANDARD AND NONSTANDARD EMPLOYMENT RELATIONSHIPS

The term “nonstandard employment relationship” implies a “standard” employment relationship, although there is no consensus on exactly what a standard employer-employee relationship entails. Indeed, the meaning of the terms “employer” and “employee” are socially constructed in a political process (see Gonos 1997; 1998).² We

constructed a similar sample of the 22,987 respondents with data on union membership.

All analyses that include earnings and union membership are based on these samples, weighted (when appropriate) with weights the BLS provided. Other analyses are based on the full sample.

2. For example, the IRS treats temporary agencies as temporary workers’ employer, while many state laws define temporary agencies as employment agencies (Gonos 1997; 1998).

argue that standard employment arrangements are characterized by the exchange of a worker's labor for monetary compensation from an employer ("Organization A" in Table 1), with work done on a fixed schedule—usually full-time—at the employer's place of business, under the employer's control, and with the mutual expectation of continued employment.

--TABLE 1 ABOUT HERE--

It is through the standard employment relationship that most workers earn a living and that the government protects workers from dangerous working conditions through health and safety laws, exploitation through the Fair Labor Standards Act, unfair treatment through the National Labor Relations Act and anti-discrimination laws, and the vicissitudes of unemployment through unemployment insurance. The government also provides additional benefits such as parental leave and social security through the standard employment relationship.

We use the term "nonstandard work" for employment relations other than standard, full-time jobs, including part-time employment in an otherwise standard work arrangement³, day labor and on-call work, temporary-agency and contract-company

3. Among workers in nonstandard arrangements, we do not distinguish between full- and part-time employees.

employment, independent contracting,⁴ and other self-employment (see Kalleberg et al. 1997 for definitions of these arrangements). These nonstandard arrangements typically depart from standard employment in several respects (see Table 1). First, some lack an employer. This is the case for self-employed persons, independent contractors, consultants, and free lancers, all of whom bear the risks of their own employment. These workers may have many clients who might be said to employ them. Independent contractors, for example, may work at and be paid by a single organization or several organizations, none of whom assumes the legal responsibilities of an employer such as deducting social security taxes or paying unemployment-insurance premia. This fact has led firms to try to evade legal obligations associated with employing workers (e.g., Callaghan and Hartmann 1991; Johnston 1995). Moreover, while some on-call workers or day laborers—for example, substitute teachers and nurses—work for a single employer (Carre’ 1992:60), others work out of a hiring hall, and still others are hired from spot markets, like a street corner.

Second, in some nonstandard work arrangements, workers are weakly attached to

4. The Basic CPS asks respondents whether they are self-employed or are wage-and-salaried employees. The CWS asked respondents whether they are independent contractors. Because some respondents who reported they received wages or salaries also said they are independent contractors, we distinguish self-employed and wage-and-salaried independent contractors.

their *de jure* or legal employer in terms of location or administrative control (Pfeffer and Baron 1988). By lobbying state legislatures, the temporary-help industry won the legal status of employer rather than employment agency, thereby freeing its clients from the legal obligations of employers (Gonos 1997). Thus, the *de facto* employers of the employees of temporary agencies or contract companies are not their *de jure* employers.

Third, employers do not control how some nonstandard workers do their jobs. For example, independent contractors control their own work; indeed, this is a legal criterion for whether a worker is an independent contractor rather than an employee (Carnevale, Jennings, and Eisenmann 1998:283). Moreover, temporary agencies' clients (the *de facto* employers) not the temporary agencies (the *de jure* employers) control the work of temporary-agency employees.

Fourth, in most nonstandard arrangements workers cannot assume their employment will continue. Indeed, employers use “on-call” workers, day laborers, workers on fixed-term contracts, temporary-agency employees, and part-time workers to limit the duration of employment (Pfeffer and Baron 1988). It is this aspect of nonstandard employment that led it to be dubbed "contingent work" (Freedman 1985). Contingent work is generally defined as jobs in which there is neither an explicit or implicit contract for long-term employment or the minimum hours vary unsystematically (Polivka and Nardone 1989:11). Since contingency *qua* employment insecurity is a dimension of the employment relationship, some full-time jobs may be "contingent."

In 1995 the primary job of nearly 84 million (65 percent) employed Americans over

age 17 was a standard full-time job, according to the CPS. Another 17 million worked part time in standard jobs, and the remaining 20 million worked full- or part-time in some nonstandard arrangement. Men were more likely than women to hold regular full-time jobs and to be self employed or independent contractors, and women were overrepresented in regular part-time jobs. Overall, the sexes' distributions across employment relations are quite similar, with an index of dissimilarity of about 15 (see Table 3, columns 1 and 2), but this similarity masks women's and men's concentration in different occupations within the same nonstandard employment arrangements (Kalleberg et al. 1997). Thus, employment in a nonstandard work arrangement may differentially expose the sexes to the risk of a bad job.

BAD JOBS

Critics of nonstandard employment often equate it with poor quality jobs. But only by measuring job quality independently of the type of work arrangement can we determine whether and what kinds of nonstandard employment raise workers' risk of bad jobs. Job quality is an important dimension of stratification in industrial societies, and inequalities in employment relations have drawn considerable attention from sociologists and economists interested in labor markets, class, and the division of labor. For example, Marx contended that employers' ownership and control of the means of production ensured that virtually all jobs would be bad. By the 1940s, U.S. sociology had replaced this deterministic

conception with one that emphasized variation in the prestige of employment (e.g., Hodge, Siegel, and Rossi 1964). More recently, sociologists have stressed variability on dimensions such as complexity and physical demands (Cain and Treiman 1981). It is workers, however, who ultimately judge job quality, and they may consider a job to be bad for many reasons (Jencks et al. 1988). Our data allow us to assess three of these—low earnings and the lack of health insurance and pension benefits—which are generally the hallmarks of bad jobs.

Broad consensus exists that wages are a fundamental dimension of job quality (Jencks et al. 1988; Farber 1997). In our analyses, we define a low-wage job as one whose hourly wage is in the bottom quintile in the CPS sample—below \$6.00 an hour (in 1995).

Because workers in the United States obtain health insurance and retirement benefits primarily through employment, jobs that do not offer these benefits may inflict considerable hardship on workers and their families, especially in single-earner households. Thus, our second and third measures of whether a job is bad are whether it provides health insurance and pension benefits. We measure fringe benefits with respondents' reports of whether they have health insurance and pension coverage through their employer.⁵ We coded self-employed independent contractors and other self-employed

5. We measure whether workers have fringe benefits, not whether their employers offer them. In addition to the workers who were insured through their job, another 15.8 percent

workers who purchased fringe benefits as having them. According to the CPS, 44 percent of employed persons over age 17 had main jobs that did not provide health benefits, and 51 percent held jobs that did not provide pension benefits. As Table 2 shows, women are less likely to have benefits than men, and people of color—especially Hispanics—are less likely to have benefits than nonHispanic whites.

-- TABLE 2 ABOUT HERE --

A Composite Measure of Bad Jobs

Some scholars contend that bad job characteristics tend to cluster. Dual labor market theorists, for example, posited that primary and secondary markets comprise good and bad jobs, respectively (e.g., Piore 1971). By contrast, Adam Smith's (1937 [1776]) hypothesis of compensating differentials holds that pay is positively associated with undesirable working conditions, because workers trade off working conditions and benefits for pay. For example, the majority of professionals working as independent contractors did not receive health insurance (64.3 percent) or pension benefits (52.6 percent), but the high pay and autonomy of independent contracting may have drawn them to work as "free professionals" (Mills 1951). Of course, low-wage jobs are likely to be

were offered health insurance and 11.2 percent were offered pension benefits by their employers. Of these, 8.4 and 8.1 percent said health insurance and pension benefits were not offered under conditions or costs that they would or could accept. In addition, 5.5 percent were covered by health insurance through another source.

bad even if they offer another desirable characteristic such as security.

Our measure of the badness of a job is its number of bad characteristics, and the three characteristics we use to measure job badness are positively correlated. The correlation between lack of health insurance and the absence of pension benefits is moderate ($r = .48$), and both are less strongly correlated with low pay (.33 and .32 for no health and no pensions, respectively). Thus, employers are not compensating for the absence of benefits with higher pay; a job that is bad on one dimension tends to be bad on others (see Hudson 1998).

The main job of about one in seven U.S. workers is bad on all three dimensions (results not shown). Nearly one-quarter (23.1 percent) of workers' main jobs are bad on two dimensions, and almost a quarter (23.9 percent) are bad on one dimension. Just four jobs in ten have none of these bad qualities.⁶

As Table 2 shows, white men are less likely to have bad jobs than women of any race or men of color. Of eight sex-race groups, white men are least likely to hold low-wage jobs, jobs without health insurance, and jobs without pensions. At the other extreme, Hispanic women are most likely to be in jobs with low pay and second most likely after Hispanic men, to hold jobs that lack pensions. Hispanic men and women are also least likely to have jobs that provide health insurance.

6. Of course, not being bad does not necessarily make a job "good." A "good" job must have other attributes (Jencks et al. 1988).

Except for Hispanics' access to pensions, women's jobs are worse than same-race men on all three measures, a difference that is not surprising given women's segregation into jobs that pay less than men's jobs and the undervaluation of women's work (Reskin 1993; England, Reid, and Kilbourne 1996). The sex differences in health insurance and pension benefits, however, are limited to married workers (not shown tabularly).

LINKING WORK ARRANGEMENTS AND BAD JOBS

We hypothesize that nonstandard work increases workers' risk of bad job characteristics compared to standard employment, and that this difference occurs partly because nonstandard jobs are less secure than standard jobs, less likely to be unionized, and involve less complex work. In addition, because employers use nonstandard arrangements to reduce employment costs, these arrangements should be related to bad job characteristics even after controlling for insecurity, unionization, and complexity. Finally, some nonstandard work arrangements should be associated with worse jobs than others: independent contractors, other self-employed, and contract company employees are likely to have fewer bad job characteristics than temporary employees, on-call workers, and part-timers. Below we outline our reasoning for these hypotheses.

Employment Insecurity

Nonstandard work arrangements are more likely than standard jobs to be bad partly

because they are less likely to provide employment security. Nonstandard workers often lack explicit or implicit contracts for permanent employment, so their employment, work schedules, and earnings vary unpredictably, depending on employers' needs (duRivage 1986:19). An important reason employers pay well and provide benefits is to reduce turnover by winning employees' loyalty. However, employers do not offer these incentives to workers they don't plan to retain. Thus, employers are less likely to offer benefits and more likely to pay low wages to workers whose future employment is uncertain (Hudson 1998).

The second pair of columns in Table 3 shows that uncertainty is more common in nonstandard than standard jobs.⁷ Overall, between 8 and 9 percent of respondents had jobs that were insecure. In almost every nonstandard work arrangement both sexes' jobs were substantially less secure than those of regular full-time workers: only 5.4 percent of men and women in regular full-time jobs reported that their jobs were of uncertain duration. Only male self-employed independent contractors and other self-employed

7. We classified the jobs of self-employed independent contractors and other self-employed workers as insecure if they expected them to last no more than one year. We classified wage-and-salaried employees as having insecure jobs if they described them as temporary, were unsure if they were temporary, could not work for their employer as long as they wished, or were unsure how long they could work for their present employer. We did not code jobs that were temporary for noneconomic reasons as contingent.

workers reported a comparable level of job security. By contrast, over three-quarters of temporary-agency employees reported that their job duration was uncertain. Sex was not consistently related to exposure to employment uncertainty: men who worked part-time, through temporary agencies, and on call were more likely than women in these arrangements to have uncertain jobs; while self-employed women and independent contractors were more likely than their male counterparts to describe their jobs' duration as uncertain, reflecting the different economic situations of self employed men and women. In sum, since employment insecurity is common in nonstandard employment, controlling for it should reduce the effect of nonstandard employment relations on the number of bad job characteristics.

-- TABLE 3 ABOUT HERE --

Unionization

Through collective bargaining, unions have improved the quality of workers' jobs. However, the right to bargain collectively protected by the National Labor Relations Act is meaningless for workers whose *de jure* employer is not their *de facto* employer (Hiatt 1995:742), so working for temporary help agencies and contract companies effectively excludes workers from union representation (Gonos 1998). Contract workers lack an employer with whom to bargain collectively since the National Labor Relations Board does not view a contracting company as the contracted workers' employer (Hiatt 1995:743). Thus, a contracting company--the *de facto* employer--can cancel the contract if workers unionize, leaving them jobless and without legal recourse (Engelstein and

Rhinehart 1998; Hiatt 1995:753). If unionization reduces workers' exposure to bad job characteristics and standard work arrangements are more likely than nonstandard arrangements to be unionized, then unionization should help account for the association between nonstandard work and bad job characteristics.

The CPS workers in regular full-time jobs were more likely to be unionized than workers in most nonstandard arrangements (see Table 3). The high unionization rate among male on-call/day laborers reflects the high rates of unionization by truck drivers, electricians, carpenters, plumbers, pipefitters, and steamfitters in nonstandard arrangements.

Occupational Complexity

Employers try to retain skilled workers with higher wages and fringe benefits. Thus, we expect jobs that involve more skill to be better than those that entail less skill. Since highly skilled jobs tend to be complex, we use the ***complexity*** of a worker's occupation as a proxy for their job skill. Our measure of occupational complexity is based on several variables from the *Dictionary of Occupational Titles*⁸

8. Our measure is based on general educational development (GED), specific vocational preparation (SVP), complexity in dealing with data and people, verbal and numerical aptitude, and the reasoning ability an occupation requires. After recoding GED and SVP so high scores indicate more complex jobs, we standardized and averaged the seven

According to Table 3, male wage-and-salaried and self-employed independent contractors, and both male and female "other" self-employed persons, held more complex jobs than workers in other arrangements. Contract company employees have lower skill levels than self-employed independent contractors and other self-employed workers, but higher levels than temporary-agency employees, on-call workers and day laborers, and part-time workers. These findings are consistent with our assumption that independent contractors and the self-employed are most likely to control their own work (see Table 1). If higher occupational complexity reduces workers' exposure to bad job characteristics, temporary employees, on-call workers/day laborers and part-time employees should have more bad job characteristics than workers in standard arrangements or those in the other nonstandard work arrangements.

Cutting Employment Costs

Establishments often opt for nonstandard workers in order to reduce employment costs, such as transaction and administrative costs and, especially, benefits which constitute between one-third and forty percent of total compensation (Cascio 1992). In fact, avoiding fringe benefits is a major reason employers use nonstandard work arrangements (Houseman 1997; Blank 1998). Part-time jobs are less likely than full-time jobs to provide health insurance, unemployment insurance (Tilly 1996), and pensions

indicators. The scale has a Cronbach's alpha of .97.

(Belous 1989:11-2). Under the Employment Retirement Security Act employers can exempt from pension plans workers employed fewer than 1,000 hours a year (duRivage 1986:23), and independent contractors' and freelancers' self-employed status exempts their clients from contributing to social security or unemployment insurance (Callaghan and Hartmann 1991:26). Temporary agencies generally offer no benefits or limit benefits to workers who worked a specified number of hours (duRivage 1986:22). Regulations enacted in 1985 allow the federal government to exempt health and retirement benefits (except Social Security) from temporary jobs, bringing government practices in line with the private sector (Appelbaum 1987:274, 281). Whether nonstandard workers qualify for unemployment compensation depends on their state residence and their hours of work (duRivage 1986:24). In sum, nonstandard work reduces workers' likelihood of receiving benefits. Because we have no measure of the employment costs for sample members, we can test this explanation only indirectly, by assessing whether nonstandard work arrangements are associated with more bad job characteristics, net of employment insecurity, unionization, and job complexity.

WORK ARRANGEMENTS AND BAD JOBS: BIVARIATE ASSOCIATIONS

The relationship between work arrangements and bad jobs for men and women is summarized in Table 4. As the first two columns show, about one in nine men and one in six women in regular full-time jobs are in the bottom wage quintile. Other self-

employment substantially exacerbates women's vulnerability to lower pay. Among permanent full-time workers, the sex difference in the likelihood of a low wage job is 4.6 percentage points. Among other self-employed, it is 21.8 percentage points. On-call and day labor also increase the difference in the sexes' exposure to low pay. The nonstandard relationships whose incumbents are at disproportionate risk of low pay include part-time employment, temporary-help employment, and other self-employment for both sexes; and contract work, and both types of independent contracting for women.

-- TABLE 4 ABOUT HERE --

The second and third pairs of columns show the proportions of men and women in each work arrangement whose employers do not provide health insurance and pension benefits. Almost 40 percent of men and half of women do not receive health insurance from their main jobs, and nearly half the men and over half the women receive no pension benefits. As we expected, workers in standard work arrangements are most likely to obtain these benefits: less than one-third lack employer-provided insurance, and about 40 percent lack pension benefits. In no other work arrangement are coverage rates this high; over 90 percent of employees of temporary agencies, 80 percent of men and women in regular part-time jobs, and over 70 percent of day laborers and on-call workers do not receive these benefits.

Self-employed independent contractors, other self employed, and contract employees fall in between part-timers, temporary-agency employees and on-call workers/day laborers, on the one hand, and standard full-time employees, on the other, in

their access to benefits. The higher likelihood of these benefits among male than female independent contractors and self-employed workers partly reflects the larger scale of their enterprises. Self-employed women are more likely than self-employed men to have a shoestring operation with no employees (Spalter-Roth 1993).⁹ Among contract workers and on-call/day laborers, men are more likely than women to have health benefits. Male contract company workers are more likely than their female counterparts to have pension benefits. These sex differences almost certainly stem from occupational differences. The modal occupation for male contract worker is systems analyst, while that for female contract workers is nurses' aide; the modal occupation for male day laborers and on-call workers is truck driver, while for women it is substitute teacher.

The last pair of columns in Table 4 presents the mean number of bad job characteristics by work arrangement. The jobs of workers in standard arrangements have fewer bad characteristics than those of workers in nonstandard arrangements. Moreover, self-employed workers and contract employees have jobs with fewer bad characteristics than regular part-timers, temporary-agency employees, and on-call workers/day laborers.

9. Male wage-and-salaried independent contractors, incorporated independent contractors, and other incorporated self-employed persons averaged 18 employees, while women in these work arrangements averaged ten. The logarithm of independent contractors' or other self-employed workers' number of employees correlates .21 with whether they had health insurance and .16 with whether they had pension plans.

Women average more bad job characteristics than men in five of the seven nonstandard arrangements, and the sex difference is substantially greater in nonstandard work than in regular full-time jobs. However, the number of bad job characteristics of male and female temps—the work arrangement with the most bad characteristics for each sex—do not differ significantly. Moreover, among part-time workers—the work arrangement associated with the second highest number of bad characteristics—men’s jobs have significantly more bad characteristics than women’s jobs.

These bivariate results are consistent with workers in nonstandard employment encountering bad job characteristics more often than workers in standard arrangements. Moreover, nonstandard work arrangements in which workers exercise greater control over their work (i.e., self-employed, independent contractors and contract employees) are associated with better jobs than the other kinds of nonstandard work arrangements.

MULTIVARIATE ANALYSIS

Other Explanatory Variables

Before testing our hypotheses about the effect of work arrangements on bad jobs, we must consider other factors that affect workers’ risk of bad jobs. Workers presumably seek jobs with as few bad characteristics as possible, but their ability to obtain better jobs depends on their relative power, as individuals and collectively, to obtain advantaged positions in the stratification system (Morse 1969; Form and Huber 1976; Kalleberg,

Wallace and Althaus 1981; Reskin 1991). We have discussed several sources of workers' power, such as unions and skills, which are associated with different work arrangements. In addition, a worker's *education* signals her/his degree of skill and hence bargaining power. Because employers generally prefer more educated workers, the latter have better options than less educated workers. To capture both respondents' educational attainment and education's credentialling effect, we measure education with a set of dummy variables for the highest level of schooling the respondent completed. To control for the fact that students' jobs are typically temporary, we include a binary variable indicating whether workers aged 18 to 24 are *currently in school* (coded 1).

A worker's *family status* may also be related to the quality of her or his job. The fact that women's role as children's primary caretaker has disproportionately concentrated women in part-time work may contribute to this association. We take this into account with measures indicating whether a worker has children (coded 1) and whether she or he is unmarried or married with a stay-at-home spouse compared to married with an employed spouse, the reference category.¹⁰

Because older workers have more labor force experience and more seniority with

10. To allow a spouse who can share childcare responsibilities to affect a worker's ability to obtain a job with fewer bad characteristics, we included interaction terms for children by marital status and spouse's employment status. Neither was significant so neither appears in the final equation.

their employer, their jobs should have fewer bad characteristics than those of younger workers. Beyond a certain age, however, older workers lose bargaining power because they lack employment alternatives. To model this, we use an age-squared term to allow the effect of age on number of bad job characteristics to decline as workers age.

To control for factors affecting job quality such as the supply of and demand for various kinds of labor, characteristics of product markets, and so on, our models include broad *occupational* and *industrial* categories. Net of unionization, occupations differ on their market power and hence on incumbents' ability to garner higher wages and fringe benefits. Industries vary on employers' need to minimize their wage bill and on their ability to invest in and capitalize on workers' training (Knoke and Kalleberg 1994). We control for economic context by including measures of urban-rural status (suburban is the reference category) and region (Northeast is the reference category). The Appendix displays descriptive statistics for our explanatory variables. To control for selection bias resulting from excluding the nonemployed and the unemployed from the sample, we also estimated our models including inverse Mill's ratios (results not shown). None of the coefficients for selection were statistically significant.

Model

Our dependent variable, the number of bad job characteristics is a count which ranges from 0 to 3. Count variables typically have a Poisson or a negative binomial distribution (Long 1997). Since Poisson regression models assume that the conditional

mean is equivalent to the conditional variance—a fairly restrictive assumption—we used negative binomial regression to assess the determinants of the badness of workers' jobs.¹¹ To facilitate interpretation, we converted the coefficients from the negative binomial regressions to estimates of the change in the percentage of bad job characteristics associated with a one-unit increase in the value of the independent variable, net of the other variables in the model. We computed percentage change using the following transformation:

$$((\exp b) - 1)100$$

For example, holding all other variables constant, black men have 9.1 percent more bad job characteristics than white men, the reference category (see third column of Table 5). Unlike the change in the actual count of bad job characteristics, the percentage change in bad job characteristics associated with a given independent variable does not depend on the value of other variables in the model.

As in logistic regression, however, the impact of any independent variable on the

11. Although some researchers use OLS regression to estimate count variables, count distributions are likely to violate the OLS assumptions that the disturbance terms are homoskedastic and the error term is uncorrelated with the independent variables, especially when the count on the dependent variable is low. See Long (1997: Chapter 8) for a discussion of the differences between Poisson and negative binomial regression models.

expected count depends on the values of the other independent variables. For example, we would expect a white, single, childless woman of average age who lives in the suburbs in the Northeast, has a high school diploma, works as a manager in manufacturing, has a regular full time permanent non-union job, and whose occupation is of average complexity to have .74 bad job characteristics.¹² Employment by a temporary-agency would raise her predicted count of bad job characteristics by 103 percent to a total of 1.5 bad characteristics.¹³ A similar man in a regular full-time job could expect to have .64 bad job

12. Because we estimated the negative binomial regression coefficients using *Stata* and unweighted data, the means of the continuous variables we use in this example differ slightly from the means in the Appendix. The unweighted means for the continuous variables for women are 39.68 (age) and .06 (complexity); for men these values are 40.65 (age) and .11 (complexity).

13. The equation for the expected number of bad job characteristics for the regular full-time worker in this example is:

$$\begin{aligned}
 E\{\text{Count}\} &= \exp(\text{intercept} + \beta \cdot \text{age} + \beta \cdot \text{age squared} + \beta \cdot \text{complexity}) \\
 &= \exp(.5126 - .0358 \cdot \text{age} + .00035 \cdot \text{age squared} - .0890 \cdot \text{complexity}) \\
 &= .7419
 \end{aligned}$$

The equation for a temporary-help agency (THA) worker is:

$$E\{\text{Count}\} = \exp(\text{intercept} + \beta \cdot \text{age} + \beta \cdot \text{age squared} + \beta \cdot \text{complexity} + \beta \cdot \text{THA})$$

characteristics compared to 1.2 for a man in a temporary job. The effect on the count of having a temporary job would differ if workers' values differed on any of the independent variables.

Results

Consistent with our main hypothesis, every type of nonstandard employment is associated with more bad job characteristics than standard full-time employment. The first “percentage change” column for each sex in Table 5 presents equations containing our measures of work arrangements, along with workers' personal characteristics. The second “percentage change” column for each sex adds measures of employment insecurity, unionization and skill, along with dummy variables for occupations and industries. As we

$$\begin{aligned} &= \exp(.5126 - .0358 * \text{age} + .00035 * \text{age squared} - .0890 * \text{complexity} + .7101 * \text{THA}) \\ &= 1.5093 \end{aligned}$$

The negative binomial regression coefficients for any independent variable can be obtained from the percentages in Table 6 using the following formula:

$$\ln ((\text{percent}/100) + 1)$$

The intercepts are .5126 for women and .5251 for men. The unweighted means of the continuous variables given above and negative binomial regression coefficients—which can be computed with the formula above using the percentages in Table 5—can be used to compute the expected count for any combination of independent variables.

expected, the coefficients for each nonstandard work arrangement in the first equations for each sex are positive, indicating that nonstandard employment arrangements have significantly more bad job characteristics than standard full-time employment, the reference category.¹⁴ Net of workers' personal characteristics, employment in a nonstandard work arrangement raises the number of bad job characteristics by at least half. Arrangements that approximate the standard employment relationship (such as contract work) or that give workers a relatively high degree of control over their work (such as the two forms of self employment) exert smaller effects on the number of bad job characteristics. By contrast, people who work as temporaries, on-call or day laborers, and regular part-time workers are substantially worse off relative to workers in standard work arrangements.

-- TABLE 5 ABOUT HERE --

Employment insecurity, unionization, and job complexity are all significantly related to the percentage change in the number of bad job characteristics. This, combined with finding (see Table 3) that these mechanisms are associated with the nonstandard work arrangements, supports our argument that insecurity, unionization and complexity help to

14. The analyses in Tables 5 to 7 include a dummy variable denoting workers who are in regular, full-time jobs of uncertain duration so our reference category (i.e., regular, full-time, non-contingent jobs) corresponds to our conception of the standard employment relation.

explain the association between nonstandard arrangements and bad job characteristics. Women and men who hold an insecure job have about 9 percent and 15 percent respectively more bad job characteristics, controlling for all of the other variables in our model (see the second equation for each sex). In addition, men and women covered by collective bargaining agreements have jobs with half as many (52 to 55 percent) bad job characteristics as workers who are not covered. The complexity of a person's job is negatively associated with its number of bad characteristics. Although the effects of unionization and complexity do not differ statistically for the sexes, employment insecurity has a significantly greater effect on men's number of bad job characteristics.

Also consistent with our expectations, nonstandard work arrangements are significantly associated with more bad characteristics than standard arrangements, net of the effects of insecurity, unionization, complexity, occupation, and industry (see the second "percentage change" columns for each sex in Table 5). However, the controls substantially reduce the effects of several of the nonstandard arrangements. Taking into account occupational complexity, employment uncertainty and unionization, as well as occupation and industry reduces the negative effects of both types of self employment on men's undesirable job characteristics by at least 41 percent and the negative effects of both forms of self employment on women's bad job characteristics by 43 percent. The smallest reductions in the percentage of bad job characteristics associated with these controls are 22 and 25 percent for female and male contract employees.

Thus, employment in nonstandard work arrangements exposes workers to

significantly worse jobs than employment in standard full-time jobs, net of workers' age, education, occupation, and industry. In addition, for both sexes temporary-agency employment, regular part-time work, wage-and-salaried independent contracting, and (for women) on-call/day labor are associated with worse jobs than the other nonstandard work arrangements. Importantly, the effects of the nonstandard work arrangements relative to standard work arrangements generally exceed those of the other variables in the equation.

Overall, women's jobs have 22 percent more bad characteristics than men's jobs (1.26 versus 1.03; see Table 2). Net of the effects of nonstandard working arrangements and the other variables in Table 5, women have a statistically significant 13.6 percent more bad job characteristics than men (results not shown). Although the percent changes associated with temporary work, part-time work, and wage-and-salaried independent contracting are greater for women than men, these sex differences do not reach conventional levels of significance. However, working on call or as a day laborer, employment with a contract company, self-employed independent contracting, and other self-employment increase women's exposure to negative job qualities relative to their counterparts in standard jobs significantly more than men's (see the last column in Table 5). These greater penalties for women are not artifacts of women having better "standard" jobs than men (see Table 4). Thus, nonstandard employment exacerbates sex inequality in the exposure to bad job characteristics.

Black men have significantly more bad job characteristics than white men; the other race differences were not significant at the .05 level in the full models. Nativity is

significantly associated with workers' number of bad job characteristics, with immigrants of both sexes exposed to 11 to 14 percent more bad job characteristics than same-sex native-born workers.

Single men have significantly more negative job characteristics than married men, mirroring their earnings disadvantage compared to married men (Korenman and Neumark 1991). The job quality of single women does not differ significantly from that of married women. For married women and men, access to a partner's earnings does not appear to matter. Having children has no significant effect on how many bad characteristics men's jobs have, but is associated with significantly more bad job characteristics for women. The concentration of mothers in part-time work is likely to help explain this effect.

Our control variables operate as expected. Higher education reduces bad job characteristics for both sexes, and men with less than a high school diploma have worse jobs than high school graduates do. Age reduces both men's and women's bad job characteristics, but at a slightly diminishing rate over the course of their careers.

Workers in manufacturing have more bad job characteristics than workers in most other industries; only workers in public administration have significantly fewer bad job characteristics than manufacturing workers. Jobs in some broad occupational categories have more bad job characteristics than managers, the reference category. Women operators, sales workers, and service workers—nearly one-third of all women (see Appendix Table A)—have significantly more bad job characteristics than female managers do. Finally, men in suburban areas have better jobs than those in urban or rural areas, and

women in suburban areas had better jobs than those in rural areas.

Effects of Work Arrangements on the Wages and Fringe Benefits

Does the fact that our composite measure gives equal weight to the three bad job characteristics affect our estimates of the impact of work arrangements? Separate analyses of the three measures of bad jobs (see Table 6) suggest not. Workers in standard arrangements are significantly more likely to have both health insurance and pension benefits than workers in each of the nonstandard arrangements, net of personal characteristics, employment insecurity, unionization, skill, occupation, and industry. Contract employees and the self employed are most similar to workers in standard arrangements, and are more likely to have health insurance and pension benefits than temporary-agency employees, regular part-time workers, and (especially women) on-call/day laborers.¹⁵

-- TABLE 6 ABOUT HERE --

Workers in standard employment relations are also less likely than those in nonstandard work arrangements to have a low-wage job, with the exception of male contract employees (see the first column in Table 6). The exception conforms to our

15. When we re-estimated the fringe benefit models in Table 6 using whether the worker was offered the benefit as the dependent variable (see Footnote 5), we obtained essentially the same results.

recognition that contract employees may have standard employment arrangements with the contract company, so their employment is nonstandard only in its location (see note to Table 1). The difference between standard work arrangements and wage-and-salaried independent contracting is also relatively small. Regular part-time workers, female self-employed persons, male temporary-agency employees, and female on-call/day laborers are especially likely to earn low wages.

Taken together, the results in Table 6 reinforce our conclusion that standard arrangements provide better jobs than nonstandard arrangements. Moreover, these results are consistent with our expectation that contract employees have better jobs than temporary-agency employees, part timers, and on-call workers/day laborers. Both types of self-employed workers are also relatively less likely to have jobs with no fringe benefits; however, they are not always less likely to hold low-paying jobs (especially self-employed women). This suggests the utility of examining further the relationship between work arrangements and wages.

Table 7 presents two additional analyses of the effects of work arrangements on wages. The first set of columns presents OLS estimates of the effects of nonstandard work arrangements on (log) hourly wages. The second set regresses the odds that workers in specific nonstandard work arrangements are in the top fifth of the wage distribution (i.e., their job pays at least \$17.32 per hour) on nonstandard employment and the control variables.

-- TABLE 7 ABOUT HERE --

The first two columns further demonstrate the disadvantages associated with regular part-time work, working as an on-call/day laborer, and self-employment (both categories): women and men in these nonstandard arrangements earn significantly lower hourly wages than workers in standard arrangements. Temporary-agency employment is more costly for men than women (whose coefficient is not significant) relative to their same-sex counterparts in standard jobs.

The logged hourly wages of contract company employees and wage-and-salaried independent contractors do not differ from those of standard employees, net of the other variables, reinforcing our conclusion that contract employees resemble employees in standard work arrangements as far as wages are concerned. Indeed, contract employees have a higher probability than those in standard work arrangements to be in the top-quintile of wages (see the third and fourth columns in Table 7). This is true too for both types of self-employed women.

The results in Table 7 underscore the heterogeneity of nonstandard arrangements. In particular, contract company employees, wage-and-salaried independent contractors, and both types of self-employment include significant numbers of both high- and low-wage jobs. By contrast, temporary-agency employment, on-call/day labor, and part-time work are generally associated with worse characteristics than regular full-time jobs.

CONCLUSIONS AND IMPLICATIONS

Nonstandard work arrangements have increased in the United States over the past two decades. This is especially true for temporary employment which has grown by about 11 percent per year since 1972 (Gonos 1997; Segal and Sullivan 1997). Part-time employment has grown from 16.4 percent of the labor force in 1970 to 18 percent in 1990, mostly through the growth of involuntary part-time employment (Tilly 1996). For example, in the middle 1980s almost all bank tellers worked full time; by the early 1990s, 60 percent were employed part time (Keltner and Finegold 1996). An increase in the number of persons reporting income only as self-employed or independent contractors suggests growth in independent contracting (Callaghan and Hartmann 1991).

Debates over the quality of nonstandard jobs are often related to discussions about why nonstandard arrangements have increased. If nonstandard jobs are systematically worse than standard jobs, then the growth in nonstandard work is more likely to reflect employers' rather than workers' preferences (Pfeffer and Baron 1988; Blank 1998). Distinguishing analytically two key concepts--the quality of jobs associated with various employment relations from whether an arrangement is nonstandard--helps to clarify these debates over nonstandard jobs in the U.S.

Much of the research on work and labor markets has argued that the firm is the central context for understanding labor market structures (e.g., Baron and Bielby 1980). Our results underscore the importance of also taking into account the type of employment

relationship for understanding the nature and outcomes of labor market structures. It is a very different matter to be employed on a full-time basis by a Fortune 500 firm than to work in the same firm as a temporary, contract, or on-call worker. In some cases, the structure of employment relations overrides firm and sector effects on workers' exposure to good or bad jobs. Thus, we found that every nonstandard work arrangement is more likely to be associated with bad job characteristics than standard work arrangements. At the same time, we found that some workers in certain nonstandard work arrangements--particularly self-employment (both independent contracting and other forms of self-employment) and contract company employment--had jobs that were not all that bad. While workers in these nonstandard arrangements were less likely to have fringe benefits than workers in standard arrangements, many earned more than regular full-time workers in standard jobs. Moreover, relatively few workers in these nonstandard arrangements expressed a preference for standard jobs (Kalleberg et al. 1997). The heterogeneity within some nonstandard work arrangements is seen in the overrepresentation of some workers--such as self-employed women--in both the low- and high-wage groups.

On the other hand, male and female temporary-agency employees, on-call workers and day laborers, and part timers are consistently more likely than regular full-time workers--and workers in the other nonstandard arrangements--to have low pay and lack insurance and pension benefits. Moreover, most workers in these arrangements (especially temporary-agency employees and on-call workers and day laborers) prefer standard, full-time employment (Kalleberg et al. 1997). In view of these findings, the

explosive growth of the temporary-help industry, in particular, makes the strong negative effect of employment in temporary agencies on job quality a matter of concern.

Nonstandard work arrangements alter the power dynamics between employers and employees. For example, temporary work and contract work, arrangements in which the legal (*de jure*) employer differs from the actual (*de facto*) employer to whom workers provide services expose workers to fundamentally different power dynamics than the standard, bilateral employment relation. The separation of the legal from the supervising employer subjects workers to two masters, thereby creating trilateral relations. Contract and temporary employees are subject to the demands of their *de facto* employers, but without the hope of security and advancement with these employers that their "real" employees can entertain. At the same time, the *de jure* employer is ill situated to evaluate their employees' performance and has minimal stake in doing so; these workers (particularly temporary help agency employees) have little hope of improving their position with their *de jure* employer by working hard or performing well. Thus, the pay and benefits of nonstandard workers are not subject to the incentive structures that their *de facto* employer provides to its "real" employees.

The trilateral nature of some nonstandard employment arrangements in which the *de jure* and *de facto* employers differ also limits these workers' ability to reduce the power imbalance with either employer through collective bargaining. For example, temps do not have the sustained contact with their *de jure* coworkers necessary to organize collectively to demand better benefits from the temporary agencies that nominally employ them.

Moreover, their transient status and the fact that their *de facto* coworkers do not share their marginal status prevent collective action with their *de facto* coworkers. Contract workers are also poorly situated to enhance their power through collective bargaining because the NLRA does not prohibit their *de facto* employer from terminating a contract--and, hence, their employment--in response to efforts to unionize. By putting the benefits of collective bargaining beyond the reach of contract workers, the trilateral nature of the employment relationship helps explain why contract employment, which otherwise resembles standard employment, is more likely to be associated with bad job characteristics than standard work arrangements.

Policies that recognize the nonstandard employment relationship are needed to ensure accountability among those organizations that employ and benefit from nonstandard workers' labor (Hiatt 1995). Laws protecting workers and legal definitions of employers and employees evolved simultaneously as a consequence of the labor movement's fight against exploitation by employers. The growth of nonstandard employment relations underscores the need for policymakers to reconsider workplace-mediated social benefits (such as health insurance and pensions) and protections for nonstandard workers, including the right to organize.

Nonstandard work arrangements represent a potential source of employment flexibility for both employers and workers. They are doubly attractive to employers because they also reduce employment costs. For many nonstandard workers, however, any gains in flexibility come at a high price, and for the society they are likely to

exacerbate socioeconomic inequality if qualified workers who seek regular full-time jobs must settle for less desirable alternatives. Understanding the diversity of work arrangements and their consequences for job quality will become increasingly important as we enter the twenty-first century.

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