

III. LABOR OVER-SUPPLY

Overemployed Workers in the U.S. Labor Market

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Abstract

The article estimates the current rate and distribution of “over-employment”—workers expressing a willingness to decrease hours of work at their job even if it means lower income. I explore the theoretical causes determining the level and trend of overemployment and consider measurement issues. The May 2001 Current Population Survey (CPS) Supplement indicates an overemployment rate under 7 percent among full-time workers. However, the rate is measurably higher among women, whites, parents of young children, workers with long workweeks, occupational classifications like managers/administrators, scientists, engineers, and some technicians, and in industries such as health care, utilities, and transportation. I then draw implications for refining Fair Labor Standards Act reforms.

Introduction: Sources of Overemployment in the Labor Market

Much of the research and policy discussion in the U.S. concerning trends in working hours and regulation occurs without much reference to how many and which specific types of workers tend to be overemployed, defined as working beyond their preferred number of hours. While such preferences are not observable, restrictions on individuals’ choice of hours of work are viewed as a central feature of the labor market (Kaufman 1999; Altonji and Oldham 2003). Most models recognize that workers often face binding constraints imposed by employers who set fixed or minimum shift lengths (Gunderson and Weiemair 1988; Contensou and Vranceanu 2000) and an under-provision of short-hour jobs (Rebitzer and Taylor 1995). Labor market institutions, such

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as the fixed cost of employee benefits, non-compliance with Fair Labor Standard Act (FLSA) overtime regulations, and weakening of labor unions, lessen restraints on the hours demanded per worker (see Belman and Belzer 1998; Hamermesh and Trejo 2000; Altman and Golden 2004).

Measuring Overemployment

Overemployment exists when there are workers employed who are willing but unable to reduce their hours of paid work at their current (or a comparable) job even if they are prepared to accept proportionately lower current or future income. Estimates of the aggregate level of overemployment vary by the type of sample and instrument, since these estimates are highly sensitive to survey question wording and the options that are presented. The preference for fewer hours depends on the implicit assumptions provoked about the foregone income, the dimensions of hours reduced, and the type of time-off gains realized. When questions include an option of obtaining higher income via more hours of work, such as in the May 1985 Current Population and General Social Survey, estimates of overemployment are as low as 6 to 10 percent (Lang and Kahn 2001; Reynolds 2003), but also up to 30 percent (Heldrich Center for Workforce Development 1999). If respondents are presented exclusively with options for reducing hours and pay, the proportion of workers that would give up at least one half day's pay for at least one half day of work less per week (or more free time or family time) ranges from 28 to over 50 percent (Jacobs and Gerson 2001; Feather and Shaw 2000; Schor 1995, 2001; Friedman and Casner-Lotto 2003).

The May 2001 Current Population Survey (CPS) Supplement, for the first time since 1985, queried if individuals, "given the choice, (would) opt for more income and more hours, less income and fewer hours, or the same income and hours?" Table 1 shows an overemployment rate no higher than the 1985 estimate of 7.6 percent (Shank 1986). There are several reasons why the rate might remain stable. The May 2001 survey was during a recession and 1985 was a period of expansion. In addition, preferred hours may become endogenous. Overemployed workers may upwardly adjust their target income (Altman 2001; Altman and Golden 2004), under loss aversion (Dunn 1996), shifting preferences toward more time-saving, purchased goods and services (Rothschild 1982). Moreover, the climate of rising earnings inequality motivates workers to longer hours as a signaling tactic (Landers et al. 1996; Eastman 1998; Bluestone and Rose 1998; Bell 2000; Brett and Stroh 2003) and positional consumption (Schor 1995). Workplace amenities, rewards, or flexibility diminish resistance to longer hours (Kaufman 1999; Golden 2003).

Hypotheses

A worker is overemployed if actual hours (h) exceed desired hours (h^*) at their current wage and job:

$$h^* < h$$

This gap may occur if some employers are not induced to adjust h downward toward h^* . If,

$$\lambda (h - h^*)^\theta \quad \text{given } \lambda > 0; \theta > 1$$

the gap can persist so long as any of these six conditions exist:

1. the administrative costs (λ) to constantly adjust h toward each employee's h^* are large;
2. the size of the gap between h and h^* is not overly large;
3. long-term risks on the organization of overemployment are small or discounted (τ is one);
4. employees lack bargaining leverage in the workplace to impose adverse cost consequences (e.g., absences, tardiness, turnover, or reduced average hourly labor productivity) on employers;
5. employees are induced to discount the cumulative, long-term consequences of overwork;
6. it is less costly for firms to induce employees to adjust h^* upward than to reduce actual hours.

Overemployment is hypothesized to be more prevalent among workers:

- who have personal characteristics associated with lower h^* , such as parents with children at home;
- with spouses present in the household (see Clarkberg and Moen 2001);
- at jobs whose hours are relatively longer (for either cyclical or structural reasons);
- with bargaining leverage insufficient to adjust their own hours downward when h^* shifts;
- in occupations and industries with insufficient job autonomy to exert control over hours; and
- in industries where the added wage cost of overtime is negligible, such as salaried jobs.

Data, Model, and Estimation Results

From the May 2001 CPS sample (over fifty-seven thousand respondents), Tables 1 and 2 display overemployment rates by fifty-two (and forty-six detailed) occupations and industries that are above the overall average of 6.3 percent. Whether an individual reports being willing to reduce hours and income would depend on a worker's personal (β) as well as job (δ) characteristics, including work hours or shifts, occupation and industry employed in, self-employment or union membership status, and flexibility of their job. The likelihood an individual (i) responds affirmatively to the option of reducing both hours and income is the respective vectors of estimated coefficients, X and Y :

$$OVER_i = \alpha + X_i\beta + Y_i\delta + \epsilon$$

The model is estimated using probit analysis. The dependent variable is bivariate, taking on a value of one if an employed individual reports a preference for fewer hours and less income. The coefficients are derivatives of the probit estimates, representing the marginal probabilities that an individual possessing a given personal or job characteristic is overemployed.

The estimation results in Table 3 show that female workers are more at risk of being overemployed than their male counterparts. Conversely, African American workers are significantly less likely to be overemployed. This finding probably owes to the lower average wage rates of these workers. Being married raises the likelihood of overemployment, relative to the (omitted) reference group of single workers. Having children in the household (relative to having either no or fully grown children) displays nuanced effects. When the youngest child in the household is younger than three years old, this raises the likelihood of feeling overemployed. Having preschool children aged three through five has a somewhat weaker effect than the presence of younger children. When the youngest child present reaches the age of fourteen, the effect of having children is reversed. This finding suggests that when children are young there is a greater demand for time, but as the child ages, there is a gradual shift toward the desire for more income when the children are teenagers.

Full-time workers have a progressively higher likelihood of being overemployed the longer are their usual hours. Working from forty-one to forty-nine hours raises the probability of overemployment considerably, relative to those working thirty-five to thirty-nine hours per week (the reference group). Working fifty or more hours per week raises the probability of overemployment still further. Part-time workers (thirty-four or fewer hours) are less apt to be overemployed. Being a union member neither increases nor decreases the chances of overemployment. Being self-employed, perhaps surprisingly, heightens the

TABLE 1
Occupations with More than Average
Overemployment of the Full-Time Employed

Occupational Classification	% Rate
Other administrative & managerial	8.7
Management related	8.6
Engineers	8.2
Math and computer scientists	7.6
Natural scientists	10.2
Health diagnosing	12.2
Health assessment	11.9
Teachers, college	9.8
Teachers, except college	7.8
Lawyers and judges	9.2
Other professional specialty	6.8
Health technicians	9.1
Technicians, except health	7.8
Sales representatives, finance, business	6.6
Supervisors sales	8.1
Computer equipment operators	8.1
Secretaries and typists	7.8
Financial records processing	7.3
Mail and message distribution	6.6
Other administrative support	7.1

TABLE 2
Industries with Above Average Overemployment of
Full-Time Employees

Industry	% Rate
Manufacturing—machinery, non-electric	6.7
Manufacturing—professional and photo	8.3
Manufacturing—toys and sporting goods	11.0
Manufacturing—miscellaneous	6.8
Manufacturing—textile mill products	6.6
Manufacturing—paper and allied products	8.5
Manufacturing—printing and publishing	7.1
Manufacturing—chemicals and allied	7.1
Communications	7.3
Utilities and sanitary services	9.9
Wholesale trade	6.6
Banking and other finance	6.9
Insurance and real estate	7.7
Hospitals	10.6
Health services, non-hospital	8.1
Educational services	8.0
Other professional services	7.6
Forestry and fisheries	9.9
Administrative human resources	6.3
Other public administration	7.5

TABLE 3. CONT.
 Preference for Fewer Hours by Demographic, Work, and Job Characteristics

	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z	dF/dx	z
<i>Major occupation</i>												
Executive, administrative and managerial											0.005+	1.77
Professional specialty											0.005	1.41
Technicians and related support											0.006+	1.74
Sales											0.008	1.45
Private household											-0.007*	-2.02
Protective services											-0.026*	-2.18
Service, except protective or household											-0.010	-1.28
Precision products, craft and repair											-0.018**	-5.01
Machine operators and assemblers											-0.018**	-4.53
Transportation and material moving											-0.020**	-4.14
Handlers, helpers, and laborers											-0.005	-0.93
Farming, forestry, and fishing											-0.011+	-1.93
Administrative support, including clerical											-0.029**	-4.57
log likelihood	-11159.0		-11008.8		-10989.4		-10954.2		-10951.5		-10893.8	
Pseudo R ²	.024	.038	.039	.040	.042	.043	.048	.048	.048	.048	.048	.048

** coefficient is significant at the .01 level; * coefficient is significant at the .05 level; + coefficient is significant at the .10 level

probability of willingness to trade income for more time. Workers who have some ability to vary their daily and ending times of work have a somewhat reduced likelihood of overemployment if they have informal arrangements as such (Golden 2003), but, also, surprisingly, have a heightened probability of being overemployed if they have formal flextime scheduling. This result suggests that formal flexibility of scheduling (or doing work at home) exacerbates rather than curbs interference of work with family or personal time.

Many of the major occupational classifications enhancing overemployment fall in the managerial and professional groups, including engineers, health diagnosticians, natural scientists, math/computer scientists, health assessment and treatment professionals, private-sector managers and administrators, lawyers/judges and management-related occupations. Two categories of technician jobs and other administrative support areas have significantly higher levels of overemployment. Several blue collar occupations, notably construction trades and laborers, fabricator/assembler, and service jobs such as personal, health, or food service occupations, are less likely to experience overemployment.

Some industries heighten the likelihood of overemployment, especially public utilities and hospitals, as well as communications and transportation and, to a weaker extent, wholesale trade and medical services other than hospitals. These results are not surprising given the incidence of mandatory overtime work (involving high profile labor disputes) in these sectors. On the other hand, being employed in social services, construction, agriculture, private household, justice/public order, or stone/glass manufacturing significantly reduces the likelihood of overemployment. Either hours in these sectors are more responsive to workers' preferences for shorter hours, or workers in these sectors are less apt to prefer shorter than actual hours.

Implications for Working Time Policy

Overemployment occurs among a non-trivial proportion of the employed, especially among certain jobs, sectors, and workers. In the United States, the only institutional restraint on hours of work is the FLSA overtime regulations, which apply to those workers who are not exempt due to having primarily managerial, administrative, or professional duties (Appelbaum et al. 2001). If a genuine goal of legislative or regulatory reform is to curb the incidence, duration, and effects of overemployment, the empirical results suggest that this would be accomplished by more precisely targeting the types of workers and jobs more prone to overemployment. Currently pending FLSA "reforms" such as compensatory (comp) time legislation are thus mistargeted. Not surprisingly, by over a three to one ratio, workers paid hourly and covered by the FLSA would prefer pay over time-off as compensation for overtime work (Friedman and Casner-Lotto 2003). Rather, FLSA coverage ought to be extended

to employees in white collar, salaried occupations, particularly in industries where overemployment is most concentrated, such as telecommunications, hospitals, and transportation, and to workers at vulnerable points of their life cycle when non-market work time becomes most valuable, such as when a worker has a child younger than three years old.

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