

Privatization and the Working Conditions of Health Care Support Staff

Roland Zullo

Institute of Labor and Industrial Relations, University of Michigan,
Ann Arbor, Michigan, USA

Immanuel Ness

Brooklyn College of the City University of New York, New York, New York, USA

Abstract: Using an assisted survey approach, we compare health care service employees' perceptions of work between public and privatized health care settings. Results indicate that laundry, maintenance, food service, and housekeeping staff employed by privately managed medical institutions have more negative perceptions of job rewards than their public sector counterparts, with no difference in perceptions of supervisor support, work stress, autonomy, and opportunity. A supplementary analysis comparing three organization types: pure-public, pure-private, and public-private shows that workers perceive higher work stress and lower rewards in public-private organizations, while workers at pure-private organizations perceive low rewards, low supervisor support, and low opportunity. Our interpretation is that privatization lowers workers' perception of rewards in completely privatized organizations and in public organizations that privatize a proportion of services.

Keywords: privatization, healthcare workers, employment conditions

Within the literature on the social and economic effects of privatization is the question of whether and how shifting public work to private control changes employment conditions for service personnel. The topic has produced strong

This research was sponsored by Poverty and Race Research Action Council (PRRAC), a Washington, D.C.-based organization dedicated to improving the quality of life for people of color, women, and immigrants residing in the United States. Supplemental financial support was received from the City University of New York Diversity Grants Program and the University of Michigan Graduate School. The authors thank Katherine Root for research assistance, and Jackie Murray for editorial help.

Address correspondence to Roland Zullo, Institute of Labor and Industrial Relations, 1111 East Catherine Street, Ann Arbor, MI 48105-2054, USA; E-mail: rzullo@umich.edu

statements by social scientists claiming that private intervention in the delivery of public goods yields greater efficiency. For if cost efficiency is achieved primarily by worsening the compensation and working conditions for service workers, then reported economic savings might be due to labor concessions, rather than improved operations. And if public goods are not delivered “smarter” through private means, but “harder”—by subjecting service workers to a system where they receive less remuneration—then it follows that reductions in gainful employment are an overlooked social cost of privatization.

Using an assisted survey approach, we compare health care service employees’ perceptions of work between public and privatized health care settings. Our aim is to contribute to the discussion of privatization and work in three ways. First, whereas prior research in this area is based on surveys of public employers (Chandler, 1994; Pack, 1989; Pendleton, 1999; Stevens, 1984), we collect data from the affected workforce. Moreover, the workers we survey occupy support functions within health care institutions. The majority of healthcare management literature reports on the concerns of direct caregivers or professionals (e.g., Keane, 2003; Koberg, 2005); less attention has been paid to the more vulnerable class of lower-wage support staff.

Our motivation for directly surveying support staff is partially based on our suspicion that public employers would underreport negative job outcomes. More critically, the direct survey method allows us to explore privatization’s effects on issues beyond compensation and job security. We evaluate worker perceptions of supervisor support, work stress, opportunity, and job autonomy.

Second, our research focuses on conditions related to privatized jobs. Prior analyses have evaluated employment outcomes for displaced public workers (Dudek & Company, 1989; GAO, 2001; Mason & Siegel 1997). While informative, these studies reveal little about changes in the work environment as operational control transfers from public to private. By focusing on a set of jobs—rather than on a group of displaced public employees—this analysis compares health care support staffs’ perceptions of job-related factors between public workers and privatization “survivors,” or those who remain employed by newly privatized facilities, as well as for those hired afterward by private management.

Third, we distinguish between two types of private intervention. Of the six research sites, two were privatized in the last decade (pure private), two are longstanding public institutions (pure public), and two are public entities that outsource internal service functions to private firms (public-private). Taking a conventional approach, we first contrast job conditions in publicly and privately managed operations. This involves grouping workers employed at the two private sites with private contractor employees, and then comparing their perceptions of work against all public employees. In a second analysis

we draw attention to the hybrid public-private organization by comparing worker responses across the three organization types: pure public, pure private, and public-private. Public-private organizations receive less attention in the literature, despite the widespread purchasing of private services by public institutions. By isolating the public-private group, we explore whether public managers use private contracting to achieve concessions from their remaining public workforce.

THEORY AND LITERATURE

A leading theoretical rationale for privatizing public services originates from the property rights literature. According to this view, private ownership is preferred over common ownership because the possibility for an individual to own the exclusive right to receive income from a resource establishes a set of incentives and threats that motivate private principals to extract an optimal value from the resource. As owners take careful account of the harms and benefits flowing from their actions, resource rights flow to their highest-value use. Concentrating ownership in the hands of the capable few promises efficiency and task focus, largely due to superior systems for monitoring employees and reducing “shirking” (Alchian & Demsetz 1972). As ownership becomes dispersed, this effect attenuates. Extending this idea to its logical end, it is the absence of such pressures in socialized systems that explain lax management, sub-optimal service, and low levels of innovation.¹

Although there is a general consensus with private property theory insofar as private contracting changes the organizational reward system, just how compensation and working conditions are affected is disputed territory. Privatization advocates dismiss negative employment consequences, emphasizing the creation of opportunities for former public employees in the private sector (Moore, 1999). On compensation, one reliable proponent asserts that “the principle reason that privatization leads to increased efficiency is not lower wages and benefits but greater productivity, that is, fewer workers needed to do the same amount of work . . .” (Savas, 2000, p. 287). The inference is that privatization increases productivity through a smarter use of labor resources, perhaps by installing supportive management, adopting labor-saving technology, minimizing redundancy and wasted effort, providing training, and so forth. Shifting ownership from public to private does not, according to this view, harm service workers economically.

Such statements contradict evidence that private contracting (Stevens, 1984), the threat of private contracting (Chandler, 1994), and private ownership (Pendleton, 1999) exert downward pressure on wages, benefits, or both. Ethnographic studies, moreover, report substantial compensation loss and a decline in job security, particularly for lower-skilled workers (Davidson

1993; Mason & Siegel, 1997). Pack (1989) explores the question of labor efficiency versus compensation differentials, and concludes that nearly all of the reported savings from privatization can be traced to labor, and of these, roughly half are due to workforce reductions and half through lower compensation.

Instances where governments protect former public workers by negotiating arrangements with contractors to preserve compensation and job security (Clark et al., 2000), the emergent living wage movement,² and the fact that privatization advocates identify negative employment consequences as a political barrier toward their cause (O'Leary & Eggers, 1993) indirectly suggest that public workers face employment-related threats during transitions to private management. Likewise, the recent discourse on the potential of labor-management cooperation as an alternative to private contracting (DOL, 1996; Rubin et al., 1999) and examples where public workers fare well in competitive bidding arrangements (Goldsmith, 2003) cast doubt on the private property claim that private contracting is superior to a properly functioning government operation. Overall what this line of research implies is that ownership structure might be less important in the delivery of services than whether labor and management collaborate constructively.

DATA AND MEASURES

Data were collected from unionized workers employed at six medical institutions located in the metropolitan New York-New Jersey region. Two were public (one state and one county), two were public but contracted with private firms for specific services, and two were formerly public that converted to private control.³ Three were acute care hospitals, two were geriatric centers, and one was a mental health center. Although the organizations varied in their care and clientele, data were collected only from occupational groups that were relatively uniform across the sites. For each site, a sample of workers providing laundry, maintenance, food, and housekeeping services were randomly drawn from union membership lists.⁴

In addition to standardizing the occupations across sampling units, choosing lower-skilled support positions meant disproportionately surveying women, minorities, and immigrants, thus allowing us to contribute to the discussion of privatization's effects on women (Bernhardt & Dresser, 2002), minorities (Stein, 1994; Suggs, 1990) and low-skilled workers (Erickcek et al., 2002; Mason & Siegel, 1997). The focus on lower-skilled jobs, more generally, tests how privatization affects the least powerful. Our sample size target was 300.

Surveying lower-skilled and predominately immigrant workers posed challenges, and steps were taken to overcome obstacles due to language, survey comprehension, and fear of reprisal. Local union leaders at each site contacted prospective respondents several days prior to the survey administration to

inform them of the survey schedule, assure confidentiality, request participation, and to explain their right to refuse to participate. The surveys were administered in a nonsupervised area, such as a break room or cafeteria, by a team of two to four bilingual researchers, and surveys were offered in English and Spanish. Many respondents completed the survey unassisted, but most received help from a member of the research team, usually to clarify survey questions. This process yielded 230 usable surveys for a response rate of 77 percent.

The survey instrument included measures from the 1977 Quality of Employment Survey (Quinn & Staines, 1979), modified for this context. In the survey, respondents rate their level of agreement with a series of work-related statements. Responses are coded on a four-point scale: strong agree = 1; agree = 2; disagree = 3; strong disagree = 4. A factor analysis (varimax rotation) of these data yielded five constructs: supervision, work stress, opportunity, autonomy, and rewards. Survey items for the constructs were combined and standardized. Table 1 lists the constructs, survey items, and Cronbach's alpha statistics.

These five constructs were regressed on the primary variables of interest: management type and organization type. Management type is a dichotomous indicator for private or public management. Private management, defined as a health care institution or service unit within a health care institution that is operated by a private entity, is coded 1, zero for public management. Of the 230 respondents, 116 (50.4 percent) were managed by private firms and 114 (49.6 percent) were under public management. Organization type is defined by the three classifications of health care institutions: pure public, public-private, and pure private. Of the 230 respondents, 87 (37.8 percent) were in pure public organizations, 65 (28.3 percent) were in pure private organizations, and 78 (33.9 percent) were in public organizations that contracted services to private firms. All equations include dummy variables to control for job type.

Our unit of analysis is the worker. However, because respondents are clustered within one of six worksites that vary in size, the regression assumption of independence among the units may be violated. To adjust for our sampling technique, regression coefficients and errors were generated with the *svy* commands available through the STATA statistical package (STATA, 2005). The cluster sampling option, with each health care institution treated as a primary sampling unit, increases the standard errors and reduces the chance of committing type I errors. Sampling weights were also used to adjust for differences in the probability that respondents were selected across the six sampling units.

RESULTS AND ANALYSIS

Table 2 provides the six composite measures regressed on private management and job controls. For every composite measure, higher values correspond with

Table 1. Composite Measures, Survey Items, and Cronbach’s Alpha

Supervision, $\alpha = 0.81$
 My supervisor appreciates my efforts.
 My supervisor is competent in doing his/her job.
 My supervisor is concerned about my welfare.
 My supervisor is proud that I work at this organization.

Work Stress, $\alpha = 0.64$
 After work I usually feel exhausted. (reverse scoring).
 My work environment is stressful. (reverse scoring)
 I have enough time to get the job done.
 My job requires that I exert a lot of physical effort. (reverse scoring).
 My job requires that I work very fast. (reverse scoring).
 I am not required to do excessive amounts of work.

Opportunity, $\alpha = 0.67$
 I learn new skills regularly.
 I have an opportunity to develop my own special abilities.
 My chances for promotion are good.

Autonomy, $\alpha = 0.62$
 I have the freedom to decide what I do on my job.
 My job hours are flexible.
 My job allows me to make a lot of decisions on my own.
 I can work at my own pace on my job.

Rewards, $\alpha = 0.60$
 My job security is good.
 My pay is fair for the work I do.
 My fringe benefits are good.

Response categories and codes: Strong Agree = 1; Agree = 2; Disagree = 3; Strong Disagree = 4. Adapted from Quinn and Staines (1978).

Table 2. Management Type and Perceptions of Work (n = 230)

	Supervision	Work Stress	Autonomy	Opportunity	Reward
Private management	-0.06	0.06	-0.16	-0.40	0.50
(Standard error)	(0.17)	(0.09)	(0.28)	(0.25)	(0.22)
Public management	Omitted	Omitted	Omitted	Omitted	Omitted
Job controls	Yes	Yes	Yes	Yes	Yes
Constant	0.24	0.05	0.29	0.09	-0.43
(Standard error)	(0.24)	(0.15)	(0.27)	(0.27)	(0.19)
R-square	0.08	0.06	0.04	0.03	0.17

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

more negative perceptions of workplace conditions. Thus, the negative and insignificant coefficient for supervision indicates no difference in perceived supervisor support across the publicly and privately managed operations. Similarly, public-private differentials for work stress, autonomy and opportunity all fail to reach conventional levels of statistical significance. These results are meaningful because if privatization brings new personnel management techniques, then one would expect variation across publicly and privately managed operations on these job dimensions.

There is a hint of variation across management type in worker perceptions of job rewards. The positive, trend-level significant coefficient for reward ($\beta = 0.50$; $p < 0.10$) suggests that privately managed workers have comparatively negative perceptions of job security, pay fairness, and benefit adequacy.

In Table 3, the five composite measures are regressed on the three organization types: pure private, public-private, and pure public. In all equations, "pure public" is the comparison group. The most striking results are for perceived job rewards. Compared with pure-public organizations, respondents in the public-private facilities ($\beta = 0.89$; $p < 0.001$), and workers in pure-private organizations ($\beta = 0.49$; $p < 0.01$) were more likely to register reward disapproval. Together the results imply that private intervention depresses worker perceptions of rewards under two circumstances:

1. when control of an organization is completely transferred to private hands and
2. when public agencies contract out internal service functions.

Public employee perceptions largely corroborate with the objective wage levels across organizations. Entry and top wage rates for food service and housekeeping functions for the six sites are presented in Table 4. For food service, the lowest wage rates are in the organization managed by a private

Table 3. Organization Type and Perceptions of Work (n = 230)

	Supervision	Work Stress	Autonomy	Opportunity	Reward
Pure private	0.30**	0.01	0.19	0.43***	0.49**
(Standard error)	(0.07)	(0.10)	(0.14)	(0.04)	(0.11)
Public-private	0.32	0.41*	0.41	0.25	0.89***
(Standard error)	(0.20)	(0.12)	(0.21)	(0.23)	(0.10)
Pure public	Omitted	Omitted	Omitted	Omitted	Omitted
Job controls	Yes	Yes	Yes	Yes	Yes
Constant	-0.00	0.02	0.02	-0.19	-0.49*
(Standard error)	(0.13)	(0.07)	(0.15)	(0.08)	(0.13)
R-square	0.10	0.09	0.06	0.05	0.24

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 4. Organizations and Hourly Rates for Food Service and Housekeeping

Organization Type	Extent of Privatization	Date of Contract	Food Service		Housekeeping	
			Entry Rate	Top Rate	Entry Rate	Top Rate
Private, for-profit	Complete	Jan. 1990	8.31	10.82	8.50	11.05
State public	None	Mar. 2002	11.30	13.72	11.30	13.72
County public	None	Jan. 2003	11.94	17.02	11.94	17.02
State public	Partial (F)	Mar. 2002	11.30	13.72	11.30	13.72
County public	Partial (F,H,L)	Feb. 2000	n.a	n.a	8.20	9.51
Public benefit (private)	Complete (L)	Jan. 2001	12.27	16.01	16.00	21.90

Key: F = Food Service; H = Housekeeping; L = Laundry

for-profit firm. These wage levels were based on the 1990 labor agreement, and as of this writing the union has been unable to negotiate improved rates. For housekeeping, the lowest wage rates are in the private contractor of a county unit, closely followed by the private for-profit organization. Workers at the county and state public institutions enjoy both higher entry rates and higher top rates than their private-sector counterparts.

The major inconsistency between reward perceptions and objective wage rates is found in the public benefit corporation (considered private in this analysis), which has the highest entry rates for food service and housekeeping, and the highest top rate for housekeeping. Site-specific factors may explain why comparatively high-paid workers might perceive that they have low rewards. During the time the data was collected, wages and benefits were in jeopardy. Under the legal status as a public benefit corporation, management was attempting to break from a county pattern on negotiations (see endnote 2). To press this demand, the hospital contracted out for laundry services with a private for-profit firm, resulting in a layoff of over 65 unit members. Soon after the outsourcing, laundry wages were reduced by approximately half.

Other findings are notable. The association between pure private and supervisor ($\beta = 0.30$; $p < 0.01$), indicates that workers in pure-private institutions rate their supervision low compared with workers in pure-public institutions. The positive and significant associations between public-private and work stress ($\beta = 0.41$; $p < 0.05$) inform us that workers in the two public institutions with private contracting rate their work stress high. This finding is consistent with the hypothesis that public institutions use private contracting as a source of bargaining leverage.

A final result from Table 3 is the positive and significant association between pure-private and opportunity ($\beta = 0.43$; $p < 0.001$). Compared with service personnel in the public organizations, workers in pure private institutions are more likely to disagree with these statements: I learn new skills regularly;

I have an opportunity to develop my own special abilities; and my chances for promotion are good. These results suggest that organizational transitions from public to private decrease opportunity for lower-skilled workers. A positive yet statistically insignificant coefficient for public-private ($\beta = 0.25$; $p = \text{n.s.}$) suggests no difference between workers in public versus public-private on perceived opportunity.

DISCUSSION AND IMPLICATIONS

Consistent with property rights theory, the results show some variation in worker perceptions of job attributes across public and private organizations. Yet the differences are selective; with the strongest findings related to compensation. Private management is weakly associated with negative perceptions of job rewards. The analysis of organization type indicates that perceptions of job rewards were significantly lower in institutions that were privately managed or in public institutions that contracted out discrete operations to private firms. Our interpretation is that privatization can lower workers' perception of rewards in both completely privatized organizations and in public organizations that contract a proportion of service to private agents. This perspective is largely supported by objective comparisons of pay rates.

Private management was not significantly associated with supervision, work stress, autonomy, or opportunity. On the one hand, these null results fail to support the view that privatization introduces superior methods for managing service personnel. Indeed, worker perceptions of management are lower in organizations that are completely privatized than in pure public types. On the other hand, the data offer no evidence that working conditions, measured on these dimensions, become more oppressive with private management. Thus, we concur with Pendleton (1999) that the private versus public distinction in labor-management relations primarily concerns compensation, with workers in privatized institutions earning less than their counterparts in the public sector.

On this point we draw three related implications. First, if enhanced cost-efficiency is largely due to compensation differentials, it implies that organized labor forfeits considerable power to bargain wage and benefit policy when the legal and institutional status of a workplace shifts from public to private. All of the respondents in the sample were represented by the same national labor union, and the six sites were located in the same regional labor market. Despite these equalizing conditions, the union was unable to maintain a rough parity of compensation for these occupations.⁵ Factors directly related to privatization, such as changes in bargaining rights, decentralized bargaining structure, the loss of civil service protections, and reduced political influence, explain why these unions failed to sustain public-sector compensation standards in privatized contexts (Ness & Zullo, 2004).

Second, privatization might contribute to income inequality. Given the evidence that public wage premiums tend to be higher for lower-skilled occupations (Belman & Heywood, 1995; Fogel & Lewin, 1974; Hundley, 1991), the negative effects on compensation should be most acute for lesser skilled workers. High-skilled workers are comparably better equipped to exit an undesirable employment situation to find jobs that sustain or grow their compensation. And because workers with less skill are nearer to the margins of poverty, it follows that a relatively large proportion will be eligible for need-based assistance. To fully assess the economic merits of privatization, some adjustment may be necessary to factor in an increased demand for public assistance.

Third, the findings underscore a political obstacle for the privatization movement: that the public generally, and public workers specifically, oppose privatization on the belief that the likely outcome is reduced compensation. Conversely our results validate the position that public workers benefit from provisions that protect compensation rates during and after an organizational transition from public to private control.

The examination of workers' perceptions across organizational types provides additional insights and questions about the effect of private intervention. Notable is the strong association between public-private organizations and negative perceptions of work stress and reward. These results support Chandler's (1994) conclusion that limited levels of privatization within the organization serve as a credible threat to gain work-rule and economic concessions from public employees.

Alternatively these results might be due to intraorganizational burden shifting. Nearly every occupation includes a mix of routine tasks and less-frequent, nonroutine responsibilities. Public managers, who prefer to purchase services that are definable, and private contractors, who resist open-ended service obligations, both find it comparatively easy to negotiate the price and performance of routine tasks. Once the contract is signed, private contractors have strong incentives to limit their efforts to those obligations that are explicitly stated in the service agreement. Burden shifting occurs when the contract fails to require the contractor to fully absorb the duties performed by the public workers that are being replaced, especially nonroutine tasks, and the responsibility of performing such tasks become shifted onto the remaining public employees (see, for example, Sclar 2000, pp. 28-44). Perceptions of high work stress and fewer rewards in the public-private organizations are symptoms of burden shifting, where focused private contractors adopt a narrow interpretation of their contractual obligations, forcing the surrounding public workforce to shoulder nonroutine functions.

Finally, lower perceptions of opportunity within pure private organizations contradict the view that privatization creates opportunities for workers (Moore, 1999). One reason for this discrepancy is the sampling frame.

By selecting health care support staff, we exclude health care occupations that are in high demand by the private labor market, such as nurses or physicians. However, there may be more to the perception of opportunity than external labor market demand. Public workers in our sample enjoyed a longer progression of steps within classifications than workers employed by private contractors. Furthermore, public employees had the right to jump classifications based on competitive civil service examinations. Such internal labor market privileges are often lost when jobs are privatized, which may explain the relatively elevated perception of opportunity in public organizations.

In drawing these conclusions, we emphasize that this research is based on survey responses from six work sites. The limited number of sites increases the chance that site-specific factors other than private ownership explain response variation. We therefore caution against generalizing findings to other populations. Our expectation, however, is that private contracting has similar effects on lower-skilled workers in other service sectors. We are less confident that these inferences will apply to populations of highly skilled workers. Another limitation of this study that deserves attention is the effect of privatization on non-union populations. To neutralize any union effect, all the workers in our sampling frame were represented by the same national union. Future research might test whether union representation mediates the effect of privatization on service workers.

NOTES

1. For compilations of empirical research supporting this view, see Boardman & Vining, 1989; De Alessi, 1980; Vining & Boardman, 1992. While a cursory review of the evidence suggests private sector superiority, exceptions warrant caution when generalizing the effect of private contracting (for more critical reviews, see: Millward, 1982; Hodge, 2000).
2. The living wage movement originated as an attempt to prevent private contractors from undermining the compensation rates of public workers. Under a typical living wage ordinance, contractors must provide their employees with a minimum rate of compensation, usually pegged just above poverty, to be eligible to bid on a publicly funded work.
3. One site classified as "private" in this analysis is a public benefit corporation. Public benefit corporations are nonprofit entities that are usually managed by a state or municipally appointed board of directors. A frequent motive for shifting from a public facility to a public benefit corporation is to enable management to have greater flexibility in a range of policy areas, such as asset purchasing, setting service fees, and labor relations. Soon after this site was transferred to a public benefit corporation, management attempted to break from the county pattern of negotiated wages and benefits.

4. Union support was essential to gain access to these workers. Consequently, the site locations were not based on a probability sample and we limit our generalizations to the six sites.
5. As Table 4 indicates, there was variation in organization type beyond the public-private distinction that may also explain compensation differentials. Moreover, while union members were represented by the same national organization, the locals were not all from the same council, where bargaining policy is determined. Union leaders were nevertheless aware of the disparities in compensation and expressed frustration at their inability to prevent concessions at the private work sites.

REFERENCES

- Alchian, A. A., and H. Demsetz, (1972). Production, Information Costs, and Economic Organization. *American Economic Review*, 62 (December), 777–95.
- Belman, D. & Heywood, J. S. (1995). State and Local Government Wage Differentials: and Intrastate Analysis. *Journal of Labor Research*, 16 (Spring), 187–201.
- Bernhardt, A., & Dresser, L. (2002). Why Privatizing Government Services Would Hurt Women Workers. Report. Washington, DC: Center for Women's Policy Research.
- Boardman, A. E., & Vining, A. R. (1989). Ownership and Performance in Competitive Environments: A Comparison of the Performance of Private, Mixed and State-Owned Enterprises. *Journal of Law and Economics*, 32 (April); 1–33.
- Chandler, T. D. (1994). Sanitation Privatization and Sanitation Employees' Wages. *Journal of Labor Research*, 15 (Spring):137–153.
- Clark, C., Johnson R. A. & Mercer, J. (2000). Impact of Privatization and Managed Competition on Public Employees. In R. A. Johnson, & N. Walzer, eds. *Local government innovation: Issues and trends in privatization and managed competition*. Westport, CT: Quorum Books.
- Davidson, J. O. (1993). *Privatization and employment relations: The case of the water industry*. London: Mansell.
- De Alessi, L. (1980). The economics of property rights: A review of the evidence. *Research in Law and Economics*, 2; 1–47. Reprinted in E. E. Bailey, & J. R. Pack, (Eds.), (1995). *The political economy of privatization and deregulation* (pp. 5–51). Aldershot, England: Edward Elgar Publishing Company.
- DOL (Department of Labor). (1996). *Working Together for Public Service*. Report of the Secretary of Labor's Task Force on Excellence in Government through Labor-Management Cooperation. Washington, DC: U.S. Government Printing Office, June.

- Dudek & Company. (1989). *The long term employment implications of privatization: evidence from selected U.S. cities and counties*. Washington, DC: The National Commission for Employment Policy, Report No. 98-04. Dodex & Co.
- Erickcek, G., Houseman, S. & Kalleberg, A. (2002). The Effects of Temporary Services and Contracting Out on Low Skilled Workers: Evidence from Auto Suppliers, Hospitals and Public Schools. Upjohn Institute Staff Working Paper No. 03-90. Kalamazoo, MI: Upjohn Institute.
- Fogel, W., & Lewin, D. (1974). Wage determination in the public sector. *Industrial and Labor Relations Review*, 27 (April),410-31.
- GAO (General Accounting Office). (2001). *DOD competitive sourcing: Effects of A-76 studies on federal employees' employment, pay and benefits vary*. Washington, DC: General Accounting Office, GAO-01-388, March.
- Goldsmith, S. (2003). Restructuring labor-management relations to improve government services. In J. Brock, & D. B. Lipsky (Eds.). *Going public: The role of labor management relations in delivering quality government services* (pp. 107-23). Urbana-Champaign, IL: Industrial Relations Research Association.
- Hodge, G. A. (2000). *Privatization: An international review of performance*. Boulder, CO: Westview Press.
- Hundley, G. (1991). Public and private sector occupational pay structures. *Industrial Relations* 30 (Fall):417-34.
- Keane, C., Marx, J. Ricci, E. (2003). Managerial and professional beliefs influencing public health privatization: Results of a national survey of local health department directors. *Journal of Health and Social Behavior*, 44 (1), 97-110.
- Koberg, C. S., Boss, R. W. Goodman, E. A. Boss, A. D. Monsen, E. W. (2005). Empirical evidence of organizational citizenship behavior from the health care industry. *International Journal of Public Administration*, 5 (6); 417-502.
- Mason, M., & Siegel, W. (1997). *Does privatization pay? A case study of privatization in Chicago*. Chicago: Chicago Institute On Urban Poverty, January.
- Millward, R. (1982). The comparative performance of public and private ownership. In Lord Roll of Ipsden (Ed.). *The mixed economy* (58-93). London: Macmillan Press.
- Moore, S. (1999). How contracting out city services impacts public employees. In P. Seidenstat, (Ed.). *Contracting out government services* (pp. 211-18). Westport, CT: Praeger.
- Ness, I., & Zullo, R. (2004). Privatization, Labor-Management Relations and Working Conditions for Lower-Skilled Employees. In Louise Simmons, ed., *Welfare, the Working Poor, and Labor*. Armonk, NY: M.E.Sharpe.
- O'Leary, J., & Eggers, W. D. (1993). *Privatization and Public Employees: Guidelines for Fair Treatment*. Los Angeles, CA: Reason Foundation.
- Pack, J. R. (1989). Privatization and cost reduction. *Policy Sciences*, 22 (March),1-25.

- Pendleton, A. (1999). Ownership or competition? An evaluation of the effects of privatization on industrial relations institutions, processes and outcomes. *Public Administration*, 77 (January),769–91.
- Quinn, R. P., and Staines, G. L. (1979). The 1977 Quality of Employment Survey: Descriptive statistics, with comparison data from the 1969–1970 Survey of Working Conditions and the 1972–1973 Quality of Employment Survey. Ann Arbor, MI: University of Michigan, Survey Research Center, 1978.
- Rubin, B. M., Rubin, R. S., & Rolle, R. A. (1999). Successful collaborative management and collective bargaining in the public sector. *Public Productivity and Management Review*, 22 (June),517–36.
- Savas, E. S. (2000). *Privatization and public-private partnerships*. New York: Chatham House Publishers.
- Sclar, E. D. (2000). *You Don't Always Get What You Pay For: The Economics of Privatization*. Ithaca, NY: Cornell University Press.
- STATA. (2005). *Stata 9 survey data reference manual*. College Station, TX: Stata Press.
- Stein, L. (1994). Privatization, workforce cutbacks, and African American municipal employment. *American Review of Public Administration* 24 (June),181–91.
- Stevens, B. J. (1984). *Delivering municipal services efficiently: A comparison of municipal and private service delivery*. Washington, DC: U.S. Department of Housing and Urban Development.
- Suggs, R. E. (1990). *Minorities and privatization: Economic mobility at risk*. Washington, DC: Joint Center for Political Studies.
- Vining, A. R., & Boardman, A. E. (1992). Ownership versus competition: Efficiency in public enterprise. *Public Choice* 73 (March);205–39.

Copyright of International Journal of Public Administration is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.

Copyright of International Journal of Public Administration is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.