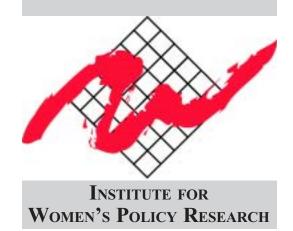
Why Privatizing Government Services Would Hurt Women Workers

By Annette Bernhardt, Ph.D. Laura Dresser, Ph.D.



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Ву

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Executive Summary

This report analyzes the implications of privatization for women workers, especially those employed in low-end occupations. Data analyzed show that women disproportionately depend on the public sector for jobs that pay decent wages and offer benefits. This is especially true for African American and Hispanic women, and for women who do not have a college education. In part, higher wages and better access to health and pension benefits in the public sector can be attributed to higher rates of union coverage. The evidence suggests that privatizing government services will have a negative impact on women workers, especially those workers who are most vulnerable.

A Relative Decline in Public Sector Employment

Over the past two decades, employment in the public sector has grown much more slowly than employment in the private sector. In 1979, 16 percent of working men held public sector jobs, while in 1998 only 13 percent did. For women, the share employed in the public sector dropped from 20 percent in 1979 to 18 percent in 1998 (See Figures 1 and 2).

- The proportion of workers employed in the public sector declined for both women and men between 1979 and 1998, with especially pronounced declines for African American and Hispanic workers.
- In 1998 almost one in five women held a public job (18 percent), a higher rate than among men (13 percent). This was especially true for African American women (22 percent).

Public sector employment declined for both women and men between 1979 and 1998 with a somewhat sharper decline among men.

Public Sector Employees Have Higher Wages and Better Access to Health and Pension Benefits

Focusing on 1998, the most current year for which data is available, the report shows that median earnings in the public sector are higher than in the private sector for most categories of workers.

- Median wages for women without a four-year college degree are 15 percent higher in the public sector. For women with a college degree, wages in the public sector are 7 percent higher than in the private sector.
- Among women, 72 percent of public workers participate in a pension plan and 69 percent have employer-provided health insurance. By contrast, in the private sector less than half have either benefit, and in the case of Hispanic women, less than a third do (see Table 5).

Thus, privatization is likely to erode the wages and benefits of women workers, especially for African American and Hispanic women and those with fewer years of formal education.

Explaining Why Wages in the Public Sector are Higher than in the Private Sector

Wage ratios shown above are useful descriptions of employment conditions, but they can also be misleading because they do not account for differences in the public and private

sector workforces. For example, workers in the public sector tend to be older and hence could be expected to have higher earnings. This study uses regression analysis to distinguish components of the wage differential that can be attributed to the public/private sector distinction. Overall, controlling for race, region, and work experience, women in the public sector are still more likely to have higher wages than their counterparts in the private sector. While non-college educated men, particularly African American and Hispanic men, also benefit from somewhat higher wages and benefits in the public sector, the effect is more pronounced for women workers. For example, women without a college degree in the public sector earn wages that are 5 to 6 percent above the earnings of their private sector counterparts.

Once union membership and occupation variables were included, however, the differences in public sector and private sector wages largely disappeared. In other words, for women who have the same occupation, union status, education, work experience, and race, the public sector does not, on average, pay better than the private sector. Unionization emerges as a central factor in understanding why the public sector pays better than the private sector.

Gender Equity in the Public and Private Sectors

While women are paid better in the public sector in an absolute sense, a gap between men's and women's wages remains (see Table 6). The size of the wage gap between male and female workers in public and private sector employment varies by race and educational background.

• The gender wage gap is smaller in the public sector, especially for women of color, but this result is driven largely by education. Only women with college degrees see greater pay equity in the public sector. For less educated women, gender inequality is as great in the public sector as in the private.

The public sector is generally regarded as providing better access to professional and managerial jobs for women. When teachers are separated from other professional and managerial occupations, however, the public sector does not appear to provide greater opportunity for women to hold managerial or professional positions.

• With the exception of teachers, women are only slightly more likely to hold managerial, technical, or other professional jobs in the public sector than in the private sector (26.8 percent and 25.3 percent, respectively).

Because women in the public sector have more education than women in the private sector, we would expect them to be well represented in managerial and professional positions. This is not the case, however. That educational wealth has not translated into greater numbers of managerial jobs for women (while it has for men) indicates the continued presence of occupational barriers for women. This report finds that the public sector does not, in general, offer exceptional opportunities for women to hold managerial and professional positions (although other research by IWPR suggests that the public sector does, in fact, offer better opportunities for women of color than the private sector).

Risks of Privatization

The second part of this research focuses on occupations — such as health care and child care workers, janitors, food preparation employees, and clerical and administrative staff — that are considered to be "at risk" for privatization. This research finds that women

working in these "at risk" occupations have less education, with close to half holding a high school degree or less. Because the wage differential in the public and private sectors is largest for women without a college education, these women have the most to lose under privatization.

- For women without college degrees, occupations "at risk" for privatization constitute 63.9 percent of their public sector jobs.
- Even though "at risk" occupations are not generally considered exceptional job opportunities, these jobs pay better in the public sector than in the private sector.

The Upshot

From a policy standpoint, there is good reason to be concerned about the continuing call for contracting out public services to the private sector. On average, public sector jobs pay better and are more likely to include pension and health benefits. When government services are privatized, women—especially women of color and women who do not have a college education—will likely experience significant declines in how much they earn and in their health and pension coverage. Even though, the public sector is far from a perfectly fair employer—glass ceilings and the gender gap in pay and benefits persist as in the private sector—this analysis finds that privatization, and the de-unionization that frequently accompanies it, is likely to prove detrimental to the economic welfare of women workers.

Background

Over the past two decades, privatization, in which businesses (or not-for-profit agencies) provide public services, has changed the nature of public sector employment. A growing number of public functions that previously were performed by government employees are now performed by private businesses. While the privatization of public services is not new, its prevalence has grown steadily over the past two decades, resulting in a decline in public sector employment as a percentage of the overall workforce.

The impetus for privatization of government services is to lower the costs of public services and improve their quality (Sawicky 1999; Mason and Siegel 1997). The literature on privatization is dominated by case studies where cost reduction was the main goal. More often than not, the researchers claim that cost savings were achieved.

There are two major problems with this research approach. First, as Sawicky (1999) argues, studying only governments that have privatized their services does not tell us what the impact would be under different circumstances and in different settings. Private contractors often "cherry pick," taking over lucrative services (such as well traveled bus routes and safer districts) and leaving less profitable services to the public sector (Barnekov and Raffel 1990). For example, a private school might not accept a disabled student, but a public school would, because it is legally required to accommodate all children. As a result, the public school might appear less efficient. In other words, the problem of comparing "apples and oranges" looms large in the privatization debate.

A second problem with the literature on privatization is that studies rarely address *how* cost savings are achieved. In particular, few analysts document whether cost savings are achieved by lowering workers' wages and benefits (as opposed to improvements in efficiency). Case study research suggests that reductions in workers' wages and benefits can be an important, if not the only, component in the cost savings achieved by privatization (Schlar 2000).

This study re-examines the impact of privatization on the wages and benefits of workers with particular attention to women workers. The public sector has historically had smaller gender and racial wage gaps, better overall pay, and higher numbers of women at professional levels than the private sector (Sawicky 1999). It also has substantially higher union density (Hirsch and Macpherson 1999), which translates into greater job stability and due-process rights—the latter may be of particular use to women and minorities. In addition, because benefits in the private sector have eroded in recent years, the public sector advantage in benefit-provision has increased (Belman and Haywood 1997; National Commission on Employment Policy 1989). Finally, Freeman (1996) found that employee involvement and job satisfaction are higher in the public sector, partly because of a greater willingness by managers to share power. Consequently, privatization may also affect non-financial aspects of job quality.

Much popular rhetoric about public sector employment focuses on raw differences in compensation and benefits between the public and private sectors, which can be substantial (Sclar 2000). Raw differences, however, are potentially misleading because they fail to control for differences in the composition of the workforce across the two sectors. The public-sector workforce, for example, is substantially better educated than the private-sector workforce.¹ It is also substantially more unionized.

Belman and Heywood (1993) found that approximately 20 percent of private sector workers have a college education, compared with 44 percent of public sector workers.

Because there are differences of opinion regarding what variables should be controlled for, estimates of the difference between public and private sector compensation are often not consistent across studies. For example, Belman and Heywood (1993) found that the pay of federal public employees was roughly equal to the wages of comparable private sector employees; other studies have found public pay levels to be higher (Cox and Brunelli 1992; Peterson, Davis, and Walker 1986).² All approaches, however, find a decline in public pay relative to private pay in recent years. The pace of this decline has varied depending on macroeconomic and political conditions (Freeman 1985), and also varies regionally (Belman and Heywood 1995). Another point of agreement is that wages among workers in the public sector are more equal than they are in the private sector (see Sawicky 1999). Part of this is likely due to the greater presence of unions, which tend to equalize wages among their members.

There is also agreement that well educated workers tend to earn more in the private sector, whereas less educated workers tend to earn more in the public sector.³ Thus, privatization is likely to affect less-skilled, low-wage workers more adversely (Sclar 2000; Poterba and Rueben 1994). Low-wage government workers who have been laid-off and who get jobs with a private contractor often lose their benefits, and their wages often (but not always) decline (National Commission on Employment Policy 1989; Suggs 1989). Minority workers may be disproportionately affected, especially if they have less seniority in the civil service system (Suggs 1989).

Research Objectives

This study addresses the following questions: What are the implications of privatization for women workers, especially those employed in low-end occupations? Are there marked differences by race or ethnicity, suggesting that privatization might have particularly negative effects on women of color? What factors might explain differences between public and private sector employment?

Direct answers are not possible because there are no datasets to identify and track all of the employment changes that can result from privatization. The Current Population Survey's bi-annual supplement on "alternative work arrangements" includes contract workers including independent contractors, temporary help agency workers, on-call workers, and contract company employees. However, "contract workers" are not synonymous with the workers impacted when government services are contracted. For example, if mass transit spending decreases, private companies may emerge to fill the void. While the mechanism is different than explicit subcontracting (and much more nebulous), the effect is the same: the public sector shrinks relative to the private sector, and wages may decline as a result.

This paper takes the simple route of comparing wages and other outcomes in the public sector to those in the private sector in order to get at the *potential* impact of privatization on women. This indirect approach has the advantage of addressing the potential impact of all forms of privatization, not simply direct subcontracting.

This study has two components. First, public sector employment growth relative to the private sector over the last two decades is documented based on data from the Current Population Survey (CPS). Second, using the most recent year available (1998), the report

In the extreme, one study found that the public/private wage gap evaporates when the higher education levels for public sector workers are considered (Gold and Ritchie 1992).

³ This study finds that college educated women earn more in the public sector than in the private sector.

"maps" the differences in job quality between the public and private sectors. Particular attention is paid to clerical and service occupations, since these workers are likely to lose the most from privatization (relatively speaking) and are the most likely to be subcontracted in the first place. Throughout, close attention is paid to differences by sex and race, since the public sector has historically provided especially strong opportunities to women of color. (The focus on differences by race, however, is limited at points by insufficient sample sizes.)

Data and Measures

The Current Population Survey (CPS), the government's monthly household survey of employment and labor markets, yields a nationally representative sample of individual workers with employment variables such as earnings, hours worked, industry, occupation, education, and unionization, as well as background variables such as age, sex, race, ethnicity, and geographic location. In order to achieve sufficient sample sizes within any one year, the Merged Outgoing Rotation Group (ORG) version of these data is used. ⁴ The exception is the analysis of pension and health care coverage, where the March 1998 CPS Supplement was used (since this is the only month where such data can be found). Sample selection was straightforward. The study includes workers aged 18-64 who had positive earnings and who were not self-employed. Final sample sizes are given in Table 1.

Some of the variables used in these analyses are basic and do not require description (for example, sex), but others require elaboration. The key variable of interest, *sector*, consists of three categories: public, private for-profit, and private non-profit. For convenience, throughout this report the terms public, private, and non-profit are used. The key outcome variable, *hourly wages*, is constructed as follows: if an individual actually reported an hourly wage, that value is used; otherwise, usual earnings per week are divided by usual weekly hours worked. The resulting measure is hourly wages at the respondent's main job, in 1998 dollars. *Part-time work* is defined as less than 35 hours per week, again using the usual weekly hours measure.

	Table 1. Sample Sizes									
		Wo	omen				Men			
	All				All					
	Workers	White	Black	Hispanic	Workers	White	Black	Hispanic		
Public	13,497	9,599	2,370	519	10,546	7,815	1,458	801		
Private	56,205	40,187	7,561	2,562	67,913	48,712	7,065	9,125		
Non Profi	t 5,989	4,845	675	179	2,688	2,109	294	147		
Total	75,691	54,631	10,606	3,260	81,147	58,636	8,817	10,073		

Source: Authors' analysis of the 1998 Merged Outgoing Rotation Group, Current Population Survey.

The ORG files effectively combine monthly samples into yearly samples. Specifically, each household entering the CPS is administered four monthly interviews, then ignored for eight months, then interviewed again for four more months. Since 1979, only households in months four and eight have been asked their usual weekly earnings/usual weekly hours. These are the outgoing rotation groups, and each year the BLS gathers all these interviews together into a single Merged Outgoing Rotation Group.

The *race* variable makes use of questions about race as well as ethnicity and differentiates among the following groups: non-Hispanic white, non-Hispanic black, Hispanic, and non-Hispanic others. In the text, the 'non-Hispanic' prefix is dropped, but the reader should remember that the race categories have been defined in this manner. The *education* variable uses information on highest grade attended, and consists of three groups: high school graduates and drop-outs; workers with some college experience but no four-year college degree; and workers with a four-year college degree or higher. The *union* variable measures whether a worker is a union member. For *occupation*, most often the Census' one-digit occupational coding is used, collapsed for brevity as needed. To identify occupations most at risk for privatization, two-digit and three-digit codes are used. For *health care coverage*, the question asks whether the respondent is currently covered by a health plan provided through their current employer, former employer or union. For *pension coverage*, the question asks whether the respondent is currently participating in the employer's or union's pension plan. Both of these variables, therefore, measure actual participation in employer-provided benefits.

At the end of the paper, several regressions are performed in which the natural log of the dependent variable, hourly wage, is used. In these regressions, an indirect measure of years of work experience is used, since no direct measure exists. "Potential" experience is calculated as the respondent's age, minus years of education minus six. This formula roughly approximates the number of years that an individual has worked in the labor market, though it does a better job for men than it does for women (who are more likely to take time out to care for children or elderly parents). Finally, all analyses are weighted with CPS earner weights, normalized to represent the actual sample sizes (rather than the whole population).

Trends in Public and Private Sector Employment Over Time =

Figure 1 shows the percent of all wage and salary workers employed in the public sector from 1979 to 1998, for men and women separately. Women have always been more likely to hold jobs in the public sector than men, and this pattern continues to the present. Both sexes, however, have seen a slow decline over the past 20 years. The trend is more pronounced among men. In 1979, 15.9 percent of men held public sector jobs, while in 1998 only 13.2 percent did so, for a decline of 17 percent over the past two decades. Women saw their public jobs go from 19.8 to 18.0 percent over that same period, for a 9 percent decline over this same period. For both men and women, there is clear evidence of the relative reduction in public sector jobs. Although the absolute number of both private and public jobs has grown, as the former has grown faster than the latter, the *percentage* of public jobs dropped. These trends cannot be directly tied to an increased use of subcontracting, the drop in relative public sector employment is certainly consistent with it.

Figure 2 takes a closer look at the experience of different racial and ethnic groups. Most striking are the high levels of public sector employment for African American men and women. At least in part, this is likely due to stricter adherence to equal opportunity laws in the public sector. It is worrisome that African American workers have seen very strong drops in public employment over time, stronger than those seen for white workers. For example, the percent of public workers has dropped by 16 percent for African American

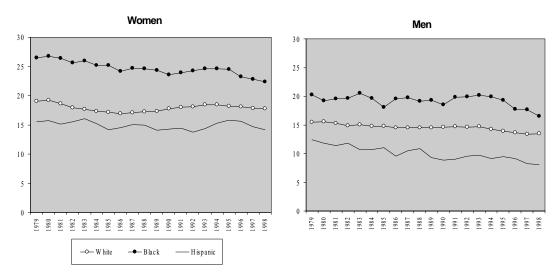
⁵ We do not show trends for non-profit employment because this sector is not consistently identified across all years.

women over the past two decades, compared with seven percent for white women. And the drop for African American men (18 percent) also outpaced that of white men (13 percent). These are disturbing figures for a minority group that has historically found some of its best opportunities for employment in this sector (see also Sawicky 1999).

Hispanic workers have relatively low levels of public sector employment, both historically and currently. Moreover, the drop in such employment for Hispanic men is the strongest of any group, declining by an astonishing 35 percent (as compared with nine percent for

Figure 1. Percent of Wage and Salary Workers Employed in the Public Sector, by Sex





Hispanic women). Given these trends, the public sector is unlikely to prove a major source of stable, well-paid jobs for Hispanic workers, especially men, in the future.

Finally, Table 2 takes a closer look at the most current information on employment across the sectors, including the not-for-profit sector. Despite the shedding of public sector jobs, women of all races and ethnicities are still more likely to hold jobs outside the private for-profit sector than their male counterparts. African American workers of both sexes are more likely to hold public jobs than whites. On the other hand, Hispanic workers are consistently underrepresented outside of the private for-profit sector. It is worth reiterating that of all these groups, African American women have the highest level of public sector employment (22.4 percent). This figure will become especially relevant when wage differences between the sectors are examined below.

Worker Characteristics

Demographic and occupational characteristics of the workforce vary significantly across the three sectors of the American economy. Table 3 reviews these basic characteristics of the public and private labor force. Compared with workers in the private sector, those in the public sector have significantly higher levels of education. For example, 45.9 percent of women in the public sector hold a four-year college degree, compared with only 19.2 percent in the private. (Some, but not all, of this differential is due to the large numbers of teachers in the public sector.) On the other end of the spectrum, about a quarter of women in the public sector have a high school diploma or less, compared with nearly half in the private sector. This pattern holds true for men as well as women.

Public workers also tend to be older, reflecting in part the job stability and seniority rules that stem from greater union strength in this sector. In fact, the difference in union coverage between the sectors is striking. For women, 36.1 percent are union members in the public sector, compared with only 6.1 percent in the private sector. The numbers for men are 41.2 percent and 13.3 percent, respectively. While the absolute figure for men is higher, it is worth noting that women have the most to gain: they are six times more likely to be unionized in the public sector than in the private sector, while for men

Table 2. Employment of Wage and Salary Workers, by Sector										
		lomen				en		_		
	Public F	Private N	Non-Prof	it	Public Pri	vate No	n-Prof	<u>it</u>		
All workers	17.8%	74.3%	7.9%	100 %	13.0 %	83.7%	3.3%	100%		
White	17.6	73.6	8.9	100	13.3	83.1	3.6	100		
African American	22.4	71.3	6.4	100	16.5	80.1	3.3	100		
Hispanic	14.0	81.9	4.0	100	8.0	90.6	1.5	100		
Other	15.9	78.6	5.5	100	13.0	83.2	3.8	100		
Source: Authors' ar	nalysis of the	e 1998 M	erged Ou	tgoing Ro	tation Group,	Current	Populat	tion		

unionization is just three times as likely. Much of this difference is likely a function of high unionization rates for teachers (who are disproportionately women) in the public sector.

Perhaps because of this strong union presence, part-time work is less prevalent in the public sector, though the differential is not as large as one might expect. In the public sector 17.7 percent of women work part-time compared with 22.6 percent in the private sector. Of course, rates of part-time work are much lower among men, with 6.7 percent of men working part-time in the public sector compared with 7.2 percent in the private sector. Given the relationship between full-time employment and benefits, the greater access to full-time jobs in the public sector suggests greater access to benefits as well.

In terms of occupational segregation, there are greater differences between women and men. In the private sector, women tend to be concentrated in service and clerical occupations and men tend to be concentrated in manufacturing-related occupations. In the public sector, however, the pattern shifts somewhat. As noted above, public workers tend to be well educated, and this is clearly reflected in the types of jobs they hold. For men, public sector employment means far fewer manufacturing jobs and many more professional, managerial, and protective service jobs. For women, it means greater numbers of professional and clerical jobs, and fewer in service and sales (which are traditionally found at the bottom of service industries). Overall, while occupational segregation is apparent across these sectors, the public sector contains a higher proportion of managerial and professional jobs for women than does the private sector.

Table 3. Characteristic	cs of t	he V	Vorkfor	ce, by	Sect	or
	v	Vomen			Me	en
	Public P	rivateN	Ion-Profit	Public Pr	ivateNo	on-Profit
High school or less	27.2%	48.29	6 25.7%	27.6%	50.8%	6 22.6%
Some college experience	26.9	32.7	33.2	29.8	27.2	24.3
College degree	45.9	19.2	41.1	42.6	22.0	53.2
	100.0	100.0	100.0	100.0	100.0	100.0
Ages 18 to 30	19.5	35.3	24.2	19.6	34.3	25.2
Ages 31 to 54	69.0	56.5	63.8	67.5	57.3	63.1
Ages 55 to 64	11.5	8.2	12.1	12.9	8.4	11.8
	100.0	100.0	100.0	100.0	100.0	100.0
Percent working part-time	17.7	22.6	27.1	6.7	7.2	13.3
Percent unionized	36.1	6.1	8.0	41.2	13.3	7.3
Executive, administrative, managerial	11.9	13.3	15.0	14.3	12.5	17.4
Professional (including teachers)	39.5	9.9	37.0	27.4	9.3	42.9
Technicians & related support	2.6	4.0	6.7	3.7	3.1	4.8
Administrative support, including clerical	28.9	24.3	21.2	11.4	5.7	6.5
Protective service	2.6	.4	.2	17.2	1.1	1.5
Service and sales	11.5	34.4	17.3	8.0	19.6	13.5
Precision production, craft, & repair	.4	2.5	.2	8.5	20.9	5.6
Operators, fabricators, & laborers	5.4	10.4	2.1	7.9	25.0	6.1
Farming, forestry, & fishing	.2	.8	.2	1.7	2.9	1.8
	100.0	100.0	100.0	100.0	100.0	100.0

Source: Authors' analysis of the 1998 Merged Outgoing Rotation Group, Current Population Survey.

Teachers and Non-Traditional Jobs

At first blush, it might appear that the public sector is a watershed of sorts for women, breaking down barriers to non-traditional occupations. But a closer look reveals that much of this is a function of the large numbers of teachers in the public sector. Table 4 summarizes our occupational data in a different way, by distinguishing between three groups. The first consists of managerial, professional, and technical occupations *except for* teachers (for example, administrators and officials, engineers, computer scientists, lawyers and judges, and all management-related occupations). The second consists of teachers (primary, secondary, and post-secondary). The third consists of all other occupations, typically front-line and non-supervisory jobs (for example, administrative assistants, data processors, welfare and childcare workers, and building maintenance occupations).

When viewed this way, it quickly becomes clear that the public sector does not generally provide exceptional opportunities for women. Although the public sector contains a very high percentage of teachers, which women fill disproportionately, it would be a stretch to call teaching a non-traditional job for women. Occupations that have truly been outside of the reach of many women—managerial, technical, and other professions—are nearly as hard to get in the public sector as in the private (26.8 percent versus 25.3 percent, respectively). It is men, however, who have the best access, with close to a third (31.1 percent) holding high-end, non-teaching jobs in the public sector, as compared with only 24.2 percent in the private sector.

This point, however, should not be overstated. After all, the general conclusion of Table 4 is that far fewer women have front-line, non-supervisory jobs in the public sector. Many more hold jobs that are well paid, challenging, have greater autonomy, and require greater skill. There is no doubt that women are better off, in an absolute sense, working in the public sector. But it is worth remembering that much of this "boosting" is accomplished through teaching jobs that women have held throughout much of the 20th century. This is relevant because women in the public sector are much better educated than in the private sector (as are men), with nearly half holding four-year college degrees (even a bit more than men). That such educational wealth has not translated into greater numbers of managerial jobs for women (while it has done so for men) indicates the continuing presence of other barriers for women.⁶

Table 4. Access	to N	on-Tr	aditiona	ıl Job	S	
		,	Women		Men	1
	Public	Private	Non-Profit	Public	Private N	on-Profit
Managers, professionals, technicians	26.8%		% 47.6%	•		56.0%
Teachers Front-line, non-supervisory jobs	27.2 46.0	2.0 72.8	11.1 41.3	14.3 54.6	.7 75.2	9.0 34.9
	100.0	100.0	100.0	100.0	100.0	100.0
Source: Authors' analysis of the 1998 M Survey.	erged O	utgoing I	Rotation Gro	up, Curre	nt Popul	ation

To push the point, female-dominated professions such as teaching typically pay less than male-dominated professions such as the law, even though comparable education levels are often required (Baker and Fortin 1999).

Health and Pension Benefits

Another key measure of worker welfare is the extent to which workers receive employer-or union-provided health care and pension benefits. Table 5 shows that benefits provision differs enormously across the public and private sectors. All workers, regardless of sex, race, or ethnicity, have significantly higher rates of pension and health care coverage in the public sector.

Among women, 71.6 percent of public workers participate in a pension plan and 69.0 percent have health insurance. By contrast, in the private sector less than half of women have either of these benefits, and in the case of Hispanic women, less than a third do. These are striking differences—public jobs clearly give a significant boost to worker welfare.

The public sector advantage in benefit provision looks quite similar for men, but with the difference that men are more likely to have pension and health coverage, regardless of sector. To a large extent, this reflects men's greater unionization rates in both sectors, which, in turn, is a function of the types of jobs men tend to hold. Another central factor limiting women's participation in pension plans is their greater propensity to work parttime (see Shaw and Hill 2002).

Wages

The final and perhaps most important question is how wages compare across the different sectors of the economy. Educational and occupational differences aside, the bottom line for most workers is how much their jobs pay. This section describes differences in the wages earned by men and women in the public and private sectors as well as differences between the two sectors for African American, Hispanic, and white workers. While the

For this analysis we can only use the March Supplement of the CPS (see Data section). As a result, the sample sizes for the non-profit sector are too small to report reliable estimates.

	Women Men						
	Public	Private, for-profit	Public	Private, for-prof			
Percent with pension plan	71.6%	37.7%	78.4%	45.39			
White	71.7	39.5	79.9	49.7			
Black	73.5	39.3	75.6	40.6			
Hispanic	67.9	24.0	77.1	26.8			
Percent with health insurance	69.0	47.2	78.6	59.3			
White	68.7	48.4	79.1	63.4			
Black	71.3	52.9	81.6	55.2			
Hispanic	67.2	32.4	73.5	42.8			

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degree to which this differential reflects the public/private sector distinction is best obtained through regression techniques (presented in the next section), a broad overview of the patterns in wages and benefits is useful.

As shown in Table 6, with the exception of college-educated men, all workers receive higher wages in the public sector. For both men and women, employment in the public sector pays off—and it pays off the most at lower education levels. Thus, the public/ private ratio is the largest for workers who do not hold a four-year college degree. By contrast, the ratio is significantly lower for college graduates. In fact, men with a college degree would be better served by finding jobs in the private sector, as their wages are higher, on average.

The general conclusion cannot be overstated: public sector employment provides the most benefits to "less-skilled" workers—those who do not have access to the labor market power that a college degree confers. It is likely that high unionization rates in the public sector, particularly for less skilled men, drive this conclusion. As noted earlier, unions have been found to compress the wage gap between front-line and supervisory workers. Thus, privatization is likely to hit hardest precisely those workers, male and female, who are the most vulnerable in the labor market: high school dropouts, high school graduates, and workers who have attended college but did not attain a four-year degree.

Wages and Sex

Another question concerns women's standing *relative* to men. Here, the findings are a bit more complicated. In the final column of Table 6, we show the ratio of women's to men's median wages in each sector. All of the ratios are less than one, meaning that women's wages are consistently lower than men's. This is not surprising. There are, however, important sector differences. Among well-educated workers (those with a college degree

Table 6. Med	dian Wa	ges by Edı	ucation,	Sex, and	Sector
				Ratio of	Ratio of
	<u>Median V</u>	Vages (\$1998)	Public/P	rivate Wages	Women's to
Education	Women	Men	Women	Men	Men's Wages
High School or Less Public Private Non-Profit Some college	\$ 9.23 \$ 8.00 \$ 8.03	\$12.35 \$10.00 \$ 8.90	1.15	1.24	.75 .80 .90
Public Private Non-Profit	\$11.00 \$ 9.60 \$10.80	\$14.00 \$12.25 \$11.05	1.15	1.14	.79 .78 .98
College Public Private Non-Profit	\$16.78 \$15.63 \$15.37	\$19.74 \$20.65 \$18.00	1.07	0.96	.85 .76 .85
Source: Authors' analy	sis of the 19	98 Merged Outgo	oing Rotation	Group, Curre	nt Population

or higher), women's wages are 85 percent of men's in the public sector, but only 76 percent of men's in the private sector.

For workers with less education, however, the picture is less promising. The gender difference in wages is about the same for workers with some college experience, regardless of which sector they work in. And for those with a high school diploma or less, the gender gap in wages is actually *greater* in the public sector than in the private. Why? It is true that women with less education have the most to gain from getting public sector jobs, in an absolute sense. But this is also true for men with low education levels, in fact, even more so than for women. Both men and women benefit from public sector jobs, but men gain more. They are pulling away from women in a relative sense, widening the gender gap.

What is the upshot? When considering the likely effects of privatization on women working in the public sector, the bottom-line consideration has to be in terms of "dollars-per-hour." First and foremost, we should be concerned about absolute wage levels. The data indicate that women—especially those with less education—have much to lose from privatization; their wages are higher in the public sector than in the private.

A second consideration is the likely effect of privatization on women's standing relative to men. Here the data indicate that women with college degrees will see a widening of the gender gap if their jobs are moved into the private sector. Among less educated workers, the gender gap will remain unchanged in the private sector, or even shrink.

Wages and Race

As noted earlier, there are strong differences in the extent to which different race and ethnic groups depend on the public sector as a source of jobs. Table 7 addresses whether there are also differences in the wages those jobs pay. The first part of the table shows the ratio of public to private wages, broken down by sex, education, and race/ethnicity. Several themes emerge.

First, it is clear that non-whites tend to benefit the most from employment in the public sector. This is especially striking for African American and Hispanic men, who consistently

Women Men									
	White	Black	Hispanic	White	Black	Hispanio			
ublic/Private Wage Ratio									
High school or less	1.16	1.11	1.18	1.15	1.22	1.30			
Some college	1.10	1.23	1.22	1.11	1.28	1.40			
College	1.05	1.17	1.24	.93	1.19	1.13			
atio of Each Group's Wages	s to White	Men's W	/ages						
Public Sector	.81	.73	.68		.83	.86			
Private Sector	.73	.60	.55		.73	.64			

see a larger difference in pay between public and private sector jobs than do white men. A similar pattern can be seen among women, though it is not as striking or as pervasive.

These findings do *not* mean that by some magical twist, African American and Hispanic workers are paid better than white workers in the public sector. Far from it—white men still earn the most, whichever sector one examines. However, because minorities are paid so much less than whites in the private sector, they have more to gain from employment in the public sector.

The second part of Table 7 illustrates this point. For this analysis, we computed the ratio of each group's wages to white men's wages (hence there is no entry for white men). Significantly, nowhere is the ratio equal to one—white men always earn more. But for all groups, the public sector does, in fact, reduce the wage gap. This is especially true for Hispanic men and women, where the gap is reduced substantially. The reduction for African American men and women is also sizeable. The reduction for white women, while still sizeable, is the smallest.

Wage Regressions by Sex

Straightforward wage tables like those can be illuminating, but they can also be misleading in that they do not adequately control for differences in the composition of the workforce across the two sectors. The public sector workforce, for example, is older than the private sector workforce, and thus has more years of work experience. Work experience is a very strong predictor of good wages, so the public sector may pay better simply because its workers have more experience. It is important, therefore, to control for age and education as well as other variables, and we do so by using standard regressions.

Some researchers have also argued that unionization rates and occupational composition should be controlled for. Again, the public sector may pay better simply because it contains more professional and managerial occupations and because more of its workforce is unionized. Higher unionization rates, however, are precisely one of the causal, *substantive* mechanisms that lead to higher wages in the public sector. We don't want to negate this effect from the outset; rather, we want to measure it. Likewise, for occupation, we do not want to erase these differences in composition at the onset. True, public jobs are likely to pay better, in part because they are more highly skilled jobs. But that's precisely the point, and not one that should be erased, at least not from the outset.

We therefore conduct two sets of regressions.⁸ Model 1 estimates average hourly wages for men and women separately, in the public and private sectors, by education group. This model controls for experience (and its square), race/ethnicity, and region. We consider the estimates from this model to be our true, baseline estimates of the public/private wage differential. Model 2 then adds unionization and occupation into the regression to get a sense of how much these characteristics of the public sector help explain its higher wages. A critical point to remember is that education is already controlled for by the time occupation is introduced into the model—so the occupation effect is not a proxy for skill differences.

Table 8 presents the results from the two models. The table does not show all estimates for all variables, but rather focuses on the issue of interest here: how much better or

Specifically, OLS regressions run separately for men and women, using weights, where the dependent variable is ln (wages).

worse public wages are, relative to private wages. "Better or worse" are expressed in terms of percentages. For example, the first entry in Table 8 indicates that for women, the average wages of high school graduates and dropouts are 6.7 percent higher in the public sector than in the private sector. Estimates that are statistically significant are marked with an asterisk.

For high school dropouts and high school graduates, the public sector premium is 6.7 percent for women as compared to only 3.7 percent for men. For workers with some college experience, the premium is 5.5 percent for women and only 3.9 percent for men. And among the most educated, those with a college degree or higher, the premium for women is positive, while it is actually negative for men, and strongly so.

Furthermore, women with less education benefit the most from public sector jobs, with wages that are about 5 percent to 6 percent higher than in the private sector. The increase for college-educated women, 3 percent, is not nearly as strong. These regressions therefore confirm our descriptive analysis of wages in the previous section.

Model 2 adds controls for unionization and occupation, showing their dramatic impact. For women, these two variables eliminate the public wage premium altogether. Thus broadly speaking, women earn more in government jobs because they are more likely to be unionized and because the occupations in the public sector are higher-end occupations. More precisely, for women who have the same demographic characteristics (age, race, and so on) and hold the same type of job (occupation, union status), the public sector does not, on average, pay better than the private sector. This confirms results from previous research (Belman and Heywood 1993; Smith 1977).

But what does this mean from a policy standpoint? Model 1 tells us that a woman without much education – say, a high school degree – will earn significantly more in the public sector. Model 2 then helps explain *why*. First, the public sector offers betterpaying occupations, even for someone with only a high school degree, and second, those

Table 8. Regression Results, by Sex

Percent Increase or Decrease in Wages in the Public Sector,
Relative to the Private Sector

	Model 1		Mode	2
Education	Women	Men	Women	Men
High School or Less	6.7*	3.7*	1.3	3.3*
Some college	5.5*	3.9*	-1.1	5.0*
College	3.0*	-8.0*	-10.4*	-15.0*
R-Squared	.298	.339	.397	.401

^{*}Significant at .05 level.

Note: Model 1 controls for experience, experience squared, race, and region. Model 2 also controls for occupation and unionization status.

Source: Authors' analysis of the 1998 Merged Outgoing Rotation Group, Current Population Survey.

⁹ These estimates were obtained with a full interaction between sector and education.

jobs are more likely to be unionized. From the vantage point of an average woman looking for a job, this sounds like a good bet—especially if, like most workers, she doesn't hold a four-year college degree. And from that same vantage point, the threat of privatization looms large, because it means lower-pay occupations, less union coverage, and, in the end, lower wages.

Wage Regressions by Race and Sex

How do these overall trends play out by race and ethnicity? Table 9 provides the results of estimating Model 1 within each race/ethnic group. Before examining the results, however, a word is necessary about significance levels in this table. When each group is considered separately, sample sizes are smaller and statistical significance becomes a bit harder to achieve. Although this point should not be overplayed (the really large effects in the table are all significant), it is important to keep in mind that some borderline effects in this table could have been statistically significant with larger sample sizes. ¹⁰

That said, what is remarkable in these results is the strong and significant wage premium that African American and Hispanic workers garner in the public sector, regardless of sex. Depending on education level, African American workers gain between 8.3 percent and 11.4 percent in wages when they hold public jobs. With one exception, Hispanic workers gain between 12.8 percent and 16.3 percent (the exception being college educated men). These are quite substantial increases for minority groups that have traditionally had a much harder time than whites getting good jobs with good wages.

White workers, by contrast, experience much smaller wage gains from public sector employment. In fact, white men don't benefit at all; they do better in the private sector. White women do have higher wages in the public sector, but the difference is on a much smaller scale than African American or Hispanic women, ranging from 1.3 percent to 4.9 percent. Only for high school graduates and dropouts is this increase significant.

Table 9. Regres	ssion Results,	by Sex	, and Race
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Percent Increase or Decrease in Wages in the Public Sector, Relative to the Private Sector

	Whi	White Black		Hispanics		
Education	Women	Men	Women	Men	Women	Men
High School or Less	4.9*	-0.3	8.3*	9.5*	14.6*	14.9*
Some college	2.5	-0.3	10.1*	11.4*	12.8*	14.7*
College	1.3	-11.0*	7.9*	11.3*	16.3*	8.9
R-Squared	.285	.325	.314	.245	.260	.235

^{*}Significant at .05 level.

Note: Model 1 results, controlling for experience, experience squared, and region.

Source: Authors' analysis of the 1998 Merged Outgoing Rotation Group, Current Population

Survey.

We do not show the results of estimating Model 2 separately for each race/ethnic/sex group, because the effect of controlling for occupation and unionization is the same for all workers combined.

Non-white workers have more to gain from public jobs than white workers, both in an absolute and relative sense. The converse, of course, is that they have more to lose if the decline of public sector employment growth continues. In fact, what is worrisome is that African American and Hispanic workers have seen the strongest decline over the past 20 years in public sector jobs, precisely the ones that offer them the most wage gains.

"At Risk" Occupations

Up to this point, the analysis has proceeded as if all parts of the public sector were equally vulnerable to the threat of privatization, regardless of function or service performed. Yet this is clearly not the case. The best information on which types of public services are being privatized comes from the International City/County Management Association (ICMA) survey. While this survey has clear limitations (federal agencies are not included, for example), it provides a general guide as to which public services are most vulnerable.

ICMA data from 1988, 1992, and 1997 show considerable variability in privatization. For example, waste management has seen significant increases in subcontracting over the past 10 years, while public safety and parks maintenance have gone virtually untouched. But few women actually work in waste management. The analysis presented here focuses on those occupations "at risk" of privatization that also employ significant numbers of women.

A close examination of the ICMA data reveal five such "at risk" occupational clusters: health care workers; child care, welfare, and social workers; janitors and maintenance workers; bus drivers and parking lot attendants; and food preparation and food service workers. Another occupation, clerical and administrative support, has been added because it employs very large numbers of women. While this occupation has not yet been privatized to a large degree, there may be increasing pressure to do so in the future, since it is one of the few remaining public service areas untouched by privatization.

Table 10 shows women's employment in these six "at risk" occupations across the three sectors. Some of the occupations are more prevalent in the private sector (perhaps reflecting

Table 10. Employment i Wor	n Six "At l men Only	Risk" Occu	pations,
	Public	Private	Non-Profit
Health Services	1.2 %	2.6 %	5.9 %
Child Care, Welfare, Social Workers	4.6	1.2	6.3
Janitors and Maintenance	2.2	2.5	2.3
Bus Drivers & Parking Lot Attendants	1.6	.7	.3
Food Preparation & Food Services	3.3	6.9	2.2
Clerical & Administrative Support	27.8	23.6	20.7
Percent of women employed in "At Risk" occupations	40.6	37.5	37.7
Percent of women without a college degree in "At Risk" occupations	63.9	41.6	51.0
Source: Authors' analysis of the 1998 Merg Survey.	ged Outgoing Rot	ation Group, Curre	ent Population

privatization that has already occurred during the past several decades). Others are more so in the public and non-profit sectors (the latter may again be evidence of past privatization). In any event, this analysis targets the potential effects of future privatization on those women who currently work in the public sector.

These "at risk" occupations constitute 40.6 percent of women's public jobs, and 12.9 percent excluding clerical occupations. These numbers are somewhat misleading, however. For women without a college degree, the "at risk" occupations constitute a much larger portion of public jobs (63.9 percent), even if clerical occupations are not counted (19.2 percent). Thus, for the population that is of greatest policy concern (i.e., "unskilled" workers), future privatization of the above occupations can have a truly strong impact.

Another way to make this point is to look at workers employed in these "at risk" occupations and look at their educational attainment. Not surprisingly, women in "at risk" occupations are significantly less educated than the overall population of women working in the public sector. Close to half (47.2 percent) hold a high school diploma or less, and fewer than one out of six hold college degrees (14.9 percent)—quite a contrast to the results shown at the outset in Table 3.

The main question, of course, is how wages compare across the sectors. The top part of Table 11 shows that, in general, public wages are higher in these "at risk" occupations than in the private sector with a few exceptions. For example, women who work in health services are actually paid better in the private sector, and in clerical occupations and maintenance jobs the public sector advantage is not all that pronounced. In the bottom of Table 11, we calculate the public/private wage ratio for all six occupations combined. While there clearly remains a public wage advantage, it is not as strong as for other public sector jobs.

An accurate estimate of the public/private differential for these "at risk" occupations requires that we again turn to regression techniques. In Table 12, we re-estimate Model 1 from

Small sample sizes do not allow us to calculate the ratio for each individual occupation.

Table 11. Median Hourly Wages in "At Risk" Occupations Women Only (\$1998)				
	Public	Private	Non-Profit	Public/Private Ratio
Health Services	\$11.55	\$11.77	\$12.50	
Child Care, Welfare, Social Workers	11.05	6.50	9.00	
Janitors and Maintenance	7.15	6.70	7.00	
Bus Drivers & Parking Lot Attendants	10.08	8.00	7.40	
Food Preparation & Food Services	7.00	5.75	6.24	
Clerical & Administrative Support	10.40	9.83	10.00	
All "At Risk" Occupations	10.00	8.75	9.93	1.14
All Other Occupations	15.38	10.00	13.40	1.54

the previous section, but this time only for the six "at risk" occupations. Results show that public wages are consistently higher than private wages, ranging from 3.6 percent to 8.2 percent higher. (Because of small sample sizes, we are hesitant to give any interpretation to this variability or to significance levels.)

In sum, in public sector occupations that are most vulnerable to privatization, women stand to see significant wage losses if their jobs are subcontracted or outsourced. These potential losses are not as strong as for other occupations. It is worth pointing out, however, that even a 5 percent difference in wages is not insignificant for jobs that, in the private sector, are paying under \$10.00 per hour. This low on the wage scale, any change in wages can have a significant impact on the economic welfare of the worker and her family.

Finally, we should note that race/ethnicity breakdowns were not possible in this analysis because of small sample sizes. We suspect, however, that our findings on "at risk" occupations would be especially marked for African American and Hispanic women. Indeed, research at the Joint Center for Political Studies found that African Americans tend to be employed in occupations that are more likely to be contracted out (originally cited in Sawicky 1999).

Summary

Even though the public sector has been shrinking over the past two decades, women are still more likely to hold public jobs than men. Therefore, examining how privatization and subcontracting will likely affect women workers remains a critical issue.

We find that the public sector holds a significant advantage in both wages and benefits over the private sector, especially for African American and Hispanic women. Wages are higher in the public sector for two reasons: first, the public sector is more likely to be unionized; and second, it offers better-paying occupations, regardless of skill level. From the perspective of the average woman looking for a job, especially, if like most workers, she doesn't hold a four-year college degree, public jobs are good jobs. From her vantage point, the threat of privatization looms large because it means lower-pay occupations, less union coverage, and, in the end, lower wages and fewer benefits.

Table 12. Wage Regressions for "At Risk" Occupations, Women Only		
	Percent Increase or Decrease in Wages in the Public Sector, Relative to the Private Sector	
High School or Less	5.3*	
Some college	3.6	
College	8.2*	
R-Squared	.159	
*Significant at .05 level.	ng for experience, experience equared, race, and region	

Note: Model 1 results, controlling for experience, experience squared, race, and region. **Source:** Authors' analysis of the 1998 Merged Outgoing Rotation Group, Current Population Survey.

If women are paid better in the public sector in an absolute sense, does this mean they also gain ground relative to men? Not necessarily. True, the gender wage gap is smaller in the public sector, especially for women of color, but this is driven largely by education. Only women with college degrees see greater pay equity in the public sector. For less educated women, gender inequality is as great in the public sector as in the private.

We also find mixed results in examining the common perception that the public sector offers women better access to non-traditional "professional" occupations. In fact, much of this perception is due to the preponderance of women teachers in the public sector. Once teachers are taken out of the equation, women are no more likely to hold managerial, technical, or other professional jobs in the public sector than in the private. This is an important finding, because women in the public sector are unusually well educated. That this educational wealth has not translated into more managerial jobs for women indicates the persistence of occupational segregation and "glass ceilings" in the public sector as well as the private.

Finally, we focus on "at risk" occupations—jobs that have historically been privatized and subcontracted. Not surprisingly, they tend to be less-skilled and lower pay occupations, such as health care and child care workers, janitors, and food preparation employees. For women without college degrees, these occupations constitute the mainstay of their public sector employment. Even though these "at risk" occupations are generally considered low-rung, they still pay better in the public sector than in the private sector. So, even when we consider only jobs that are the most likely to be privatized, we find that the impact on women's wages would be detrimental, especially for the less educated.

In sum, from a policy standpoint, there is good reason to be concerned about the continuing call for leaner government and the contracting out of as many public services as possible. Women depend disproportionately on the public sector for jobs that pay a living wage and that provide benefits. If these jobs are privatized, women—especially women of color and less educated women—will see significant declines in how much they earn and in their access to health and pension coverage. This does not mean that the public sector is a cure-all for inequality: glass ceilings and the gender gap persist in the public as in the private sector. But, the bottom line is that privatization, and the deunionization that invariably accompanies it, can only prove detrimental to women's economic welfare.

- Baker, Michael and Nicole M. Fortin. 1999. "Topics in Labor Economics: Women's Wages in Women's Work—A U.S./Canadian Comparison of the Roles of Unions and 'Public Goods' Sector Jobs." *American Economic Review* May:198-203.
- Belman, Dale and John S. Heywood. 1993. "Job Attributes and Federal Wage Differentials." *Industrial Relations* 32(1):148-157.
- Belman, Dale and John S. Heywood. 1993. "The Truth about Public Employees: Underpaid or Overpaid?" Briefing Paper. Economic Policy Institute, Washington, DC.
- Belman, Dale and John S. Heywood. 1995. "State and Local Government Wage Differentials: An Intrastate Analysis." *Journal of Labor Research* 16(2):187-201.
- Belman, Dale and John S. Heywood. 1997. "Changes in the Relative Provision of Public-Sector Pensions." *Public Finance Review* 25(4):426-441.
- Cox, W. and S. A. Brunelli. 1992. *American's Protected Class: Why Excess Public Employee Compensation is Bankrupting States.* Washington, DC: American Legislative Exchange Council.
- Freeman, Richard. 1985. "How do Public Sector Wages and Employment Respond to Economic Conditions?" NBER Working Paper #1653. National Bureau of Economic Research, Cambridge, MA.
- Freeman, Richard. 1996. "Through Public Sector Eyes: Employee Attitudes toward Public Sector Labor Relations in the U.S." In Dale Belman, Morley Gunderson, and Douglas Hyatt, eds. *Public Sector Employment in a Time of Transition*. Madison, WI: Industrial Relations Research Association.
- Gold, Steven D. and Sarah Ritchie. 1992. *Compensation of State and Local Employees:*Sorting Out the Issues. Albany, NY: National Commission on State and Local Public Service.
- Hirsch, Barry and David Macpherson. 1999. *Union Membership and Earnings Data Book*. Washington, DC: Bureau of National Affairs.
- International City/County Management Association. 1999. *The Municipal Year Book*. Washington, DC: ICMA.
- Mason, Maryann and Wendy Siegel. 1997. *Does Privatization Pay? A Case Study of Privatization in Chicago*. Chicago, IL: Chicago Institute on Urban Poverty Policy.
- National Commission for Employment Policy. 1989. *The Long Term Employment Implications of Privatization: Evidence from Selected U.S. Cities and Counties.* A study prepared by Dudek and Company for the National Commission for Employment Policy. Washington, DC: National Commission for Employment Policy.

- Needleman, Ruth. 1994. "The Devaluation and Privatization of Public Service: Race and Gender Implications." Prepared for the Fourth Annual Women's Policy Research Conference, June 3-4.
- Office of Management and Budget, Office of Federal Procurement Policy. 1994. Summary Report of Agencies' Service Contracting Practices. Washington, DC.
- Osborne, D. and T. Gaebler. 1992. *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector.* Reading, MA: Addison-Wesley.
- Poterba, James M. and Rueben, Kim S. 1994. "The Distribution of Public Sector Wage Premium: New Evidence Using Quantile Regression." NBER Working Paper #4734. National Bureau of Economic Research, Cambridge, MA.
- Sawicky, Max. 1999. *Privatization: An Exploration of the Literature*. Washington, DC: Economic Policy Institute.
- Sclar, Elliott. 2000. *You Don't Always Get What You Pay For: The Economics of Privatization*. Ithaca NY: Cornell University Press.
- Shall, Lois and Catherine Hill. 2002. *The Gender Gap in Pension Coverage: What Does the Future Hold?* Washington, DC: Institute for Women's Policy Research.
- Smith, Sharon. 1977. "Government Wage Differentials." *Journal of Urban Economics* 4: 248-271.
- Suggs, Robert E. 1989. *Minorities and Privatization: Economic Mobility at Risk.* Washington DC: Joint Center for Political Studies Press.
- U.S. General Accounting Office. 1985. *Comparison of Federal and Private Sector Pay and Benefits.* Washington, DC.

