

EQUITY IN STATE CIVIL SERVICE SYSTEMS: AN EXAMINATION OF
BUREAUCRATIC REPRESENTATION, WAGE DISCRIMINATION, AND
PUBLIC/PRIVATE WAGE GAPS

by

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(Under the Direction of J. EDWARD KELLOUGH)

ABSTRACT

Civil service employees in the United States, at all levels of government, are a critical component in the success of the nation's system of governance. This dissertation examines the status of state government civil service systems with regards to three indicators of civil service equity: female and minority representation, wage discrimination within the civil service, and wage equity with the private sector. Given the changing nature of civil service systems, a supplemental analysis of the impact of two common reforms of the past twenty years, personnel decentralization and private sector contracting, is also provided.

In the area of bureaucratic representation, results indicate that women are moderately overrepresented in state civil service employment, and that representation rates for African-Americans vary, with underrepresentation in some states, nearly proportional representation in others, and substantial overrepresentation in other states. Results for Latinos show that, on average, they are underrepresented in the state civil

service systems. Of note is the finding that private sector discrimination, relative to public sector discrimination, positively impacts bureaucratic representation rates for both women and Latinos, but not for African-Americans.

Results of analysis of civil service wage discrimination find that women, on average, experience wage penalties of 9 percent when compared to men of similar human capital characteristics, and African American and Latinos experience lower rates of wage discrimination, 8 and 3 percent respectively. With regard to public/private wage gaps, results indicate that state civil servants experience an overall wage premium of 2 percent when compared to similar employees in the private sector. However, when separated by gender, this premium is erased for men such that they experience a 2 percent wage penalty. On the other hand, female state civil servants experience a wage premium of 4 percent. Results of supplemental analysis of personnel reform find no evidence that personnel decentralization and private sector contracting function as determinants of bureaucratic representation, civil service wage discrimination, or public/private wage equity.

INDEX WORDS: representative bureaucracy, wage discrimination,
 public/private wage equity, civil service reform

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DEDICATION

This dissertation is dedicated to those family members who passed on prior to its completion and all those who have assisted me in my academic and professional career.

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Chapter 1 The Critical Importance of the Civil Service

Civil service employees, at all levels of government, have been and continue to be, a critical component in the success of the United State's decentralized system of governance. The work of government is, by nature, complex and labor intensive, and it is civil servants at the frontlines who are ultimately responsible for the implementation of public policy. From operating public hospitals to ensuring the safety of our nation's roads and highways, their professionalism and expertise is constantly relied upon. Naturally, the civil service systems which dictate how these workers are recruited, selected, trained, compensated and disciplined remain a key focus for the field of public administration, and how these civil service systems operate directly influence the quality of public workforces and the services the public sector provides.

In light of the importance of civil servants to the functioning of this nation, it is no surprise that the civil service systems under which they operate have historically been influenced by changing political tides, and, as a result, have evolved over time. Early civil service systems were rooted in political patronage and valued political loyalty and control. Following the Pendleton Act of 1883, civil service systems gradually shed their emphasis upon patronage and adopted the ideal of merit based systems, stressing the value of politically neutral competence. With time, these merit based systems were

criticized for, among other things, their inflexibility and blind adherence to rules and procedures. As a result, reformers called for changes that integrated more managerial flexibility into civil service systems. Given the importance of civil servants and the evolving nature of the systems under which they operate, it is imperative that research in the field of public administration assess the status of both civil servants and the systems under which they operate.

This dissertation makes an valuable contribution to the body of public administration research on the civil service by specifically evaluating the status of state government civil service systems with regard to equity in both the composition and compensation of civil service workforces. In terms of sheer size, state civil servants represent the second largest population of public sector employees, being roughly twice the size of the federal civil service and one-third the size of the local government civil service. In 2002, the Census Bureau reported that there were approximately 21 million public sector employees nationwide, with roughly 5 million of those employed by state governments (Census, 2004). State government civil servants serve in a variety of capacities from the highly visible state trooper units monitoring our nation's highways to the virtually invisible state accountants staffed in agencies throughout the nation. To give an example of particular functional areas, there were over 173,000 state civil servants employed in financial administration and over 240,000 in public welfare positions in 2002. Other functional areas with large

concentrations of state civil servants included state hospital staff with over 430,000 employees and natural resources staff with over 160,000 civil servants (Census, 2004).

Additionally, the importance of state civil servants has grown throughout the years due to the steady devolution of public sector responsibilities from the federal government to the states (Gold & Ritchie, 1993; Leland, 2001). From social welfare programs to homeland security, an increasing number of roles and responsibilities have shifted away from the federal sector and been placed firmly in the province of the states. To fully appreciate this growing responsibility, one need only reference the aftermath of 2005's hurricane Katrina and the critical role that state civil servants in all functional areas played in the recovery effort. Given the limited capacity of the federal government and the devastation experienced by local governments across the Gulf coast, the responsibility for responding to the humanitarian disaster in its early days fell firmly on the shoulders of state civil servants from Texas to Alabama. State law enforcement agencies were relied upon to provide security where there was none; social service agencies were asked to organize care for the sick and elderly; and, at a more administrative level, state agencies were quickly tasked with reassessing and recommitting state budget and personnel resources to better respond to the crisis.

Although there are a number of potential indicators by which to evaluate state civil service workforces, I have chosen to focus primarily on the composition and compensation of civil

servants, with particular attention paid to the status of female and minority civil servants. I specifically assess state civil service workforces on three indicators of equity. They include the following: (1) the representation of women and minorities within the state civil service, (2) the presence of sex and race-based wage discrimination within the civil service, and (3) wage equity between state workers and comparable workers in the private sector within the states. These three indicators of equity are important in that they each are integral to the ideal of staffing public sector bureaucracies with a diverse group of talented and motivated individuals, an ideal which is fundamental for both symbolic reasons and those tied to notions of distributive justice. For each indicator, I provide descriptive statistics of state-level variation from 1987 to 2002, as well as explore the determinants of inter-state variation. These components of the dissertation represent a major contribution to the field given that that this level of historical, state-level of analysis has yet to be addressed in prior research. As a supplement to the dissertation, I also provide an exploratory evaluation of the extent to which certain personnel management reforms of the past twenty years function as determinants of the indicators listed above. Like the analysis of the indicators of equity, the impact of these reforms have also not been addressed in prior research.

The first indicator, the representation of women and minorities in the state civil service relative to their presence in state populations, is key for a number of reasons, namely

those grounded in the theory of representative bureaucracy and the public sector's symbolic commitment to diversity. Simply stated, public sector jobs are public resources and it matters what individuals or groups of individuals are chosen to carry out the will of the state. Early public sector positions were the sole province of the nation's male landowning elites and were clearly not intended to be reflective of the nation's population of subsistence farmers, slaves, and women. Initial efforts to transform the public sector, in this case the federal government, to something more representative of the general population took place under the presidency of Andrew Jackson. Clearly breaking from tradition, he sought to staff the federal bureaucracy with more "common men," the logic being that in order for the federal government to enjoy a level of institutional legitimacy, it was necessary that it be reflective of common background of most Americans (Mosher, 1982). However, Jackson's push for a more representative federal bureaucracy was still limited to white males and it would take another one hundred years before women and African Americans would legitimately be brought under the umbrella of efforts to make public sector bureaucracies more representative of the entire U.S. public.

In many respects, the gains in public sector employment for women, African Americans and Latinos have been mutual, with all groups benefiting from each other's struggles for inclusion. In the first half of the twentieth century women were generally relegated to the lower administrative ranks and African Americans and Latinos, when they were able to find public sector

employment, were limited to the most menial jobs available (Nigro, Nigro, & Kellough, 2007). In one of the first attempts to combat discrimination within the federal bureaucracy (and within companies holding large wartime contracts with the Department of Defense) African American civil rights leader A. Philip Randolph threatened to lead a march on Washington, D.C. in 1941 to bring awareness to the issue. Ultimately fearing damage that would result to America's image abroad as a land of freedom and equality, especially when juxtaposed to Nazi Germany, President Roosevelt was able to convince Randolph to cancel the march by making a commitment to opening up federal and defense industry employment to African Americans and by signing Executive Order 8802. The Order prohibited discriminatory employment practices by federal agencies and contractors, and established the Fair Employment Practices Committee charged with investigating claims of discrimination by employees or applicants for employment. Although by no means a perfect approach to ending discrimination and increasing the representativeness of the federal bureaucracy, FDR's actions did set the stage for later efforts such as President Kennedy's use of "affirmative action" in the recruitment of women and minorities. Ultimately, however, it would take federal legislation to firmly protect the rights of women and minorities seeking public sector employment. The Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972 firmly prohibited discrimination on the basis of race or sex and signified the beginning of a period of

increased public sector employment for both women and minorities.¹

On a theoretical level, efforts to increase the representativeness of public sector bureaucracies have also been bolstered by the theory of representative bureaucracy. Writing in reference to the British Civil Service, J. Donald Kingsley first wrote of the enhanced sense of legitimacy, which is present in a bureaucracy staffed with members from all segments of society (Kingsley, 1944). Later scholars applied Kingsley's notions of representation to the American bureaucracy, and, focusing specifically on the case of African Americans, Samuel Krislov wrote of the need for the public sector to be more representative in terms of race in order to achieve a greater level of institutional legitimacy (Krislov, 1967, 1974). Using both of their works as a theoretical grounding, numerous scholars have since expanded on the theory of representative bureaucracy with contemporary scholarship distinguishing between passive representation, which pertains to the statistical presence of women and minorities, and active representation, which pertains to the ability of women and minorities to use their presence within the bureaucracy to the benefit of others like themselves. This dissertation will focus on the former, passive representation, by estimating the presence of women, African Americans, and Latinos in state bureaucracies relative to their

¹ For a more detailed history of affirmative action in the public sector, see Kellough (2006).

overall presence in the state population, and second, by providing an explanatory model of their representation rates.

The second indicator of equity examined here, state government discrimination, builds upon the first indicator by measuring both the presence and extent of wage discrimination within state civil service systems for women, African Americans, and Latinos. As constructed, this indicator serves as a direct reflection of the extent to which state governments compensate individuals on an equal basis, regardless of race or gender, holding common characteristics such as age, education, occupation and marital status constant. As a point of clarification, this measure does not assess the presence of discrimination against particular individuals or reflect the number of cases reported to enforcement agencies such as the Equal Employment Opportunity Commission (EEOC). Rather, it looks at each state workforce in the aggregate and asks "What is the effect upon wage rates of being a women, African American, or Latino, holding all other human capital and occupational characteristics constant?" The benefit of this type of measure is that it does not attempt to observe instances of discrimination prohibited by the Equal Employment Opportunity Act of 1972, but focuses, instead, on patterns of discrimination that have the ability to slip under the radar since they are evident more in the aggregate than at the individual level. For example, there may be states in which women have been historically discriminated against with regard to wages, but for unknown reasons, there have been no complaints filed with the EEOC. In this case, this indicator would provide

a measure of the extent of wage discrimination within that state, even without the presence of a formal complaint of wage discrimination.

The primary contribution of this indicator to the overall dissertation, much like that of the first, is its ability to capture the extent to which state governments serve as "model employers" with regard to the employment of women and minorities. As has been pointed out in the literature, the public sector is responsible for both adhering to and enforcing legislation prohibiting employment discrimination, and, given this dual role, it is commonly held that the public sector, more than any other sector of employment, should be a model for other sectors to follow (Goldfarb & Heywood, 1982; Krislov, 1967; Miller, 1996; Mosher, 1982; Van Riper, 1958). Prior studies of public sector wage practices have found mixed evidence of the extent to which the public sector fulfills this role. In particular, Heywood (1989) found that women in state civil service systems experienced a roughly sixteen percent wage penalty compared to men, and non-whites experienced a six percent wage penalty compared to whites. Although they are slightly better than comparable private sector statistics for the same year, these penalty rates clearly indicate that state governments have a great deal of work to do in meeting the goal of non-discrimination. However, research assessing the extent of these discriminatory wage differentials at the state level almost exclusively treat state employment in the aggregate, ignoring variation between the states. This dissertation addresses this

gap in the literature by providing disaggregated measures of wage discrimination and testing potential determinants of interstate variation.

The third, and final, focus of this dissertation is the gap in wages between state civil servants and individuals employed in the private sector, controlling for occupation, education, and other common human capital characteristics. Similar to the prior indicator in its estimation, this measure provides a direct assessment of how competitive public sector wages are in comparison to the private sector, excluding non-wage benefits. This measure is key to a comprehensive evaluation of the effectiveness of state civil service systems for a number of reasons related to public sector recruitment and retention of top quality employees. First, the ability of state civil service systems to offer competitive wage rates when compared to the much larger private sector labor market directly influences the type of candidates that can be enticed into the public sector. Simply stated, if state civil service systems fail to offer competitive wage rates, then one cannot expect them to attract high quality candidates. Second, the presence of competitive wage rates also influences the ability of state civil service systems to retain top quality employees. If public sector wage rates are competitive, then one can expect state employees will be less likely to be lured by the prospect of higher wages in the private sector and vice versa (Gold & Ritchie, 1993). Prior scholarship on public/private wage gaps has found evidence of public sector wage penalties at the state level; however, past studies are

limited in that they estimate wage penalties at the aggregate level, thus ignoring interstate variation (Borjas, 2003). This dissertation will fill in this gap in the literature by providing disaggregated, state-by-state measures of public/private wage gaps, and testing potential determinants of interstate variation.

The importance of this research effort is only further increased by contemporary efforts to reform public sector personnel systems. Over the past thirty years, the practice of public sector human resources management has been transformed dramatically. While core components of the New Public Management and Reinvention of Government movements in the 1990s and beyond have driven reforms such as decentralization, merit pay, and at-will employment, the traditional standards of neutral competence, merit-based selection, and relative security of tenure, first established through the Pendleton Act of 1883, have waned (Gore, 1993; Hays, 1996; Hays and Sowa, forthcoming; Kearney & Hays, 1998; Kettle, Ingraham, Sanders, & Horner, 1996; Osborne & Gaebler, 1992; Winter Commission, 1993). At all levels of government, personnel systems have experienced reforms that have altered both the spirit and practice of personnel administration. As a result, human resources professionals are encouraged, now more than ever, to become more "business like" in their practices. Although relying upon what may be less than empirically grounded assumptions, proponents of these reforms profess that, by becoming more private sector oriented, public sector human resources systems will greatly increase the

efficiency and effectiveness of government operations (Hays, 1998).

At the federal level, this change has been responsible for the wholesale delegation of major human resources management responsibilities from the Office of Personnel Management to individual federal agencies. Agencies are now able to conduct their own recruitment and selection activities, as well as invest in their human resources systems at a level they feel appropriate. Likewise, more recent reforms within the Department of Homeland Security and the Department of Defense have sought to further increase managerial flexibility by implementing merit pay systems that more closely resemble compensation structures in the private sector; the logic being that by doing so, these critical agencies will be able to better recruit and retain high performing employees.

The transformation at the state and local level has been no less significant. Moved by the same political and ideological currents as the federal government, state and local governments have also shifted towards more private-sector oriented human resources practices, with states such as Georgia and Florida arguably implementing the most dramatic reforms. In 1996, the State of Georgia passed legislation that placed all new hires in an at-will employment status and completely decentralized its personnel operations. Florida followed suit in 2001 and moved its management employees to an at-will status, decentralized personnel operations and developed a broad-banded compensation

system (Bowman, West, & Gertz, 2006; Kellough & Nigro, 2002; Nigro & Kellough, 2000).

Overall, these reforms represent a significant departure from centralized and standardized personnel systems of old. Whether based on arguments for enhanced efficiency or simply a desire for public sector employees to be subject to the same forces as those affecting the private sector, these reforms have changed the way both scholars and practitioners view the field. However, what has been lacking, to date, is a detailed analysis of their influence upon core human resources indicators. As many scholars note, these reforms are rarely, if ever, evaluated; and more often than not, their success appears to be taken as a forgone conclusion by their proponents. As a supplement to the primary evaluation of the indicators of equity described above, this dissertation takes a step in this direction by conducting an exploratory assessment of the influence of two key reforms of this type, personnel decentralization and the contracting out of public services to the private sector. Although data limitations prohibit a more extensive analysis of these reforms, this supplement provides a critical first step towards future research in this area.

Outline of Dissertation

In the next chapter, I provide detailed descriptions of the data and empirical methodologies utilized throughout the dissertation. In Chapter 3, I turn to the first indicator of equity, the bureaucratic representation of women, African

Americans, and Latinos. I begin by overviewing the literature on bureaucratic representation, emphasizing prior scholarly efforts to measure female and minority representation rates and explain their determinants. I then describe the variation in bureaucratic representation that exists across the states and discuss the results of an explanatory model of bureaucratic representation for each group of civil servants. In Chapter 4, I address the presence of internal wage discrimination in state civil service systems. I begin by overviewing historical efforts to fight discrimination within the public sector as well as the legal framework prohibiting discrimination on the basis of race or gender. I then describe the variation in wage discrimination that exists between the states, and last, discuss the results of an explanatory model of wage discrimination for women, African Americans, and Latinos. In Chapter 5, I address the third and final indicator of equity, public/private wage gaps at the state level. I begin by describing public sector compensation systems in the states and reviewing the literature on public/private wage differentials. I then describe the variation in public/private wage gaps that exists between the states and the results of an explanatory model.

In Chapter 6, I turn my attention to personnel reform. I overview the development and importance of civil service systems in the United States and trace the history of public personnel management to the present. I then discuss more contemporary reform efforts that have taken place within many state civil service systems over the past ten years. Included in this

overview is a discussion of reforms that have been implemented in Georgia, Florida, New York, and South Carolina, as well as a more detailed review of decentralization and private sector contracting. Last, I evaluate the influence of personnel decentralization and private sector contracting on each of my indicators of equity for all fifty states. I conclude the dissertation in Chapter 7 by providing an overall summary of the results from Chapters 3 - 6, implications for the field, and directions for future research.

Chapter 2 Research Methodology

There are myriad challenges conducting research on state civil service systems in the field of public administration. First, with regard to research on the representation of women and minorities in state government, the Equal Employment Opportunity Commission prohibits the release of disaggregated state-level workforce data. As a result, researchers must undertake the time-consuming process of contacting state governments individually if disaggregated data are to be collected. Second, the collection of data on state government wage rates is no less daunting. As is the case with the representation of women and minorities, wage rate data is also released in aggregated form with state and local government combined. Taken as a whole, there are extremely few avenues for collecting historical, state-level data of the type needed to address issues such as the extent to which minority representation has grown in state government or the presence of female or minority wage discrimination in state civil service systems.

One potential solution to this challenge is the use of the federal government's most extensive survey of United States citizens, the Current Population Survey (CPS). Conducted by the Bureau of Labor Statistics, the CPS provides the most comprehensive snapshot of the state of employment in the U.S. on a monthly basis. Among other items, the CPS polls Americans on numerous aspects of their employment status, from whether or not

they are currently employed to their industry of employment. However, key to this dissertation is the CPS's classification of employment sector for respondents. Data from the survey allows for the classification of each respondent into the following four categories: private sector, public sector (local government), public sector (state government), and public sector (federal government).² In conjunction with questions on income levels, as well as a host of demographic variables, the CPS provides the ability to assess the status of state civil service systems with regards to the indicators examined here: bureaucratic representation, wage discrimination, and public/private wage gaps.

Below, I provide a more detailed description of how each of these indicators is estimated. Next, I describe the source and estimation of the independent variables I test as determinants of the variation that exists across the states on the indicators listed above. Last, I briefly overview the explanatory models that will be covered in greater detail in the corresponding chapters.

Background on the Current Population Survey

The CPS has been used by government for the past five decades to estimate important labor force characteristics, such as the unemployment rate, and is the primary source of information on

² Beginning in 1994, the CPS added the Non-profit sector to the list of possible employment sectors. However, since my analysis begins prior to this period, I choose not to add this designation in order to allow for consistent analyses over-time.

the U.S. labor force (BLS, 2005). The survey provides a monthly examination of individuals in approximately 60,000 households based upon a multi-staged stratified sample. This sampling procedure ensures that estimates of labor force attributes are accurate at both the state and national levels. Key individual characteristics documented in the survey include age, sex, race, educational attainment, occupation, industry, weekly hours of work, and income. Households are questioned for 8 months (four consecutive months, followed by an eight month hiatus, and four consecutive months the following year). In their fourth and eighth interviews, household respondents are asked questions about their incomes. These households are referred to as the Outgoing Rotation Group, and represent one fourth of the households in the total CPS survey. For my analysis, only these Outgoing Rotation Group responses, which contain reported wage rates, are used.

Civil Service Indicators of Equity (Dependent Variables)

Bureaucratic Representation

Individual-level employment data from the CPS are used to construct representation ratios for women, African-Americans, and Latinos in state civil service systems. Researchers have often measured minority or female representation as the ratio of the percentage of minorities or women in a given organization to the percentage of minorities or women in the relevant population as a whole (see Grabosky & Rosenbloom, 1975; Cayer & Sigelman, 1980;

Dometrius, 1984; Kellough, 1990; Sigelman, 1976).³ For example, the proportion of African Americans in a particular agency could be divided by the African American proportion of the national population. In this particular case, I observe, for each state, the proportion of the state civil service workforce comprised of women or members of selected minority groups between the ages of 18 and 64 and divide that number by the proportion of the state civilian labor force consisting of individuals from the same groups. I use the minority or female proportion of the state civilian labor force in the denominator of my measure rather than minority or female proportion of the total state population because I believe that labor force data provide a more reasonable standard for representation.⁴ This ratio will equal 1 when the proportion of a state civil service system occupied by members of a particular group is equal to the proportion of that state's overall civilian labor force consisting of members of the same group. For African Americans, the measure is estimated as follows:

³ There are additional measures of representation used in the literature which also incorporate female and minority stratification within the bureaucracy, most notably Greene, Selden, and Brewer's *rho* measure of representation (2001). However, I use the proportional representation measure discussed above since the CPS does not capture the organizational rank of civil service employees, thus prohibiting me from incorporating a measure of stratification.

⁴ One of the core questions in selecting a measure of bureaucratic representation concerns what constitutes a minimal standard of representation for organizations to achieve. Although group presence in the overall population may be used, it does not account for those individuals in the population that are not in the labor force. To address this issue, I have chosen to use the presence of women and minorities in the labor force because I believe that it is a more reasonable estimate of the labor pool available to state civil service systems. However, it should be noted that this measure may also result in larger representation ratio estimates in those instances where women and minorities are less represented in the labor force relative to their overall presence in the population.

$$\text{Representation Ratio} = \frac{\text{Proportion of State Civil Service Positions Held by African Americans}}{\text{Proportion of the State Civilian Labor Force Held by African Americans}}$$

Over-representation occurs when this ratio is greater than one and under-representation occurs when the ratio is less than one. I further limit my measure to include only those individuals who report earning more than \$1/hour and less than \$100/hour, and I exclude teachers from estimates of both public sector employees and the overall civilian labor force to allow for a more accurate measure of bureaucratic representation since public school teachers are not typically considered part of a state civil service bureaucracy.⁵

Civil Service Wage Discrimination

Just as important as the goal that women and minorities be adequately represented in state civil service systems is the goal that they be compensated in a manner that is just and equitable. Although the public sector has historically been at the forefront of promoting equal employment opportunity and seeking to end discriminatory wage practices, it was not until passage of the Equal Employment Act of 1972 that state governments were required to adhere to the guidelines of the Civil Rights Act of 1964. From that point forward, state governments have been required to report salary rates, in addition to representation rates, for all

⁵ Teachers are also excluded from EEO-4 Reports on state government employment.

functional areas of state employment as well as average salary rates for women and minorities. Where salary rates or occupational advancement for women and minorities are found to be lower than that of males or whites, research has generally considered these areas where equal employment opportunity has not reached its full potential. In such cases, it is common for advocates of equal employment opportunity to push for initiatives, such as professional development programs or supervisory EEO training, that hold the promise of raising both the employment and advancement rates of women and minorities to levels on par with those in the majority.

Apart from actual complaints of discrimination filed with agencies such as the EEOC, an additional means of assessing the extent of wage discrimination within state governments is the use of individual level data contained in the Current Population Survey to compare wage rates between different groups, holding general contributors to employment success, such as education and age, constant. Using Ordinary Least Squares (OLS) wage regressions, it is possible to estimate the percent of wage discrimination for women and minorities, on a state by state basis, from 1987 to 2002. This methodology has been used in prior wage discrimination research, such as in J.S. Heywood's (1989) comparison of wage discrimination between the private sector, local government, state government, and the federal government.

To construct a measure for state civil service discrimination, I first estimate three log wage equations for each state in each year using three variations of the model specified below:

$$\ln(\text{wage}_{i,t}) = \alpha_{i,t} + \beta D_{i,t} + \gamma H_{i,t} + \varepsilon_{i,t}$$

Where:

D = dummy variables for women and minorities (Female, African American, Latino)
H = vector of human capital controls (age, age squared, full-time status, education, occupation, industry, marital status)
i = state
t = year

Three models are necessary to estimate the presence and extent of wage discrimination. In Model (1) the log wage equation includes all state civil service employees and includes a dummy variable for the sex of the respondent. This allows for the estimation of the effect of being a female, holding common human capital characteristics, "H," constant. In Model (2) the dummy variable for female is removed and a dummy variable for whether or not the employee is African American is included. This allows for the estimation of the effect of being African American, holding common human capital characteristics constant. In Model (3), the dummy variable for African American is removed and a dummy variable for Latino is included along with the human capital controls listed above. Like the previous models, this allows for the estimation of the effect of being a Latino state government employee across all fifty states. When analyzed as a whole, these estimations allow me to compare rates of wage

discrimination for each group of employees across all fifty states in the years covered.

Public Private Wage Gaps

The last indicator of interest to be addressed in the dissertation is the gap in wages that exists between individuals employed in the private sector and those employed in the state civil service. Although distinct from the prior two indicators in that it does not address the dynamic of race or gender, this indicator is important for its ability to assess the extent to which state government wage rates, on the whole, are competitive with wage rates in the private sector. This assessment is critical because of its link to both the recruitment and retention of high performing employees in the public sector.

Past research finds evidence that public/private pay gaps vary by level of government with federal wages generally higher than those in the private sector and state and local government, wages generally below those in the private sector (Borjas, 2003). However, the gap in the literature to date, has been on the variation in public sector wage gaps across geographic locales. Specifically in the case of state government analysis, past research has looked at state government wage gaps in the aggregate, thus ignoring the possibility of variation between the states.

To construct a measure for state government wage gaps from years 1987 to 2002, I estimate OLS log wage equations for each state in each year using the model specified below:

$$\ln(\text{wage}_{i,t}) = \alpha_{i,t} + \beta D_{i,t} + \gamma H_{i,t} + \varepsilon_{i,t}$$

Where:

D = dummy variable for state government employment
 H = vector of human capital controls (age, age squared, full-time status, education, occupation, industry, marital status)
 i = state
 t = year

In this model, I restrict the population to those individuals in the Current Population Survey who were employed in either the private sector or in state civil service. Thus, in this equation, the dummy variable "D" allows me to estimate the effect on wages of being employed in state government relative to being employed in the private sector, holding human capital characteristics such as age and education constant.

Explanatory Factors (Independent Variables)

Private Sector Discrimination

Research suggests that the extent of discrimination in the private sector towards women and minorities should impact the representation of these groups in other employment sectors, given that these sectors are more or less discriminatory than the private sector. I test the impact of this dynamic on the representation of women and minorities in state government by estimating the difference in wage discrimination, for women, African Americans, and Latinos, experienced in the private sector and state government and using these estimates as independent variables in an overall explanatory models of bureaucratic representation.

To construct a measure of private sector discrimination, relative to discrimination in the public sector, from years 1987 to 2002, I estimate OLS log wage equations for each state in each year using the model specified below:

$$\ln(\text{wage}_{i,t}) = \alpha_{i,t} + \beta D_{i,t} + \gamma H_{i,t} + \varepsilon_{i,t}$$

Where:

D = vector of interactive dummy variables
 H = vector of human capital controls (age, age squared, full-time status, education, occupation, industry, marital status)
 i = state
 t = year

The vector of dummy variables, "D", includes all interactions of race, sex, and public sector employment status with white males employed in the private sector serving as my omitted category. Doing so allows for consistent comparisons across gender, race, and ethnicity.

Using coefficient estimates from each of the dummy variables, represented as "D" above, I then calculate wage penalty differences for women, African Americans, and Latinos. To do so, I sum all coefficients for women in the private sector and subtract them from the sum of all coefficients for women in the public sector. For example, the private sector discrimination measure for women is calculated as follows:

$$[\beta_{_WPF} + \beta_{_APF} + \beta_{_LPF} + \beta_{_OPF}] - [\beta_{_WPvF} + \beta_{_APvF} + \beta_{_LPvF} + \beta_{_OPvF}]$$

Where:

$\beta_{_WPF}$ = Coefficient on White public sector females
 $\beta_{_APF}$ = Coefficient on African-American public sector females
 $\beta_{_LPF}$ = Coefficient on Latino public sector females

$\beta_{_OPF}$	= Coefficient on Other public sector females
$\beta_{_WPvF}$	= Coefficient on White private sector females
$\beta_{_APvF}$	= Coefficient on African-American private sector females
$\beta_{_LPvF}$	= Coefficient on Latino private sector females
$\beta_{_OPvF}$	= Coefficient on Other private sector females

As constructed, a positive value for private sector discrimination would indicate more discriminatory private sector wage rates relative to public sector wage rates.

Political Ideology

To capture the impact of political ideology on my indicators of equity, I utilize a citizen ideology estimate that is based upon a combination of voter support for congressional incumbents, congressional challengers, incumbent ideology and challenger ideology (Berry, Ringquist, Fording, & Hanson, 1998). Berry et. al. define citizen ideology as the average position of a state's citizenry on a liberal-conservative continuum (p. 327). To capture this position across all fifty states and over the years covered, the authors

identify the ideological position of each member of Congress in each year using interest group ratings. Next, we estimate citizen ideology in each district of a state using the ideology score for the district's incumbent, the estimated ideology score for a challenger (or hypothetical challenger) to the incumbent, and election results that presumably reflect ideological divisions in the electorate. Finally, citizen ideology scores for each district are used to compute an unweighted average for the state as a whole (p. 330-331).

This measure ranges from 0 to 100, conservative to liberal.

Gross State Product (GSP)

I utilize Gross State Product as a measure of economic prosperity and growth within the states. As a counterpart to the national estimates of the Gross Domestic Product (GDP), GSP is the "sum of the GDP origination in all the industries in the state" (BEA, 2006a). This measure is provided on an annual basis by the U.S. Bureau of Economic Analysis.

Per Capita Income

I utilize Per Capita Income as a measure of the wealth of a state's citizenry. Personal income is defined as "the income received by all persons from all sources" (BEA, 2006b). This measure is provided on an annual basis by the U.S. Bureau of Economic Analysis.

Total Unemployment Rate

I utilize the total unemployment rate within states as a measure of the health of the labor market within the states. As defined by the U.S. Bureau of Labor Statistics, individuals classified as unemployed are those respondents to the CPS who "do not have a job, have actively looked for work in the prior four weeks, and are currently available for work" (BLS, 2001). This measure is provided by on an annual basis by the BLS.

Unionization

The extent of employee unionization within the public sector has long been thought to influence areas such as female and minority representation and public sector wage practices. To estimate the extent of public sector unionization within the

states over the years covered, I construct a measure of unionization using data from the Current Population Survey. For each state in each year, I estimate the percentage of state civil service employees who designated themselves as either being a member of a public sector union or being covered by a public sector union.⁶

Decentralization (Reform)

In the latter portion of my dissertation, I address the issue of personnel reform, paying specific attention to the extent of personnel decentralization within the states. There are few complete measures of decentralization within the states, and all cover a single year assessments. To test the impact of this reform on the indicators listed above, I utilize an assessment completed in 1999 by the National Association of State Personnel Executives (NASPE) (2000). It lists the extent of personnel decentralization by functional areas such as compensation, recruitment and selection. For each functional area, states are categorized as either possessing decentralized, centralized, or shared personnel authority.

Contracting (Reform)

Similar to data on personnel decentralization, data on state government contracting is quite limited. As a result, the few

⁶ In order to estimate a more consistent measure of unionization, this measure is calculated on a five year rolling basis. It should also be noted that this measure does not capture the variation in union strength across states that may result from differences in collective bargaining agreements. However, to the extent that the legal framework for collective bargaining in the states

assessments that have been conducted are for single years, with no assessments having been conducted over consecutive years. In order to test the impact of state government contracting on the three indicators listed above, I utilize a survey of state government administrators published in 1998 by the American State Administrator's Project (ASAP) (Brudney, Fernandez, Ryu, & Wright, 2005). The ASAP survey is advantageous because it provides data on the presence, extent, and characteristics of state government contracting for all fifty states. For my analysis, I will focus specifically on both the presence and extent of state government contracting.

Explanatory Models

I use the independent variables described above to construct explanatory models in the following chapters. In Chapters 3 - 5, I seek to explain the drivers of variation for each of the dependent variables described above. In these chapters, I estimate fixed-effects models. Utilizing this methodology allows me to examine how deviations from the long term average of each of my indicators corresponds to long run deviations in each of my independent variables. The chief advantage of fixed effects estimation is that the influence of time invariant unobserved measures is eliminated from the models.⁷ Year dummy variables are also included to control for time-specific effects that

has been relatively stable during the period under analysis, differences across the states are accounted for in fixed effects explanatory models.

⁷ Regional controls are not included in these models since their effect is included in the state fixed effects.

impact all states equally.⁸ To correct for heteroskedasticity, all results reported are based on robust estimation of standard errors using the Huber/White sandwich estimator, clustered by state.

Due to limitations in acquiring historical data on personnel decentralization and contracting at the state level, my explanatory models for Chapter 6 are constructed as single year cross-sectional models and estimated using Ordinary Least Squares regression.

⁸ For a discussion of the benefits of using a fixed effects model for this particular analysis, see Cornwell and Kellough (1994).

Chapter 3 Bureaucratic Representation

The extent to which the public bureaucracy is representative of the society it serves, especially with respect to the employment of women and racial and ethnic minorities, has long been considered an important issue. If, as Steven Hays has observed, "public jobs are public resources, to which everyone has a potential claim" (Hays, 1998, p. 300), a representative government workforce provides an indication that equality of opportunity is taken seriously within the public sector. Government has an obligation, as noted earlier, to serve as a model employer and provide an appropriate example for the private sector (Goldfarb and Heywood, 1982; Krislov, 1967; Miller 1996; Van Riper, 1958). Additionally, a more representative public bureaucracy may help to ensure that the interests of all people are considered in bureaucratic decision-making processes (e.g., see Saltzstein, 1979; Meier, 1993a).

To date, most research in the United States examining the representativeness of public bureaucracies has been focused at the national or local levels. Given the importance of bureaucratic representation and the prominent role of state-level bureaucracies in administering public programs, surprisingly few scholars have directed their attention to the representation of women and minorities in state government. The relative lack of state-level research is the result, in part, of difficulties associated with obtaining appropriate data. Statistics on the representation of minorities and women in state employment are

collected by the U.S. Equal Employment Opportunity Commission (EEOC), but the agency does not disaggregate those data by states. As a result, researchers must contact each state individually to collect similar data or use EEOC data aggregated across the states at a single point in time. This situation has resulted in an absence of studies focusing on multiple states across time, which would permit more thorough analysis of the issues involved. As explained in the previous chapter, such work is possible, however, using data from the Bureau of Labor Statistics' Current Population Survey.

In this chapter, I measure representation rates for women and minorities in individual state civil service systems from 1987 to 2002. I then explore the determinants of minority and female representation by examining the impact of a number of potentially important variables. I am especially interested in testing the significance of what is possibly a critical, yet until now unexamined, determinant of public sector representation -- wage discrimination in the private sector. In testing this variable, my focus is on the issue of whether private-sector wage penalties (or premiums) for women and minorities, relative to those in the public sector, are associated with state bureaucratic representation rates. Thus, I seek to shed light on an issue raised earlier by Bergman (1971) regarding the extent to which women and minorities are "pushed" into certain employment sectors due to discriminatory wage practices in alternative sectors. In addressing this issue, I first overview the literature on bureaucratic representation. I then present

results on my measures of bureaucratic representation from 1987 to 2002. Finally, I review my explanatory model and discuss the results of that analysis and implications for the field.

Bureaucratic Representation: An Overview

The issue of bureaucratic representation has frequently been associated with efforts to maintain bureaucratic legitimacy by ensuring that public bureaucracies are responsive to the citizens they serve. From President Jackson's Nineteenth Century effort to staff the federal government with more "common" men to contemporary efforts to ensure that today's fastest growing minority group, Latinos, are sufficiently represented, governments at all levels have sought to reach the goal of representativeness. The theory of representative bureaucracy, provides a rationale for these efforts by suggesting that public institutions that are more representative of the public they serve work to ensure that all interests are addressed as policy decisions are made, and a growing empirical literature supports that argument (e.g, Keiser, Wilkins, Meier, & Holland, 2002; Meier, 1993b; Selden, 1997; Selden, Brudney, and Kellough, 1998).

Since its emergence as an important theoretical concept in the discipline of public administration, scholars have researched the dynamics of representative bureaucracy with much work focusing on the presence and extent of either passive or active forms of representation. Passive representation, as is widely understood, refers simply to the presence of specified groups within the public workforce, while active representation refers

to efforts by members of those groups within the bureaucracy to ensure that the interests of people who share their group identities are not ignored. The passive representation of minorities and women within the federal service is reviewed annually by the U.S. Office of Personnel Management (OPM) in its reports on the Federal Equal Opportunity Recruitment Program (e.g., U.S., OPM, 2005). Using agency and occupational measures of representation, these reports provide detailed information on the status of minority and female employment within the federal government. The most recent report supports findings from previous years indicating that women and African Americans have achieved proportional representation across the federal service, but that Latinos remain underrepresented despite more targeted efforts such as the recent 9-Point Hispanic Employment Initiative (U.S., OPM, 1999). Scholarly research at the federal level has sought to uncover determinants of agency variation in female and minority representation rates. Specifically, work by Kellough (1989 and 1990) and Cornwell & Kellough (1994) has shown that contextual factors such as agency size, mission, extent of unionization, and geographic location are important variables. This research has also pointed to issues of stratification within the federal service by highlighting the fact that in many cases women and minorities have been underrepresented within the upper ranks of federal employment.

Similar research findings have been reported for local, especially municipal, governments. Using 1975 and 1980 EEO-4 reports from a sample of municipalities, Saltzstein found that,

although overall representation rates increased in the five year period between reports, females still remained disproportionately represented in lower level positions, representing 65 percent of the clerical ranks but only 7.9 percent of the non clerical ranks (1986). In a similar fashion, Mladenka analyzed 1984 EEO-4 data from a sample of cities with populations over 10,000 (1989 & 1991). In his analysis, he found that while African Americans held 20.1 percent of all municipal jobs, they held only 9.6 percent of administrative positions and 12.6 percent of professional positions.

Compared to analysis at the federal and local levels, little work has focused on assessing the representation of women and minorities in state bureaucracies. As noted previously, the Equal Employment Opportunity Commission (EEOC) measures the representation of women and minorities in state civil service positions every year, but only releases data aggregated across the states. In 2003, the EEOC reported that within the states, women held 50.7 percent of all bureaucratic positions while comprising 46.5 percent of the overall U.S. civilian labor force. African Americans and Latinos represented 19.3 percent and 6.5 percent of all state civil service positions, respectively, while comprising 10.4 and 13.1 percent of the total U.S. civilian labor force (EEOC, 2003; OPM, 2003). These data suggest that African Americans are significantly over-represented while, as is the case in the federal sector, Latinos are underrepresented in state civil service systems. Also, similar to findings for the federal government, analyses at the state level have found that women and

minorities are generally underrepresented at higher occupational grades and leadership posts (Dometrius, 1984; N. M. Riccucci & J. R. Saidel, 1997; Sigelman, 1976; Sigelman & Karnig, 1976). Other researchers have found that women and minorities tend to be concentrated in certain types of functional areas. For instance, Cayer and Sigelman (1980), using 1973 and 1975 EEO-4 data aggregated at the state and local level, documented the fact that women and minorities tend to be overrepresented in labor-intensive, unskilled functional areas. Specifically, minorities were dramatically overrepresented in the Housing, Utilities, Transportation, Sanitation and Sewage functional areas while women were equally overrepresented in the Hospitals, Sanitariums and Health functional areas (p. 447).

The limited research available at the state level has also examined determinants of female and minority bureaucratic representation. Using disaggregated 1995 EEO-4 data for forty-nine states, Greene, Brewer, and Selden (2003) found state liberalism, the unemployment rate, and gross state product to be positive predictors of the representation of women. In the case of African Americans, they found gross state product per capita to be a positive predictor of civil service representation, and interestingly, in the case of Latinos, they found that same variable was negatively associated with bureaucratic representation.

Measuring Representation

Table 1 presents my estimates of state-level representation ratios for the years 1987, 1994, and 2002.⁹ In general, I find that as of 2002, women were over-represented in every state. Indeed, my ratio for the representation of women in that year ranges from 1.03 for Alaska to 1.40 for Oklahoma and Texas. The state ratios for African-Americans are also interesting. By 2002, African Americans were overrepresented in forty-one states and underrepresented in nine. My estimate of the African American representation ratio ranged from 0.35 for Colorado to 1.91 for Arkansas. In general, the states with the lowest representation ratios for African Americans are also those with the smallest African-American populations. The process that produces that pattern is not known, but it may be that states with small minority populations may not have focused on the issue of minority representation in their civil service systems to the same extent as states with larger minority populations. In other words, it may be the case that a minority population must reach a certain critical mass, in terms of size, before it becomes a political force within a state.¹⁰ For Latinos, representation is considerably below parity, as I have defined it, in most states. Even in states with the largest and most established Latino

⁹ In order to achieve more reliable estimates of the representation ratios I use 5 year moving averages. That is, I pool five preceding years of state data in order to estimate the representation ratio for a given year. The estimate for 1987, therefore, is the average of the ratios for the years 1983, 1984, 1985, 1986, and 1987. Estimates for 1994 and 2002 are constructed similarly.

¹⁰ Although my results indicate that women and minorities are substantially overrepresented, it is necessary to point out that this is most likely not the case at upper organizational levels, especially given prior findings to the contrary.

populations (e.g., California and Texas), representation ratios are low, standing at 0.66 and 0.77 respectively in 2002. In states with large recent influxes of Latino workers such as North Carolina and Georgia, the representation ratios are even lower (.38 and .43 respectively).

Determinants of Representation

Clearly, there is significant variation in the representation of minorities and women in state bureaucracies. I now turn to a consideration of factors that may be associated with that variation. Some of these variables have been found to be important predictors of bureaucratic representativeness in other studies, but other variables are more unique to the context of the states and have not been examined earlier. As previously noted, I am particularly interested in the impact of private sector discrimination.

Political Ideology

I expect the political ideology of a state's citizenry to be a significant predictor of bureaucratic representation. In explaining the determinants of occupational segregation by race and gender in state and local governments, itself an aspect of bureaucratic representation, Lewis and Nice posit that adherents to more liberal ideological perspectives tend to be more supportive of equal employment opportunity efforts, and as such, more liberal states and localities should experience lower levels of racial segregation (1994). Using 1981 and 1987 EEO-4 data for

a sample of states and local governments, they found citizen conservatism to be positively related to occupational segregation for African Americans. Applied to the broader concept of bureaucratic representation, I expect those states with more liberal citizens to possess more positive views towards diversity, which should, in turn, lead to more diversity within state government. As noted in Chapter 2, I use a citizen ideology estimate that is based upon a combination of voter support for congressional incumbents, congressional challengers, incumbent ideology and challenger ideology (Berry, Ringquist, Fording, & Hanson, 1998). The measure ranges from 0 to 100, conservative to liberal, and I predict that citizen liberalism will be positively related to the representation of women and minorities in state civil service systems.

Gross State Product (GSP) & Per Capita Income

Stearns and Coleman (1990) assert that economic prosperity can serve to benefit women and minorities because their advancement is less likely to be viewed as coming at the expense of white males. Similarly, Saltzstein (1986) points out that it is much easier to provide increased public sector employment opportunities to any particular group when the "size of the pie" is expanded (p. 156). To test the impact of this variable on female and minority representation, I utilize Gross State Product as a measure of overall economic prosperity within the states. I predict that GSP will be positively related to the representation of women and minorities in state civil service employment.

It has also been asserted that the individual wealth of a state's citizenry may be linked to minority representation. Mladenka (1989) hypothesized that wealthier, better educated populations tend to be more open and tolerant and, as a result, should tend to hire more minorities in all employment categories, including the public sector. Mladenka constructs an education, income, and housing index to test his hypothesis, and finds that variable to be significantly and positively related to African American and Latino public sector employment. I examine one element of his index. As a measure of the wealth of state populations, I use state per capita income to test whether or not states with populations that are better off financially tend to possess more representative bureaucracies. This measure is not highly correlated with the previous measure, GSP, and I predict that state per capita income will be positively related to state bureaucratic representation of women and minorities.

Total Unemployment Rate

It is conventional wisdom that during economic downturns, women and minorities are disproportionately represented among those who are unemployed. Given the public sector's relative insulation from economic downturns, I might expect women and minorities to be even more attracted to public sector employment in those states with higher total unemployment rates. Alternatively, Stein (1986) finds evidence of local unemployment rates having a negative effect on minority representation in local government. I examine the impact of state-level

unemployment rates on the employment of minorities and women in state bureaucracies to determine whether it has a positive or negative effect.

Unionization

The extent of public sector unionization has often been found to be an important determinant of public sector representation. However research is mixed regarding the predicted impact of unionization upon female and minority representation. Some have found unionization to negatively impact public sector representation (Saltzstein, 1986; Mladenka, 1991). Others have found unionization to positively impact bureaucratic employment of minorities and women (Kellough & Elliott, 1992). Still, others have found unionization to have little or no impact upon bureaucratic representativeness (Ricucci, 1986; Kellough, 1990; Cornwell & Kellough, 1994). Given these mixed findings, I include the extent of state employee unionization in my model but am unable to predict its impact on minority and female state civil service employment.

Private Sector Discrimination

Although many studies have provided valuable insight into the representation of women and minorities in public bureaucracies and the determinants of that representation, the influence of the private sector labor market on the presence of minorities and women in the public sector has not been examined. Theory suggests that discrimination against a particular group of

individuals (e.g., racial minorities) in one sector will lead them to seek employment in other sectors, assuming they are less discriminatory (Bergmann, 1971). As a result, the preferred and less discriminatory sector may even experience a "surplus" of those individuals who were subject to discrimination in the other area, which, in this case, could account for the overrepresentation of African Americans and women in state civil service systems. Offering a similar argument, Saltzstein (1986) suggests that in cases where minority women experience fairly limited employment options, they "may be more inclined to take advantage of municipal governments' role as "employers of last resort" (p. 148-149). Mladenka (1991) further describes this phenomenon in stating that "one could logically expect to discover an inverse relationship between minority public employment levels, job growth in the private sector, and black success in private managerial positions" (p. 535). To test this proposition, I examine the impact of private sector race-, ethnic-, and sex-based wage discrimination on state public sector representation rates for women, African Americans, and Latinos.

I predict that when private sector wage discrimination for women, African-American and Latinos is greater than public sector wage discrimination, individuals from those groups will demonstrate a preference for employment in the public sector rather than the private sector. In the case of women and minorities, evidence generally demonstrates that both groups experience wage discrimination, in both sectors, with the private sector generally exhibiting higher levels of discriminatory wage

practices in most cases. The empirical and theoretical literature on the estimation of wage discrimination in US labor markets is very large and the number of different methodologies used to estimate these effects has been well documented (e.g., Cain, 1986; Blau & Kahn, 1997). In testing this particular variable, I choose one of the more parsimonious of these methods: OLS estimation of a log wage equation containing standard human capital and demographic controls highlighted in the literature.¹¹

As described in Chapter 2, I draw from CPS data and I include those individuals employed in either the private sector or state government for each year from 1987-2002. Using this sample population, I estimate separate wage regressions for each state in each year. As constructed, my models predict wages as a function of standard human capital and demographic variables such as education, age and age-squared, and marital status.¹² To estimate the difference in private and public sector wage discrimination, I also include a series of dummy variables that interact race, sex, and public-sector status. For instance, one dummy variable in this vector represents Latino women employed in the state public sector. In all models, the omitted category is white males employed in the private sector. This procedure allows for consistent comparisons of wage penalties across gender, race, and ethnicity. Overall, I run a total of 800

¹¹It is unclear, *ex ante*, that more advanced decomposition methods such as Oaxaca (1973) and Juhn, Murphy and Pierce (1993) would provide better measures of wage discrimination faced by workers in either the public or private sector.

separate wage regressions -- one regression for each state in each year.¹³ Using these estimates, I calculate the difference in sector specific wage discrimination. A positive measure of private sector discrimination (the difference in wage discrimination rates between the private and public sectors for a particular group) is indicative of a more discriminatory private sector market relative to the public sector.

To illustrate how to interpret this estimate, consider the following example from the State of Georgia. For year 2000, I estimate a log wage equation that contains, along with the human capital, occupational, and industry codes listed earlier, a series of interactive dummy variables by race, gender, and sector of employment (private or state government). Based on the results of this log wage regression, I estimate that women employed in state government experience a 58 percent wage penalty when compared to white males employed in the private sector in Georgia. This estimate represents the sum of wage regression coefficients for white, African American, Latino, and Other women classified as state government employees. On the other hand, women employed in the private sector experience a much higher wage penalty, 89 percent, compared to white males in the private sector. This estimate represents the combined wage regression coefficients for those women (white, African American, Latino,

¹² Age-squared is included to control for the non-linear effect of age upon wages.

¹³ This particular model is based upon a similar model utilized by J.S. Heywood in 1989 using 1983 CPS data. Coefficients for females, African-Americans, and Latinos indicate the impact of these demographic characteristics on wages.

and Other) employed in the private sector. Thus, I calculate the difference in wage discrimination between the two sectors at 31 percent and, for ease of discussion, I term this measure private sector discrimination. This implies that, controlling for common human capital characteristics (age, age-squared, education, marital status, full-time status, occupation, and industry), as well as race and ethnicity, women experience a 31 percent penalty working in the private sector relative to working in the state civil service. Stated more succinctly, in the instance of this state and year, women employed in the public sector fared much better, in terms of wage discrimination, than women employed in the private sector.

My measure of the relative size of this discrimination penalty is then used as an independent variable in my explanatory model of bureaucratic representation. I predict that private sector discrimination for women and minorities will be positively associated with each group's corresponding representation rate in state civil service systems. My predicted effect is consistent with prior research that has found evidence of less discriminatory wage differentials for women and minorities employed in the public sector (Borjas, 2003; Heywood, 1989; Smith, 1977; Venti, 1987).

Results

The columns in Table 2 show estimates of the average rate of private sector discrimination from 1987 to 2002 for women, African Americans, and Latinos. Using the State of New York as an example, from 1987-2002 women experienced a discrimination penalty of 8.5 percent. This indicates that, on average, women working in state government fared much better, 8.5 percent, than women working in the private sector. Again, it should be noted that the discrimination measure is calculated as the difference in female wage discrimination between the public (state government only) and private sectors- controlling for age, age-squared, education, marital status, urban/rural, industry and occupation. As this table highlights, women, African Americans, and Latinos generally face higher discriminatory wage penalties in the private sector than in public sector. In the case of women, their wage penalty in the private sector was higher than in the public sector in 39 states. In fact, the average private sector discrimination rate for women across my panel is 16.4 percent.

Table 3 shows the results of my explanatory model of bureaucratic representation. There is broad support for my prediction that female and minority public sector workers are driven, at least to some extent, by private sector discrimination into the public sector. The first column in Table 3 shows the results of my fixed effects estimations of the determinants of the female representation ratio. As predicted, an increase in my measure of private sector discrimination results in an increase in the representation of women working in state bureaucratic

employment. The effect size is reasonably small, but precisely estimated and is significant at the one percent level in a one tailed test of significance.¹⁴ A one percent increase in private sector discrimination for women leads to a 1.7 percentage point increase in their state employment representation ratio. To see this effect, consider a state that had a representation ratio equal to 1. If that state's private-sector labor market discrimination rate for women increased by one percent relative to the public sector market, then the model predicts that the state representation ratio for women would increase to 1.017.

Columns 2 and 3 present the results for the determinants of African-American and Latino representation rates, respectively.¹⁵ Overall, I find no statistically significant effect of private sector discrimination on African-American representation ratios. Conversely, I find a large and statistically significant effect of private sector discrimination on Latino representation. A one percent increase in the wage penalty for Latinos is predicted to increase Latino representation in the public sector by 7.9 percentage points.

¹⁴ Throughout this section I use one-tailed tests of significance for the private sector discrimination variable. Since I can find no theoretically sound reason why increases in private sector wage penalties should reduce the public sector representation of women, African-Americans and Latinos. Furthermore, my results for women and African-American men would be unchanged in a two-tailed test. Results for Latinos would be significant at the .10 percent level in a two tailed test.

¹⁵ In certain states, there are years for which there are no observations for African American and/or Latino state government employees. Including these states in our explanatory models creates unbalanced panels for Models 2 through 5. As a result, these states are omitted in order to estimate balanced models.

The results for African-Americans are interesting given African Americans' significant over-representation in state civil service workforces. I investigated the lack of effect by estimating separate regressions for male and female African-Americans.¹⁶ Columns 4 and 5 present the results for the determinants of representation for female and male African-Americans, respectively. I find no statistically significant impact of private sector discrimination on the representation of African-American women, but for African-American men, the story is considerably different. I find a very large and statistically significant effect of private sector discrimination on African-American male representation ratios. These results raise many questions. In general the estimated impact of private sector discrimination is quite large. Secondly, the R-squared measures for these models are considerably lower than those of the female or Latino models. It may be that the factors that determine the representation of African-Americans in the public sector are inadequately captured in my model.

Turning briefly to consideration of other variables in my models, I find limited support for the impact of state liberalism on female and minority bureaucratic representation. In fact, liberalism appears to be an important factor only for women. Its impact is indistinguishable from zero in each of the other models. With regard to the predicted effect of state economic

¹⁶ I conducted a Chow test to determine the appropriateness of running separate models for African American men and women. Test results support running these two models separately.

prosperity, that bureaucratic representation is positively related to state GSP, there are mixed results. For females, GSP is found to have no significant effect on bureaucratic representation. However, in the case of Latinos and African-Americans, both combined and by gender, GSP has a positive and statistically significant effect on each of their respective representation ratios. Specifically, in the case of African-Americans, the effect sizes are exceptionally large, further emphasizing the importance of economic prosperity in their public sector employment rates.

Surprisingly, I find no support for my prediction that state per capita income is positively related to bureaucratic representation, and I no evidence that total unemployment rate impacts bureaucratic representation. Although I did not predict the impact of unionization, I find that it has a negative and statistically significant impact upon Latino representation and a positive and statistically significant impact upon African-American female representation.

Chapter Summary

In sum, I find mixed results regarding the representation of women and minorities in state civil service systems. Specifically, I find that women are moderately overrepresented in state civil service employment, and that representation rates for African-Americans vary much more than women, with underrepresentation in some states, nearly proportional representation in others, and substantial overrepresentation in

other states. Results for Latinos show that, on average, they are underrepresented in the state civil service systems. However, in some states, they do approach proportional representation, and in a few cases they are overrepresented.

With respect to the impact of a key variable of interest, private sector wage discrimination relative to public sector wage discrimination, I find that it positively impacts bureaucratic representation rates for both women and Latinos, but not for African-Americans. However, when separated by race, I find that private sector discrimination faced by African-American males is positively related to their representation in the state civil service. Other determinants found to have a positive impact upon bureaucratic representation include citizen ideology, gross state product and union membership/coverage.

Table 1. State Representation Ratios, by state & year (1987, 1994, & 2002)*

	Female			African American			Latino		
	1987	1994	2002	1987	1994	2002	1987	1994	2002
Alabama	1.23	1.42	1.30	1.38	1.46	1.47	--	--	--
Alaska	1.12	1.03	1.03	0.82	1.35	0.75	0.79	1.15	0.87
Arizona	1.13	1.06	1.17	1.06	1.36	1.79	0.62	1.04	0.92
Arkansas	1.32	1.10	1.30	1.13	1.38	1.91	--	--	--
California	1.15	1.15	1.20	1.60	1.36	1.80	0.56	0.66	0.66
Colorado	1.11	1.08	1.18	0.62	1.16	1.65	0.97	1.12	0.96
Connecticut	1.15	1.16	1.17	1.32	1.94	1.49	1.18	0.97	1.14
Delaware	1.23	1.13	1.20	1.43	1.47	1.41	0.68	0.78	0.32
Florida	1.10	1.15	1.27	1.34	1.60	1.58	0.36	0.40	0.49
Georgia	1.22	1.19	1.23	1.05	1.41	1.31	1.12	0.12	0.43
Hawaii	1.17	1.30	1.27	0.50	0.80	0.93	0.22	0.92	0.73
Idaho	1.16	1.17	1.14	1.30	4.25	0.81	0.41	0.49	0.37
Illinois	1.03	1.07	1.26	1.46	1.57	1.55	0.18	0.35	0.42
Indiana	1.08	1.22	1.25	1.59	2.25	1.90	0.58	0.54	0.26
Iowa	1.07	1.08	1.27	1.58	2.66	1.29	1.32	1.77	0.30
Kansas	1.22	1.06	1.27	1.43	1.44	1.16	1.43	0.72	0.53
Kentucky	1.29	1.19	1.19	1.08	0.96	1.33	--	--	--
Louisiana	1.32	1.31	1.27	1.23	0.98	1.15	--	--	--
Maine	0.99	1.02	1.14	--	--	--	--	--	--
Maryland	1.16	0.99	1.07	1.37	1.34	1.56	0.86	0.27	0.48
Massachusetts	1.08	1.09	1.04	1.79	1.81	1.78	0.78	1.12	0.69
Michigan	1.29	1.17	1.26	1.59	1.58	1.21	0.95	0.98	0.82
Minnesota	1.04	1.10	1.12	0.86	0.39	1.51	0.69	1.12	0.53
Mississippi	1.24	1.19	1.20	1.32	1.33	1.08	--	--	--
Missouri	1.29	1.28	1.21	1.25	1.28	1.03	--	--	--
Montana	1.14	1.07	1.12	--	--	--	0.68	0.99	0.48
Nebraska	1.09	1.19	1.17	0.75	0.86	0.75	1.02	1.14	0.99
Nevada	0.99	1.09	1.31	0.62	0.79	1.27	0.45	0.51	0.35
New Hampshire	0.95	1.01	1.18	--	--	--	--	--	--
New Jersey	1.11	1.14	1.14	1.91	2.19	1.81	0.61	0.58	0.83
New Mexico	1.05	1.12	1.20	1.07	1.06	0.43	0.99	1.02	1.04
New York	1.04	1.02	1.04	1.09	1.12	1.15	0.43	0.51	0.41
North Carolina	1.10	1.11	1.22	1.12	1.08	1.19	1.23	0.29	0.38
North Dakota	1.12	1.09	1.11	--	--	--	0.66	1.04	0.45
Ohio	1.25	1.18	1.15	2.15	1.81	1.52	1.40	1.26	1.06
Oklahoma	1.24	1.23	1.40	1.75	1.14	1.40	0.51	0.55	0.83
Oregon	1.16	1.21	1.34	2.86	1.04	0.77	1.21	0.64	0.96
Pennsylvania	1.01	0.99	1.04	1.35	1.74	1.42	0.88	0.74	0.35
Rhode Island	1.14	0.92	1.07	1.33	1.13	1.24	0.69	0.22	0.26
South Carolina	1.19	1.19	1.28	1.24	1.15	1.40	1.31	0.56	0.39
South Dakota	1.04	1.04	1.08	0.46	2.39	1.01	--	--	--
Tennessee	1.17	1.21	1.20	1.46	1.44	1.40	--	--	--
Texas	1.23	1.26	1.40	1.33	1.41	1.63	0.75	0.69	0.77
Utah	1.11	1.20	1.25	0.96	0.89	1.31	1.18	1.00	0.39
Vermont	0.98	1.15	1.09	--	--	--	--	--	--
Virginia	1.11	1.15	1.11	1.32	1.35	1.11	0.51	0.39	0.15
Washington	1.18	1.29	1.30	1.05	1.15	1.35	1.65	0.53	0.92
West Virginia	1.18	1.23	1.06	1.33	1.00	1.21	0.00	1.09	1.76
Wisconsin	1.13	1.16	1.20	0.43	0.70	1.73	0.90	0.84	0.40
Wyoming	1.18	1.22	1.22	2.20	0.67	0.35	0.88	0.82	0.69
United States Average	1.14	1.14	1.19	1.29	1.41	1.31	0.83	0.76	0.61

Notes: * Representation Ratios were derived from the U.S. Bureau of Labor Statistics' Current Population Survey. In order to construct reliable estimates of the representation ratios I use 5 year moving averages. That is, we pool five preceding years of state data in order to estimate the representation ratio for a given year. The estimate for 1987, therefore, is the average of the ratios for the years 1983, 1984, 1985, 1986, and 1987. Estimates for 1994 and 2002 are constructed similarly.

-- States for which there are no observations for African American and/or Latino state government employees in our sample for the years examined are omitted.

Table 2. Private Sector Wage Discrimination, by state & year (1987, 1994, & 2002)*

	Female			African American			Latino		
	1987	1994	2002	1987	1994	2002	1987	1994	2002
Alabama	0.306	-0.041	0.408	0.127	0.117	-0.144	--	--	--
Alaska	0.657	0.188	-0.386	0.409	0.186	0.036	0.827	-0.103	-0.176
Arizona	0.089	0.027	-0.069	0.169	-0.201	-0.148	0.400	0.145	0.197
Arkansas	0.427	0.286	-0.140	0.090	0.129	0.112	--	--	--
California	0.285	0.211	0.078	0.139	0.157	0.129	0.275	0.188	0.195
Colorado	0.368	0.026	-0.195	-0.151	-0.115	-0.033	0.063	0.264	-0.041
Connecticut	0.662	0.763	0.544	0.023	0.040	0.183	0.150	0.457	0.208
Delaware	0.761	-0.583	0.464	0.007	-0.032	0.041	0.533	-0.018	-0.040
Florida	0.137	-0.198	0.106	-0.090	-0.070	-0.056	0.021	-0.199	0.020
Georgia	0.445	-0.203	0.314	0.159	0.061	-0.030	0.099	-0.389	0.111
Hawaii	-0.100	-0.291	-1.505	0.330	-0.166	-1.579	-0.157	0.023	-0.666
Idaho	0.394	-0.007	0.048	-0.321	-0.112	-0.050	0.057	0.048	0.374
Illinois	0.413	0.142	-0.161	0.127	0.061	0.216	0.412	0.190	0.183
Indiana	-0.123	0.013	0.142	-0.156	-0.217	-0.030	-0.159	-0.157	0.357
Iowa	-0.005	0.425	-0.315	0.252	0.366	0.278	0.048	0.011	-0.093
Kansas	0.233	0.370	0.124	0.134	0.006	-0.054	-0.095	-0.012	-0.289
Kentucky	-0.197	0.299	0.066	-0.085	-0.388	0.020	--	--	--
Louisiana	-0.049	0.714	-0.099	0.032	0.072	-0.008	--	--	--
Maine	0.578	-0.437	0.635	--	--	--	--	--	--
Maryland	0.236	0.074	0.179	0.282	0.118	-0.005	-0.575	0.230	-0.036
Massachusetts	0.074	0.024	-0.310	-0.026	0.286	-0.004	0.054	-0.021	-0.120
Michigan	0.484	0.376	0.169	0.304	0.104	0.074	0.079	0.118	0.254
Minnesota	0.886	0.544	0.138	0.483	0.180	0.325	-0.411	0.210	-0.200
Mississippi	0.092	-0.516	-0.047	-0.089	-0.099	-0.036	--	--	--
Missouri	-0.621	0.260	-0.276	0.051	0.239	-0.104	--	--	--
Montana	0.308	0.424	0.483	--	--	--	-0.238	0.279	0.312
Nebraska	-1.036	-0.151	-0.456	-0.764	-0.139	-0.470	-0.063	-0.012	-0.075
Nevada	-0.520	0.650	0.227	-0.117	0.275	0.179	-0.385	0.360	0.018
New Hampshire	0.621	0.034	-0.294	--	--	--	--	--	--
New Jersey	0.334	0.432	0.241	0.044	0.096	0.114	0.229	0.430	-0.090
New Mexico	0.053	0.451	0.106	0.264	0.245	-0.350	0.018	0.163	0.010
New York	0.067	0.255	0.127	0.144	0.124	0.065	0.182	0.214	0.181
North Carolina	0.677	0.054	0.234	0.170	-0.004	0.163	0.662	0.560	0.102
North Dakota	0.649	-0.137	0.040	--	--	--	-0.092	0.185	-0.114
Ohio	0.519	0.079	-0.099	-0.003	0.056	0.166	0.365	0.014	-0.055
Oklahoma	0.424	0.090	0.098	0.118	0.226	-0.110	0.132	-0.193	0.399
Oregon	-0.405	0.038	0.000	-0.305	-0.451	0.361	-0.178	-0.123	-0.140
Pennsylvania	1.177	-0.169	0.789	0.218	0.012	0.101	0.434	0.162	0.348
Rhode Island	1.010	0.287	0.225	0.124	0.360	0.243	0.718	-0.081	0.336
South Carolina	0.142	-0.039	0.371	0.029	-0.045	0.068	-0.225	0.201	0.538
South Dakota	-0.042	0.111	-0.025	-0.093	-0.166	-0.123	--	--	--
Tennessee	-0.614	0.383	-0.222	-0.131	0.121	-0.137	--	--	--
Texas	0.209	0.260	-0.009	0.160	0.123	0.037	0.281	0.141	0.014
Utah	-0.379	1.683	-0.208	0.193	0.514	-0.159	-0.480	-0.054	0.121
Vermont	0.453	0.914	0.046	--	--	--	--	--	--
Virginia	0.118	0.236	0.382	0.161	0.228	0.232	-0.180	0.042	-0.244
Washington	0.686	0.848	0.263	0.204	0.447	0.064	0.176	0.318	0.214
West Virginia	0.344	0.430	-0.405	-0.229	-0.347	-0.102	--	--	--
Wisconsin	0.974	0.061	0.716	0.186	-0.161	0.426	0.323	-0.400	0.268
Wyoming	0.937	0.351	0.172	0.624	-0.016	0.627	0.168	-0.233	0.130
United States Average	0.263	0.201	0.054	0.071	0.049	0.012	0.091	0.078	0.066

Notes: * Private sector discrimination estimates were derived from the U.S. Bureau of Labor Statistics' Current Population Survey. In order to construct reliable estimates of private sector wage discrimination I use 5 year moving averages. That is, I pool five preceding years of state data in order to estimate the private sector discrimination measure for a given year. The estimate for 1987, therefore, is based upon data reported in years 1983, 1984, 1985, 1986, and 1987. Estimates for 1994 and 2002 are constructed similarly.

-- States for which there are no observations for African American and/or Latino state government employees in my sample for the years examined are omitted.

Table 3. Models of Bureaucratic Representation

	Dependent Variable: State Representation Ratio				
	-1- Female	-2- Latino	-3- All	-4- African American Female	-5- Male
Private Sector Discrimination	0.017 (3.30) ††	0.079 (1.93) †	0.146 (1.39)	0.127 (1.23)	0.535 (2.09) †
Citizen ideology	0.002 (5.88) ††	-0.002 (1.02)	-0.001 (0.22)	0.003 (1.02)	-0.002 (0.62)
Gross state product (trillions)	0.007 (0.19)	0.703 (5.09) ††	0.883 (3.49) ††	1.695 (4.81) ††	0.504 (1.94) †
Per capita income (thousands)	0.001 (0.50)	-0.012 (0.96)	0.001 (0.05)	-0.018 (0.96)	-0.002 (0.13)
Total unemployment rate	0.004 (1.89)	-0.018 (1.48)	0.012 (0.75)	0.021 (1.08)	-0.016 (0.83)
Union membership/coverage	0.071 (1.05)	-0.845 (1.94)	0.626 (1.08)	2.047 (2.72) *	0.181 (0.28)
Constant	0.963 (18.97) **	1.443 (4.51) **	0.937 (2.53) **	0.808 (1.90)	1.175 (2.63) **
State Fixed Effects	yes	yes	yes	yes	yes
Year Controls	yes	yes	yes	yes	yes
Observations	800	608	720	703	709
Number of States	50	38	45	45	45
R-squared	0.75	0.59	0.46	0.59	0.47

(robust t-statistics in parenthesis)

† p< .05, one-tailed test * p< .05, two-tailed test

†† p< .01, one-tailed test ** p< .01, two-tailed test

Chapter 4 State Civil Service Wage Discrimination

Having discussed the representation of women and minorities in the state civil service and the impact of private sector discrimination on bureaucratic representation, I now turn my attention to an equally important area of concern, the presence wage discrimination within the state civil service. The concern for race and gender pay equity is long-standing within the field of public administration. As is the case in the private sector, the public sector is responsible for adhering to laws that prohibit discrimination on the basis of race or gender, most notably the Equal Pay Act of 1963, the Civil Rights Act of 1964, and the Equal Employment Opportunity Act of 1972, which extended coverage of the 1964 Act to federal, state, and local governments. Additionally, the goal of non-discrimination in wages is a common objective for effective human resources management given the negative impact that discriminatory wages can have on employee morale and motivation. What is unique to the public sector, however, is the notion that because of its position as an enforcer of anti-discrimination measures in the private sector, it should serve as a "model employer" with regard to the absence of discrimination, the employment of women and minorities, and the employment of other historically disadvantaged groups such as the disabled.

The goal of the public sector serving as model employer is by no means new to the field of public administration. As Paul

Van Riper writes in his classic history of the civil service, one of the first attempts by the federal government to act as model employer was the implementation of the eight hour workday in 1888, and later attempts to end discrimination within the civil service were also in line with attempts to be a model employer (Van Riper 1958). Although writing before the passage of the Equal Employment Opportunity Act of 1972, Samuel Krislov pointed out that if the federal government is to be responsible for enforcing anti-discrimination legislation within the private sector, then it should also hold itself to the same standard (Krislov, 1967). In his classic text, *Democracy and the Public Service*, Frederick Mosher noted that

Government—more especially the federal government—has often aspired to be a “model employer,” in the vanguard of fair practices in the field...It has led most employers in the competitive principle, “equal pay for equal work,” a retirement system, a minimum wage, and more recently employment of the physically handicapped, and employment opportunities for women and minorities (Mosher, 1982).

Writing specifically about the federal government’s relationship with private contractors, Goldfarb and Heywood state that according to the “model employer” rationale, “the government should actually lead private industry both by *being* a model employer and by forcing its contractors to be model employers” (Goldfarb and Heywood, 1982 p. 65).

In Chapter 3, I measured and tested the impact of private sector wage discrimination, relative to public sector wage discrimination, on bureaucratic representation, using white males employed in the private sector as my base comparison group.

Although pertinent to the question of how private sector wage practices influence public sector representation rates, this measure does not isolate the presence of discriminatory wage penalties within the state civil service, an equally important area of concern.

In this chapter, I analyze the extent to which state governments have acted as "model employers" in terms of both sex- and race-based wage discrimination. To do so, I measure both the presence and extent of wage penalties for women, African Americans, and Latinos in the state civil service, the assumption being that those states possessing discriminatory wage differentials are not fully living up to the model employer ideal. I begin by discussing the legal framework under which public civil service systems are supposed to prohibit wage discrimination and ensure equal employment opportunity. I then overview research evaluating the extent to which the public sector has done so with regard to wage discrimination. I next review the data and methodology used to estimate discriminatory wage differentials in the public sector, and move on to a discussion of the variation in civil service wage discrimination between the states. Last, I discuss the results of an explanatory model of this variation.

Prohibiting Discrimination: The Legal Framework

As required by the Equal Employment Opportunity Act of 1972, state governments are required to adhere to Title VII of the Civil Rights Act of 1964 which makes it unlawful for an employer to "fail or refuse to hire or to discharge any individual, or

otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, or national origin" (Section 703 (a), Title VII, Civil Rights Act of 1964). Subsequent court cases have interpreted the 1964 Act as prohibiting both intentional discrimination (disparate treatment) as well as unintentional discrimination (disparate impact), and following the 1972 Act, state governments were encouraged to ensure that women and minorities were represented both horizontally and vertically throughout their bureaucracies.

The 1972 Act granted the Equal Employment Opportunity Commission the right to monitor the employment practices of state governments through the submission of annual state status reports, commonly known as the EEO-4 Report. Specifically with regard to the submission of annual reports, Section 709 (c) of Title VII requires that states

shall (1) make and keep records relevant to the determinations of whether unlawful employment practices have been or are being committed, (2) preserve such records for such periods, and (3) make such reports therefrom as the Commission shall prescribe by regulation or order, after public hearing, as reasonable, necessary, or appropriate for the enforcement of this title or the regulations or orders thereunder.

Data from individual state EEO-4 reports are then compiled into a bi-annual report released by the EEOC every odd year. The report, titled *Job Patterns for Minorities and Women in State and Local Government*, provides aggregated assessments of the employment and compensation of state and local employees by race

and gender, both nationally and on a state-by-state basis. As described in earlier chapters, the assessments contained in the EEO-4 reports are helpful in providing a summary analysis of the state of equal employment opportunity efforts across the states, but due to the aggregation of state and local employment, researchers have been precluded from conducting analyses of state civil service employment separate from local government employment.

Although state governments have been encouraged to achieve proportional representation within their ranks, the means by which they are allowed to do so have been defined through a series of court cases over the past twenty years. In its 1987 *Johnson v. Transportation Agency, Santa Clara County, California* decision, the Supreme Court upheld the ability of government organizations to implement preferential affirmative action plans to address inequities in race and gender representation. In that particular case, the Transportation Agency of Santa Clara County voluntarily chose to implement an affirmative action plan that granted hiring preferences to minorities and women in cases where job classifications had traditionally shown signs of segregation. Following their plan, the agency chose to promote a female employee over a male employee for one particular job opening, thus leading to the lawsuit against the agency. Based upon precedent established in an earlier case, *United Steelworks of America v. Weber* (1979), the Supreme Court upheld the County's action.

Subsequent decisions have had the effect of placing more restraint on public sector affirmative action efforts found permissible in the *Johnson* decision. As has been pointed out by other scholars, the central question surrounding affirmative action efforts in the public sector is whether or not they are in violation of equal protection rights found in the 5th and 14th amendments to the U.S. Constitution (Nigro, Nigro, & Kellough, 2007). In answering this question, the courts have employed two alternate standards, the first being the rational standard that maintains that preferential programs possess a rational link between the means of implementing the program and the ends they hope to achieve. The second standard is much more rigorous and is commonly referred to as the strict scrutiny standard. It holds that preferential programs meet the criteria of serving "compelling government interest" and being "narrowly tailored to meet that interest in that there are no less-intrusive alternatives available" (Nigro, Nigro, & Kellough, 2007, p. 262). In *Wygant v. Jackson Board of Education* (1986), the Supreme Court upheld that the latter, and subsequently more difficult, standard should be applied to cases involving preferential programs by state or local governments. Later, in its *Adarand v. Peña* (1995) decision, the Supreme Court held that the federal government should also meet the strict scrutiny standard in implementing preferential hiring programs, and that such programs "must be shown to serve a compelling governmental interest and must be narrowly tailored to meet that interest to achieve constitutional legitimacy" (Nigro, Nigro, & Kellough, 2007, p. 263). The

requirement that preferential programs be narrowly tailored has also been applied to state and local governments, and "has been interpreted to mean that affirmative action should not impose any undue burden on innocent third parties—that is, the government must use the least intrusive means available to achieve its end" (p. 263).

Evidence of Discrimination in State Government

Although state governments have been granted the authority to implement affirmative action programs to address past discrimination in hiring, compensating, and promoting women and minorities, the extent to which all facets of discrimination have been fully addressed is a question that remains to be answered. As discussed in the previous chapter, women and African Americans are well represented, and in some cases, overrepresented in state civil service systems, whereas Latinos tend to be underrepresented across the states. However, assessments of bureaucratic representation ratios only tell half the story since they do not provide insight into the compensation of women and minorities, or the extent to which women and minorities experience wage discrimination within the state civil service.

This additional area of focus, wage discrimination, is more difficult to assess in the public sector. Although reporting on aggregated state and local government data, the EEOC's EEO-4 report provides an initial degree of insight into the possible presence of wage discrimination in the public sector by reporting average wages by race and gender. In 2003, it reported the average salary for women employed in state and local government

to be \$34,675 compared to \$42,170 for males. For African Americans and Latinos, their average salaries were \$33,579 and \$36,565, respectively, compared to \$39,987 for whites and \$38,696 across all racial groups (EEOC, 2003, p. 1). Although informative of the potential existence of discriminatory wage differentials in state and local government employment, these statistics fall short in that they do not control for differences in human capital characteristics in state and local government employees. As a result, they do not address the extent to which comparable individuals are compensated in an equitable manner by race and gender. To fully address this issue, researchers have had to employ more sophisticated methodologies using individual employment data containing measures of wages as well as other human capital characteristics.

Prior to the 1980s, most work on public sector wage discrimination focused primarily on the federal government and specifically on the wages of women and African Americans. Researchers found evidence that, when compared to the private sector, the federal government tended to be less discriminatory, but that women and African Americans still experienced significant degrees of wage discrimination within the federal government (Long, 1976; Smith, 1976; Smith, 1977). In particular, Long found that African Americans employed by the federal government earned approximately 24 percent less than comparable whites. This estimate dropped to 21 percent for African Americans employed in white-collar positions and rose to approximately 26 percent for African Americans employed in blue-

collar positions (p. 91). For women, Long found that they experienced a roughly 26 percent wage disadvantage across all occupations and in the managerial ranks, this estimate rose to a 33 percent wage disadvantage (p. 92).

Sharon Smith (1977) extended the study of public sector wage discrimination to the state and local levels and, using CPS data from 1973 and 1975, estimated that African Americans experienced an 8 percent wage penalty across local governments but did not find significant results for African American wage discrimination at the state level. Interestingly enough, she found a higher rate of wage discrimination at the federal level, 14 percent, for African Americans. In the case of women, Smith found evidence of significant levels of discrimination at all levels of government, with women at the state level experiencing the lowest levels of discrimination (p. 106-116). Using 1975 CPS data to estimate the presence of public private wage gaps by level of government for whites and African Americans, Alton Smith (1980) confirmed Sharon Smith's earlier results in finding indirect evidence of lower rates of wage discrimination for African American males, African American females, and white females in state and local government compared to rates in the federal government.

Using 1983 data from the Current Population Survey, Heywood (1989) was one of the first researchers to extend estimates of public sector wage discrimination beyond just white and African American comparisons by estimating the extent of wage discrimination within the public sector for all non-whites and women. In the case of women, he estimated that they experienced

a 14.8 percent wage penalty at the state level, which was substantially lower than the federal wage penalty (21.9%) and higher than the local government wage penalty (12.2%). For non-whites, he estimated that they experienced a 6.1 percent wage penalty at the state level, which was lower than the federal wage penalty (7.8%) and higher than the local government wage penalty (6.2%).

Although each of the studies highlighted above provide evidence that the public sector is far from perfect in its quest to fulfill the role of a model employer, it should be noted that all of the analyses treat each level of government in the aggregate. Thus, estimates of wage discrimination for state and local government employees fail to take into account variation across the states and regions of the country. Given the drastic differences in state civil service systems, discussed later in Chapter 6, it becomes evident that a more specific assessment of state government wage discrimination must take into account these differences. In the following section, I discuss the results of state level wage discrimination estimations, disaggregated across the states.

Measuring Discrimination

As outlined in Chapter 2, in order to estimate the extent of wage discrimination within state government, I estimate a series of three separate wage equations for women, African Americans, and Latinos for each state in each year. This allows me to compare women to men, African Americans to all non-African Americans, and Latinos to all non-Latinos. Although an

alternative method would have been to use white males employed in state government as a base comparison group, I chose to use the selected method in order to estimate more conservative estimates of internal wage discrimination within state civil service systems.¹⁷

Table 4 lists the average wage discrimination coefficients for women, African Americans, and Latinos across all states from 1987 to 2002. On average, women in state government experienced a 9 percent wage penalty when compared to men. Estimates peaked in the mid 1980s at 11 percent, dropped throughout much of the 1990s and rose slightly in later years. African Americans experienced an 8 percent wage penalty when compared to all other ethnic groups over the selected years. Unlike the case of women however, historical estimates are less consistent, rising to a high of 11 percent in 1995 and falling to a low of 5 percent in 1987 and 2000. Although underrepresented within all state governments, Latinos experienced the lowest levels of wage discrimination across all groups. Overall, Latinos experienced a wage discrimination rate of 3 percent over the selected years, and estimates show a virtual absence of wage discrimination in 1992 and 2002.

Table 5 presents estimates of civil service wage discrimination by region from years 1987 to 2002, and, as can be seen, there is considerable variation.¹⁸ For women, discrimination estimates range from a high of 11 percent for

¹⁷ This approach is consistent with that used by Heywood (1989).

states located in the Middle Atlantic to a low of 7 percent in those states that comprise the New England region. The story for African Americans is much different than that of women. In fact, estimates of wage discrimination are highest in the New England region at 14 percent and lowest in the West North Central region at 3 percent. On the whole, estimates of wage discrimination for Latinos are lower across all regions with the lowest estimates occurring in the West North Central and South Atlantic regions, 2 percent, and the highest estimates occurring in the East North Central region, 7 percent.

Table 6 unpacks the previous two tables by providing estimates of wage discrimination for women, African Americans, and Latinos, by state, for years 1987, 1994, and 2002. In the case of women, there is a great deal of variation across the states with estimates of wage discrimination reaching as high as 26 percent in Wyoming in 1987 to virtually zero in Alabama in 2002. However, what is striking is that women experienced some degree of wage discrimination in every state except for Alabama, and that exception was only in 2002.

Rates of wage discrimination experienced by African Americans are, on average, lower than those experienced by women. In states such as Iowa, Utah, and West Virginia African American state employees even experienced wage premiums when compared to non-African Americans. Still, variation in the estimates of wage discrimination for Latinos paints a much different picture than

¹⁸ Please see Appendix A for a complete listing of states by region.

that of women and African Americans. On average, Latinos have experienced lower rates of discrimination than both women and African Americans, and estimates steadily decreased from 1987 to 2002. In fact, the overall average across the states in 2002 is zero, and in states such as Arizona and Connecticut, Latinos have experienced consistent wage premiums.

Determinants of Civil Service Discrimination

Clearly, there is significant variation in the estimates of discrimination experienced by minorities and women in state bureaucracies, and I now turn to a consideration of factors that may be associated with that variation. It should be noted that the literature has historically focused on the representation of women and minorities with public sector bureaucracies. As a result, research on specific predictors civil service wage discrimination is quite sparse. However, in many respects, the factors that have been thought to impact the representation of women and minorities in state government should also be similar to those that would impact the wages paid to women and minorities. In other words, if political ideology is thought to influence a state's willingness to employ women and minorities at rates consistent with their representation in the overall population, then it follows that it should also influence that state's practices with regard to the compensation women and minorities.

Political Ideology

I expect the political ideology of a state's citizenry to be a significant predictor of state civil service wage discrimination. In particular, I predict that states with more liberal political ideologies will be more supportive of equal employment opportunity, of which equal pay can be considered a core component. This predicted impact is in line with Lewis and Nice's 1994 finding that conservatism is positively related to occupational segregation, given that the segregation of women and minorities into lower-paying occupations, irregardless of education or other qualifications, would serve to increase wage discrimination. As described in Chapter 2, I use a measure of citizen ideology constructed by Berry et al (1998) and I predict that citizen liberalism will be negatively related to state wage discrimination.

Gross State Product (GSP) & Per Capita Income

Stearns and Coleman (1990), Saltzstein (1986) and Mladenka (1989) have all pointed out the positive relationship between economic prosperity, both at the state and individual levels, and the equal employment and advancement of women and minorities. In many respects, compensating women and minorities at levels equal to their male and non-minority counterparts is one of the central goals of equal employment opportunity. As such, I predict that both Gross State Product and state Per Capita Income will be negatively related to state wage discrimination.

Total Unemployment Rate

There is little direct evidence in the literature to support a predicted impact of state unemployment rates on wage discrimination within the state civil service. However, given the positive relationship between economic prosperity and equal employment opportunity, one could reasonably assume wage discrimination would not logically decrease during times of economic downturns, as exhibited in state unemployment rates. As alluded to by Stearns and Coleman (1990), competition for jobs can be expected to increase during these periods, and, as a result, any advancement by women and minorities, either in the realm of representation or equality in wages, can be viewed as coming at the expense of the majority. Given the security commonly associated with public sector jobs, one can only expect increased competition in the public sector during these periods. As such, I predict state unemployment rates to be positively related to state civil service wage discrimination.

Unionization

As is the case with the previous variable, there is little direct evidence of unionism's impact upon state public sector wage discrimination; however, research on the private sector labor market does shed light on its potential impact. In analyzing the impact of trade unionism on racial discrimination, Ashenfelter (1972) found evidence of lower wage differentials between African Americans and whites in unionized labor markets as opposed to nonunion labor markets. Additionally, Freeman

(1980) found unionization to be negatively related to overall wage dispersion among employees covered by union collective bargaining agreements. Taken together, these findings suggest that unionization would serve to decrease wage discrimination in the public sector. In analyzing discrimination within the federal bureaucracy, Borjas (1982) supports this suggested effect in noting that "to the extent that agencies with powerful bureaucratic organizations resemble labor unions, these agencies will have not only less wage inequality but also smaller racial and sexual wage differentials" (p. 284-286). As such, I predict that unionization within the state civil service will be negatively related to state civil service wage discrimination.

Results

Using the variables described above, I construct a state-level panel data set with 800 observations from years 1987 to 2002. I then estimate a fixed-effects model where my dependent variable is the extent of wage discrimination experienced by women, African Americans, and Latinos. To assist in the interpretation of my results, estimates of discrimination are recalculated as earnings ratios. For example, if women experience a 15 percent wage penalty relative to men in a given year and state, this would be expressed as an earnings ratio of 85 percent. In other words, women would be expected to earn 85 percent of the wages of comparable males for that state and year.

Table 7 shows the results of my explanatory models of state civil service wage discrimination. Specifically, column one presents results for women, column two for African Americans, and

column three for Latinos. There is no support for my prediction that civil service wage discrimination is negatively related to citizen liberalism in any of the models. This is somewhat surprising in the case of women, where citizen liberalism was found to be positively related to bureaucratic representation.

Although I find no statistically significant results for the impact of gross state product on civil service wage discrimination, I find mixed, but significant, results for the impact of state per capita income. In the case of women, per capita income is found to be negatively related to women's earning ratios, or, alternatively, positively related to civil service wage discrimination. Counter to its predicted impact, results suggest that a \$1,000 increase in state per capita income results in a one percent decrease in women's earnings ratio. However, in the case of African Americans, this effect reverses such that a \$1,000 increase in the state per capita income results in a one percent increase in African Americans' earnings ratio. The effect of per capita income on Latino earnings ratios mirrors that of women in that an increase in state per capita income of \$1,000 results in a two percent decrease in earnings ratios.

For the variable total unemployment rate, I find no statistically significant results in a two-tailed test of significance; however, the impact of unemployment on African American earnings ratios is significant and in the predicted direction in a one-tailed test of significance. As illustrated, a one percent increase in the state unemployment rate results in

a one percent decrease in African American earnings ratios. Last, I find mixed results for the impact of unionization upon state civil service discrimination. In the case of women, unionization is found to be negatively related to women's earnings ratios such that a one percentage point increase in unionization results in a 19 percent decrease in women's earnings ratio. This result is counter to my predicted impact, but, in the case of Latinos, I find unionization to have a large positive impact upon earnings ratios such that a one percent increase in unionization results in a 61 percent increase in the Latino earnings ratio.

Chapter Summary

Results of my analysis show that women, on average, experience a substantial wage penalty, 9 percent, when compared to men of similar human capital characteristics. However, estimates of African American and Latino state civil service wage discrimination are lower, at 8 and 3 percent respectively, but are still cause for concern given the public sector's role as a model employer with regard to equal employment opportunity.

Results also suggest that there are different phenomena impacting wage discrimination among women and minorities. For instance, per capita income is found to have a negative effect on the earnings ratio for women and Latinos, thereby indicating increased wage discrimination. However, it has the effect of increasing the earnings ratios of African Americans, thereby indicating decreased wage discrimination. Unionization, on the

other hand, is found to have a positive impact on the earning ratios for Latinos while having a negative impact on the earnings ratios for women. Overall, these results lead to the conclusion that much more research needs to be done in the way of further explaining the determinants of wage discrimination across state civil service systems.

Table 4. State Wage Discrimination, by year*

	Female	African American	Latino
1987	-0.11	-0.05	-0.03
1988	-0.11	-0.07	-0.04
1989	-0.11	-0.09	-0.04
1990	-0.11	-0.08	-0.04
1991	-0.09	-0.10	-0.02
1992	-0.09	-0.08	0.00
1993	-0.09	-0.08	-0.01
1994	-0.08	-0.07	-0.02
1995	-0.08	-0.11	-0.04
1996	-0.08	-0.09	-0.06
1997	-0.08	-0.07	-0.09
1998	-0.08	-0.07	-0.02
1999	-0.09	-0.08	-0.01
2000	-0.10	-0.05	-0.01
2001	-0.10	-0.06	-0.02
2002	-0.10	-0.07	0.00
Total	-0.09	-0.08	-0.03

***Notes:**

Values represent coefficient estimates of the effect of being either female, African American or Latino on log wages. Therefore, female state government employees experienced an 11% wage penalty, compared to men, in 1987.

Discrimination estimates were derived from the U.S. Bureau of Labor Statistics' Current Population Survey. In order to construct reliable estimates of state government wage discrimination I use 5 year moving averages. That is, I pool five preceding years of state data in order to estimate the state government discrimination measure for a given year. The estimate for 1987, therefore, is based upon data reported in years 1983, 1984, 1985, 1986, and 1987.

Table 5. State Wage Discrimination, by region (1987-2002)*

	Female	African American	Latino
New England	-0.07	-0.14	-0.04
Middle Atlantic	-0.11	-0.08	-0.04
East North Central	-0.10	-0.08	-0.07
West North Central	-0.08	-0.03	-0.02
South Atlantic	-0.10	-0.07	0.02
East South Central	-0.08	-0.08	-0.03
West South Central	-0.10	-0.06	-0.05
Mountain	-0.10	-0.09	-0.04
Pacific	-0.09	-0.08	-0.03
Total	-0.09	-0.08	-0.03

***Notes:**

Values represent coefficient estimates of the effect of being either female, African American or Latino on log wages. Therefore, female state government employees, on average, experienced a 7% wage penalty, compared to men, in the New England region.

Table 6. State Government Wage Discrimination, by state & year (1987, 1994, & 2002)*

	Female			African American			Latino		
	1987	1994	2002	1987	1994	2002	1987	1994	2002
Alabama	-0.15	-0.12	0.00	-0.10	-0.05	-0.04	--	--	--
Alaska	-0.14	-0.10	-0.15	0.00	-0.05	-0.03	0.18	-0.19	-0.06
Arizona	-0.14	-0.12	-0.12	-0.05	-0.20	-0.17	0.12	0.03	0.02
Arkansas	-0.08	-0.17	-0.08	-0.04	-0.09	-0.03	--	--	--
California	-0.13	-0.05	-0.11	-0.09	-0.03	-0.06	0.00	-0.04	0.02
Colorado	-0.10	-0.07	-0.13	-0.14	-0.20	-0.04	-0.03	0.01	-0.06
Connecticut	-0.02	0.04	-0.14	-0.10	-0.20	-0.17	0.04	0.18	0.02
Delaware	-0.14	-0.05	-0.09	-0.09	-0.05	-0.11	0.19	-0.07	-0.01
Florida	-0.12	-0.09	-0.10	-0.05	-0.02	-0.07	-0.01	-0.03	0.01
Georgia	-0.15	-0.08	-0.16	-0.04	0.00	-0.13	-0.13	-0.47	0.10
Hawaii	-0.14	-0.12	-0.03	-0.05	-0.15	-0.46	-0.19	-0.07	-0.04
Idaho	-0.07	-0.12	-0.03	-0.30	-0.17	-0.11	0.02	-0.11	0.12
Illinois	-0.13	-0.06	-0.11	-0.03	-0.05	-0.06	-0.02	-0.02	-0.11
Indiana	-0.18	-0.16	-0.14	-0.06	-0.07	-0.17	0.11	-0.10	0.14
Iowa	-0.12	-0.07	-0.14	0.29	-0.09	0.18	0.10	-0.10	-0.08
Kansas	-0.05	-0.10	-0.13	0.06	-0.10	-0.07	0.02	0.00	-0.15
Kentucky	-0.10	-0.10	-0.09	0.08	-0.23	0.01	--	--	--
Louisiana	-0.13	-0.09	-0.09	-0.07	-0.04	-0.05	--	--	--
Maine	-0.11	-0.01	-0.04	--	--	--	--	--	--
Maryland	-0.14	-0.13	-0.05	0.04	-0.05	-0.09	-0.22	0.10	0.03
Massachusetts	-0.09	-0.10	-0.08	-0.03	0.03	-0.08	-0.02	-0.10	-0.04
Michigan	-0.07	-0.03	-0.08	-0.01	-0.08	-0.02	-0.10	-0.09	0.05
Minnesota	0.02	-0.06	-0.07	0.12	-0.09	-0.06	-0.66	-0.06	-0.35
Mississippi	-0.16	-0.04	-0.05	-0.14	-0.12	-0.10	--	--	--
Missouri	-0.13	-0.14	-0.05	-0.05	0.07	0.00	--	--	--
Montana	-0.12	-0.08	-0.04	--	--	--	-0.19	0.03	0.00
Nebraska	-0.11	-0.11	-0.11	-0.08	-0.23	-0.24	0.02	-0.06	-0.03
Nevada	-0.20	-0.08	-0.08	-0.17	-0.12	-0.02	-0.27	0.00	-0.10
New Hampshire	-0.05	0.04	-0.08	--	--	--	--	--	--
New Jersey	-0.20	-0.08	-0.05	-0.06	-0.10	-0.08	-0.03	0.08	-0.19
New Mexico	-0.16	-0.10	-0.05	0.05	-0.12	-0.26	-0.03	-0.02	0.01
New York	-0.16	-0.07	-0.10	-0.04	-0.11	-0.05	0.00	-0.03	0.03
North Carolina	-0.10	-0.04	-0.12	-0.06	-0.11	-0.03	0.16	0.17	-0.04
North Dakota	-0.08	-0.06	-0.18	--	--	--	-0.11	0.39	-0.22
Ohio	-0.05	-0.07	-0.13	-0.06	-0.03	0.01	0.10	-0.04	-0.04
Oklahoma	-0.11	-0.08	-0.17	-0.04	0.04	-0.09	-0.08	-0.11	0.09
Oregon	-0.13	-0.11	-0.06	-0.14	-0.24	0.18	0.00	-0.15	-0.08
Pennsylvania	-0.13	-0.04	-0.07	-0.01	-0.07	-0.04	0.05	-0.07	0.07
Rhode Island	-0.06	0.02	-0.10	0.01	-0.04	-0.02	0.15	-0.43	0.01
South Carolina	-0.13	-0.13	-0.13	-0.07	-0.11	-0.07	-0.48	0.06	0.43
South Dakota	-0.10	-0.04	-0.17	-0.16	-0.08	-0.11	--	--	--
Tennessee	-0.08	-0.04	-0.11	-0.12	0.04	-0.10	--	--	--
Texas	-0.06	-0.05	-0.13	-0.07	-0.08	-0.04	-0.01	-0.03	-0.06
Utah	-0.19	-0.03	-0.09	0.11	0.07	0.09	-0.25	-0.05	-0.17
Vermont	-0.03	-0.10	-0.12	--	--	--	--	--	--
Virginia	-0.06	-0.13	-0.18	-0.03	-0.06	-0.08	0.10	0.03	-0.05
Washington	-0.11	-0.01	-0.06	-0.02	-0.07	-0.03	0.00	0.04	0.01
West Virginia	-0.13	-0.13	-0.16	-0.06	0.04	0.06	--	--	--
Wisconsin	-0.01	-0.05	-0.10	-0.20	-0.12	0.06	-0.03	-0.21	-0.12
Wyoming	-0.26	-0.10	-0.12	-0.06	0.05	0.15	0.13	-0.07	0.02
United States Average	-0.11	-0.08	-0.10	-0.04	-0.08	-0.07	-0.05	-0.02	0.00

Notes: * Civil service discrimination estimates were derived from the U.S. Bureau of Labor Statistics' Current Population Survey. In order to construct reliable estimates of state government wage discrimination I use 5 year moving averages. That is, I pool five preceding years of state data in order to estimate the state government discrimination measure for a given year. The estimate for 1987, therefore, is based upon data reported in years 1983, 1984, 1985, 1986, and 1987. Estimates for 1994 and 2002 are constructed similarly.

-- States for which there are no observations for African American and/or Latino state government employees in my sample for the years examined are omitted.

Table 7. Models of State Government Wage Discrimination

	Dependent Variable: Wage Discrimination (Earnings Ratio)		
	-1- Female	-2- African American	-3- Latino
Total unemployment rate	-0.00 (0.05)	-0.01 (1.83)	0.00 (0.11)
Gross state product (in trillions)	0.03 (0.9)	-0.06 (0.95)	0.01 (0.09)
Citizen ideology	0.00 (1.39)	-0.00 (1.35)	0.00 (0.19)
Per capita income (thousands)	-0.01 (5.16) **	0.01 (2.13) *	-0.02 (2.75) **
Union membership/coverage	-0.19 (3.22) **	0.09 (0.62)	0.61 (2.54) *
Constant	1.15 (24.93) **	0.89 (8.92) **	1.01 (5.31) **
State Fixed Effects	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes
Observations	800	720	608
Number of State	50	45	38
R-squared	0.39	0.31	0.36
(Robust t statistics in parentheses)			
* significant at 5%; ** significant at 1%			

Chapter 5 State Civil Service Wages Compared to Private Sector Wages

Arguably one of the most important tasks of any human resources system is the compensation of its employees in a manner that ensures quality candidates will be attracted to the organization and high performing employees will be retained. In fact, the Pendleton Act's insistence upon ensuring relative security of tenure for federal employees was, in essence, an attempt to provide a compensation system that discouraged federal employees from seeking to supplement their salaries unethically. As such, how a human resources system compensates its employees serves as a key indicator of its performance, and one critical measure of performance related to compensation has been the manner in which public sector organizations compensate their employees relative to the private sector. From a purely market-based perspective, logic holds that employees of equal skill and talent will naturally seek to maximize their wages, and if public sector organizations are found to consistently compensate employees at below private sector wage rates, then one can assume they would be at a competitive disadvantage in the market for talented workers.

In many respects, the perception of the public sector operating at a competitive disadvantage with regard to compensation is commonly accepted within the field of public administration. At all levels of government, it is not uncommon to hear public sector managers speak of their inability to

recruit top college graduates because of counter offers from private sector employers, and reforms such as pay-banding and merit pay have been sold as potential solutions to this assumed managerial dilemma. This assumption has been so accepted in the field of public administration that the vast majority of the literature within public administration does not even attempt to assess the presence or extent of public/private wage gaps. Instead, scholarly work has focused primarily on the processes and legal context of public sector compensation, such as designing an effective classification system, conducting salary surveys, evaluating employee performance, and ensuring equal pay for equal work.

On the other hand, the field of labor economics has addressed the issue of public sector wages independently of the field of public administration. While not greatly concerned with public sector compensation systems and processes, research in this area is focused primarily on verifying the presence and extent of a public/private wage gaps. This approach has resulted, at the state level, in wage gap estimates aggregated across the states. However, the field has paid no attention to variation in wage gaps across the states, a topic of considerable importance to public administration scholars. In this chapter, I address this gap in the literature by estimating the presence and extent of wage gaps between the state civil service and private sector for all fifty states, from 1987 to 2002. I begin by discussing public sector compensation systems, paying particular attention to the methods by which the public sector attempts to

offer competitive wage rates. Next, I review the literature on public/private wage gaps, emphasizing prior estimates of gaps between state civil service wages and private sector wages. I then describe the data and methodology I use to estimate wage gaps at the state level, and last, I conclude with a discussion of the historical variation in wage gaps between the states, as well as the results of an explanatory model of this variation.

Public Sector Pay: Striving to Compete

Compensation in the public sector has experienced numerous transformations since the reforms of the late 1800s, and current debate on the issue has been centered on topics such as pay comparability with the private sector and pay-for-performance.¹⁹ However, at the core of each of these topics of debate are questions surrounding the recruitment and retention of qualified employees capable of carrying out the will of the state. Simply stated, in order for the public sector to carry out critical tasks such as law enforcement or emergency management, it must offer wages that are clearly competitive with the private sector. If not, it is destined to be shunned by high performing candidates, as well as fight the constant lure of more lucrative private sector employment. This challenge is even further intensified in those locations and agencies where the public sector has moved away from long-term employment relationships, long considered one of the most desirable aspects of public

¹⁹ In this chapter, compensation refers to salaried compensation and not total compensation.

sector employment, to less stable ones such as at-will employment or temporary employment agreements.

Public sector pay rates have generally been an outcome of the political process given their nearly complete reliance on tax revenue. Legislators, executives, and public sector unions all play some role in determining what public employees in their jurisdictions are to be paid. As one may surmise, a myriad of factors come into play during this process. Among other things politicians and policymakers must based their decisions on the extent of tax revenues for a particular jurisdiction, the financial needs of other public sector programs, and last, comparable pay rates for similar occupations in other employment sectors. However, given this complex interplay of competing forces, it is still clear that the critical goal of public sector pay remains the ability of the public sector to offer pay rates that are comparable or competitive with those in the private sector.

To identify competitive pay rate levels, most public sector organizations rely upon salary surveys of comparable positions in the private sector. Since these positions are the most likely alternative for potential or current public sector employee, it is the goal of public sector organizations to offer pay rates that are at or at least near private sector rates. These rates are commonly referred to as "prevailing rates." However, there are a number of issues that arise when seeking to identify prevailing rates for public sector occupations. First, and most relevant to the previous chapter, if there are patterns of wage

discrimination that are present in the private sector labor market, then basing public sector pay rates upon this market only perpetuates these patterns of discrimination. Second, policymakers must determine which labor markets are most appropriate for a comparison of pay rates. Inappropriate comparisons could potentially lead to higher or lower prevailing rates than needed. For example, if New York State were seeking to determine the prevailing rate for its state accountants, it would be folly to survey the pay rates of accountants working in the State of Mississippi, given the lower cost of living in the latter state. Quite naturally, New York would need to survey pay rates in regions with similar costs of living, such as Pennsylvania or New Jersey. The third major issue confronted in seeking prevailing pay rates in the public sector concerns the willingness of political decision makers to actually adjust pay rates when necessary. In areas where public opinion of the quality of government services is low, calling for increased public sector pay rates may be unfavorable. Nigro et al. shed further light on this phenomenon and point out that,

When authorizing changes in base pay, legislators tend to be more generous with those in the lower ranks. These lower-paid workers are more numerous and they are more likely to be able to exert strong political pressure. Managerial and executive personnel, on the other hand, usually do not have much clout in the electoral process. In the face of relatively high pay on the top levels of the non-elected bureaucracy, legislators and the voting public are more likely to be responsive to the plight of the underdog (2007, p. 149).

The authors later point out, the tendency to raise lower-level salaries and keep upper-level salaries constant can eventually lead to salary compression, a situation in which there is minimal variation between salary grades within an organization. Under some circumstances, this can lead to public sector pay rates that are artificially high for lower level positions and too low for higher-level, professional positions, thus furthering the recruitment and retention challenge.

Overall, the success of the public sector in offering prevailing salary rates varies across levels of government. At the federal level, the Federal Employees Pay Comparability Act (FEPCA) of 1990 sought to address the issue by establishing a number of guidelines/goals in setting federal pay, some the most critical of which include: pay comparability based upon local area of employment, comparison to all non-federal labor markets, and elimination of gaps in pay between the federal and non-federal sectors. As a result of this legislation, federal employees are now paid at rates that vary by geographic location such that a federal accountant in San Francisco, CA is paid more than an identical accountant in Athens, GA, and cost of living adjustments are made on a yearly basis. Although there are no uniform guidelines for setting pay rates at the state and local levels, prior research has shown that to varying degrees, state and local governments do offer salary rates that are comparable to the private

sector (Nigro, Nigro, & Kellough, 2007, p. 153-154). It is to this area, the presence of pay comparability in the public sector, that I now turn my attention.

Public/Private Wage Gaps: Prior Evidence

Due to the political salience of public sector compensation, the literature on public/private wage gaps is both expansive and somewhat mixed with regard to findings on the presence and extent of wage penalties or premiums for public sector employees. As Miller (1996) points out, prior findings can, in some instances, be attributed to ideological bias in choice of methodological approaches to estimating public versus private sector wage differentials. For instance, researchers can choose to simply compare the average salaries of public and private sector employees, ignoring differences in the occupational composition of each sector. Doing so almost certainly results in estimates of public sector wage premiums, given the absence of low-paying service sector jobs in the public sector. On the other hand, researchers can choose to consider the public sector as a whole when making comparisons to private sector employment, thus disregarding differences in compensation practices between federal, state, and local government. This methodology inevitably provides a skewed picture of public sector compensation because it ignores both differences in occupational composition and compensation policies between different levels of government. Still, researchers can choose to treat state and local public sector employment in the aggregate and thereby

disregard any variation that may or may not exist between the states and localities.

Given the range of methodological approaches to estimating public versus private sector wage differentials, it should come as no surprise that there is also a great range of findings in this research area. In an effort to provide as clear a review of the literature as possible, I will focus on a number of key research findings that are widely cited in the literature on public/private wage gaps and specifically reference findings at the state level. In one of the earliest works devoted to the public/private wage gap, Smith found that, contrary to the prevailing assumption in public administration, public sector wages, excluding benefits, were found to be higher than private sector wages, but that this gap varied according to level of government (Smith, 1977). Specifically, Smith found that when simply comparing average hourly wages, based upon 1975 CPS data, public sector wages at all levels of government exceed those in the private sector for both males and females. However, when controlling for common wage determining characteristics such as education, experience, and occupation, these wage premiums disappeared in some instances. At the state level, men were found to experience an overall wage penalty when compared to similar males employed in the private sector while women were found to experience an overall wage premium when compared to women in the private sector.

Belman and Heywood (1988) provide a more nuanced analysis of the public private wage gap by looking at the gap between public

administrators (public sector employees also classified as administrators) and private sector employees. Using 1978 CPS data, they find that, controlling for common human capital characteristics, public administrators experience wage premiums at all levels of government, with the largest experienced at the federal level and the smallest at the local level. However, unlike Smith (1977), they do not estimate results separately by gender.

In one of the first efforts to provide a disaggregated analysis of public private wage gaps, Belman and Heywood (1995) estimate the wage gaps among a sample of seven states (Wisconsin, Ohio, Indiana, Illinois, Michigan, Mississippi, and California) with particular attention paid to Wisconsin. In support of conducting a disaggregated analysis of wage gaps, the authors point out that the aggregated analysis conducted in earlier studies "may provide inaccurate estimates of state and local government earnings differentials and may also produce inappropriate policy decisions...Aggregated data may incorrectly suggest that state compensation is roughly comparable, but disaggregated data may show that this is the result of differentials of offsetting signs" (p. 187). Using CPS data from 1989, 1990, and 1991, the authors found the average hourly wage for state employees in Wisconsin to be \$12.68 as compared to \$10.23 in the private sector and \$11.45 at the local level of government (p. 195). When controlling for common wage determining factors, such as education, marital status, and occupation, the authors find that state employees in Wisconsin

experience a 5.8 percent wage premium compared to similar private sector workers. When comparing Wisconsin state employees to all non-state government employees, the authors estimated an average premium of 2.34 percent (p, 194). When extended to the six other states in their analysis, the authors find considerable variation. In particular, state government employees in Mississippi experience a penalty of 2.44 percent while state government employees in California experience a premium of 3.05 percent when compared to all other non-state government employees.

Although most studies of public/private wage gaps utilize the Current Population Survey to estimate sector specific wage gaps, Miller expands upon the previous literature by utilizing the Bureau of Labor Statistics's Occupational Compensation Survey Program (OCSF) (1996). Unlike the more comprehensive Current Population Survey, the OCSF survey is designed to provide a comparison of specific occupations, forty-four in all, across the major sectors of employment, private, federal, state, and local. Using 1993 OCSF data on twenty-two white-collar occupations, Miller finds that occupations in the private sector were paid more than similar occupations at the state and local levels approximately 80 percent of the time (p. 22). Additionally, Miller finds that within professional and administrative occupations, state and local government pay rates were comparable to rates in the private sector for budget analysts and personnel specialists, but that "private industry paid a premium of 10

percent to 19 percent for entry-level workers in 6 of the 11 professional and administrative occupations" (p. 23).

In one of the more recent studies of the public private pay gap issue, Borjas (2003) seeks to explain the manner in which wage compression in the public sector has had the effect luring high-skilled laborers into the private sector where there is a much greater degree of wage dispersion and subsequent opportunities for advancement. In describing overall trends in public and private sector pay, Borjas provides an aggregated estimate of the public private pay gap, by sector, from 1977 to 2001 using CPS data as well as data from the Public Use Microdata Samples. Estimating wage gaps separately for men and women and controlling for common human capital characteristics, Borjas finds that state employees, when compared to employees in the private sector, experience overall wage penalties across all years. In the case of men employed in state government, Borjas finds that penalties have gradually decreased from approximately 15 to 20 percent in 1980 to roughly 10 percent in 2000. For women in state government, Borjas finds that they experience wage penalties of approximately 10 percent throughout the period with episodic increases in penalties occurring in the mid-1980s and late 1990s.

Overall, what should be clear from a survey of the literature is that the results of estimating public/private wage gaps is largely dependent upon one's choice of methodology as well as the decision to aggregate or disaggregate data across employment sectors. In the following section, I review the

methodology I use to estimate disaggregated public private wage gaps at the state level.

Estimating State Public versus Private Pay Gaps

As outlined in Chapter 2, I estimate disaggregated public private pay gaps at the state level for each state and year from 1987 to 2002. Estimating disaggregated gaps at the state level is important given evidence of considerable variation in state level pay gaps previously found in the literature (Belman & Heywood, 1995). For each state and year, I estimate three log wage equations using only state government employees and private sector employees in my sample population. The first equation contains both men and women and includes a dummy variable for state government employment. To address differences in pay between men and women, the second two equations are estimated separately for women and men. In sum, this approach provides me with three distinct estimates of the public/private wage gap, one for all state employees, one for men, and one for women.

Table 8 lists the average public private pay differentials, both overall and by gender, across all states from 1987 to 2002. Overall, state employees, experienced a wage premium, 2 percent, when compared to similar employees in the private sector. These results also show that the premium peaked in the early 1990s and was essentially erased by 2002. However, the results for women and men are considerable different. As has been discussed in the previous chapter, women in the public sector tend to experience less discrimination than women in the private sector, and these results confirm prior findings. On average, women employed in

state government experienced a 4 percent premium over the years covered with the premium peaking at 6 percent in the early 1990s and steadily declining to 2 percent by 2002. Men, on the other had, experienced a wage penalty of 2 percent over the years covered, with the smallest penalties occurring throughout the nineties.

Table 9 presents estimates of the public private pay gap by region, and, as can be seen, there is considerable variation. For men and women combined, state government wage premiums are highest in the Middle Atlantic and East North Central regions and non-existent throughout the South. Women experienced wage premiums across all regions, with the highest premiums, 7 percent and 6 percent, occurring in the Middle Atlantic and East North Central regions. For men, the story is much more mixed, but, on average, men experienced a wage penalty in state government. However, in the Middle Atlantic, East North Central, and Pacific regions they experienced wage premiums across the years covered.

Table 10 unpacks results from the prior two tables and provides public private pay gap estimates by state for years 1987, 1994, and 2002. Overall, the state-by-state results are consistent with those aggregated by year and region. The wage premium experienced by men and women combined is gradually erased from 1987 to 2002; however, there are still states such as Wisconsin, Michigan, and Minnesota where state employees experienced substantial wage premiums. For women, results show an overall decrease in wage premiums across each of the time periods, and by 2002, there are a considerable number of states,

such as Texas and Colorado, where wage premiums experienced in prior years have shifted into wage penalties. Results for men also tell an interesting story. As expected, men in state government experienced overall wage penalties when compared to similar men in the private sector. However, there are states in which male state civil service employees have experienced consistent wage premiums when compared to those in the private sector. In particular, men employed by the States of California, Illinois, Michigan, Montana, Nevada, and Texas experienced wage premiums in each of the time periods shown.

Determinants of Public Sector Wage Gaps

Given the variation in public private pay gaps across the states, I now explore the factors that may be significant determinants of state level variation. To date, there has been relatively little research on the determinants of state government compensation, and virtually no research attempting to explain the variation in public/private wage gaps across the states. As a result, many of the independent variables that I include in the following explanatory models are done so on the basis of prior research linking them to other aspects of public sector compensation.

Political Ideology

As was discussed earlier, public sector pay rates are highly influenced by political forces. In states where public sector employees are disparaged, one would expect policymakers to be reluctant to support increases in public sector salaries. On the

other hand, one could reasonable expect more support for public sector pay, as witnessed by prevailing rate wages, in those states with more favorable views of both government and public sector employment. Given the common platform of reduced government endorsed by contemporary Conservatives, I predict that more liberal states will pay state government employees at rates on par with those offered in the private sector (Kearney, 2003).

Gross State Product (GSP) & Per Capita Income

The variables GSP and per capita income are included for fairly straightforward reasons. The vast majority of state government payroll costs are funded through tax revenues from both industry and personal income.²⁰ Therefore, it is reasonable to expect that those states with more prosperous economies, as demonstrated by GSP and per capita income, will be more able to pay their state government employees at rates on par with those offered in the private sector. This relationship is consistent with prior research finding per capita income to be positively related to average state salaries (Kearney, 2003). As such, I predict that state economic prosperity, as measured by GSP and per capital income, will be positively related to public sector wages, relative to those in the private sector.

²⁰ It should be noted that there are states, such as Texas, that do not tax the personnel income of their residents. This further justifies the inclusion of GSP as a measure of state economic status.

Total Unemployment Rate

Much like the GSP and per capita income, state unemployment is an indicator of state economic health. In times of high unemployment, one would expect there to be a surplus of candidates for all jobs, especially those in the public sector given their general insulation from economic downturns. Based upon the increased appeal of public sector employment during these periods, it is logical to assume that state governments would be able to pay wage rates either at or lower than comparable private sector wage rates. As such, I predict that the state unemployment rate will be inversely related to public sector wages, relative to those in the private sector.

Unionization

Public sector unions are generally regarded as advocates for competitive public sector pay rates, and research has found that state unions, through their collective bargaining processes, positively impact state employee wages (Belman, Heywood, & Lund, 1997; Kearney, 2003; Kearney & Morgan, 1980). Using 1991 CPS data, Belman et al. (1997) found unionization to positively impact earnings for both state and local government employees, and, using data from the 2002 *Governing Source Book*, Kearney (2003) found the extent of unionization to positively related to average state employee salaries. As such, I predict that state government unionization rates will be positively related to public sector wages, relative to private sector wages.

Results

Using the variables described above, I construct a state-level panel data set with 800 observations from years 1987 to 2002. I then estimate a fixed-effects model where my dependent variable is the gap in pay between comparable public and private sector employees. To assist in the interpretation of my results, estimates of pay gaps are recalculated as earnings ratios. For example, if state government employees experienced 2 percent wage penalty relative to comparable private sector employees in a given year and state, this would be expressed as an earnings ratio of 95 percent. In other words, state government employees would be expected to earn 95 percent of the wages of comparable private sector employees for that state and year.

Table 11 shows the results of my explanatory models of public private pay gaps at the state level. Specifically, column one presents results for all state employees, column two for women, and column three for men. There is minimal support for my predicted effect of liberalism upon state government pay. I find significant results only in the case of women, and, even in this case, the effect size is nearly imperceptible.

Surprisingly, results for the impact gross state product on state government pay are not as predicted. In all three models, I find that gross state product negatively impacts state government earnings such that a one trillion dollar increase in GSP results in a 9 percent decrease in civil service wages for all state employees, a 9 percent decrease for female state

employees, and a larger, 10 percent decrease for male state employees. Although not as predicted, these results suggest that more prosperous states may enjoy private sector salary rates that are simply too high for state governments to match, either on fiscal or political grounds. Interestingly enough, the results for per capita income do not match those for GSP. I find that per capita income is a significant predictor of state employee earnings in all three models, but that it is positive for overall and male state employment and negative in the case of female employment. However, the effect sizes are substantial only in the case of males, with a one thousand dollar increase in per capita income resulting in a 1 percent increase in male state employee wages.

Results for the effect of unemployment on state employee earnings are also not as predicted. Coefficients are positive and significant in all three models; however, in all three cases, the impact of increases in state unemployment rates is less than 1 percent. Given the relatively stability of public sector employment, these results may be indicative of decreases in private sector wage rates due to excess labor supply which, in turn, would lead to higher relative public sector earnings.

Last, results for the impact of unionization on public sector wages are significant in the case of overall state employment and female state employment. As predicted, the impact of unionization is positive, and results suggest that a 1 percent increase in unionization rates results in a 10 percent increase

in earnings for all state employees and a 16 percent increase in earnings for female state employees.

Chapter Summary

Results from this chapter indicate that state civil servants experience an overall wage premium of 2 percent when compared to employees of similar human capital characteristics in the private sector. However, when separated by gender, this premium is erased for men such that they experience a 2 percent wage penalty. On the other hand, female state civil servants experience a wage premium of 4 percent. When separated by geographic region, it is found that women fare best in the Middle Atlantic and East North Central states while men fair worst in the South Atlantic and East South Central states.

In testing possible determinants of public private pay equity, I find considerably mixed results. Citizen liberalism is found to positively impact civil service wages for women but have no effect on men. Surprisingly, gross state product is found to negatively impact the earnings of all state civil servants, regardless of gender. However, per capita income is found to positively impact male civil service wages while negatively impacting female state civil service wages. Although effect sizes are relatively small, state unemployment is found to positively impact wages for all groups of civil servants, and unionization is found to positively impact wages for both female civil servants and civil servants as a whole.

Table 8. Public/Private Wage Gaps, by year*

	Overall	Female	Male
1987	0.01	0.05	-0.03
1988	0.02	0.05	-0.03
1989	0.02	0.06	-0.02
1990	0.03	0.06	-0.01
1991	0.03	0.06	-0.01
1992	0.03	0.06	-0.01
1993	0.03	0.06	-0.01
1994	0.02	0.05	-0.01
1995	0.02	0.04	-0.01
1996	0.01	0.03	-0.01
1997	0.01	0.03	-0.01
1998	0.00	0.03	-0.02
1999	0.01	0.03	-0.02
2000	0.01	0.02	-0.01
2001	0.00	0.02	-0.02
2002	0.00	0.02	-0.02
Total	0.02	0.04	-0.02

***Notes:**

Values represent coefficient estimates of the effect of being a state government employee on log wages. Therefore, state government employees experienced a 1% wage premium, compared to private sector employees, in 1987.

Estimates were derived from the U.S. Bureau of Labor Statistics' Current Population Survey. In order to construct reliable estimates, I use 5 year moving averages. That is, I pool five preceding years of data in order to estimate the effect of being a state government employee for a given year. The estimate for 1987, therefore, is based upon data reported in years 1983, 1984, 1985,

Table 9. Public/Private Wage Gaps, by region* (1987-2002)

	Overall	Female	Male
New England	0.02	0.05	-0.01
Middle Atlantic	0.05	0.07	0.02
East North Central	0.04	0.06	0.01
West North Central	0.01	0.04	-0.02
South Atlantic	0.00	0.04	-0.04
East South Central	0.00	0.04	-0.06
West South Central	0.00	0.02	-0.03
Mountain	0.01	0.04	-0.01
Pacific	0.02	0.04	0.01
Total	0.02	0.04	-0.02

***Notes:**

Values represent coefficient estimates of the effect of being a state government employee on log wages. Therefore, state government employees experienced a 2% wage premium, compared to private sector employees, in the New England region.

Table 10. Public/Private Wage Gaps, by state and year (1987, 1994, & 2002)*

	Overall			Female			Male		
	1987	1994	2002	1987	1994	2002	1987	1994	2002
Alabama	0.06	0.00	-0.06	0.12	0.05	0.02	0.02	-0.07	-0.15
Alaska	0.15	0.10	-0.04	0.16	0.09	-0.06	0.12	0.10	-0.03
Arizona	0.00	-0.02	-0.01	0.01	0.01	0.00	-0.01	-0.05	-0.01
Arkansas	0.02	0.02	0.01	0.04	0.06	0.02	-0.05	-0.04	0.01
California	0.06	0.05	0.02	0.09	0.06	0.01	0.03	0.03	0.05
Colorado	0.04	0.02	-0.04	0.09	0.08	-0.02	-0.02	-0.05	-0.07
Connecticut	0.04	0.07	0.12	0.13	0.13	0.11	-0.06	0.01	0.15
Delaware	0.03	-0.02	0.01	0.06	0.00	0.04	-0.05	-0.05	-0.03
Florida	-0.03	-0.08	-0.02	0.02	-0.05	0.03	-0.07	-0.10	-0.13
Georgia	0.03	0.01	0.01	0.07	0.01	0.01	0.01	0.00	0.01
Hawaii	-0.05	-0.02	-0.07	-0.01	-0.04	-0.03	-0.08	0.03	-0.11
Idaho	-0.03	0.04	0.00	0.03	0.08	0.04	-0.13	0.02	-0.01
Illinois	0.04	0.01	0.05	0.05	0.01	0.05	0.02	0.03	0.03
Indiana	-0.05	-0.03	0.01	-0.02	-0.02	0.02	-0.08	-0.05	-0.02
Iowa	0.03	0.12	0.00	0.06	0.17	0.04	0.03	0.04	-0.03
Kansas	0.01	0.04	0.01	0.04	0.04	0.06	-0.03	0.05	-0.04
Kentucky	-0.01	0.01	0.02	0.04	0.05	0.07	-0.09	-0.04	0.01
Louisiana	-0.02	0.02	-0.07	0.00	0.03	-0.04	-0.08	0.00	-0.11
Maine	-0.03	0.03	-0.06	-0.03	0.00	-0.03	-0.03	0.07	-0.10
Maryland	0.04	0.04	-0.02	0.08	-0.03	-0.01	-0.02	0.12	-0.03
Massachusetts	-0.02	0.01	-0.05	0.00	0.02	-0.04	-0.04	-0.01	-0.04
Michigan	0.09	0.07	0.05	0.14	0.10	0.08	0.03	0.03	0.01
Minnesota	0.09	0.08	0.05	0.18	0.10	0.07	-0.02	0.06	0.01
Mississippi	-0.05	-0.04	-0.03	-0.03	0.00	0.06	-0.09	-0.10	-0.10
Missouri	0.01	-0.03	-0.08	0.03	-0.05	-0.02	-0.03	-0.04	-0.13
Montana	0.04	0.05	0.04	0.08	0.09	0.04	0.01	0.00	0.03
Nebraska	-0.06	0.04	-0.01	-0.01	0.05	-0.01	-0.12	0.04	-0.02
Nevada	0.02	0.08	0.08	0.02	0.15	0.10	0.02	0.01	0.04
New Hampshire	-0.12	-0.04	-0.07	-0.09	0.05	-0.06	-0.13	-0.11	-0.07
New Jersey	0.00	0.06	0.05	0.05	0.10	0.05	-0.06	0.00	0.04
New Mexico	0.03	0.11	0.01	0.00	0.09	0.05	0.03	0.11	-0.02
New York	0.03	0.06	0.02	0.05	0.08	0.05	0.01	0.04	-0.01
North Carolina	0.06	0.00	0.03	0.08	0.06	0.04	0.04	-0.06	0.04
North Dakota	-0.03	0.00	0.02	0.04	0.03	0.01	-0.11	-0.03	0.05
Ohio	0.02	0.03	0.02	0.07	0.09	0.02	-0.06	-0.04	0.01
Oklahoma	0.02	0.01	0.00	0.05	0.05	0.03	-0.04	-0.05	-0.04
Oregon	-0.08	0.04	0.02	-0.01	0.05	0.03	-0.14	0.05	-0.01
Pennsylvania	0.07	0.03	0.06	0.10	0.08	0.08	0.04	0.00	0.02
Rhode Island	0.05	0.08	0.06	0.16	0.10	0.06	-0.08	0.07	0.08
South Carolina	0.03	-0.01	0.02	0.10	0.02	0.03	-0.03	-0.02	0.02
South Dakota	-0.04	0.01	0.01	-0.01	0.01	0.01	-0.07	0.01	0.00
Tennessee	-0.04	0.01	-0.05	-0.04	-0.01	-0.01	-0.07	0.04	-0.06
Texas	0.06	0.03	-0.02	0.08	0.03	-0.04	0.02	0.03	0.01
Utah	-0.05	-0.12	-0.04	-0.05	-0.12	0.00	-0.05	-0.13	-0.09
Vermont	-0.03	0.00	-0.10	0.07	0.08	-0.07	-0.11	-0.09	-0.12
Virginia	0.04	0.07	0.00	0.08	0.13	0.04	0.00	-0.01	-0.05
Washington	0.07	0.11	0.00	0.12	0.13	0.03	0.02	0.09	-0.06
West Virginia	-0.10	-0.08	-0.09	0.03	-0.03	-0.05	-0.19	-0.13	-0.11
Wisconsin	0.12	0.00	0.09	0.19	0.02	0.12	0.00	-0.03	0.03
Wyoming	0.05	-0.01	0.01	0.09	0.11	0.00	0.04	-0.13	0.01
United States Average	0.01	0.02	0.00	0.05	0.05	0.02	-0.03	-0.01	-0.02

Notes: * Estimates were derived from the U.S. Bureau of Labor Statistics' Current Population Survey. In order to construct reliable estimates I use 5 year moving averages. That is, I pool five preceding years of state data in order to estimate the public/private wage gap for a given year. The estimate for 1987, therefore, is based upon data reported in years 1983, 1984, 1985, 1986, and 1987. Estimates for 1994 and 2002 are constructed similarly.

Table 11. Models of Public/Private Wage Gaps

	Dependent Variable: Public/Private Wage Gap (Earnings Ratio)		
	-1- All	-2- Women	-3- Men
Citizen ideology	0.000 (1.76)	0.001 (2.24) *	0.000 (0.19)
Gross state product (in trillions)	-0.094 (4.16) **	-0.092 (3.34) **	-0.107 (3.17) **
Per capita income (thousands)	0.003 (1.99) *	-0.004 (2.55) *	0.010 (4.58) **
Total unemployment rate	0.005 (3.25) **	0.004 (2.51) *	0.005 (2.69) **
Union membership/coverage	0.101 (2.27) *	0.168 (3.40) **	0.056 (0.97)
Constant	0.893 (26.64) **	1.006 (26.11) **	0.767 (16.21) **
Observations	800	800	800
Number of State	50	50	50
R-squared	0.67	0.64	0.56
Robust t statistics in parentheses			
* significant at 5%; ** significant at 1%			

Chapter 6 Does Civil Service Reform Make a Difference Regarding Equity? An Exploratory & Preliminary Analysis

The history of personnel reform in the United States is one that is long and varied. From the Pendleton Act of 1883 to current efforts to reform the personnel systems of the federal Departments of Homeland Security and Defense, public sector personnel systems have constantly come under scrutiny and been viewed as a means of enhancing government performance and effectiveness. In its simplest form, one can distinguish between two phases of personnel reform, the first being the movement to institute highly structured and standardized civil service systems to combat abuses inherent in spoils systems of the late 1800s, and the second being the movement of the past thirty years to incorporate more flexibility and less structure into personnel systems in an effort to address inefficiencies inherent in the former systems. Key products of the first reform movement included codified merit systems, centralized personnel administration, strict classification of work processes and occupations, and highly structured compensation systems. Each was critical because they ensured uniformity across the government such that no one agency or managerial layer could detrimentally influence the entire system. For instance, a centralized personnel system helped ensure that all candidates for employment were treated fairly and equitably, and that the principle of merit was applied uniformly. The second reform

movement ushered in changes aimed at increasing managerial discretion and flexibility, such as decentralized personnel authority, merit-based compensation plans, and an increasing reliance on the privatization of government services.

Although there have been an array of reforms implemented at all levels of government, I have chosen to focus specifically on two reforms that have been widely implemented across the states, the decentralization of personnel authority and the use of private sector contractors to provide government services. It should be emphasized that both of these reforms have the potential to substantially impact state civil service systems. This chapter begins by providing a summary overview of both reform movements, with particular attention paid to the Pendleton Act of 1883, the New Public Management/Reinventing Government movement, and specific recommendations made by the National Commission on the State and Local Public Service (Winter Commission). I then provide a detailed discussion of personnel decentralization and private sector contracting. To illustrate the diversity of reform efforts within state governments, I provide brief case studies of reforms in the States of Georgia, Florida, New York, and South Carolina. Last, I review past literature on the impact of personnel reform, and discuss the results of my exploratory analysis of the extent to which state personnel decentralization and state government contracting influence bureaucratic representation rates, civil service wage discrimination, and public private wage gaps.

Early Civil Service Reform

When compared to the reforms of the past thirty years, it is perhaps a bit ironic that the first public sector reform movement was led by a push for standardization and centralization of personnel processes. In response to the corruption, party patronage, and nepotism which was characteristic of public personnel administration in the early 19th Century, government reformers sought to institute a system that would provide the benefits of employing a stable class of public employees, in this case federal, while at the same time opening public service up to the population at large on a competitive basis. Prior to this period, civil service appointments were generally made on the basis of political affiliation, not on individual merit, and with each change of the political landscape, the civil service changed with it. This process ultimately made it more difficult to implement government programs since civil servants were not required to possess any particular expertise in their occupations, and were subject to high degrees of political turnover. Nigro et al. summarize the goals of the reformers well in stating that,

Advocates of civil service reform wanted a stable infrastructure for their commercial activities...By advancing "neutral competence" as *the* core value of public service, the civil service reformers sought to undermine a critical element of the machine's base of electoral power and administrative control—patronage (2007).

What resulted was the Pendleton Act of 1883. Loosely based upon the British Civil Service system, the Act established the

nation's first traditional civil service merit system supported by the three pillars of *neutral competence*, *merit-based selection*, and *relative security of tenure*. It was thought that these three pillars, working in conjunction, would sufficiently insulate public sector employees from the whims of politics and the temptation of corruption and would ensure politically neutral competence. To maintain a sense of political neutrality among the civil service population, candidates were to serve political leaders of either party with equal fidelity and without regard to their political affiliation. To ensure that only the most qualified candidates were selected, a system of open and competitive civil service examinations was instituted, and to prevent the practice of political coercion, civil servants were shielded from removal on political grounds. Along with establishing a merit system, the Pendleton Act created the Civil Service Commission, a central personnel agency tasked with staffing the federal bureaucracy in an independent manner while meeting the goals laid forth in the Act. Although the Act did not immediately move all federal employees into the protected or "classified" civil service, each subsequent Presidential administration, in an attempt to broaden its influence, increased the number of employees covered by the original Act (Van Riper, 1958).

State and local governments across the nation, not immune to the transformation taking place at the federal level, eventually took heed, and, by the 1930s and 1940s, most possessed civil service systems highly similar in both form and substance to that

of the federal government²¹ (Nigro, Nigro, & Kellough, 2007). In states such as New York, the first to adopt a formal merit system, personnel processes were very similar to those of the federal government, with centralized hiring authorities, strict procedures for selection, and strong employee protections. In fact, one of authors of the Pendleton Act, Everett Wheeler, also assisted in drafting the legislation that created New York's civil service system (Chi, 2005). Hallmarks of these formal and standardized systems included strong central control over the selection of civil servants, as well as a strict adherence to civil service rules and procedures with regards to the classification, promotion, and dismissal of employees.

Renewed Calls for Reform

Fast forward to the late 1970s and personnel systems designed to enhance efficiency and fight the ills of previous spoils systems had come to be disparaged in many quarters. Instead of ensuring that public employees were hired and compensated in an equitable and just manner, a common perception emerged that these systems actually did more to impede effective personnel management rather than aid it. Of course, this is not to say that this perception was an accurate portrayal of the status of all personnel systems, but the typical view was reflected in Savas and Ginsberg's influential article "The Civil

²¹ In fact, states receiving federal funds were required to implement merit systems as means of ensuring that state programs funded by the federal government would also implemented by a meritorious, neutrally competent civil service.

Service: A Meritless System?" In it, they describe a New York State civil service system that "prohibits good management, frustrates able employees, inhibits productivity, lacks the confidence of the city's taxpayers, and fails to respond to the needs of the citizens" (1973, p. 89). They go on to state that "while this bleak picture may not yet be fully representative of all civil service systems in the country, neither is it uncommon. Furthermore, considering that New York often serves as a leading indicator of societal problems, this pattern, if it has not already been reproduced elsewhere, may be soon - unless a groundswell of popular opinion leads to a new wave of reform (p. 89)."

In many respects, Savas and Ginsberg's commentary on the New York State civil service system was indicative of a growing tide of sentiment against the core components of traditional civil service systems, namely centralized hiring authority, standardized compensation plans, and relatively strong employee protections compared to the private sector. By the late 1970s, calls to reform the federal civil service system resulted in the Civil Service Reform Act of 1978. Based on the belief that the rules and standards of the federal civil service system actually limited effectiveness, the legislation abolished the U.S. Civil Service Commission and introduced a number of reforms, including the limited use of pay-for-performance compensation systems, the establishment of a Senior Executive Service, and creation of the

U.S. Office of Personnel Management to serve as the federal government's central personnel agency. Unlike the Civil Service Commission, which possessed a significant degree of independence from the Executive branch, the Office of Personnel Management was subject to direct executive control with its Director being appointed by and serving at the pleasure of the President.

Although the decade of the 1980s witnessed relatively few calls for wholesale reform of civil service, as was called for in the Civil Service Reform Act of 1978, the 1990s ushered in an era of drastic change. As part of the New Public Management and Reinventing Government movements, personnel systems were once again the target of efforts to increase public sector performance. Proponents of reform called for increased managerial flexibility and a greater focus on customer service rather than a strict rules-based approach characteristic of traditional systems (Osborne & Gaebler, 1992).

As a result of their efforts, some aspects of the federal civil service were significantly reformed in the mid 1990's under Vice President Al Gore's National Performance Review (NPR) (Gore, 1993). Based in large part on the ideas and recommendations of the overall reinvention movement, NPR sought to transform the federal bureaucracy by streamlining civil service rules and procedures, as well as cutting the overall size of the civil service workforce. Specifically, NPR advocated a number of action items under the goals of "Cutting Red Tap" and "Empowering Employees to Get Results." In the area of personnel administration, key action items achieved included the

abolishment of the Federal Personnel Manual (a lengthy policy handbook), the decentralization of recruitment and examining authority away from the Office of Personnel Management to individual federal agencies, simplification of the complex federal classification system, and customization of agency performance evaluation systems (p. 497-502).

The focus on reinventing the public sector was not only limited to the federal government. In 1993, the National Commission on the State and Local Public Service, chaired by former Mississippi Governor William Winter and commonly referred to as the Winter Commission, issued its call for reforms in its aptly titled report, *Hard Truths/Tough Choices: An Agenda for State and Local Reform*. Similar in spirit to NPR, the report began by stating that "state and local institutions of government need to drastically improve their capacity and performance if we are to meet the challenges of our rapidly changing economic and social systems" (p. 1). In particular, the report made ten recommendations for reform centered around the themes of "Removing the Barriers to Stronger Executive Leadership," "Removing the Barriers to Lean, Responsive Government," "Removing the Barriers to a High-Performance Workforce," "Removing the Barriers to Citizen Involvement," and "Reducing Fiscal Uncertainty" (p. 9). In the area of civil service reform, the Commission advocated, among other items, decentralizing personnel authority, reducing the emphasis placed upon seniority in the hiring and promotion process, and implementing broad-banded compensation systems (p. 24-30).

Far from ignoring the calls for reform, state and local governments across the nation took significant steps to implement many of the recommendations advocated by both the National Performance Review and the Winter Commission (Kellough & Selden, 2003; Selden, Ingraham, & Jacobson, 2001). From decentralizing the authority to examine and select job candidates to stripping civil servants of their property rights, many states ambitiously aimed to inject a greater degree of managerial discretion and flexibility into their personnel systems. As will be discussed in greater detail later in this chapter, states like Georgia and Florida stand out for what many consider to be the most radical examples of civil service reform. Under the leadership of Governor then Zell Miller, Georgia decentralized its major personnel operations from the State Merit System (a central personnel agency) to line departments and agencies in 1996. Additionally, the state took the most dramatic step of all by instituting at-will employment for all employees hired or promoted after 1996 (Nigro & Kellough, 2000). This last component of the Georgia reforms was perhaps the most significant because it directly contradicted the spirit of the reforms of the late 19th century, namely a belief that public employees should enjoy relative security of tenure. Reforms in Florida soon followed, and in 2001, under the leadership of Governor Jeb Bush, the state implemented its "Service First" program. Similar to the reforms which took place in Georgia, Florida chose, among many other reforms, to move all supervisory and confidential employees to at-will status and ended the practice of rewarding

seniority in the state's compensation system (Bowman, West, & Gertz, 2006).

Personnel Decentralization

The decentralization of personnel operations is worthy of detailed analysis for a number of pertinent reasons. First, efforts to decentralize personnel systems have served as the core of many of the personnel reform movements across the states (Hou, Ingraham, Bretschneider, & Selden, 2000; Kellough & Nigro, 2006a). Second, the act of decentralizing personnel authority from central personnel offices to individual state agencies significantly increases the degree of managerial flexibility in such areas as recruitment and selection. Thus far, the impact of decentralization has not been fully assessed. Some scholars have argued that the increased levels of managerial flexibility inherent in decentralized personnel systems may have little impact upon the ability of personnel systems to perform more effectively or, at worst, impede performance. Hays and Sowa suggest, for example, that decentralization could potentially subject public sector employees to the whims of agency managers, and, in some cases, serve to negatively impact employees (Hays & Sowa, Forthcoming).

Ultimately, the reform trend towards decentralized personnel systems is rooted in criticisms of traditional, centralized merit systems of the past. In an effort to ensure standard application of civil service rules and procedures, the Pendleton Act tasked the U.S. Civil Service Commission with providing core personnel

services, such as applicant testing and position classification for agencies across the government. Under this model, the Civil Service Commission served as the central hub of personnel activities and government sub-agencies were required to work directly with the Commission in both the recruitment and selection of candidates. For example, if an office within the Department of Interior was in need of an accountant, it would rely on the Civil Service Commission to both test applicants for a vacant position as well as provide the Department with an eligible list of candidates for selection. Under this system, it was thought that the principle of merit based selections would be better upheld because it allowed for the consistent application of civil service rules and procedures across the government. Under this system, as described above, a potential applicant could be relatively confident that he or she would receive the same treatment whether applying for a position within the Department of the Interior or the Department of Health and Human Services.

Following the example of the federal government, state governments across the nation also instituted centralized personnel systems to handle common personnel functions such as recruitment, selection, and position classification. However, the effectiveness of centralized personnel systems in ensuring the consistent application of merit principles eventually came under question. Centralization was associated with inefficiencies in the timeliness of the hiring process and the strict adherence to civil service rules and procedures. At the

federal level, agencies and their managers complained that it took far too long to hire employees from the time a vacancy was announced to the time a list of eligibles was provided to a manager. Likewise, others complained that strict adherence to civil service rules and procedures prevented managers from hiring their candidates of choice because, in many cases, eligible and non-eligible candidates were only separated by few points on civil service exams (Gore, 1993; Savas and Ginsberg, 1973).

Criticisms of centralized merit systems culminated with the across-the board decentralization of core personnel operations, such as testing and assessment, from the Office of Personnel Management to individual agencies in 1996 ("Pub. L. 104-52", 1995). As a major component of efforts to "reinvent" the federal bureaucracy, the National Performance Review asserted that by decentralizing personnel operations to the agency level, federal personnel systems, as a whole, would achieve greater efficiency in recruiting and selecting talented candidates for vacant positions.²² In turn, the Office of Personnel Management was tasked with transforming its role from a central personnel office for the entire federal government to that of a consultant to federal agencies in the manner in which they conducted their personnel operations.

Given the similarities in structure between state and federal personnel systems, it was common for criticisms of one

²² It should be noted that the federal government had begun to decentralize a number of personnel functions prior to 1996, but not at the wholesale level which occurred in 1996.

sector to apply to the other, and, as was noted earlier, the Winter Commission was pivotal in its call for decentralized merit systems at the state and local level. In an effort to end what it termed "civil service paralysis" the report stated that

Over the years, the basic purpose of the civil service system has been forgotten: To recruit the most talented among our citizens into government, not to employ legions of classification experts and personnel administrators who spend their days tracing and bumping routes and rewriting job descriptions...The Commission believes that states and localities are best served by a decentralized merit system that helps agencies and departments address issues of hiring and mobility, pay, diversity, firing, and the operation of the personnel system (p. 25).

This call for decentralized merit systems was heeded by many states, and recent assessments of show that to a great extent, the centralized merit systems of the past have become more of the exception rather than the norm. A survey conducted by the Council of State Governments (CSG) and the National Association of State Personnel Executives show that as of 1999, only two states, Connecticut and Tennessee, managed employee selection processes through a central personnel agency. Likewise, only five states, Alaska, Delaware, Nebraska, Oklahoma, and Vermont, recruited potential employees through a central personnel agency (NASPE, 2000). As Keon Chi writes, "nearly every state has decentralized at least some of its central personnel functions. But the real debate is not around the question of whether decentralization in general is desirable or not...Rather, the

debate appears to be around questions such as, how extensive should decentralization be?" (Chi, 2005).

Private Sector Contracting

The contracting of public sector services, a form of government privatization, is also characteristic of contemporary reform, and, at its base, it holds the potential of fundamentally transforming the make-up of the public sector workforce. At its most elementary level, contracting simply refers to the process of governments entering into service contracts with private or non-profit entities as a means of reducing labor costs associated with traditional civil service systems as well as capitalizing on the flexibilities inherent in private sector labor agreements. As scholars have previously pointed out, there are numerous consequences that may result from contracting which include resistance from public sector labor unions, loss of public sector jobs, and decreased public employee morale from the threat of future contracting (Nigro, Nigro, & Kellough, 2007). Inevitably, moving positions that are either in the public sector or would have been, absent contracting, has the potential to impact public sector representation rates and overall public sector wage rates given the established differences between the two sectors and the types of jobs typically contracted to the private sector. As Nigro et al. point out, the human resources strategy behind efforts to contract out services is to focus government resources on "core," highly skilled occupations and open up other non-core positions to the private sector market (2007). To the extent

that women and minorities are overly concentrated in these typically lower level, non-core positions, one can expect them to be significantly impacted by contracting. Also, to the extent that lower-level positions, those for which the literature suggests there is a premium placed on public sector employment, are removed from the civil service, one can expect a significant impact on the public private wage gap.

The history of the public sector contracting with non-governmental organizations to provide key goods and services is wide and varied. From the use of behemoth defense industry contractors to build naval battleships to the use of local contractors to construct roads and bridges across the nation, the public sector has, in many respects, always maintained a functional relationship with the private sector. However, what distinguishes past efforts from those of the present is the increased push to contract out public sector services as part of overall government reform efforts. Advocates of New Public Management and Reinvention have argued that contracting public services to the private sector provides a number of benefits in terms of efficiency and productivity. Due to competition, the use of private sector contractors can potentially lower the cost of public services. When no longer needed, public agencies can easily choose not to renew contracts, without regard for the employment of contractors, and the use of contracts can also serve to appease political interests by hiding the true size of the public sector (Light, 1999; Nigro, Nigro, & Kellough, 2007).

As researchers have pointed out, although there is a great deal of research on the practice of public sector contracting, most of this work has been focused on the federal and local levels of government. In contrast, relatively little has been written on the presence, extent, or concrete benefits of contracting at the state level. In its 2002 survey of state government contracting, the Council of State Governments (CSG) found that a majority of states surveyed used some form of contracting, and that the level of contracting for a vast majority of the states had either remained constant or increased in the past five years (Chi, Arnold, & Perkins, 2003). Common functional areas for contracting listed by CSG include personnel administration, education, health and human services, corrections, and transportation.

Along with research conducted by the CSG, the American State Administrator's Project (ASAP) has provided the only other empirical analysis of contracting at the state level (Brudney, Fernandez, Ryu, & Wright, 2005). Data from the 1998 ASAP survey indicated that approximately 70 percent of state agencies engaged in some form of contracting, with roughly 80 percent of those services having been contracted to the for-profit sector. In order gauge the intensity of state contracting, the ASAP survey queried administrators on the percentage of their state budgets dedicated to contracts. On the whole, over 50 percent of administrators indicated that they spend 10 percent or less of their budgets on contracting, while roughly 30 percent spent less than 5 percent of their budget on contracting. In terms of

quality and cost savings, approximately 50 percent of respondents indicated that the use of private sector contractors had improved service quality and roughly 30 percent indicated that contracting had served to decrease service costs (p. 397-398).

Although the privatization trend clearly enjoys the support of the vast majority of states, there have been voices heeding the potential pitfalls or costs to civil servant employees. Most important among these are the cost to public sector employees displaced by contracting. Quite naturally, public sector unions have come out in opposition to contracting. In examining the private sector contracting at the state and local level, the American Federation of State, County and Municipal Employees (AFSCME) points out that

Contracting out often results in higher costs, poorer service, increased opportunities for corruption and diminished government flexibility, control and accountability. Contracting out can compromise the security of information and public assets. In addition, the local economy and tax base may suffer as decent jobs with benefits are replaced with low-wage, no-benefit jobs provided by companies located in another part of the country or even overseas (AFSCME, 2006, p. 1).

Given the importance of public sector employment to the advancement of women and minorities, examining the potentially negative impact of contracting becomes even more critical. However, to date, there has been a virtual absence of empirical research on how contracting has impacted the representation rates of women and minorities in the public sector (Chi, Arnold, & Perkins, 2003). This chapter seeks to address this gap in the literature, but in an effort to place a face with the topic of

reform, I now turn to a brief overview of how these movements have manifested themselves within a select group of states.²³

State Level Reforms: Georgia, Florida, New York, & South Carolina

As one may discern from the previous discussion of personnel decentralization and private sector contracting, civil service reform efforts have by no means been identical across the states. Some states have sought to wholeheartedly embrace reforms advocated by the Winter Commission, while others have sought to hold on to more centralized, formal systems of the past. In order to provide a more accurate description of the reform dynamic taking place within this states, the following section provides a brief overview of reform movements in four key states, Georgia, Florida, New York, and South Carolina. Georgia and Florida are generally recognized as two of the most radical states to have implemented state civil service reforms. South Carolina has taken a much more moderate approach to reforming its personnel system while New York has been able to enact reforms within the context of a highly traditional merit system.

Georgia

In the mid 1990s, the state of Georgia implemented what is considered perhaps the most drastic set of state level personnel reform packages in the United States today. In response to many of the standard criticisms of traditional civil service systems

²³ These states were chosen for illustrative purposes since each have witnessed different approaches to civil service reform.

discussed above, the state, under the leadership of then Governor Zell Miller, decentralized personnel operations from the state Merit System to state agency personnel offices, instituted a performance based compensation system for state employees, and took the radical step of transitioning all state employees either hired, transferred, or promoted after passage of Act 816 to an at-will employment status (Nigro & Kellough, 2006).

The first reform, implemented in 1995, transformed the state's compensation system by seeking to link employee performance to annual salary increases. Termed GeorgiaGain, the new system included changes such as updated position descriptions, a performance appraisal process linked to specific job performance standards, structured supervisory training on the new process, and, most importantly, a merit pay plan in which annual salary increases were to be based upon employee performance appraisals.²⁴

The second reform, passed as part of legislative Act 816 in 1996, took the radical step of changing the state's employment relationship with its employees by placing all employees either hired or promoted after July 1, 1996 into an unclassified or "at will" status. Specifically, those employees serving in an "at will" status were not granted a property interest in their employment, and, as such, could be terminated without the due process rights afforded those employees in the classified civil service ranks.

²⁴ For a more detailed discussion of merit pay, see Kellough and Lu, 1993.

The third reform, also a part of Act 816, followed the suggestion of the Winter Commission to decentralize human resources operations to the agency level in an attempt to add both flexibility and increased responsiveness to the state's hiring system. Having operated under a traditional civil service system, the state moved the responsibility for core human resources functions from the state Merit System to individual agencies. Essentially overnight, state agencies were granted the authority to carry out functions that they had previously relied upon the Merit System to do for them. Among other things, agencies were tasked with position classifications, recruitment, applicant assessments, and above all, adhering to state and federal employment laws. As Nigro and Kellough point out, "it was hoped that this reform would encourage agencies to implement streamlined recruiting and hiring processes tailored to their specific needs and circumstances" (2006, p. 118).

Florida

Riding the tide of New Public Management and reinvention reforms, the State of Florida reformed its civil service system in 2001. Although similar in many respects, reforms in Florida were different from those in Georgia and those at the federal level in both their scope and focus. As Bowman, West, and Gertz point out, Florida's move towards civil service reform began much earlier than 2001 (2006). During the Chiles-MacKay administration in the mid-1990s, the state passed legislation which, among other things, simplified the state's personnel

classification processes and decentralized decision-making authority. These reforms were common aspects of the overall reform movement emphasizing increased bureaucratic discretion and flexibility; however, reforms enacted in 2001 had the effect of taking these reforms one step further by primarily transforming the employment relationship between the state and its managerial employees.

Elected in 1998 on a platform dedicated to making state government more efficient and businesslike, Governor Jeb Bush made it a priority to both reduce the size of the state's civil service workforce as well as make it more responsive by reducing traditional merit-based employment protections. Under the guidance and recommendations of a private, independent group of business leaders, the Florida Council of One Hundred, the Governor called for an end to the traditional public sector employment relationship in which civil servants were granted a property interest in their jobs and guaranteed due process rights in the case of removals and downsizing. Termed the Service First initiative, the Governor was successful in having legislation passed that moved all supervisory, managerial, and confidential employees into the Selected Exempt Service under which they were removed from the classified civil service and made "at-will" employees of the state. In total, approximately 16,000 state employees were stripped of their classified status, with only

state police and nurses being exempt from the legislation (Bowman, West, & Gertz, 2006).²⁵

In addition to further changes to the state's classification and performance appraisal systems, the reform legislation added even more flexibility to the recruitment and selection process. Specifically, Service First drastically reduced civil service rules and procedures by eliminating much of the process oriented paperwork associated with hiring new employees under the traditional personnel system, and requiring only "written rationale demonstrating that the recommended person is qualified and satisfies job requirements" (Bowman, West, & Gertz, 2006). This reform served to significantly enhance managerial discretion in the selection process.

New York

Employing the oldest state civil service system in the nation, New York's approach to civil service reform stands in stark contrast to states like Georgia and Florida. Having modeled itself after the original federal civil service system, New York's civil service system is still characterized by the presence of a strong, centralized personnel office, the Department of the Civil Service (DCS), as well as a Civil Service Commission (CSC) modeled after the federal Civil Service Commission prior to the Civil Service Reform Act of 1978. In

²⁵ As Bowman, West, and Gertz (2006) point out, these employees were most likely allowed to retain their classified status because of their support for the Governor during his gubernatorial campaign.

addition to the DCS and CSC, the Public Employment Relations Board is tasked with working with the states many public employee labor unions, and the Governor's Office of Employee Relations facilitates the relationship between state employees and the executive branch.

Having been much maligned in Savas and Ginsberg's classic piece on the inefficiencies of traditional civil service systems, the New York civil service system has been slow to change, and, in many respects, has withstood the tides of reform experienced by other states across the nation. In contrast to other states such as Florida and Georgia, early efforts to reform the states personnel structure, rules, and processes proved unsuccessful. However, more incremental efforts in 1995 to increase the efficiency and effectiveness of state personnel operations were more successful under the leadership of Governor George Pataki and DCS head George Sinnott (Ricucci, 2006). As a career personnelist, Sinnot advocated improvements to the personnel system under the constraints of existing rules and regulations. Among other improvements implemented in 1995, key reforms included the consolidation of state classification titles and the resurrection of a management internship program designed to groom future civil service leaders.

South Carolina

Reforms in the state of South Carolina represent somewhat of a "middle-ground" approach to human resources management. On the whole, the state has gone to great lengths to adopt many of the

tenets of the Reinvention and New Public Management movements while at the same time not going so far as to rid itself completely of all of the hallmarks of traditional civil service systems.

In comparison to the State of New York, South Carolina adopted a merit-based civil service system relatively late. It was not until 1968 that the state had any sort of formal personnel system, with all hiring prior to that year being handled at the discretion of agency heads. The State Personnel Division was established in 1968 to serve as the core of a formal merit system and centrally administer core personnel functions. However, the state did not make participation in the formal merit system mandatory, except for those agencies that were required to do so under federal funding guidelines. As such, the majority of state agencies fell outside of the control of the State Personnel Division (Hays, Byrd, & Wilkins, 2006).

In the period between 1968 and the early 1990s, many of the criticisms of traditional, merit-based personnel systems also applied to South Carolina. Although operating through a mix of centralized and decentralized organizational structures, many core functions such as position classification and candidate examinations were handled centrally through the Office of Human Resources (OHR), formerly the State Personnel Division. Like those systems in other states, common complaints included delays in hiring talented candidates as well as inordinately complex and overwhelming classification standards. It was in this environment that the state chose to reform its personnel system

through the State Government Accountability Act of 1993 and subsequent personnel reforms.

In an effort to link pay to performance, the Accountability Act authorized state agencies to either increase or decrease employee salaries based upon employee performance appraisals. It also encouraged agency use of flexible work schedules to better meet the needs of a more contemporary employee base. Many of the personnel functions that were centrally located in the Office of Human Resources were delegated to agency managers. Specifically, recruitment, screening and selection authorities were granted to agencies. Also, the Act greatly transformed the State's compensation structure by instituting a broad-banded classification system which empowered agency managers with the ability to set salary rates for new or existing employees at any point within a designated band. In addition to the changes implemented through the Act, the Office of Human Resources also transformed its primary mode of operations from that of a central, oversight agency to that of a more consultant-based organization. Leaving behind the role of personnel "gatekeeper," the new OHR's "primary task is to provide problem-solving and technical assistance services to agency managers and internal personnel offices" (Hays, Byrd, & Wilkins, 2006).

From the brief overview of South Carolina's move towards personnel reform, it should be clear to the casual observer that they have chosen what, in many respects, is the "middle-ground" of reform. Unlike New York's adoption of personnel reforms within the confines of a highly traditional, merit-based system,

South Carolina has chosen to adopt a decentralized personnel system with many of the core personnel functions delegated down to the agency level. However, they have not attempted to go as far as Georgia and Florida by removing civil service protections by transitioning employees to an "at-will" employment status.

The Impact of Civil Service Reform: A Review of the Literature

A great deal has been written on the topic of civil service reform at the federal, state, and local levels of government. Particularly at the state level, research has found that states across the nation have invested significant time and resources towards reforming their civil service systems, with widespread evidence of both deregulation and delegation of personnel authority, as well as increased use of more reformed compensation systems (Selden, Ingraham, & Jacobson, 2001). In looking at the drivers of civil service reform within the states, others have found the professionalism of state legislatures to be positively related to civil service reform, while state unemployment rates and unionization rates tended to be negatively associated with civil service reform (Kellough & Selden, 2003).

Despite this research, many have pointed out that a great deal of work remains to be done in the area of assessing the impact of key reforms on state workforces. At the present, there has been only a handful of works seeking to evaluate the impact of reforms such as decentralization and merit-pay. Kellough and Nigro's 2000 survey of civil servants in the State of Georgia provides one of the most comprehensive assessments of the

employee perceptions of the effectiveness of civil service reform (Kellough & Nigro, 2002, 2006b; Nigro & Kellough, 2006). In surveying employee supervisory and non-supervisory attitudes on all aspects of the reforms, the authors found evidence of an overall lack of support for pay-for-performance, at-will employment, and human resources decentralization. Thirty percent of employees believed that the compensation system established through GeorgiaGain served as a positive means of motivating employees; 19.8 percent of supervisors believed that moving employees to an "at-will" status actually eased supervisory responsibilities; and 33.4 percent of supervisors believed that the civil service reforms enhanced the timeliness of the hiring process (Nigro & Kellough, 2006).

The South Carolina Office of Human Resources (OHR) has also undertaken its own assessment of its reforms and, unlike the attitudes of managers and supervisors in Georgia, it has found overwhelmingly positive attitudes towards its reforms. In 2002, 92 percent of managers and personnel staff indicated that they were satisfied with the performance of OHR. Additionally, OHR found that approximately 50 percent of agency managers utilized new personnel flexibilities such as hiring critical employees at the mid-point of pay bands as well as granting merit-based salary increases (Hays, Byrd, & Wilkins, 2006, p. 192-193).

Although each of these findings adds significantly to our understanding of civil service reform, what has been missing, to date, are evaluations of the impact of these reforms on "hard" measures of personnel system performance (Hays, Byrd, & Wilkins,

2006). These remain some of the most difficult areas in which to address civil service reforms because many governments are either unwilling or unable to capture key metrics such as the impact of personnel deregulation on time-to-hire rates or the impact of increased managerial discretion on the selection of candidates.

Exploring the Impact of Reform on Civil Service Equity

In many respects, the following analysis is highly exploratory in nature since there has been no prior research which tests the significance of either decentralization or contracting as determinants of bureaucratic representation, wage discrimination, or public private wage comparisons. To date, the literature can be characterized primarily by efforts to both measure and explain the determinants of personnel reform and contracting (Kellough & Selden, 2003; Brudney, Fernandez, Ryu, & Wright, 2005; Hays & Sowa, forthcoming). As stated earlier, even fewer scholars have sought to uncover the impact of these efforts, with the most notable being Nigro and Kellough's assessment of the impact of personnel reforms in the state of Georgia on employee attitudes (2000 & 2006).

Lack of research in this area, however, should not imply that personnel decentralization or private sector contracting do not hold the potential for impacting indicators of civil service equity. Whether state governments choose to partially or fully decentralize their personnel operations, the simple process of decentralization inherently places more discretion and authority into the hands of sub-agency administrators. To the extent that

these administrators adhere to the standards and norms of prior centralized processes, one would not expect decentralization to significantly impact measures of equity. However, if personnel decisions under decentralized systems are found to differ, both in process and spirit, from prior centralized systems, then one may very well expect them to impact areas such as bureaucratic representation and wage discrimination.

Kellough (1998) speaks directly to this possibility. In critiquing strategies such as personnel decentralization, advocated by the Reinventing government movement, he points out that

The danger in these strategies, however, is that other values may be compromised while efficiency is increased. One of the most important of these additional values is equity or fair treatment for all people subject to a government's jurisdiction. Equity in the administration of government can clearly suffer under reinvention...(p. 15).

To further illustrate Kellough's point, it is helpful to look more closely at the dual processes of candidate recruitment and selection. Under more traditional, centralized systems, the process of candidate recruitment and selection is characterized by high degree of standardization. State government personnel offices are most likely to recruit for the civil service as a whole and provide agency managers with lists of eligible candidates based upon guidelines applicable to all state government employees. On the other hand, under decentralized personnel operations, agency managers possess the ability to tailor their recruitment processes as they see fit, which would

directly influence potential applicant pools as well as subsequent lists of eligible candidates. In turn, this could potentially impact the representativeness of the overall workforce if the gender and ethnic mix of new hires under decentralized systems differs substantially from those hires made under centralized systems. Further, this potential impact is not limited solely to the representativeness of state workforces since the decentralization of promotion and compensation processes also hold the potential of impacting wage rates for women and minorities as well as overall wages in comparison to those found in the private sector.

Private sector contracting also has the potential to significantly impact state government workforces in a number of key respects. In its simplest form, contracting refers to the act of entering into a contract with the private sector to provide services that fall under the auspices of government responsibility. From trash collection to legal services, governments at all levels have chosen to contract an array of services to the private sector, but, apart from assumed gains in efficiency or effectiveness, private sector contracting also holds the potential to significantly impact government workforces, specifically in areas such as ethnic and gender representation and wage rates. To the extent that changes in government services significantly alter the occupational mix of government jobs, then one would expect contracting to also impact those personnel indicators found to be related to occupational groupings, namely bureaucratic representation and wages. For

instance, if a particular state decides to push for contracting out to the private sector its lower level administrative positions, and those positions are disproportionately held by women, then it can be assumed that such efforts would negatively impact overall female representation rates. Also, given prior evidence showing that lower level government positions experience wage premiums when compared to the private sector, such contracting efforts would inevitably decrease state government wage premiums or increase wage penalties.

Overall, the reasons for the dearth of research in this area are primarily centered upon issues of data availability. First, measures of decentralization and contracting are generally difficult to obtain. Unlike representation and wage information, which are collected nationally by the Bureau of Labor Statistics and EEOC, data on decentralization and contracting are not collected by any government agency. As a result, independent research organizations have been tasked with contacting the states individually to collect the data, a process that is inevitably costly and time consuming.

To date, there have only been a handful of efforts to collect data on both measures at the state level, and in each of these instances, data has only been collected at a single point in time. In the area of decentralization, the Council of State Governments, in conjunction with the National Association of State Personnel Executives, has provided the most complete assessment of personnel decentralization within the states. For the most recent year in which the survey was completed, 1999,

they surveyed state governments on the extent of decentralization in a number of areas of personnel management. Most germane to my analysis were the areas of job classification, compensation, recruitment, selection, and employee promotion. For each area, the extent of decentralization was categorized as centralized, decentralized, or a shared arrangement between central state personnel offices and their client agencies. Using the measure of decentralization from each of these areas, I construct an overall index of decentralization which ranges from one to eleven, centralized to decentralized.

Assessing the extent of private sector contracting at the state level has also proven problematic. To date, there have only been two organizations that have done so, the Council of State Governments (CSG) and the American State Administrator's Project (ASAP), both at single points in time,. The CSG assessment, conducted in 2002, asked State Budget Directors the following two questions: "Which of the following best describes the amount of privatization activity in the past five years?" and "In your state, do you see privatization increasing in the next five years, decreasing in the next five years or remaining the same?" (CSG, 2003).²⁶ Although significant for its ability to capture key privatization metrics at the state level, the CSG assessment falls short in one key respect, it does not assess the extent of privatization at the state level. Although a supplementary question to the survey seeks to do so, it is

limited to only five functional areas: corrections, education, health and human services, personnel, and transportation. Additionally, eleven states chose to respond to the CSG survey, thus limiting the capacity for more sophisticated modeling of the impact of privatization upon the indicators discussed in the preceding chapters.

Similar in many respects to the CSG assessment, the American State Administrator's Project sought to measure the extent of state government contracting in a 1998 survey of state government agency heads. As part of a much larger effort, the ASAP survey asked respondents a series of questions related to contracting, most importantly whether or not their agency used private sector contracts and what percentage of their agency's budget was allocated to private sector contracts. Unlike the CSG assessment, the ASAP survey did not limit itself to certain functional areas, and, to date, is the only survey that provides a measure of private sector contracting across all fifty states. Given this advantage over the CSG assessment, I utilize the ASAP survey to construct an index of state government contracting ranging in values from one to six, low to high levels of contracting.

Results

As described in Chapter 2, limitations in data availability necessitate that I estimate single year, cross-sectional models

²⁶ For the first question, respondents were given the option of answering "Dramatically increased," "Increased," "Stayed the same," "Decreased," or "Dramatically decreased."

in attempting to explore the impact of decentralization and contracting upon the indicators of equity previously discussed. Since data for both state government decentralization and contracting are for 1999 and 1998, respectively, I have chosen to include both indices into a series of cross-sectional models corresponding to each of the equity indicators previously analyzed. Data for each of the equity indicators represent the average value of that indicator for years 1995-1999. The results for each of my explanatory models are shown in Table 12. The models are categorized by equity indicator with an overall total of nine separate models. In the models under the indicator bureaucratic representation, neither personnel decentralization nor private sector contracting is found to be a statistically significant predictor of representation for women, African Americans, or Latinos. However, it should be noted that the negative impact of personnel decentralization upon Latino bureaucratic representation nearly approaches statistical significance at the 5 percent confidence level. The story for the remaining two indicators, state civil service wage discrimination and public private wage gaps, is much the same. For both groups of indicators, neither personnel decentralization nor private sector contracting is found to have a statistically significant impact. Overall, these results suggest that the potential for personnel reform to erode civil service equity has not been realized in the case of state government personnel decentralization and private sector contracting, but, more importantly, this exploratory analysis should serve as a starting

point for future research on the impact of personnel reform on core human resources indicators.

Chapter Summary

As previously stated, the analysis conducted in this chapter is exploratory in nature given the limitations in available data on the presence and extent of personnel decentralization and private sector contracting. Overall, I find no evidence that personnel decentralization or private sector contracting function as statistically significant determinants of bureaucratic representation, civil service wage discrimination and public private pay equity. Although by no means conclusive, these results should be viewed as preliminary in nature and the starting point for future research utilizing more precise measures of personnel reform.

Table 12. Models of Civil Service Equity: The Impact of Personnel Decentralization and Private Sector Contracting

Dependent Variables	Bureaucratic Representation			State Civil Service Wage Discrimination			Public Private Wage Gaps		
	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-
	Female	African American	Latino	Female	African American	Latino	All Employees	Female	Male
Decentralization Index	-0.001 (0.12)	-0.055 (1.68)	-0.06 (1.86)	0.005 (1.32)	0.005 (0.53)	0.018 (0.73)	-0.003 (0.79)	-0.001 (0.11)	-0.004 (0.67)
Contracting Index	0.002 (0.10)	0.03 (0.39)	0.051 (0.39)	-0.002 (0.15)	-0.017 (0.51)	0.093 (1.55)	-0.002 (0.15)	0.00 (0.00)	-0.008 (0.46)
Citizen ideology	0.001 (0.88)	0.001 (0.13)	0.001 (0.28)	0.001 (1.03)	-0.003 (0.99)	-0.003 (1.03)	-0.001 (0.67)	0.00 (0.35)	-0.001 (0.87)
Gross state product (in trillions)	0.011 (0.23)	0.448 (2.06)*	-0.116 (0.73)	-0.002 (0.07)	0.026 (0.32)	0.058 (0.65)	-0.019 (0.53)	-0.031 (0.67)	-0.001 (0.02)
Per capita income (thousands)	-0.004 (0.75)	-0.002 (0.09)	-0.003 (0.12)	-0.004 (1.65)	0.001 (0.16)	-0.006 (0.61)	0.002 (0.47)	0.001 (0.25)	0.004 (0.94)
Total unemployment rate	-0.023 (1.38)	-0.204 (2.12)*	0.053 (0.54)	-0.001 (0.07)	-0.01 (0.45)	0.017 (0.44)	0.007 (0.48)	0.003 (0.18)	0.021 (1.17)
Union membership/coverage	-0.029 (0.29)	-0.145 (0.33)	-0.448 (0.80)	0.201 (4.29)**	0.139 (0.63)	-0.16 (0.47)	0.205 (2.55)*	0.241 (2.65)*	0.16 (1.63)
Constant	1.225 (5.99)**	2.583 (2.91)**	1.445 (1.32)	0.829 (9.27)**	1.009 (3.13)**	1.005 (2.38)*	-0.088 (0.61)	-0.109 (0.60)	-0.149 (0.98)
Observations	48	43	37	48	43	37	48	48	48
R-squared	0.53	0.55	0.37	0.54	0.21	0.30	0.38	0.26	0.48

Robust t statistics in parentheses

* significant at 5%; ** significant at 1%

*Regional controls included but not shown

Chapter 7 Conclusion

As has been emphasized throughout this dissertation, civil servants and the systems under which they operate have and will continue to remain an absolutely critical link in the government's ability to carry out the will of the state. Ultimately, civil service systems are responsible for ensuring that government employees are recruited, selected, trained, and compensated in a manner that ensures the presence of diverse, high quality civil service workforces. This dissertation has sought to address how state civil service systems have fulfilled this responsibility by assessing their performance on three indicators of equity: bureaucratic representation, wage discrimination, and pay equity with the private sector. By no means the only indicators of civil service performance, these indicators are important for both their symbolic and practical worth. The most important contribution of this dissertation, however, is that it provides one of the first longitudinal, state-level assessments of these indicators to date. Due to data limitations, prior research on state government bureaucratic representation has focused on single year estimates of representation rates or has aggregated representation rates across the states. Likewise, prior research on state government wage discrimination and public/private wage gaps have almost exclusively analyzed states in the aggregate, thus ignoring variation between the states.

This dissertation has also sought to address the changing nature of human resources management by evaluating the extent to which recent personnel reforms have impacted the above indicators of equity. In particular, I evaluate the extent to which personnel decentralization and private sector contracting function as determinants of bureaucratic representation, wage discrimination within the civil service, and public sector pay equity with the private sector. This level of analysis has also yet to be addressed in the literature.

Overall, the results contained in this dissertation provide a number of valuable contributions to the field. The results of Chapter 3 lend support to those who espouse that the public sector can and should serve as a model employer with regard to wages and representation, but they also point out that, in the case of Latino underrepresentation, much more work needs to be done to ensure that they are better represented within the state government sector. Additionally, evidence showing that the public sector actually discriminates less against women and minorities than the private sector should cause the field of public administration to be suspicious of compensation reforms which aim to make the public sector more like the private sector. The results of my explanatory analysis indicate that there are a number of factors which influence bureaucratic representation rates for women and minorities. Of note are findings that private sector discrimination, relative to that experienced in the public sector, positively impacts representation rates for women, African Americans, and Latinos.

In many respects, the analysis of civil service wage discrimination in Chapter 4 builds upon my analysis of bureaucratic representation by seeking to answer two pressing questions with regard to equal employment opportunity in the states: "To what extent do state civil service systems discriminate against women and minorities?" and "What state level factors aid in explaining variation in state civil service wage discrimination?". In one of the first disaggregated assessments of wage discrimination at the state level for all fifty states, I find that women and African Americans experience substantial levels of wage discrimination within state government, but that Latinos have enjoyed diminishing rates of wage discrimination such that the average rate of wage discrimination across all fifty states was estimated at zero in 2002.

The results of explanatory analysis of civil service wage discrimination are mixed. Per capita income is found to increase wage discrimination for women and Latinos but decrease wage discrimination rates for African Americans. Also, union representation/coverage is found to increase wage discrimination rates experienced by women but decrease that experienced by Latinos.

The results of analysis of public/private wage equity in Chapter 5 provide some telling observations for those who assume that the public sector is always at a disadvantage when competing for talented employees. On the contrary, results indicate that state civil servants have actually enjoyed wage premiums when compared to private sector employees over the years studied.

However, results vary substantially when analyzed separately by gender, such that women enjoy increased premiums while men experience overall wage penalties.

The results of explanatory analysis of this indicator are also mixed. Citizen ideology is found to increase female earnings relative to those in the private sector while gross state product is found to decrease earnings ratios for both men and women. Per capita income is found to have a positive impact on men's earnings ratios but a negative impact upon female earnings ratios. Total unemployment is found to positively impact earnings ratios for both men and women while union membership/coverage is found to positively impact earnings ratios for women.

Although exploratory in nature, the results of the analysis of personnel decentralization and private sector contracting in Chapter 6 are also quite interesting. They reveal no evidence that either of these two reforms has influenced the indicators of equity in the civil service, but, as stated in the chapter summary, these results should be viewed as a first step towards future research, not as conclusive evidence that personnel decentralization and private sector contracting do not impact equity in civil service systems.

Policy Implications

The results of each of my analyses suggest a number of important implications for public personnel policy at the state level. The first concerns the impact of private sector wage

practices on the employment of women and minorities in the state civil service. Results from Chapter 3 suggest that state governments be more cognizant of the role that private sector wage practices play in their ability to attract women and minorities into their workforces. Although more recent data suggest that state governments discriminate less than the private sector, reform efforts targeted at instilling a more private sector orientation into the public sector hold the potential for erasing this distinction. If the public sector were to mimic the private sector in all aspects of compensation, this would most definitely erode its status as a model employer.

A second implication directly relates to the first. Although the data show that state civil service systems discriminate less against women and minorities than the private sector, subsequent analyses highlight the fact that this does not mean that women and minorities do not face any wage discrimination in state government. In fact, analyses show that women and African Americans experience substantial rates of wage discrimination when compared to males and non-African Americans. These results suggest that state governments should both maintain and bolster their EEO efforts.

A third implication concerns the often contentious issue of public sector pay comparability with the private sector. Although the common perception within the field has been that public sector wages are simply not on par with those in the private sector, results of analyses at the state level tell a different story. On average, state civil servants experience

wage premiums when compared to similar individuals in the private sector. When separated by gender, women have consistently experienced higher wage premiums than overall results suggest, but men in the state civil service have experienced consistent wage penalties. These results indicate that, on average, state civil service systems are providing comparable wages for their employees, and that assertions that state civil service wages are not comparable should be viewed with more skepticism.

Future Research

In many respects, this dissertation has only scratched the surface of evaluating state civil service performance, and it possesses a number of shortcomings that should be addressed in future research. Two areas, in particular, stand out as opportunities for improvement. The first area concerns state civil service compensation. One of the major weaknesses of my analysis is that it has focused solely on wages as a measure of compensation, but this measure is limited in that it does not take into account value of non-wage benefits such as public sector pensions, health benefits, and job security. Each of these benefits are key components of overall employment compensation, and future research should incorporate these additional measures into an assessment of civil service compensation.

The second area for future research concerns civil service reform. Although exploratory in nature, my analysis of the impact of personnel decentralization and private sector

contracting highlights the need for future research on both the presence and extent of each of these reforms. One shortcoming of my analysis of these reforms is that, due to data limitations, I am unable to fully assess their impact since I do not have measures of the time periods in which they were enacted, nor do I have measures of how they have varied over time. Given the capacity of these reforms to dramatically transform civil service systems, it is imperative that they be fully assessed and evaluated based upon their impact upon key indicators of civil service equity. There is obviously much more research that remains to be conducted. The importance of civil service across this nation necessitates that it be carried out to the fullest extent possible.

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Appendix A Census Regions by State

New England

Maine
Vermont
New Hampshire
Massachusetts
Connecticut
Rhode Island

South Atlantic

Delaware
Maryland
Virginia
West Virginia
North Carolina
South Carolina
Georgia
Florida

West South Central

Oklahoma
Arkansas
Texas
Louisiana

West North Central

North Dakota
South Dakota
Nebraska
Kansas
Minnesota
Iowa
Missouri

Pacific

Alaska
Washington
Oregon
California
Hawaii

Middle Atlantic

New York
New Jersey
Pennsylvania

East South Central

Kentucky
Tennessee
Mississippi
Alabama

East North Central

Wisconsin
Michigan
Illinois
Indiana
Ohio

Mountain

Montana
Idaho
Wyoming
Nevada
Utah
Colorado
Arizona
New Mexico