

**Executive Compensation and Gender:
A Longitudinal Study of a National Nonprofit Organization**

November 17, 2004

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Paper Presented at ARNOVA
Los Angeles, CA
November 2004

The authors would like to thank Brian Denton (graduate student in economics at IUPUI) for excellent research assistance in preparing this paper. We would also like to thank Paul Carlin, Partha Deb, and Mark Wilhelm for helpful comments on earlier drafts. Of course, any errors remain the sole responsibility of the authors.

Executive Compensation and Gender: A Longitudinal Study of a National Nonprofit Organization

Literally hundreds of studies have been conducted examining executive compensation and the relationship between CEO pay and performance in the for-profit sector (see Barkema & Gomez-Mejia, 1998; Gomez-Mejia, 1994; Gomez-Mejia & Wiseman, 1997; Tosi, Werner, Katz & Gomez-Mejia, 2000 for reviews of this literature) and considerable research has been done on the relationship between pay and performance in the public sector as well (e.g., Condrey & Brudney, 1992; Pearce & Perry, 1983; Perry, Petrakis, & Miller, 1989; Perry & Porter, 1982). However, very little empirical work has addressed executive compensation in the nonprofit sector (see Brickley & Van Horn, 2002; Hallock, 2002a, Oster, 1998, and Werner, Konopaske, & Gemeinhardt, 2000 for exceptions). Moreover, the literature on pay for performance systems in nonprofit organizations has been criticized for a lack of successful models and theory validation, a preponderance of case studies, and too few longitudinal designs using appropriate controls (Alvarado, 1996). Although there has been some theoretical work on incentive compensation in nonprofits, (e.g., Steinberg, 1990; Weisbrod, 1988), we know little about the incentives of managers within nonprofits (Brickley & Van Horn, 2002) and have less understanding of the determinants of executive compensation in nonprofits from an empirical point of view (Hallock, 2002a).

We were provided with an excellent opportunity to conduct an in-depth, longitudinal study on the relationship between CEO pay and organizational performance in a large, well-established 501 3(c) organization. The results of this study were reported in a paper presented at the 2003 ARNOVA conference (Mesch & Rooney, 2003). Five years of compensation and performance data, as well as human capital and organizational variables, were examined across 123 individual agencies within this larger nonprofit. An unexpected finding from this study was that we found a robust and significant finding of gender differences in salary and bonus; female CEOs earned significantly less than their male counterparts (Mesch & Rooney, 2003). Specifically, female CEOs were paid over \$12,000 less in salary than male CEOs and between \$7000 and \$9800 less in bonus—even after controlling for differences in human capital, organizational size, and organizational performance variables.

These preliminary results are consistent with the accumulating body of literature indicating such pay differentials in nonprofits—even though the nonprofit labor force is dominated by women. Reports in the popular press give an account of surveys that indicate senior female executives as well as other top positions of our nation's nonprofits are routinely paid less than men in similar jobs—as high as a 50% gender differential exists for CEOs (Lewin, 2001; Lipman, 2002). The pay gap is greatest among the largest nonprofits (Lipman, 2002; Guidestar, 2004). A recent analysis of nonprofit compensation found the gender gap to persist when compared to earlier surveys and that women earn significantly less than men in all job categories. Although women were more likely to head smaller organizations, even when controlling for organization size, women earned less (GuideStar, 2004).

Recent empirical research on nonprofits has found similar results. Although Oster (1998) found the gender of the CEO was not significantly related to compensation across a wide range of nonprofits, several studies have found just the opposite (e.g., Hallock, 2002b; Gibelman,

2000; Gray & Benson, 2003; Lette, 2001; Werner, Konopaske, & Gemeinhardt, 2000). Gray and Benson (2003) looked at a national sample of nonprofit small business development centers and found that males on average earned \$4874 more than their female counterparts. Werner, Konopaske and Gemeinhardt (2000) sampled different types of nonprofit agencies from a large metropolitan area and found women to earn \$1,707 less than their male counterparts --after controlling for education, tenure, demographic, and organizational characteristics. Gibelman's (2000) findings substantiate the existence of the glass ceiling phenomenon among nonprofit human service agencies where men were disproportionately represented in upper-level management positions as well as earning higher salaries. Hallock (2002b) examined the gender wage gap among managers of nonprofit organizations using data on compensation of managers in the U.S. and found that women who led nonprofits earn about 20% less than men in comparable positions. Similar findings have been found in the public sector (e.g., Lewis, 1998) and private sector (e.g., Jones, 2003); even when controlling for firm size, performance, pay philosophy, and other company and individual attributes—top paid women executives have been found to receive lower pay than men (e.g., Renner, Rives, & Bowlin, 2002).

The purpose of this research is to examine possible reasons as to *why* this gender gap exists by conducting further analyses on this data set from this national nonprofit. These data and subsequent analysis will allow us to examine the relationship between pay and gender more in-depth—controlling for the human capital variables often associated with compensation as well as testing for possible nonlinear interaction effects. Although our earlier work found gender to have a significant marginal impact on the intercept (that is, we used a dummy variable which shifts the intercept up or down), we found no studies that have looked at this relationship in a non-linear model across multiple agencies within the same organization and across multiple years. We also examine the data to determine whether or not the differences in gender persist in various size of organization categories.

Human Capital Theory, Gender, and Pay

Within the economics literature, the major supply-side explanation for sex differences in outcomes has been viewed within the framework of the human capital model (Blau & Ferber, 1986). Examples of human capital investments include expenditures on education, training, job search and geographic migration (Blau & Ferber, 1986). Human capital theory views these factors as the major source of a worker's current and future productivity and proposes a rationale for research findings of the positive correlation between age and education/experience and earnings—older people earn more because they have more experience and those with more education and training result in more productive workers who are paid more (Strober, 1990). More specifically, it has been found, for example, that higher college grades lead to higher wages (Weinberger, 1998). Furthermore, as individuals increasingly participate in the labor force over a life cycle, the greater the inclination to invest in their human capital (Blau, 1998). General investment in human capital can be readily transferred, making an individual more productive across a variety of jobs and occupations (Becker, 1993; Blau & Ferber, 1986). Longitudinal research demonstrates this strong positive association between educational attainment and labor force participation (i.e., Blau, 1998).

Sex differences in human capital investment can produce substantial differences in the pay and occupations of men and women in the labor market (Blau & Ferber, 1986). That is, men and women come to the labor market with different tastes as well as with different human capital

characteristics. Furthermore, men and women may differ in terms of decisions as to whether to acquire different amounts and/or types of human capital, dependent upon expected costs and benefits of the investment (Blau & Ferber, 1986). “Human capital theorists argue that most women do indeed anticipate shorter and less continuous work careers than men” (Blau & Ferber, 1986, p. 215). As such, women are expected to select occupations that require less investment in human capital. If men and women have different expectations about having and/or raising children and the choices to interrupt their respective careers to do so, as well as place different priorities on their careers, they may make different investments in their respective stocks of human capital and subsequently, their earnings are substantially affected. Indeed, as Rose and Hartmann (2004) found--women who elected to “step out” of the labor force for even a short time period suffered a large penalty in their cumulative earnings that was never remedied over their working lifetime and into retirement.

The close interpersonal interactions between executives and boards that generally exist in nonprofit organizations would seem to encourage the development of relational governance elements—less focus on economic measures of performance and more on the value of the relationship over time including human capital characteristics such as experience, tenure, and age for determining CEO rewards. However, research on executive compensation in nonprofits has paid little attention to the human capital specificity of CEOs. In one study, Gray and Benson (2003) did find significant and positive effects for educational level and tenure on CEO compensation in a study of nonprofit small business development centers. In general, human capital factors contribute to the pay gap found between men and women and we would expect in our study of executive compensation that pay would vary according to the types of human capital acquired by the CEO. Therefore, the focus of this study is on the human capital variables--in conjunction with performance indicators--in determining CEO pay differentials between men and women.

Gender Differences in Pay

Although there is a paucity of research conducted on gender differentials of executive pay in nonprofits, gender differences in compensation are sufficiently documented in the recent literature to suggest that there is a significant difference between executive pay for men and women. However, little of this research has examined factors that may explain this phenomenon. We review here the recent literature on gender differences in pay as well as possible factors that may lead to these differences.

Research efforts over the past three decades “have attempted to disentangle factors that account for the gender pay gap” (Renner, Rives & Bowlin, 2002, p. 332). Some “argue that women’s prospects in the labor market have steadily increased and that any small remaining gap in earnings between women and men is not significant” (Rose & Hartmann, 2004, p.iii). Rose and Hartmann’s (2004) comprehensive study of the long-term earnings gap between men and women shows otherwise. Their study, which looked at the cross sectional and cumulative pay of men and women over fifteen years, including those who worked part-time and dropped in and out of the labor force to care for children or elderly parents, found that, although the wage gap has narrowed over the last several decades, when looking at longitudinal data, “the losses to women and their families due to the wage gap are large and can be devastating” (p. iii). Even with increased time in the labor market after their children are grown, women cannot make up the loss in lifetime earnings and are stuck in lower-paying sex-segregated occupations. Family

responsibilities typically fall more heavily on women and women can achieve pay parity only when they behave more like traditional men and leave the primary family responsibilities at home. Women enter retirement without pensions, are less likely than men to move up and out of low-wage work, and make only 38 percent of what men earn cumulatively over a 15 year period. “This gap of 62 percent is more than twice as large as the 23 percent gap commonly reported” (Rose & Hartmann, 2004; pg. iii). Furthermore, when examining women with a bachelor’s degree, they found that women earn less than men with only a high school diploma or less (even when the comparison is restricted to those with earnings in all 15 years of the study period). This occurs in an environment in which women have been afforded new opportunities and where women’s labor force participation has steadily increased; where a majority of women with young children work outside the home, and where women are earning more bachelors and masters degrees than men, especially in the professional fields (Rose & Hartmann, 2004, p. 1).

Other studies have found similar results. For example, Blau (1998) looked at the trends in the well-being of American women from 1970-1995 and found that, although gender equality in the labor market was rising for all age and education groups, there was a sharp decline for less educated women and their families, especially high school dropouts, compared to other women. Blau and Ferber (1986) report, however, that even “within educational categories, men earn more than women at every age, even among the youngest workers who are recent entrants to the labor force. This suggests that sex differences in years of formal education and on-the-job training do not fully explain sex differences in earnings” (p. 219). Weinberger (1998) found that, “on average, white or Hispanic male college graduates enjoy a wage premium relative to other graduates with the same type and quality of college education” (p. 81). She found that among recent college graduates, white women, black men, black women, Asian men and Asian women have a wage disadvantage of 10 to 15 percent relative to white men with the same type and quality of college education. Others, too, have found that women and black men have lower wages than white men with the same number of years of education (Corcoran & Duncan, 1979; Blau & Ferber, 1987). Wood, Corcoran, and Courant (1993) looked at male-female pay differences in lawyers’ salaries and found that, even controlling for work interruptions for child care, work history, school performance, and job measures, one fourth to one third of the earnings gap remains unexplained.

It has been suggested that one reason why the pay gap remains is discrimination. Rose & Hartmann’s (2004) recent study would suggest that gender discrimination in the labor market is not a thing of the past. Pay gaps between men and women continue to exist, *ceteris paribus*. This is often cited as an estimate of discrimination (Blau, 1998; Weinberger, 1998)—that is, “the portion of the pay gap that is not due to sex differences in qualification is presumed to be due to labor market discrimination” (Blau & Ferber, 1986), p. 219). Blau and Ferber (1986) make the distinction between social discrimination and labor market discrimination. “Societal discrimination denotes the multitude of social influences that cause women to make decisions that adversely influence their status in the labor market” (Blau & Ferber, 1986, p. 183) whereas “labor market discrimination exists when two equally qualified individuals are treated differently solely on the bases of their sex” (pg. 229). If labor market discrimination exists, the economic status of women will be adversely affected “by producing differences in economic outcomes between men and women that are *not* accounted for by differences in productivity-related characteristics or qualifications (Blau & Ferber, 1986, p. 229). If this occurs, women may be more reluctant to undertake human capital investments, which would exacerbate the cycle of social discrimination and lead to further under-investments in human capital by women.

Although it is often difficult to distinguish empirically which type of discrimination is operating as well as difficulty in determining the magnitude of the effect, “the evidence suggests that the *direct* effects of labor market discrimination may explain half or more of the pay differential between men and women” (Blau & Ferber, 1986, p. 235).

Occupational segregation has been well-documented in the literature as a possible reason for wage disparity between men and women (Blau & Ferber, 1986; Weinberger, 1998). Occupational assignments may be affected by labor market discrimination (Weinberger, 1998) as well as by societal discrimination (i.e., societal discrimination may cause sex differences in education and field of specialization [Blau & Ferber, 1986]). That is, the socialization process has a powerful influence on the occupations that men and women choose, as well as the role that they expect work to play in their lives (Blau & Ferber, 1986).

Considerable research has demonstrated that predominantly female occupations pay less, even after controlling for personal characteristics (i.e., Albelda, 1986; Blau, 1998; Rose & Hartmann, 2004). Albelda (1986), using longitudinal data over a 24-year period, found that the occupational distributions of men and women changed very little when race was held constant—the greatest change occurring in the distributions of white and nonwhite women. He concludes that “both educational attainment and the business cycle have significantly contributed to the lessening of occupational segregation by race, but not by gender” (p. 410). These “occupational differences between men and women may reflect differences in preferences or discrimination” (Blau, 1998; p. 127). However, “occupational segregation itself may have deleterious effects on women’s economic status by reinforcing exaggerated notions of gender differences in capabilities, preferences, and social and economic roles [and] such views could adversely affect the labor market outcomes even of women who enter traditionally male pursuits” (Blau, 1998; p. 127). Her study concluded that, although there was evidence of improvement in women’s marketability and that the experience gap between men and women as well as job tenure has been reduced, “the implication that discrimination against women declined seems less credible than that their unmeasured characteristics improved,” given anti-discrimination legislation that has been enacted over the past 30 years (Blau, 1998, p. 138). As such, occupational measures cannot be used alone to explain differences in wages (Weinberger, 1998).

A second factor consistently cited for the discrepancy of wages between men and women has been discontinuity of expected labor force participation. “A woman returning from a labor force interruption will not only have to contend with her depreciation of skills over the interim but also with the advancement of the field during her absence” (Blau & Ferber, 1986, p. 196). As such, we would expect her earnings to fall—particularly in fields where the rate of technological change is rapid (Blau & Ferber, 1986).

Given the consistency of research findings on the wage gap between men and women, we would expect to see significant main effects for gender—even after controlling for the human capital variables traditionally found in the academic literature, as well as for occupational assignment. (We compare female CEO’s with their male counterparts within the same organization—thereby controlling for occupational segregation effects on compensation). We also control for discontinuity of expected labor force participation (we include only CEO’s who have been in their position for the entire five years of the study; however, we do not have data to control for career interruptions that precede the period of study).

Our study builds upon this body of research by examining gender within the context of human capital variables to ascertain whether and where the differences in gender may be more specifically located. Given the overabundance of research findings on the wage gap between men and women, we would expect to see a significant main effect for gender—even after controlling for the human capital variables as well as including human capital by gender interaction terms.

Methods

Sample and Data

The data used in this study were obtained from a large, well-established nonprofit organization that was founded in the early 1900's. Today, this organization is a \$1.8 billion nonprofit consisting of a network of 207 community-based, autonomous member agencies, 24 countries worldwide, that serves individuals with workplace disadvantages and disabilities by providing job training and employment services, as well as job placement opportunities and post-employment support. In 2002, a total of 583,351 clients were served across all sites. Even though each site is part of the national federation, each site operates as an independent agency where decision-making across sites is decentralized, and individual CEO compensation decisions are determined by a local agency boards. Our sample consists of 186 sites--*all* of the full member agencies from the U.S. and Canada (seven agencies) for a 100% response rate. There are 21 agencies outside of the U.S. and Canada that are considered "associate" members. These agencies were not included in this study. The demographic characteristics of the CEOs in our sample (used in the final regressions) are as follows: 22% females, average age is 55.0 and 94% have a bachelor's degree or higher. There were no data available on the race and ethnicity of the CEOs. Among the women in the sample, the average age is 55.3 and 91% have a college degree or higher. The men average 54.7 years of age and 94% of them have at least a college degree.

Five years of archival data were obtained from the period of 1998-2002 from the organization's national headquarters. On an annual basis, their national organization collects CEO compensation data through their national annual executive salary and compensation survey--collecting data on base pay and incentive pay. Performance data are collected annually through a different statistical report. CEO compensation and human capital data were coded and matched with each local agency's performance indicators. In order to more precisely isolate the pay for performance issues, only CEOs who remained in their CEO position for the entire period of time were included in the analysis. This has the benefit of not confounding pay for performance for a given CEO with a change in salary at an existing site associated with hiring a new CEO. This included a total of 122 agencies in the final sample. There were 27 female CEO's in the final sample. These data allow us to test for trends over time within each agency, as well as across agencies.

Dependent Variables

Compensation. CEO compensation was operationalized in two ways—*base salary* and *bonus only* (over a 12 month period). These measures represent total cash provided to the incumbent and are widely used in the executive compensation literature. In theory, base salary is used to represent a fixed component of total compensation, whereas bonuses vary according to

some measure of performance (Gomez-Mejia, 1994). Although stock options, profit sharing payments, and other stock market equity-based pay and benefits are additional components of total pay package found in the literature, these measures were not included because they are not relevant for nonprofits.

Independent Variables

Performance indicators that directly relate to the mission of the organization as well as measures of organizational success were the main independent variables of interest in this research. These performance measures included the following: (1) *number of clients in paid training* are clients who receive a paycheck from the agency and work within the agency, (2) *number of clients in competitive job placements* are clients who are paid competitive wages or salaries—placed in competitive jobs inside or outside the agency, (3) *total population served*, defined as the sum of (1) and (2) plus all other clients that the agency may be under contract to serve. Most of the individuals that a particular agency “serves” are never on their payroll. They are only on the payroll if they are doing productive work (i.e., #1 and #2 above). Someone coming in for vocational assessment, training, placement or educational services, or other services that the agency may offer are never employed by the agency, nor are they doing productive work for which wages would either be warranted or required. Additionally, we include (4) *net worth* (total assets minus total liabilities) as measure of the agency’s financial management performance.

Organizational size. Organizational size, measured as *revenue*, is earned income plus support (contributions or grants) plus any other (e.g., investment income) measured in dollars. Organizational size has been measured this way in the executive pay literature (Tosi et al., 2000).

Contract. Whether or not the CEO is under an employment contract could affect determination of their salary and bonus. Agency boards have autonomy as to whether or not a CEO was under contract. We coded this as a dummy variable where 1 = CEO had a formal contract with the agency and 0 = otherwise.

Human Capital Variables

CEO external experience was measured in two ways. First, *external to agency experience* was coded as a dummy variable where 1 = experience as CEO anywhere outside of the organization and 0 = otherwise. Second, *organizational CEO experience* was coded as a dummy variable where 1 = individual had previous CEO experience in any of the agencies and 0 = otherwise. Both variables are a measure of being an external successor (coming from outside the agency) because both would necessitate a move into a new organization. Organizational internal experience was operationalized as *staff experience*, which was coded as a dummy variable where 1 = experience on the staff within the agency other than as the CEO (staff people are frequently promoted into the CEO position) and 0 = otherwise. *Board experience* was coded as a dummy variable where 1 = CEO had previous experience as a board member within the organization and 0 = otherwise. *Organizational affiliation* refers to whether or not the CEO served in leadership positions within National by participating in national executive meetings, regional associations, or serving on the National Board of Directors. It could be a current or previously held post and was coded as a dummy variable where 1 = CEO affiliation and 0 = otherwise. *Training* was coded as a dummy variable where 1 = CEO had received executive training from or through National and 0 = otherwise. *Education* was coded as a dummy variable where 1 = bachelor, masters or Ph.D. degree and 0 = some college degree or less. *Age* and *age*

squared as of May, 2003 was specified in years. *Tenure in position* and *tenure squared* is the number of years in the current CEO position as of May, 2003. *Gender* was coded as 1 = female.

Analyses

To exploit the fact that we had annual data from 122 sites over four years (contemporaneous model) and 116 sites over five years (lagged model), we used Pooled Ordinary Least Squares (OLS) and a Fixed Effects Model. These panel techniques allow us to test the hypotheses more accurately by controlling for idiosyncratic aspects of organizational performance and/or organizational or CEO characteristics that might impact CEO compensation but for which we could not collect data. This approach has been used widely in the executive compensation literature. Pooled OLS is better than using OLS from a single year, because it preserves much more available information from each of the agencies. In general, we would prefer to use the Fixed Effects model, because it yields more precise estimates than pooled OLS, as it controls for idiosyncratic variations among the various agencies that are unrelated to our hypotheses being tested. However, one of the key advantages of the Pooled OLS is that it allows us to test the human capital variables, which all drop out in the Fixed Effects models because they are time invariant. Given that this paper focuses on differences in compensation by gender and gender and other human capital variables drop out on the Fixed Effects models, we only report the Pooled OLS results.

In both of these frameworks, we estimated a Contemporaneous model (pay this year is based on this year's performance) and a Lagged model (pay this year is based on last year's performance). The Contemporaneous model had a sample size between 207 and 321, depending on the dependent variable and the specification. Similarly, the Lagged model had a sample size between 249 and 382. The motivation for testing both lagged and contemporaneous models is, given possible differences in either the timing of when the pay decisions are made and/or when the pay changes are reported on the surveys of CEO compensation, we felt that it was conceivable that the compensation and performance measures might be rewarded and/or reported in a contemporaneous manner or in a lagged manner. By testing both sets of models, we can ascertain whether or not the results are sensitive to these assumptions.

The dummy variable for gender alone indicates whether or not women are paid more or less than men overall (a shift in the intercept), but the interaction terms will tell us whether or not there are differences in the slopes of each of the variables--that is, whether or not men and women get paid differently for similar education or training (or as economists would say, whether men and women experience differences in their marginal revenue product for various human capital inputs). First, we interact all of the variables at once, but also interact them one at a time to ensure that sample size limitations are not yielding insignificant results for any of the interaction terms. We also test all of the significant interaction terms in one model.

Our analysis progresses from a simple inspection of descriptive statistics and correlation coefficients to t-tests for differences between the means for men and women CEOs. Then we use more sophisticated regression analyses using Pooled OLS. Finally, we use interaction terms to ascertain whether gender effects are concentrated in one or more aspect that we can measure.

Results

Table 1 presents the descriptive statistics for the sample (1.1 for the entire sample; 1.2 for men only and 1.3 for women only). One item of interest is that there seems to be a higher share of women earning any bonus than men. If we use the samples from the Contemporaneous Pooled OLS estimates, 74 percent of the women earned a bonus, but only 62 percent of the men did. Similarly, if we used the Lagged Pooled OLS samples, 81 percent of the women were paid a bonus but only 62 percent of the men. Table 2 contains the correlation coefficients. Note that Gender is significantly correlated with several of the other independent variables, as well as negatively correlated with Salary, as well as being negatively correlated with several of the performance and experience variables.

Table 3.1 is a summary (a full set of these tests are available from the authors by request) of the t-tests for differences in the means between the men and women in the sample for each variable by year (and by estimation procedure). A couple of items worth noting from these results: First, men's base salary is always more than women's and is virtually always significantly more (approximately \$20,000 per year, depending on specification sample). Second, men's bonuses are always more than women's, but these differences are not always significant. When they are significantly different, they are between \$10,000 and \$12,000 more. However, there are other differences that are also significant and important in examining differences in salary by gender. We find that men have tenure in their posts that is about 50% more than women and that men operate agency sites that are about 50% larger in total revenues and 50% larger in net worth. Furthermore, in many of the years, the agencies operated by men have better performance metrics than those operated by women. If we had to stop our analysis here, we would have to say that the men do get paid more than the women, but the men have had longer tenures in their posts, operate larger agencies and have better results: all of which might merit the higher compensation.

Given this pattern of men operating larger and better performing agencies and being compensated better than women, we bifurcated the sample along the median by revenue sizes and examined whether these differences persist when examining only the "small" and "large" agencies. Table 3.2 presents the summary of these t-tests (full set of results available from the authors). Even when we split the sample along the median for total revenue, we find that men receive significantly higher salaries (almost \$30,000 more for men), but no significant differences in bonuses by gender. Men also had significantly better performance results and about 50% longer tenures. Whereas among the smaller half of the agencies, women were paid slightly more and received slightly higher bonuses than men, but these differences were not significant.

Given this pattern among the "larger" half of the agencies, we further divided the larger half of the agencies into the largest two quartiles. Table 3.3 presents the summary results for these groups (full set of results available from authors). Men were much more likely to have more organizational CEO experience among the second quartile (50th-75th percent by revenue), but we found no other significant differences for the second quartile. Among the largest quartile, we found that men were leading larger, and more effective agencies and for a longer time than women, but there were no significant differences in base salary or bonuses.

Fortunately for our research, we can also use more sophisticated techniques to try to resolve how much of these differences are due to differences in size and performance and how much are attributable to human capital and demographics. Tables 4 and 5 present our base model results, as well as additional runs disaggregated by size groups. The key fact to note in the base models is that Gender is large, negative and highly significant with respect to both base Salary and Bonus. This suggests that women get paid just over \$12,000 less per year in base salary and between \$7,000 and almost \$10,000 less per year in Bonus than men—even after controlling for differences in performance and human capital variables (see Mesch and Rooney, 2003, for a discussion of the other human capital and performance related results).

Tables 4.1 and 4.2 show detailed results for our analysis of Bonuses using the contemporaneous and lagged Pooled OLS models for various size groups. First let's note the common features. Revenue, our size of organization variable, is positively associated with bonus in almost all of the size categories but has a very small effect. The number of clients in paid training has a negative effect on bonus when it is significant, but is frequently insignificant. Conversely, the number of clients in competitive job placements is positive when significant but is also rarely significant. Total population served is negative and significant in both the overall sample and the upper half of the agencies. Net worth, our measure of financial management, is the most robust result and, as might be expected, is positive and significant both overall and among all size classifications. It is clear that the boards of these agencies reward good financial management across all sizes of organizations. Having a contract is associated with a significantly larger bonus in the overall sample and in all but the smallest and largest agencies. It may be that the contracts more clearly stipulate the terms and conditions under which a bonus must be paid.

For the sake of space, we will ignore the other human capital variables for now except gender. Gender is significant and negatively associated with bonus in all but the largest agencies. Smaller organizations show a smaller gap (~\$5,000), but that is probably because they tend to pay smaller bonuses overall. The larger half of the agencies (based on revenue) award women significantly smaller bonuses than men. The women's bonuses are between \$15,600 and \$24,200 smaller than men's, depending on whether using the lagged or contemporaneous model respectively—even after controlling for differences in human capital variables and performance metrics. In looking at the second quartile, women, earn between \$13,300 and \$22,600 less than men, holding everything else constant. While gender is insignificant in the models for the top quartile (presumably due to the relatively small number of women in that quartile as opposed to differences in behaviors), it seems clear that the gender differential grows as the size of the organization grows.

Turning to base salary in Tables in 5.1 and 5.2, we find similar results as we did with bonuses. These tables delineate the results for our analysis of Salary using the contemporaneous and lagged Pooled OLS models for various size groups. As with Bonuses, revenue, our size of organization variable, is positively associated with base salary in almost all of the size categories but has a very small effect. This small effect is most likely attributable to the fact that we have disaggregated the results for the regressions based on size as measured by revenue (aside from the base model). By definition, this decreases the variation in the data and the order of magnitude of the size effects. The performance metrics are generally positively associated with

salary and usually significant. The exceptions being that the number of clients in paid training has a positive effect on salary in the overall sample, but no effect in the analyses of various size cohorts. Conversely, the number of clients in competitive job placements is negative when significant but is also rarely significant (only in the overall sample and in the upper half sample). Total population served is positive and significant in both the overall sample and in most of the other various size groups. Net worth, our measure of financial management, is positive and significant both overall and among the larger half and the top quartile (but not among the small agencies or even the second quartile). It is clear that the boards of these agencies reward good financial management across all sizes of organizations. Having a contract is associated with a significantly larger base salary in the overall sample and in most of the size groups. It may be that the contracts more clearly stipulate the terms and conditions under which a salary increment might be earned.

It is clear that CEO external experience has a positive effect on base salary, especially CEO experience that is external to the agency. This experience also grows in value with organizational size. Organizational CEO (i.e., being a CEO at a different agency within the same federation) experience and staff experience within the organization, both play a positive and significant role in determining salary, but these have smaller effects in smaller agencies and are smaller overall than the external to the agency CEO experience. Organizational affiliation has a fairly large and negative association with salary in larger sites. Similarly, training has a negative effect on salary both overall and in the largest agencies. Age has a surprisingly large positive effect on salaries in the largest organizations, but age squared is negative and significant which suggests that the age effect increases salary but at a decreasing rate. Tenure and tenure squared also suggest that tenure in office tends to have a positive effect on salary but that it is also increasing at a decreasing rate.

Gender is significant and negatively associated with salary in the overall sample and all but the smallest and the largest agencies. The evidence is strongest in the second quartile: among these organizations, women are paid between \$23,900 (Lagged model) and \$28,300 (Contemporaneous model) less than men, holding constant other human capital traits, organizational performance and size. While gender is insignificant (or only approaching significance) in the models for the bottom half and the top quartile (presumably due to the relatively small number of women in the top quartile as opposed to differences in behaviors), it seems clear that the gender differential grows as the size of the organization grows, as the salary differences for women are much larger in the second quartile as they are either overall or for the upper half.

Table 6 presents a summary of all of the gender effects for both bonus and salary for both contemporaneous and lagged models and for each size classification. It confirms the importance of gender as an explanatory variable and the robustness of the effects across both models for both bonus and salary. Finally, it clearly demonstrates the growth in the gender gap as the agencies get larger in size.

The dummy variable for gender alone indicates whether or not women are paid more or less than men overall (a shift in the intercept), but by interacting gender with various human capital variables, the interaction terms will tell us whether or not there are differences in the

slopes of each of the variables. We tried including interaction terms for every human capital variable and Gender, but the model imploded (none of the interaction terms were significant and Gender lost its significance). We think this might be due to the sample size, so we ran each interaction term separately. Table 7 shows the summary of these models: we include only the sign and level of significance for the main Gender variable and each of the interaction terms for each of our four main models (full sets of all of these regressions are available from the authors). There are no significant interaction effects between Gender and any of the human capital variables for Bonus, but there are a few for salary. With the inclusion of the interactive effects, the Gender main effect loses its significance in some of the models, but it retains its negative sign in all of the results in which it remains significant. In the few cases in which the interaction terms are significant in the Salary models, the interaction term is always positive, but it fails to fully offset the negative effects associated with the main Gender effects (see Tables 8.2 and 8.3).

When we include all of the interaction effects that were significant when run separately, they also become insignificant (see Table 8.1). The tests for joint significance of the combined sets of interaction terms for each of our models is either insignificant or only approaches significance at traditional levels. This might also be a sample size problem. As seen in Tables 8.2 and 8.3, the coefficient on Gender remains large even when including any or all of the significant interaction effects. The net marginal effect of Gender, after taking into account the effects of the significant interaction terms (evaluated at their sample means) suggests that women are still paid thousands less than men. Including all of the significant interaction effects (that is significant when run individually), women are paid between \$7,635 (Lagged Pooled OLS) and \$13,643 (Contemporaneous Pooled OLS) less than men with comparable human capital characteristics and comparable performance.

Finally, in order to measure whether or not there were any gender differences among those becoming CEOs, as well as between those becoming CEOs and those already serving as CEOs, we lifted our earlier sample restriction to include those agency sites that had experienced a change in leadership. Starting with t-tests for differences between means, we found no significant differences by gender when we compared the salary and bonus for those who changed CEO posts during our period of analysis or who reported a change at any time. Note: if we look at all CEOs who changed, compared to all CEOs, who did not change, those who changed received lower salaries and lower bonuses, but they also managed significantly smaller agencies and had much shorter tenure than those who did not change. This suggests that one of the ways CEOs improve their compensation is by staying in place and growing the organization, but another strategy is to move on to increasingly larger agency sites across the country.

In regressions (full set of results available from authors by request) including a dummy variable for the year of the change and including another interaction term between gender and the year of the change, these additional variables are always insignificant. This was the case in both the pooled OLS results and for each individual year when run separately.

Conclusions

The results of our study indicate that there are significant differences in executive compensation between men and women in this national nonprofit organization. The purpose of

our study was to shed light on the nature of these differences as to *why* these differences occurred by conducting a set of analyses to isolate the various factors which may influence executive pay decisions. We started by conducting t-tests to examine differences in means between men and women. The results of this analysis showed significant differences for both salary and bonus—men are consistently paid more and receive larger bonuses across time for both the contemporaneous and lagged models. However, this analysis also reveals that men have significantly longer tenure, operate larger agencies, place more clients in competitive job placements, and serve more clients than female CEO's. Even when we disaggregated the sample further by size, these results are supported (at least for salary); men earn a significantly higher salary than women CEO's—but, again, had longer tenure and more clients placed in competitive jobs (a primary performance measure). These results suggest that the compensation differences between men and women are a result of longer tenure, better performance and serving in larger organizations.

We then conducted a more sophisticated econometric analysis, controlling for organizational size, tenure, performance, as well as other human capital and organizational factors and found that gender maintained its significance. Across both contemporaneous and lagged pooled OLS modes for bonus and salary, women earned significantly less than men, *ceteris parabis*--even when disaggregating the sample by size. These results were further supported when controlling for significant interactions between gender and human capital variables; the coefficient for gender remains large even when including the significant interaction terms. In general, our results indicate that women are paid significantly less than men.

These results are compelling, yet disquieting. Although empirical research in the fields of economics and organizational behavior have found similar results and offer explanations as to why sex differences in pay occur, our study examines only agencies within *one* nonprofit--agencies, presumably, that share the same mission, culture, organizational structure, and have similar personnel policies. Furthermore, we restricted our sample to only those CEOs who had not moved in the last five years to eliminate any “churning” or recent “bidding” effects. Given these controls, along with the comprehensive set of analyses conducted over a five year period of time, we are more confident in these results.

What we do not know, however, is information about job interruptions for the female CEO's. The literature is clear that job interruptions (employment gaps and leaves of absence) for both males and females can affect long-term compensation. For women, however, these gaps tend to be longer than men's and more often for purposes of child rearing. Unlike men, women's careers do not move in a progressive pattern from promotion to promotion—but zig-zag depending on the different roles played during the course of her lifetime (Powell & Graves, 2003). Finally, we cannot claim that our study is evidence for a *prima facie* case of discrimination. Our study does show a pattern consistent with discriminatory behavior—holding constant the human capital variables traditionally found to explain discrepancies in pay. But our pattern is one in which these differences get larger as organizational size increases—except for the largest organization. Furthermore, all of the hire, fire, and pay decisions are made by local boards each acting autonomously. Certainly more work needs to be conducted in this area before any conclusions may be drawn.

References

- Albelad, R.P. (1986). Occupational segregation by race and gender, 1958-1981. **Industrial and Labor Relations Review**, 39: 404-411.
- Alvarado, E.I. 1996. The validity of supplementary pay systems in nonprofit organizations. **Nonprofit Management & Leadership**. 6: 291-304.
- Barkema, H.G., & Gomez-Mejia, L.R. 1998. Managerial compensation and firm performance: A general research framework. **Academy of Management Journal**. 41: 135-145.
- Becker, G.S. (1993). **Human capital**. The University of Chicago Press: Chicago.
- Blau, F.D. (1998). Trends in the well-being of American women, 1970-1995. **Journal of Economic Literature**, 36: 112-165.
- Blau, F. & Ferber, M. (1987). Discrimination: Empirical evidence from the United States. **American Economic Review**, 77: 316-320.
- Blau, F. & Ferber, M. (1986). **The economics of women, men and work**. Prentice-Hall, Englewood Cliffs, NJ.
- Brickley, J.S. and Van Horn, R.L. 2002. Managerial incentives in nonprofit organizations: Evidence from hospitals. **The Journal of Law and Economics**. XLV: 227-249.
- Condrey, S.E. & Brudney, J.L. 1992. Performance-based managerial pay in the Federal government: Does agency matter? **Journal of Public Administration Research and Theory**. 2: 157-174.
- Corocran, M. & Duncan, G.J. (1979). Work history, labor force attachment, and earnings differences between the races and sexes. **Journal of Human Resources**, 14: 1-20.
- Gibelman, M. 2000. The nonprofit sector and gender discrimination: A preliminary investigation into the glass ceiling. **Nonprofit Management & Leadership**. 10: 251-269.
- Gomez-Mejia, L.G. 1994. Executive compensation: A reassessment and a future research agenda. In G. Ferris (Ed.), **Research in personnel and human resources management**: 161-222. Vol.12. Greenwich, CT: JAI Press Inc.
- Gomez-Mejia, L.R. & Wiseman, R.M. 1997. Reframing executive compensation: An assessment and outlook. **Journal of Management**. 23(3): 291-374.
- Grey, S.R. & Benson, P.G. 2003. Determinants of executive compensation in small business development centers. **Nonprofit Management & Leadership**. 13: 213-227.

GuideStar (October 2004). Gender, geography, and nonprofit compensation. GuideStar Nonprofit Compensation Report. Philanthropic Research, Inc.

Hallock, K.F. 2002a. Managerial pay and governance in American nonprofits. **Industrial Relations**. 41: 377-406.

Hallock, KF. 2002b. The gender pay and employment gaps for top managers in U.S. nonprofits. Unpublished manuscript.

Jones, D. (January 27, 2003). Few women hold top executive jobs, even when CEO's are female. **USA Today**.

Lette, L. 2001. Whiter the nonprofit wage differentials? Estimates from the 1990 Census. **Journal of Labor Economics**. 19: 136-170.

Lewin, T. June 3, 2001. Women profit less than men in the nonprofit world, too. **New York Times**, p. 26, column 1.

Lewis, G.B. 1998. Continuing progress toward racial and gender pay equality in the Federal service: An update. **Review of Public Personnel Administration**. 18: 23-40.

Lipman, H. (July 25, 2002). Charities pay women less than men, study finds. **Chronicle of Philanthropy**. <http://philanthropy.com/premium/articlas/v14/i19/19004001.htm>

Mesch, D.J. & Rooney., P.M. (November, 2003). Executive compensation and organizational performance: A longitudinal study of a national nonprofit organization. Paper presented at the ARNOVA conference, Denver, CO.

Oster, S.M. (1998). Executive compensation in the nonprofit sector. **Nonprofit Management & Leadership**, 8, 207-221.

Pearce, J.L. & Perry, J.L. 1983. Federal merit pay; A longitudinal analysis. **Public Administration Review**. 43: 315-325.

Perry, J.L., Petrakis, B.A., & Miller, T.K. 1989. Federal merit pay, round II: An analysis of the performance management and recognition system. **Public Administration Review**. 49: 29-37.

Perry, J.L. & Porter, L.W. 1982. Factors affecting the context for motivation in public organizations. **Academy of Management Review**.7: 89-98.

Powell, G.N. & Graves, L.M., (2003). **Women and Men in Management**. Sage Publications: Thousand Oaks: CA.

Renner, C., Rives, J.M., & Bowlin, W.F. 2002. The significance of gender in explaining senior executive pay variations: An exploratory study. **Journal of Managerial Issues**. 14: 331-345.

Rose, S.J. & Hartmann, H.I. (2004). Still a man's labor market: The long-term earnings gap. Institute for Women's Policy Research: Washington D.C.

Steinberg, R. 1990. Profits and incentive compensation in nonprofit firms. **Nonprofit Management & Leadership**. 1: 137-151.

Strober, M.H. 1990. Human capital theory: Implications for HR managers. **Industrial Relations**. 29: 214-240.

Tosi, H.L., Werner, S., Katz, J.P., & Gomez-Mejia, L.R. 2000. How much does performance matter? A meta-analysis of CEO pay studies. **Journal of Management**. 26: 301-339.

Werner, S., Konopaske, R., & Gemeinhardt, G. 2000. The effects of United Way membership on employee pay in nonprofit organizations. **Nonprofit Management & Leadership**. 11: 35-48.

Weinberger, D.J. (1998). Race and gender wage gaps in the market for recent college graduates. **Industrial Relations**, 37: 67-84.

Weisbrod, B. (1988). **The Nonprofit Economy**. Harvard University Press: Cambridge, MA.

Wood, R.G., Corcoran, M.E., & Courant, P.N. 1993. Pay differences among the highly paid: The male-female earnings gap in lawyers' salaries. **Journal of Labor Economics**. 11: 417-441.