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Eric C. Twombly and Nicholas Harvey

Department of Public Management and Policy Department
Andrew Young School of Policy Studies, GSU

Biographic Sketches

Eric C. Twombly is an assistant professor of public administration and urban studies at the Andrew Young School of Policy Studies at Georgia State University. Dr. Twombly has written extensively on nonprofit health and human service issues in the nonprofit sector.

Nicholas Harvey is a doctoral student and graduate research assistant in the public policy joint-doctoral program of Georgia State University and the Georgia Institute of Technology. His research interests include nonprofit management and finance and faith-based policy.

Abstract

This paper uses data from a national random sample of 1,045 nonprofits in five industries to assess the extent to which executive compensation and fiscal performance are related. The industries include the arts, education, environment, health, and human services during the period of 2000 to 2002. As hypothesized, the data reveal no statistically significant relationship between pay and performance in these industries. Instead, other factors, most notably organizational complexity, are key determinants of executive compensation. In the end, the paper provides a set of findings that may be used by policymakers and others to inform their opinions and decisions about how to improve accountability and compliance in the nonprofit sector.

INTRODUCTION

The issue of executive compensation in the nonprofit sector has sparked considerable debate in policy and media circles and generally created two lines of argument. On the one hand, some suggest that nonprofits must pay their chief executives in line with market rates because organizational productivity depends on their ability to attract and retain effective leaders. Indeed, if a nonprofit fails to offer competitive wages, then a talented executive may choose, other things being equal, to work in a similar position in the for-profit or governmental sectors (Young 1984; Twombly forthcoming). On the other hand, some have argued that because nonprofits are charitable by purpose and exempt from federal taxation, they should not set executive pay by market standards for risk of paying their chief officers excessively and deflecting organizational resources from the pursuit of their charitable missions. Swirling around the debate are press accounts of executive pay scandals at notable nonprofits, such as the Smithsonian Institution, which used its funds for chauffeurs and private planes for its executive director (Independent Review Committee Smithsonian Institution, 2007), raising the ire of several congressional lawmakers (Grimaldi, 2007).

Exacerbating the debate on nonprofit executive compensation are recent efforts by the United States Congress, state attorneys general, and several private organizations to improve the accountability of charities. In essence, many lawmakers and nonprofit sector watchdogs want to ensure that charities are using their funds wisely, not only in the remuneration of their chief executives, but also to produce effective and efficient goods and services. These factors are particularly important because of the public subsidies – and therefore arguably the competitive economic advantage over other organizational forms – that nonprofits receive through their tax-exempt status. In this regard, critics of the nonprofit sector – and even some nonprofit advocates themselves – have questioned the extent to which these organizations perform their charitable functions efficiently, and whether the compensation paid to their chief executives relates to organizational performance. This broad line of inquiry provides the foundation for the empirical question of this paper: to what extent is executive compensation statistically related to the organizational performance of nonprofit organizations?

There are several ways to measure performance, particularly in the nonprofit sector. Broadly speaking, one may assess performance programmatically or politically. From a programmatic perspective, one may examine the degree to which nonprofits provide services that improve the conditions of their clients or achieve stated public policy goals, such as moving welfare clients into the workforce. From a political perspective, strong performance may relate to the ability of a nonprofit to influence the direction of public policy, such as formulation of legislative initiatives to improve contract reimbursements rates for nonprofit providers. In the end, this paper assesses the effects of fiscal performance on executive compensation in the nonprofit sector. We select this relatively narrow focus for two reasons. First, there is a large policy push to examine the economic stewardship of nonprofits, relating to the issue of whether they are effectively using public and charitable resources and how they compensate their chief executives. Second, there is a large body of work on the relationship between fiscal performance and executive pay in the for-profit sector. And because economic models from the for-profit sector are increasingly being applied to the nonprofit sector, the availability of data described below provides an opportunity to examine the pay-for-performance link among nonprofits.

To assess the extent to which nonprofit executive compensation and fiscal performance are statistically related, we used data from the National Center for Charitable Statistics (NCCS) at the Urban Institute to draw a national random sample of 1,045 nonprofits that filed Form 990 returns with the Internal Revenue Service (IRS). The study examines nonprofits in five industries, including the arts, education, environment, health, and human services, during the period of 2000 to 2002. Using descriptive and multivariate techniques, we examine not only the statistical relationship between executive compensation and financial performance, but also other institutional factors that may predict nonprofit executive wage setting. This study provides the first systematic analysis of a pay-for-performance link in the nonprofit sector.

LITERATURE

There is little question that executive compensation is a vital organizational topic. It is used as an incentive that affects business decisions and strategies, which influences

firm performance (Finkelstein and Boyd, 1998). Compensation may also have a motivational effect, serving as a quantitative indicator of value of executives and a reward for their efforts. However, for-profits and nonprofits differ in significant ways, both structurally and legally, which impact the manner in which executives are paid and how the public views their compensation packages.

In the for-profit context, executives can participate in the firm's profitability not only by receiving wages, but also through profit sharing, return on company investments, issuance of stock, and other mechanisms. When a for-profit executive engages in profitable strategies, he or she and the firm realize financial benefits. However, because nonprofits have no shareholders, do not issue stock, and cannot distribute economic residuals, compensation options are more limited, often centering on direct pay, deferred compensation, and taxable benefit packages. These differences between for-profits and nonprofits make direct compensation comparisons problematic, even for similarly sized organizations in the same industries.

For-profits and nonprofits do have an important and common characteristic: the need to remain financially viable. At a minimum, financial viability relates to revenues exceeding expenses in order for the organization to meet payroll and other financial obligations. In practice, however, it means much more. In the for-profit sector, fiscally viable firms may have an easier time, all things being equal, than financially vulnerable groups attracting investors and securing capital. Access to capital is also a key consideration in the nonprofit sector, and for many nonprofits that receive government funding or donor support, maintaining their fiscal viability may signal to funders that they are programmatically and financially able to implement public policy and to supply charitable services.

Organizational financial viability is rooted in fiscal performance, but it is on this issue that for-profits and nonprofits diverge substantially on the question of measurement. In some respects, assessing fiscal performance in the for-profit sector is easier than in the nonprofit sector, because for-profits are theoretically profit-maximizers. In other words, all things being equal, a for-profit firm will determine the optimal mix of strategies to maximize revenues and minimize expenses to produce a set of goods. In this regard, for-profits may be assessed on the extent to which they produce profits and how their profits

compare with similar firms in the market. Of course, there is a multitude of nuanced indicators that relate to financial performance in the for-profit literature, and there is no consensus on the most effective way to measure them. For example, some authors suggest using profits, sales, market equity value, revenue, and firm size as a function of sales and revenue are viable financial measures, while others focus solely on the creation of shareholder equity value through the value of firm stock (Deckop, 1988; Abowd and Kaplan, 1999; Bebchuk and Fried, 2005).

Nonprofits, however, do not theoretically form as profit maximizers. Instead, many enter an industry to provide goods and services that are undersupplied, relative to their demand, by for-profit firms and government. This notion of mission pervades the *raison d'être* for several subsectors, such as human services and the community-based health field, in the nonprofit universe. Thus, because some nonprofits enter the market for charitable rather than financial reasons, the for-profit financial performance model does not transfer easily into the nonprofit context. Moreover, not all nonprofits have sales, and nonprofits do not have market equity value in the same sense as for-profits, because nonprofits do not have shares of stock. This tension of the “double bottom line” of financial viability and mission attainment complicates the relationship between executive compensation to performance in the nonprofit sector (Young and Jung, 2007; Minkoff and Powell, 2006).

Still, the significant policy and public debates on accountability and economic stewardship in the nonprofit sector push forward inquiry into nonprofit fiscal performance and the related and growing interest in whether nonprofit chief executives are being paid commensurately with their organizations' financial outcomes. But because of the unique organizational and mission-driven nature of much of the nonprofit sector, the overarching hypothesis of this analysis is that there is no statistically significant evidence of a pay-for-performance link. Instead, we expect that empirical results to show that other institutional variables play a key role in predicting executive wages in the nonprofit sector. These institutional factors are discussed in detail below.

METHODOLOGY

The research design includes a descriptive analysis of the compensation of nonprofit chief executives and multivariate analyses of compensation determinants. The primary data source is the National Nonprofit Research Database (NNRD), created by NCCS at the Urban Institute. The dataset contains digitized information for 501(c)(3) public charities that filed Form 990 with the IRS. The variables in the NNRD include most of the Form 990 line items, such as financial and compensation information. The dataset is extensively cleaned and verified by NCCS for completeness and accuracy, although it has some important shortcomings. For example, because the NNRD includes only nonprofits that file with the IRS, it under-represents small and faith-based organizations that are not statutorily required to file. As a result of these limitations, the generalizability of the NNRD should be viewed cautiously.

The units of analysis are individual nonprofit organizations in five industries, namely, arts, education, environment, health, and human services. The study excludes organizations that specifically identify themselves as religion-related, public benefit and mutual benefit groups. We also excluded hospitals and higher educational institutions. These particular types of organizations were excluded from the study because they tend to operate differently or on significantly larger budgets than groups included in the analysis.

We used other decision rules to delineate the study population. For example, the study focuses on frontline direct providers of goods and services – mainstays in the implementation of public policy initiatives and to some the new street level bureaucrats (Hill, 2003). Supporting organizations – or groups that fund other nonprofits – are excluded. Furthermore, we included only nonprofits that compensated their chief executives or reported labor costs. In other words, we excluded nonprofits that either have or appear to have all voluntary operations.

Finally, because we are interested in how financial dynamics affect executive compensation over time, we used the NNRD to draw a national random sample of a pooled set of nonprofits that filed consecutively over the three-year period of 2000 to 2002. The result of the implementation of these decision rules was the inclusion of relatively large nonprofit organizations in the study population, while those with limited budgets, often less than \$75,000 in revenue, tended to be excluded from the population.

In the end, the sample, which we stratified by industry and size, includes 1,045 nonprofits from a population of 49,416. The sample has a confidence level of 95 percent and a confidence interval of plus or minus three.

Table 1 compares the sample to its population on three dimensions, including industry, size in total expenses, and location in census regions. The results of Table 1 suggest little variation between the sample and its population by industry and size, but some variation by location. Indeed, 28.0 percent of the sample is located in the northeast region of the U.S., compared to 25.7 percent of the population of nonprofits. In addition, 21.9 percent of the sample is found in the Midwest, compared to 24.0 of the population. Because of the narrow focus of the study, the findings should be viewed with some caution.

Table 1. Comparison of Means in the Sample and Full Population

Characteristic	Sample N=1,045	Population N=49,416
Industry		
Arts	12.5	12.6
Education	14.2	14.2
Environment	3.8	3.7
Health	49.9	49.9
Human Services	19.6	19.7
Size (Total Expenses)		
Less than \$100,000	5.4	5.4
\$100,000 to \$500,000	34.6	34.6
\$500,000 to \$1 million	17.0	17.0
\$1 million or more	43.0	43.0
Location (Census regions)		
Northeast	28.0	25.7
Midwest	21.9	24.0
South	28.4	28.7
West	21.6	21.7

Source: Authors' tabulation of NNRD

The study uses total compensation for chief executives as its dependent variable. The variable is the sum of salary and other forms of compensation, such as deferred compensation and contributions to retirement plans, as reported on Part V of the Form 990. The chief executive, defined as the person who leads the daily operations of the organization, was identified through a twofold process. First, we constructed a computer program to search and code the data by key terms (e.g., President, Chief Executive, Executive Director). The computer output was manually verified to ensure the program's reliability. Second, in cases where the computer program revealed more than one possible chief executive, we manually reviewed the Forms 990 to select the appropriate person.

The independent variables include several internal factors, including three fiscal performance measures and other control measures. The first financial performance is the proportional change in net assets from 2001 to 2002. Net assets equal the difference between total assets and total liabilities, and, when calculated across time, serve as an operational form of the growth or contraction of an organization's net worth or wealth. The second measure is the percentage change in operating margin in 2001. Operating margin is the within-year difference between revenues and expenditures, and constitutes the extent to which an organization balanced its budget. The final measure is the proportional change in revenue between 2001 and 2002, which serves as a proxy for the extent to which an organization grew its operation. Each measure captures a different aspect of nonprofit operations and is rooted in the literature on nonprofit organizations (See Chang and Tuckman, 1990; Trussel, 2002; Twombly and Auer; 2003). We use proportional calculations to moderate the effect of organizational size.

The other internal predictors of executive compensation reflect common explanatory determinants in the nonprofit literature, namely, industry specificity, organizational size, age, and location (Oster, 1998; Hallock, 2000; Frumkin and Keating, 2001). In an attempt to control for the heterogeneity of the nonprofit sector, industry is measured as five dummy variables. Organizational size is measured categorically in terms of total expenses and is included as dummy variables in the multivariate model. Organizational age is measured continuously and reflects each group's ruling date, that is, the year in which the group received its tax-exempt status from the IRS. Location is

operationalized by census regions, namely, the Northeast, Midwest, South, and West, and is included as dummy variables in the multivariate model.

As noted above, we also include measures of organizational complexity, legitimacy, and managerial scope. Complexity is measured in two forms. First, we use the Herfindahl Index to calculate the degree of revenue concentration in each organization. The index has been used in other studies of nonprofit organizations, most notably by Chang and Tuckman (1990) and Hager (2001) in their assessment of determinants of fiscal vulnerability. The index ranges from near zero to one. Numbers closer to zero indicate a greater degree of revenue variation – or receipt of multiple revenue sources – while those closer to one constitute stronger revenue concentration. An index score of one means that a nonprofit is solely reliant on one revenue source. Generally, nonprofits that operate with multiple revenue streams may be more administratively and financially complex than groups that rely on single funding sources (Gronbjerg 1993)

Complexity is also measured as the amount of commercial revenue earned by a nonprofit. Commercial revenue includes program service income in the form of contracts, voucher revenue, and other forms, and net income from the sale of goods and inventory and special events. The pursuit and receipt of commercial revenue for many types of nonprofit organizations requires a different set of managerial and leadership skills than are often associated with charities that are supported solely by donor contributions. Moreover, commercialism can complicate nonprofit operations, particularly in small to mid-sized groups, by requiring sophisticated accounting systems and compliance with IRS regulations on unrelated business income. We use the natural log of the commercial revenue variable in the multivariate models to account for its non-linear distribution, and we anticipate that the complexity variables, both from 2001, will positively and significantly relate to executive compensation, even when controlling for organizational size.

Legitimacy is measured in two ways. First, we created a dichotomous variable to indicate the receipt of government support in 2001. Obtaining government support can signal to the broader community or its board that an organization is a legitimate provider of goods and services. Second, we created a dichotomous measure of the receipt of donor

support in 2001. This variable is similar to the dichotomous government support variable, but because some organizations may receive one source but not the other, we included both measures in the model.

Like organizational complexity, we expect that legitimacy will be statistically and positively related to nonprofit executive compensation. Indeed, nonprofits that are in the midst of leadership transitions may need to spend extensively to attract high profile executives to maintain their legitimacy among donors or other funders. Second, for organizations with stable structures, they may need to provide relatively high executive compensation, compared with their peer organizations, to retain their chief executives in the face of market competition.

Finally, managerial scope is measured as the percentage spent on administration in 2001. This variable may cut either way in explaining compensation patterns. On the one hand, higher proportional spending on administration may signal that an organization is more willing to spend on labor to attract and retain key staff. On the other hand, in a charge environmental climate in which some nonprofits feel pressured to look fiscally leaner and more accountable, there is an incentive to reduce proportional managerial costs. Either way, we expect that this variable will have a statistically significant effect on executive compensation.

FINDINGS

Table 2 provides the descriptive statistics of the dependent and independent variables in the study. The mean executive compensation in 2002 was roughly \$72,000. The median was lower at \$54,500, reflecting some variation in the upper quartile of the distribution. The proportional net asset change, on average, was 8.8 percent from 2001 to 2002, although, like total executive compensation, the median was lower (1.5 percent). Within-year percentage change in operating margin was 10.73, meaning that for every \$110.73 in revenue, the average nonprofit had \$100 in expenses. The proportional revenue change, on average, from 2001 to 2002 was 9.08. The median values for percentage operating margin and proportional revenue change were also substantially lower than their means.

Table 2. Descriptive Statistics

Category	Variable	N	Mean	Median	Std.
Compensation	CEO total compensation	1,045	71,997.41	54,500.00	65,588.55
Performance	% Net asset change, 2001-2002	990	8.80	1.51	49.25
	% Operating margin, 2001	1,045	10.73	2.62	35.12
	% Revenue change, 2001-2002	1,045	9.08	4.19	37.61
Industry	Arts	1,045	0.13	0.00	0.33
	Education	1,045	0.14	0.00	0.35
	Environment	1,045	0.04	0.00	0.19
	Health	1,045	0.20	0.00	0.40
	Human Services	1,045	0.50	0.00	0.50
Size (Total Expenses)	Less than \$100,000	1,045	0.05	0.00	0.23
	\$100,000 to \$500,000	1,045	0.35	0.00	0.48
	\$500,000 to \$1 million	1,045	0.17	0.00	0.38
	\$1 million or more	1,045	0.43	0.00	0.50
Location (Census regions)	Northeast	1,045	0.28	0.00	0.45
	Midwest	1,045	0.22	0.00	0.41
	South	1,045	0.28	0.00	0.45
	West	1,045	0.22	0.00	0.41
Complexity	Revenue concentration, 2001	1,034	0.68	0.66	0.21
	Commercial revenue, 2001 (in 1,000s)	1,045	1,621.29	205.20	5,983.61
Legitimacy	Receipt of government support, 2001	1,045	0.49	0.00	0.50
	Receipt of donor support, 2001	1,045	0.87	1.00	0.34
Management	% spent on administration, 2001	1,045	16.53	13.71	14.29
Age	Organizational age, 2002	1,000	22.23	19.00	16.28

Source: Authors' tabulation of NNRD

Table 2 reiterates the distribution of the sample by industry and size reported above. The largest industry, in terms of number of organizations, provides human services. Roughly half of the sample fit into this industry. These groups supply such services as childcare, job training, and housing services, and many simultaneously provide multiple services. Health providers, excluding hospitals, constitute roughly one-fifth of the population. This classification includes community-based health clinics, organizations that provide public health education to local communities and their residents, and other localized health services. The smallest industries in the study include educational nonprofits (14 percent), the arts (13 percent), and the environment (4 percent). Indeed, only 40 groups in the study focus primarily on environmental issues.

Because of the manner in which the sample was drawn, the study focuses heavily on relatively large nonprofits. Of the 1,045 groups, roughly 43 percent had total expenses of \$1 million or more in 2002. More than half of the nonprofits in the study incurred expenses of between \$100,000 and \$1 million that year. Only 0.5 percent of groups had expenses of less than \$100,000. Still, because of the stratified nature of the sampling procedure, the distribution of organizations by these expense categories reflects the overarching population of nonprofits that report compensation or labor costs of their Form 990.

Table 2 also shows that 28 percent of organizations in the study are located in the Northeast region of the U.S. Another 28 percent is found in the South region. In contrast, 22 percent of the nonprofits are located in the Midwest and 22 percent are found in the West. In terms of age, the average nonprofit in the study has been in business for more than 22 years, while the typical group is more than 19 years old.

With respect to organizational complexity, the data reveal that the average nonprofit in the study received a Herfindahl index score of 0.68, suggesting that it tended to have relatively concentrated revenue streams. Still, the standard deviation suggests substantial variation on index scores. Indeed, a closer review of the data found that several organizations reported well diversified revenue sources, pushing their index score relatively close to zero, while other nonprofits received revenue from only one source, providing them with an index of one. The data also revealed substantial variation on receipt of commercial revenue. Indeed, while the average organization in the study

received more than \$1.6 million in commercial revenue, the typical nonprofit – or the median organization – earned only \$205,200.

The data on organizational legitimacy and managerial scope also exhibited some statistical variation. Nearly half of all organizations received governmental support in 2001, while 87 percent received donor contributions (table 1). The average group also used 16.5 percent of its expenses on administration, compared with the median nonprofit organization, which had proportional administrative expenses of roughly 13.7 percent.

Compensation Patterns by Industry, Size, and Location

Table 3 provides a closer look at executive compensation patterns in the nonprofit sector. More specifically, the table reports of the bivariate relationship between executive compensation and three key indicators, namely, industry, size, and location. Table 3 shows that the health industry best compensates its chief executives. Indeed, nonprofit leaders in the health field more \$92,000, on average, in 2002. What is more, the standard deviation of more than \$81,000 in the health industry suggests a relatively wide distribution of compensation among chief executives. In contrast to the health field, environmental organizations paid the lowest compensation packages to their executives. On average, chief executives in the environmental field earned less than \$52,000. The typical executive received even less (\$45,380).

Table 3. Executive Compensation by Industry, Size and Location

Characteristic	N	Mean	Median	Std.
Industry				
Arts	131	66,051	48,000	68,830
Education	148	73,462	59,492	53,058
Environment	40	51,593	45,380	35,790
Health	205	92,413	70,939	81,463
Human Services	521	66,610	52,709	61,010
Size (Total Expenses)				
Less than \$100,000	56	22,230	21,649	12,608
\$100,000 to \$500,000	362	39,379	37,390	22,064
\$500,000 to \$1 million	178	62,713	53,103	50,495
\$1 million or more	449	108,183	89,178	78,037
Location (Census regions)				
Northeast	293	72,745	58,637	56,910
Midwest	229	70,307	48,310	82,746
South	297	71,865	55,602	57,489
West	226	72,915	54,388	66,834

Source: Authors' tabulation of NNRD

Table 3 also reveals that, similar to the findings in the literature, nonprofit executive compensation is strongly related to organizational size. Groups with at least one million dollars in expenses pay, on average, roughly five times as much as nonprofits with less than \$100,000 in expenses. This distribution makes sense because the complexity of an organization tends to grow in relation to its size, requiring greater skills and expertise from its chief executive. But the data reveal little variation in chief executive salaries by region. In fact, nonprofits, on average, in the Western region of the U.S. pay their executives the highest compensation packages (\$72,915), but the range from highest average pay to the lowest (namely, \$70,307 in the Midwest) average compensation varies by only \$2,600 (table 3).

Correlates of Executive Compensation

Taken together, the descriptive analysis provides new empirical information on executive compensation patterns in the nonprofit sector. Table 4 extends the descriptive examination by supplying a set of bivariate correlates that show the statistical relationship between executive compensation and the independent variables in the study. Moreover, the results in table 4 begin to shed some light on the hypotheses posed above.

There are several significant relationships presented in table 4, but some are unsurprising. For example, that industry, size, and organizational age are significant predictors of nonprofit executive compensation reflect much of the literature on the topic. But of particular importance is the insignificant relationship between all financial performance indicators and executive compensation. As we posited above, there appears to be no pay-for-performance link in the nonprofit sector, at least in a bivariate analysis. In contrast, some institutional factors are strong determinants of executive compensation. For example, in terms of organizational complexity, the receipt of commercial revenue in 2001 is positively and significantly related to executive compensation in 2002. Similarly, the receipt of government support and donor contributions in 2001 – the dichotomous indicators of organizational legitimacy – are also significantly correlated with executive compensation in 2002.

Table 4. Correlation Coefficients of Executive Compensation and Explanatory Variables

Category	Variable	Coefficient	P-value	Signif.
Performance	% Net asset change, 2001-2002	-0.02	0.57	
	% Operating margin, 2001	-0.04	0.24	
	% Revenue change, 2001-2002	0.03	0.42	
Industry	Arts	-0.03	0.27	
	Education	0.01	0.77	
	Environment	-0.06	0.04	*
	Health	0.15	<.0001	**
	Human Services	-0.08	0.01	**
Size (Total Expenses)	Less than \$100,000	-0.18	<.0001	**
	\$100,000 to \$500,000	-0.36	<.0001	**
	\$500,000 to \$1 million	-0.06	0.04	*
	\$1 million or more	0.48	<.0001	**
Location (Census regions)	Northeast	0.01	0.82	
	Midwest	-0.01	0.66	
	South	0.00	0.97	
	West	0.01	0.81	
Complexity	Revenue concentration, 2001	0.04	0.16	
	Commercial revenue, 2001	0.53	<.0001	**
	Receipt of government support, 2001	0.08	0.01	**
Legitimacy	Receipt of donor support, 2001	0.09	0.00	**
	% spent on administration, 2001	-0.05	0.11	
Age	Organizational age, 2002	0.25	<.0001	**

Source: Authors' tabulation of NNRD

* = $P \leq 0.05$

** = $P \leq 0.01$

Determinants of Executive Compensation

Table 5 extends the bivariate analysis by reporting on the findings of three multivariate models. Each model uses a different fiscal performance indicator as an independent determinant of executive compensation. We use different models for two reasons. First, each financial performance measure theoretically relates to a different aspect of nonprofit functioning. Second, although the measures are theoretically divergent, the proportional changes in net assets and operating margins are strongly correlated. Thus, by including these two variables in the same model, we would raise the potential for violating the statistical assumptions of the general linear model used in the analysis. Therefore, we estimate their coefficients in separate models. Otherwise, each model uses identical independent variables, such as industry, size, and so forth, to predict nonprofit executive compensation.

The results of table 5 confirm the absence of a pay-for-performance link in the nonprofit sector, while holding constant other factors. While proportional changes in net assets and operating margins between 2001 and 2002 were negatively correlated with executive compensation, and the percentage change in revenue was positively correlated in the same period, their coefficients fail to meet the standard for statistical significance of 0.05.

Not surprisingly, organizational size tends to be the strongest determinant of nonprofit executive compensation, when statistically controlling for other factors, although only for nonprofits with \$500,000 or more in expenses. In fact, depending on the model, chief executives of nonprofits with total expenses of between \$500,000 and \$1,000,000 earned from \$34,600 to \$35,600 more annually than leaders of nonprofits with total expenses of less than \$100,000 (the reference group in the multivariate model). Moreover, nonprofits that have greater than \$1,000,000 annually pay between \$72,600 and \$74,770 more to their chief executives than nonprofits in the models' reference group, controlling for other factors.

Size and complexity go hand and hand, so that revenue concentration and receipt of commercial revenue – the two proxy variables for organizational complexity in the models – are statistically significantly related to executive compensation makes some

Table 5. Determinants of Executive Compensation

Variable	Model 1: Net assets			Model 2: Operating margin			Model 3: Revenue		
	Coefficient	S.E.	Signif.	Coefficient	S.E.	Signif.	Coefficient	S.E.	Signif.
% Net asset change, 2001-2002	-23.59	36.59							
% Operating margin, 2001				-7.04	51.50				
% Revenue change, 2001-2002							12.93	48.68	
Arts	14,430.59	10,463.37		13,866.73	10,680.39		13,775.46	10,687.14	
Education	6,557.13	10,300.37		5,025.88	10,526.55		5,070.17	10,491.95	
Health	16,851.23	10,089.69		17,456.45	10,285.96		17,524.12	10,229.08	
Human Services	2,576.15	9,515.17		2,782.51	9,729.71		2,852.26	9,682.32	
Expenses: \$100,000 to \$500,000	16,003.77	8,708.33		15,837.99	8,827.28		15,723.60	8,827.73	
Expenses: \$500,000 to \$1 million	34,618.44	9,336.61	**	35,571.03	9,446.68	**	35,445.94	9,442.72	**
Expenses: \$1 million or more	74,771.21	9,100.18	**	72,828.59	9,179.85	**	72,640.15	9,210.38	**
Northeast	-1,140.30	5,103.78		-1,393.98	5,159.86		-1,419.73	5,155.99	
Midwest	585.69	5,407.27		-1,663.23	5,477.43		-1,682.85	5,473.65	
South	808.25	5,082.01		-1,290.98	5,145.29		-1,364.81	5,140.24	
Revenue concentration, 2001	28,843.81	10,281.19	**	29,017.39	10,325.11	**	29,083.47	10,328.23	**
Commercial revenue, 2001, log	1,515.21	455.99	**	1,586.59	453.35	**	1,595.00	454.21	**
Receipt of government support, 2001	-2,198.73	4,037.21		-2,073.84	4,076.10		-2,037.91	4,078.97	
Receipt of donor support, 2001	3,500.94	5,929.67		184.01	5,760.69		117.34	5,759.36	
% spent on administration, 2001	63.61	129.46		36.01	128.60		36.02	128.58	
Organizational age, 2002	422.76	121.84	**	443.19	123.18	**	444.09	123.23	**
Intercept	-27,868.00	17,430.96		-23,463.67	17,706.57		-23,631.81	17,625.12	
	N=	941		N=	988		N=	989	
	Adj R-sq=	0.302		Adj R-sq=	0.283		Adj R-sq=	0.283	

Source: Authors' tabulation of NNRD

Note: Environmental organizations, those with less than \$100,000 in expenses, and those located in the western region of the U.S. are the reference groups in the model.

* = $P \leq 0.05$, ** = $P \leq 0.01$

sense (see table 5). However, controlling for size, industry, and other factors renders the relationship between organizational legitimacy and executive compensation insignificant. Moreover, the receipt of governmental support is negatively related to compensation values, a finding that while insignificant still runs counter to the hypothesis posed above. Further, identical to the bivariate relationship noted above, managerial scope – at least in terms of proportional administrative spending – has no statistically significant bearing on nonprofit executive compensation.

DISCUSSION

The debates that surround the issue of executive compensation in the nonprofit sector, particularly as they relate to the link between pay and performance, have largely unfolded without quantitative examination, leaving policy makers, nonprofit watchdogs and advocates devoid of systematic information on which to form opinions and make decisions. This paper provides the first nationally representative analysis of how the fiscal performance of nonprofit organizations relates to the remuneration of their chief executives in five industries.

Given the mission-specific orientation of many nonprofit organizations, it is unsurprising to find an insignificant relationship between executive compensation and financial performance among the groups in this study. Despite the large push for increased accountability, better economic stewardship, and, in some sense, the application of business models to the nonprofit sector, the link between pay for performance is absent. Of course, this exploratory analysis failed to consider all types of nonprofits, particularly potentially more business-oriented organizations like hospitals and higher educational institutions, which not only comprise the largest types of groups in the nonprofit universe, but also have the financial resources to invest in better accounting systems than smaller nonprofits. In the end, examining the pay for performance link in larger nonprofit subsectors may yield different results than those in this analysis.

Still, the insignificant link between pay and fiscal performance among the five industries in this study necessitated an examination of other determinants of executive compensation. In this regard, consistent with the literature, the data reveal that age and

industry specification are significantly and positively related to nonprofit executive compensation. Institutional factors, such as organizational complexity and legitimacy, also have a significant and positive effect on executive compensation, and complexity remains significantly related to executive pay in the multivariate analyses, providing a theoretical insight into nonprofit compensatory practices and a basis for future research. The strongest determinant of chief executive pay, however, is organizational size, a finding that mirrors nearly all studies on this topic and suggests a key mechanism used by nonprofit boards to compensate their chief officers.

In the end, the findings yield more questions than answers, particularly as efforts to raise accountability standards in the sector are redoubled. For example, to what extent do environmental variables, such as competition for skilled executive labor, relate to compensation in the sector, and how should these environmental factors be considered by policymakers in determining sanctions against nonprofits that are charged with excessively compensating their officers? These questions constitute gaps in the theoretical and policy literature and provide the basis to move forward from this analysis.

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