An Exploration of Nonprofit Hospital Executive Compensation

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PRELIMINARY RESULTS – DO NOT QUOTE WITHOUT PERMISSION
Introduction
The purpose of this study is to examine the relationship between executive compensation and financial performance in the tax-exempt healthcare sector in the United States (US). Government legislators mandate nonprofit organizations meet their stated tax-exempt purpose, and remain accountable to stakeholders. For these reasons, tax-exempt hospitals often face increased scrutiny from Federal, state, and local governing authorities, as well as donors. Critics allege that tax-exempt hospitals are failing to provide substantial community benefit and are thus undeserving of tax-exempt status received under Section 501(c)(3) of the Internal Revenue Code. A major component of this criticism lies with compensation arrangements of hospital executives. Guidestar encourages nonprofit entities “be prepared to explain to the IRS and the public why the salaries and benefits they offer their leaders are appropriate” (GuideStar, 2015: 2-3). Scrutiny of nonprofit executive compensation occurs at both the state and Federal levels, whereby some states have introduced legislation to limit executive pay in nonprofit hospitals. For example, New York’s Governor issued an Executive Order to “prevent public funds from being diverted to excessive compensation...to ensure that taxpayer dollars are being used to help New Yorkers in need” (State of New York, 2014).

Congressional agencies have also attempted to introduce various bills aimed at nonprofit executive compensation. Although not passed, the House Ways and Means Committee introduced legislation to impose penalties on tax-exempt organizations that pay over $1 million in compensation (House Bill 1, 2014). The U.S. Senate Finance Committee has also raised questions concerning executive compensation in the nonprofit sector. For example, Senator Chuck Grassley noted it is critical for charities to “keep their trust with the American people” (U.S. Senate Committee on Finance, 2004). Overall, this scrutiny led to several legislative oversight investigations – including the Nonprofit Hospital Study conducted by the Treasury Department and the Internal Revenue Service (IRS). Results of the
study revealed many executive compensation packages were higher than industry norms, which led to questions of whether tax-exempt hospitals are truly providing enough benefit to the community served.

Prior academic literature has focused heavily on compensation in the for-profit sector—including board compensation and executive power (Bebchuk, Cremers and Peyer, 2007). In the nonprofit sector, research has examined the use of incentive compensation in nonprofit organizations in various industries (Baber et al. 2002; Frumkin and Keating 2010; Sedatole, Swaney, Yetman and Yetman 2015). Considering increasing calls by legislators for analysis within the nonprofit sector, recent accounting literature analyzes executive compensation in numerous nonprofit sectors (Balsam and Harris 2013; Gaver and Im 2014). In a similar fashion, Garner and Harrison (2013) examine the effect of excess compensation on nonprofit financial performance. Our study contributes to existing literature by focusing on the nonprofit healthcare sector. Globally, the healthcare sector continues to rank among the largest economic sectors in numerous countries (Ditzel et al. 2006), and in the United States, there are over 5,700 registered hospitals, of which over 2,894 are nonprofit (AHA 2014). Understanding the relationship between executive compensation and nonprofit hospital performance is critical in this current healthcare market. As noted by Hansmann (1996), nonprofit organizations face a nondistribution constraint since they are not allowed to distribute any excess earnings to its stakeholders. Kramer and Santerre (2010) argue this nondistribution constraint forces nonprofit hospital CEOs to be compensated “based upon their relative success and fulfilling the charitable mission of their organizations”.

Nonprofit hospitals face further scrutiny of operations given the implementation of the Affordable Care Act (ACA). Implementation of the ACA requires tax-exempt hospitals to substantiate and justify its community impact. All of these economic pressures highlight the need to examine executive compensation within nonprofit hospitals. Our research adds to the void of compensation analysis in the nonprofit healthcare market. We seek to examine nonprofit executive compensation and
its association to charity care. Research has found compensation is linked to certain financial performance measures of nonprofit hospitals (Evans 2006; Eldenburg et al. 2015). Our focus on charity care is relevant and timely because limited research exists that provides evidence there is a relationship between charity care and executive compensation. Our findings indicate there is a positive relationship between the amount of charity care provided by the hospital and CEO compensation. Based on our sample, the program ratio, a key measure of a hospital’s focus on its mission, is negatively related to compensation. This finding is interesting, as it signals the higher the executive compensation, the lower the program ratio. This negative relationship is also found with donations – donors tend not to contribute to nonprofit hospitals when executive compensation is at higher levels. In terms of governance, hospitals with more outside board members tend to disclose lower compensation levels. This supports the notion that external monitoring does impact compensation disclosures. These results are consistent with prior research, and illustrate the importance of compensation disclosures within nonprofit hospitals. The paper is organized as follows: the next section provides a discussion of the relevant prior literature. The third section discusses our methodology, followed by our results in the fourth section. The final section provides our concluding remarks.

**Literature Review and Research Questions**

**Nonprofit Compensation**

Nonprofit organizations often receive heightened media attention in various situations, including executive pay disclosures, natural disasters, or governance scandals. Public disclosure of nonprofit executive compensation also leads to increased scrutiny of operations. A recent survey by the Council on Foundations indicates a median increase in CEO pay of 14% between 2011 and 2015 (Koenig 2016). Prior research indicates executive compensation does vary across sectors (both for-profit and nonprofit) (Ballou and Weisbrod 2003, Preya and Pink 2001). Nonprofit financial performance has been shown to affect executive compensation (Baber, Daniel and Roberts 2002; Brickely and Van Horn 2002;
Aggarwal, Evans, and Nanda (2012). The directional relationship of this effect is disputed, with Eldenburg and Krishnan (2003) and Hermalin and Weisbach (2003) finding higher compensation levels associated with better performing organizations.

Newton (2015) examines the relationship between executive compensation and organizational performance in large U.S. nonprofits, while controlling for governance quality. Specifically, she argues prior literature fails to provide directional predictions as to how nonprofit CEO-to-employee relative pay should relate to organizational performance. Her results indicate highly compensated nonprofit CEOs are associated with both inferior organizational performance and poor governance quality.

Dhole et al. (2015) examine whether the California Nonprofit Integrity Act of 2004 impacted CEO compensation. The California Nonprofit Integrity Act closely mirrors regulations of the Sarbanes-Oxley Act, and requires nonprofit organizations to engage in transparent operations, and justify executive compensation. While Neely (2011) investigates compensations of managers and directors, Dhole et al. (2015) focuses only on CEO compensation. Both studies examine whether the Act had an effect on nonprofit compensation. Dhole et al. (2015) argue that under reasonable circumstances, the Act would have moderating effects on compensation. Their results illustrate an increase in CEO compensation after implementation of the Act – likely due to increased regulatory costs. The authors conclude the Act did not have a disproportionate impact on executive compensation, and the post-Act higher compensation is likely due to added administrative burdens.

Several studies rely on accounting-based performance metrics to examine nonprofit compensation. For example, Sedatole et al. (2015) find a positive relationship between changes in compensation and changes in revenue stream – excluding unrelated taxable income. Their analysis is one of the few studies that disaggregate total revenue into component sources, including unrelated business taxable revenue. They conclude that executives are incentivized to increase many sources of revenue. Garner and Harrison (2013) find a negative relationship between compensation and nonprofit
performance. They argue managers reallocate resources away from the mission of the entity – which aligns with prior research in the for-profit literature (Brick, Palmon and Wald 2006). They conclude that powerful CEO autonomy may be detrimental to firm performance. In terms of organization size, Dhole et al. (2015) find a positive relationship with CEO pay, which is consistent with the findings of Hallock (2002).

Another key measure of nonprofit financial performance is donations. Balsam and Harris (2014) indicate sophisticated donors use compensation information when making decisions. In their sample, sophisticated donors reduce their financial support to entities after disclosure of high executive compensation. Their study focuses on disclosure of a growth in executive compensation in the media; whereas mere disclosure in the Form 990 and not mentioned in the media does not result in a significant relationship. Dhole et al. (2015) also find a negative relationship between compensation and donations in their sample of California nonprofit organizations.

Financial performance of nonprofit entities is often measured by revenue type, including donations. Research has recently expanded the scope of financial performance by investigating the revenue complexity of nonprofit organizations. Dhole et al. (2015) measure complexity as the number of revenue sources reported on the Form 990. Their analysis of California nonprofit organizations illustrate a positive association between complexity and CEO compensation. We seek to expand upon the use of revenue complexity and apply this financial performance measure to the nonprofit healthcare industry.

Hotel Compensation & Charity Care

Providing charity care is one of the foundational premises of nonprofit tax-exempt hospitals. The tax-law requires tax-exempt hospitals to provide for the ‘common good’, as well as sufficient charity care. This issue of charity care dates back to the Tariff Act of 1913, which posits that tax exemption should be granted to organizations operated exclusively for charitable purposes. Crabtree and Smith
(2006) illustrate that the tax law in the US fails to provide a succinct definition of charity care – yet hospitals are evaluated on whether or not sufficient charity care is provided. Prior legal research also illustrates that a quantifiable baseline calculation of charity care still does not exist at the Federal level, yet Congressional regulators continue to evaluate the level of charity care provided by tax-exempt hospitals (Campbell, Smith and Hostetler 2013; Kenedy et al. 2010).

Empirical findings concerning executive compensation in the nonprofit healthcare sector have produced conflicting results. Eldenburg et al. (2015) acknowledge the importance of charity care to hospitals’ objectives, and examine whether it impacts compensation practices. The premise of their research is based on the idea that competitive pressure in the health sector has motivated nonprofit hospitals to use compensation incentives that are profit-based (Lambert and Larcker 1995, Erus and Weisbrod 2003, Brickley and Van Horn 2002). Their evidence does not indicate an association between profit-based compensation and charity care levels within nonprofit hospitals. Nonprofit managers face normative pressure from several external stakeholders; this combined with the nondistribution constraint, contribute to management’s focus on providing charity care. Grasse, Davis, and Ihrke (2014) find a positive relationship between financial health and executive compensation in nonprofit hospitals. Financial health is measured as the savings indicator, based upon the work of Greenlee and Bukovinsky (1998). Hospitals in their sample also exhibited a positive associate between compensation and total expenditures.

Joynt et al (2014) examine the relationship between hospital CEO pay and financial performance, including community benefit. Their results indicate a marginal relationship between compensation and hospital financial performance; however, results did not indicate a relationship between compensation and charity care. Kramer and Santerre (2010) empirically examine compensation of 35 CEOs from 29 nonprofit hospitals in Connecticut. Their results indicate compensation is related to organizational size, and executives are rewarded with additional pay when
hospitals perform well financially. In terms of charity care, there is a negative association between charity care and compensation for these Connecticut hospitals.

As illustrated, empirical findings surrounding compensation and charity care are mixed. We expect, given the need to provide charity care to maintain tax-exempt status, there is a relationship between a nonprofit hospital’s reported charity care and key financial performance measures. This leads to our research questions:

RQ1: Is CEO compensation from a nonprofit hospital related to charity care?
RQ2: Is CEO compensation from a nonprofit hospital related to revenue complexity?
RQ3: Is CEO compensation from a nonprofit hospital related to program expenses (organizational efficiency)?
RQ4: Is CEO compensation from a nonprofit hospital related to the size of the organization?

Methodology

Data

We use Form 990 data from the Internal Revenue Service Statistics of Income (SOI) file for 501(c)(3) nonprofit hospitals. This data is available from the National Center for Charitable Statistics (NCCS) for years 2009-2012. There are noted potential problems with the Form 990 and SOI data, however, established research notes that this is the most useful dataset because it represents the realistic tax filings of hospitals (Froelich and Knoepfle 1996; Marudas 2004; Tinkelman 2004; Feng, Ling, Neely, Roberts 2014). We rely on this tax return data because it reflects the data actually reported to government oversight agencies. To be consistent with prior research, we eliminate observations with missing values, including observations where administrative, program, and fundraising expense equals (or is less than) zero (Krishnan, Yetman and Yetman 2006; Wing et al. 2004; Yetman and Yetman 2011; Kitching, Roberts and Smith 2012). We also winsorize at one percent to address the influence of extreme
outliers. The final sample includes 11,062 observations. Table 1 presents the sample selection procedures.

**Table 1**  
**Sample Selection Procedures**

<table>
<thead>
<tr>
<th>Sample Selection Criteria</th>
<th>Total Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hospitals in NCCS database (SOI data)</td>
<td>16,094</td>
</tr>
<tr>
<td>Less: Extreme one percent*</td>
<td>81</td>
</tr>
<tr>
<td>Form 990 includes errors or missing data</td>
<td>4,951</td>
</tr>
<tr>
<td>Total observations</td>
<td>11,062</td>
</tr>
</tbody>
</table>
* Winsorize at one percent

**Model Specification**

In order to analyze our research questions concerning the relationship between hospital financial characteristic variables and compensation, we analyze the following model, following the work of Dhole et al. (2015). Our model allows for an examination of the roles various financial and non-financial variables play in hospital operations and its association with compensation.

\[
\text{LnComp}_{it} = \beta_0 + \beta_1 \text{LnCharityCare}_{it} + \beta_2 \text{Donations}_{it} + \beta_3 \text{Endow}_{it} + \beta_4 \text{Excess}_{it} + \beta_5 \text{ProgramRatio}_{it} + \beta_6 \text{Complex}_{it} + \beta_7 \text{BoardComposition}_{it} + \beta_8 \text{BoardOutsiders}_{it} + \beta_9 \text{LnTA}_{it} + \beta_{10} \text{YEAR}_{it} + \text{error}_{it}
\]

The natural logarithm (log) of compensation (\(\text{LnComp}\)) is the dependent variable. This represents the reportable compensation on the W-2/1099-Misc for the executives as reflected in Part VII of the Form 990.

\(\text{LnCharityCare}\) is the natural log of total charity care expenses reported on Schedule H of the Form 990. This is the sum of charity care at cost plus unreimbursed Medicaid and unreimbursed costs. Research notes the lack of a consistent definition of charity care prior to the implementation of the Affordable Care Act. Our research relies on the Form 990 disclosures and recognizes that this measure
may be different from what may be reported on the entity’s financial statements. Relying on prior research, we measure Donations as the total donations as a percentage of total revenue (Balsam and Harris 2014).

Other financial performance measures in our model include total endowments as a percentage of total expenses (Endow). We follow Core, Guay and Verdi (2006) by using the sum of cash, savings and investment securities as a percentage of total expenses. Their results indicate this endowment measure is associated with CEO compensation. Following Dhole et al. (2015), we do not predict the direction of the relationship between Excess and compensation. They argue the direction is based on management decision making, and their results based on California nonprofit entities illustrate a positive relationship.

The ProgramRatio is a common measure of nonprofit financial performance. This is a measure of how much nonprofit entities spend on their direct programs – total program expense / total expenses. Research often uses this as a measure of organizational efficiency. Baber, Daniel and Roberts (2002) find that changes in executive compensation are associated with changes in the program ratio. Dhole et al. (2015) find a negative relation between CEO pay and the program ratio – which is actually consistent with for-profit findings when pay and performance are measured as levels (Core 2002).

Complex is revenue complexity, measured as the total number of revenue sources listed on Form 990, Part I. This is one of the unique measures of financial performance based on the work of Dhole et al. (2015). Nonprofit hospitals may not have very complex revenue streams as compared to other nonprofit entities. Hospitals tend to have their revenue streams from a few stable sources, include patient revenue and investment earnings. We expect that many of our sample hospitals will not have very complex revenue structures.

The corporate governance measures of our model are BoardComposition – which is the number of voting members that serve on the board. We include these as monitoring variables to examine the impact of internal monitoring on executive compensation. Prior research is mixed regarding the
monitoring effects of boards. For example, Jensen (1993) suggests larger board are not effective in monitoring or disciplining managers; while Aggarawal et al. (2012) argue larger boards in the nonprofit sector are able to meet the needs of multiple stakeholders.

Our other governance measure is BoardOutsiders – measured as the percentage of outside members that serve on the entity’s board. This governance measures is important in the nonprofit sector due to regulatory oversight of any fraud instances in the nonprofit sector. Beasley (1996) states firms without fraud have a high percentage of outside directors; furthermore, board members also have an impact on compensation decisions. Newton (2015) finds highly-compensated nonprofit executives are associated with poor governance quality. This relates to the premise that nonprofit entities are often measured by public view that operational focus should be on community programming, rather than executive compensation. Further research also indicates that the fewer ‘outsiders’ on a board, the higher the compensation of executives (Cardinaels 2009; Brickley et al. 2010). Our model also controls for size using the log of Total Assets (LnTA) – which is a consistent measure of size in the literature (Dhole et al. 2015; Sedatole et al. 2015). Research also finds that size is positively related to executive compensation (Oster 1998, Frumkin and Keating 2010, Hallock 2002)

Results

Table 2 presents descriptive statistics for our sample. The mean (median) CEO compensation for the sample are $4.7 ($3.0) million dollars, respectively. Higher compensation in nonprofit hospitals is consistent with prior research, particularly due to the asset intensive nature of the business. Average donations as a percentage of total revenue is 8.7 percent, while average excess net assets is $9.0 million. The average program ratio for the sample is 82.6 percent – which is also consistent with industry norms. The average board size for the sample is 15 members, with a low size of three members.
Table 2
Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Min.</th>
<th>Median</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comp</td>
<td>4,790,662</td>
<td>5,354,948</td>
<td>0</td>
<td>3,087,263</td>
<td>29,091,657</td>
</tr>
<tr>
<td>Donations</td>
<td>0.08765</td>
<td>0.21209</td>
<td>0</td>
<td>0.00295</td>
<td>0.00295</td>
</tr>
<tr>
<td>Excess</td>
<td>9,015,993</td>
<td>25,589,519</td>
<td>-29,564,378</td>
<td>-29,564,378</td>
<td>161,642,611</td>
</tr>
<tr>
<td>ProgramRatio</td>
<td>0.82677</td>
<td>0.15225</td>
<td>-29</td>
<td>0.85747</td>
<td>1.000</td>
</tr>
<tr>
<td>BoardSize</td>
<td>15.00662</td>
<td>9.44146</td>
<td>3.000</td>
<td>13.000</td>
<td>69.000</td>
</tr>
<tr>
<td>BoardOutsiders</td>
<td>0.78555</td>
<td>0.24714</td>
<td>0</td>
<td>0.85714</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Table 3 reports the estimation results for the model. The overall model is significant, and all independent variables are significant. Consistent with prior research (Dhole et al. 2015), there is a positive relationship between charity care and executive compensation. This signals that nonprofit hospitals due focus on providing significant levels of charity care to the community. This finding also holds when we analyze the model using actual charity care levels instead of the natural log ($t = 2.88; p=0.0039$). Also consistent with prior findings (Dhole et al. 2015; Core 2002) there is a negative relationship between compensation and the program ratio. In terms of donations, the higher the compensation, the lower the donations as a percentage of the entity’s revenue stream. This indicates that donors tend to be savvy investors with their dollars, and the level of compensation may signal that the organization may use its funds for other purposes – thus leading to decreased donations. Nonprofit hospital endowments are negatively associated with executive compensation. Endowment values may be associated with the level of donations. If donors do not see value in contributing to organizations paying high compensation levels, the endowment values are negatively impacted as well.

In terms of governance oversight, results indicate hospitals with more outside board members tend to have lower executive compensation. This governance monitoring is consistent with prior research. The purpose of a board is to provide fiscal responsibility and oversight. An active board, along with outside board members, are seen to be more effective at implementing strong fiscal oversight. Our results are also consistent with the findings of Dhole et al. (2015) regarding the complexity of the
organization’s revenue stream. We find a negative relationship between executive compensation and revenue complexity. Our results show a positive relationship between compensation and the size of the organization – which is consistent with both Dhole et al. (2015) and Hallock (2002).

Table 3
Model Specification

\[
\ln(\text{Comp}_{it}) = \beta_0 + \beta_1 \ln(\text{CharityCare}_{it}) + \beta_2 \text{Donations}_{it} + \beta_3 \text{Endowment}_{it} + \beta_4 \ln(\text{Excess}_{it}) + \beta_5 \text{Program Ratio}_{it} + \\
\beta_6 \text{Complexity}_{it} + \beta_7 \text{Board Composition}_{it} + \beta_8 \text{Board Outsiders}_{it} + \beta_9 \ln(\text{TA}_{it}) + \beta_{10} \text{YEAR}_{t} + \text{error}_{it}
\]

Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>10</td>
<td>10348</td>
<td>1034.75466</td>
<td>1797.59</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Error</td>
<td>11050</td>
<td>6361.32363</td>
<td>0.57563</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>11061</td>
<td>16709</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Root MSE       | 0.75871| R-Square      | 0.6193      |
Dependent Mean | 14.88961| Adj R-Sq     | 0.6189      |
Coeff Var      | 5.09561|             |             |

Parameter Estimates

| Variable               | DF | Parameter Estimate | Standard Error | t Value | Pr > |t| Tolerance | Variance Inflation |
|------------------------|----|--------------------|----------------|---------|------|----------|-------------------|
| Intercept              | 1  | 7.85219            | 0.10322        | 75.85   | <.0001|         | .                 | 0                 |
| LnTA                   | 1  | 0.38147            | 0.00775        | 49.20   | <.0001| 0.31059 | 3.2197            |
| COMPLEX                | 1  | -0.02734           | 0.00622        | -.40    | <.0001| 0.68385 | 1.46232           |
| ENDOW                  | 1  | -0.00553           | 0.00050321     | -.1099  | <.0001| 0.75138 | 1.33088           |
| DONATIONS              | 1  | -0.52106           | 0.04403        | -11.84  | <.0001| 0.70716 | 1.41412           |
| lnCHARITYCARE         | 1  | 0.01843            | 0.00118        | 15.56   | <.0001| 0.57423 | 1.74146           |
| lnEXCESS               | 1  | 0.06672            | 0.00631        | 10.57   | <.0001| 0.35593 | 2.80951           |
| PROGRAMRATIO          | 1  | -0.24916           | 0.05349        | -4.66   | <.0001| 0.83076 | 1.20371           |
| BOARDSIZE              | 1  | 0.01458            | 0.00083721     | 17.42   | <.0001| 0.80257 | 1.246             |
| BOARDOUTSIDERS        | 1  | -1.29799           | 0.03188        | -40.72  | <.0001| 0.92921 | 1.07618           |
| YEAR                   | 1  | 0.0289             | 0.00646        | 4.47    | <.0001| 0.99468 | 1.00535           |

Where:
\(\ln(\text{Comp})\) = the natural log of CEO compensation
\(\ln(\text{Charity Care})\) = charity care expense reported on Schedule H, Form 990; consists of the sum of (charity care at cost + unreimbursed Medicaid + unreimbursed costs)
\(\text{Donations}\) = total donations / total revenue
Endow = (sum of cash, savings, and investment securities) / total expenses
LnExcess = the natural log of excess of revenues over expenses
ProgramRatio = program ratio expense; measured as total program expenses / total expenses
Complex = revenue complexity; measured as the total number of revenue sources listed on Form 990, Part I.
BoardComposition = number of voting members that serve on the board
BoardOutsiders = percentage of outside members that serve on the board
LnTA = natural log of total assets
YEAR = tax year

We further analyzed the data using the original model by adding the interaction between compensation and revenue complexity. Untabulated results indicate all model variables remain significant, except the interaction term.

Additional Analysis

We divided our sample hospital by level of complexity – low, mid, and high. High complexity hospitals were those with over 8 distinct revenue sources, while low complexity included less than four sources. There were 28 observations in the high complexity category; 1,975 considered low complexity, and 9,059 of mid complexity. Table 4 presents the model results for the mid-complexity hospital sample. Results are consistent with the overall model – there is a negative relationship between compensation and program ratio, and a positive relationship with charity care.
Table 4  
Model Specification  
By Mid-Complexity

\[ \text{LnComp}_i = \beta_0 + \beta_1 \text{LnCharityCare}_{it} + \beta_2 \text{Donations}_{it} + \beta_3 \text{Endow}_{it} + \beta_4 \text{LnExcess}_{it} + \beta_5 \text{ProgramRatio}_{it} + \beta_6 \text{Complex}_{it} + \beta_7 \text{BoardComposition}_{it} + \beta_8 \text{BoardOutsiders}_{it} + \beta_9 \text{LnTA}_{it} + \beta_{10} \text{YEAR}_{it} + \text{error}_{it} \]

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Value</th>
<th>Pr &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
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<td>7842.71723</td>
<td>784.27172</td>
<td>1603.99</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Error</td>
<td>9048</td>
<td>4424.0257</td>
<td>0.48895</td>
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</tr>
<tr>
<td>Corrected Total</td>
<td>9058</td>
<td>12267</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Root MSE 0.6993  
R-Square 0.6393  
Dependent Mean 14.997  
Adj R-Sq 0.6389  
Coeff Var 4.6626

| Variable        | DF | Parameter Estimate | Standard Error | t Value | Pr > |t| Tolerance | Variance Inflation |
|-----------------|----|--------------------|----------------|---------|------|----------|-------------------|
| Intercept       | 1  | 7.66972            | 0.11666        | 65.75   | <.0001 | .        | 0                 |
| lnTA            | 1  | 0.37845            | 0.00845        | 44.78   | <.0001 | 0.29637  | 3.37416           |
| COMPLEX         | 1  | -0.0065            | 0.00783        | -0.83   | 0.4068 | 0.83179  | 1.20223           |
| ENDOW           | 1  | -0.00857           | 0.0007947      | -10.78  | <.0001 | 0.79735  | 1.25415           |
| DONATIONS       | 1  | -0.63988           | 0.05554        | -11.52  | <.0001 | 0.69445  | 1.43999           |
| lnCHARITYCARE   | 1  | 0.0174             | 0.00126        | 13.83   | <.0001 | 0.60575  | 1.65085           |
| lnEXCESS        | 1  | 0.07316            | 0.00686        | 10.66   | <.0001 | 0.33329  | 3.00038           |
| PROGRAMRATIO    | 1  | -0.283             | 0.06794        | -4.17   | <.0001 | 0.86055  | 1.16204           |
| BOARDSIZE       | 1  | 0.01243            | 0.0008482      | 14.65   | <.0001 | 0.81999  | 1.21966           |
| BOARDOUTSIDERS  | 1  | -1.19145           | 0.03577        | -33.31  | <.0001 | 0.92879  | 1.07667           |
| YEAR            | 1  | 0.02996            | 0.00661        | 4.53    | <.0001 | 0.99354  | 1.0065            |
Concluding Remarks

This study contributes to existing literature by focusing the relationship between executive compensation and financial resources of nonprofit hospital organizations. This research is timely and relevant considering the recent changes to federal tax disclosure requirements for hospitals – due to the Affordable Care Act. Nonprofit hospitals receive scrutiny from stakeholders – including donors and legislators – to ensure sufficient charity care is provided to the community. Compounding the need for diligent fiscal management is the concern nonprofit funds are not focused on the community, but going to executive pay. Our results, based on the healthcare sector, are consistent with prior literature. Nonprofit executive compensation is related to charity care disclosures, and negatively related to donations. Management must be aware of the potential negative impact of compensation disclosures on entity donations levels. Savvy donors scrutinize fiscal management and will seek to donate to organizations that are perceived to be more efficient in their compensation structure.

Board oversight and fiduciary duty is also related to compensation disclosures. Our sample hospitals with more outside board members tend to pay less in executive compensation. Considering federal regulators focus on the governance structure of nonprofit entities, this relationship with compensation is important. The Form 990 requires nonprofit hospitals to disclosure numerous governance aspects – including the number of outside board members. Regulators will continue to emphasize the importance of board financial oversight – not just on fiscal performance, but compensation package arrangements. Given the relationship between compensation and charity care disclosures, future research in the nonprofit sector should examine the actual compensation contracts for these hospital executives. This form of detailed analysis can provide insight into what nonprofit board members value for their organizations. Future research should also further examine the relationship between executive compensation and unrelated business income. Considering unrelated business income is subject to corporate income tax rates, do organizations that engage in unrelated
income sources reward these activities in the compensation packages of its executives? The nonprofit healthcare sector provides a unique setting to examine these issues, and academic literature may contribute to developing future legislative policy that answers the call for more scrutiny of the sector.
References


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