ABSTRACT

We examine the associations between board chair-CEO relation, board chair characteristics, and top executive compensation in U.S. nonprofit organizations. Using a sample of 2,153 organization-year observations in our empirical tests, we find a significant positive association between board chair-CEO relation and top executive compensation. We find that board chair characteristics such as board chair’s tenure, gender, and co-chairing are not significantly associated with top executive compensation. The findings should be helpful to further understand influencing factors on nonprofit executive compensation.

Keywords: governance, executive compensation, nonprofit, board chair
Executive compensation is a well-researched area. Studies in both the for-profit setting (e.g. Bebchuk and Fried 2004; Fama and Jensen 1983; Jensen and Meckling 1976; Jensen et al. 1990b; Murphy 1985; Tosi et al. 2000; etc.) and the nonprofit setting (e.g. Gibelman 2000; Baber et al. 2002; Brickley and Horn 2002; Hallock 2002; Brickley et al. 2003; Gray and Benson 2003; Grasse et al. 2003; Jobome 2006; Frumkin and Keating 2010; Aggarwal et al. 2012; Balsam and Harris 2018) have shown evidence of either pay-for-performance or the associations between governance and executive compensation. Board chair and CEO are two main actors in organizations. Yet, to our knowledge, no prior research has examined the association between board chair CEO relationship, board chair characteristics, and executive compensation. This study intends to fill the literature gap.

In a recent nonprofit study, Jäger and Rehli (2012) utilize cases where organizations experience a replacement of the board chair and the executive director and find that the power relation characterized by the two actors' equivalent capabilities and complementary preferences enhances checks and balances between the board chair and the executive director. Based on their findings, we expect that the board chair CEO power relation may play a role in determining CEO compensation. In this study, we measure the board chair-CEO relation by their tenure together in their respected roles for the current organization.1 Our goal is to examine whether the cumulative work experience and increasing familiarity between the two main parties have an impact on CEO

1 We understand this measure does not capture all aspects of board chair-CEO relation (such as their social connections outside the nonprofit organization). Nevertheless, we believe the years served together by the pair plays a significant role in shaping their power dynamics and thus has an influence on CEO compensation.
compensation. Many CEOs act as board chair in for-profit firms. In contrast, in the nonprofit sector, almost all board chairs are independent of the executive function. This unique setting provides us a clean testing opportunity to investigate the role of board chair and whether board chair characteristics are associated with CEO compensation.

Several nonprofit studies (Gibelman 2000; Brickley et al. 2003; Jobome 2006) have examined the association between CEO tenure and executive compensation. As far as we know, no prior research has investigated the association between board chair tenure and executive compensation. Given that board chair and CEO are two main actors in organizations and the board is an important governance feature, we expect that board chair tenure may play a role in determining executive compensation. Based on a for-profit study (Kesner 1988) that examines the role of board director gender on committee membership, we expect that board chair gender may influence executive compensation in the nonprofit setting. Garner and Harrison (2013) report that the negative relation of CEO pay to performance exists for firms with only one executive, indicating that having multiple executives may mitigate the agency problems. Thus we posit that board co-chairing could mitigate the agency problem arising from the autonomy possessed by a powerful board chair.

Using a sample of 2,153 organization-year observations, we find a positive association between board chair-CEO relation and CEO compensation. Our results show that if the board chair and CEO have previously worked together for the same nonprofit, the CEO compensation is 5% higher than if they have no previous cohort experience. The evidence indicates the potential entrenchment risk due to the power relation, which could negatively affect stakeholders. However, there is no consistent supporting evidence that female board chairs and board co-chairing appear to be associated with the level of CEO compensation. Consistent with
prior research, we also find positive associations between CEO compensation and board size, lag total revenue, lag assets, lag unrestricted cash, and lag CEO compensation.

Our study makes the following contributions to the executive compensation literature. First, to our knowledge, this is the first study that examines the association between board chair CEO relation, board chair characteristics and CEO compensation. We utilize the unique setting in the nonprofit sector where virtually all board chairs do not participate in the executive function whereas many CEOs are board chair in the for-profit sector. The unique setting provides a clean test environment for us to examine the association between board chair characteristics and CEO compensation. Second, our results show that the power relation between board chair and CEO increases CEO compensation, suggesting entrenchment risk. The findings not only further the understanding of the determinants of CEO compensation but also can bear regulatory implications. Regulators could use our results to impose rules to mitigate the impact that the power relation between board chair and CEO has on CEO compensation in nonprofits.

The next section reviews related literature and develops our hypotheses. The following two sections discuss our research model and results. The last section summarizes our findings and draws conclusions.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Executive compensation has been long studied in the for-profit world. The main stream of this literature is based on the agency theory which was developed by Jensen and Meckling (1976). Executive compensation, such as bonus, stock, and stock options, can be arranged to reward executives for better firm performance (Fama and Jensen 1983; Jensen and Meckling 1976). Another strand of executive compensation research (e.g., Bebchuk and Fried 2004) views
executive compensation as the result of either managerial power or rent extraction. Research has also empirically examined the determinants of executive compensation (Jensen et al. 1990b; Murphy 1985; Tosi et al. 2000).

In the nonprofit sector, research on executive compensation was sparse in the past and has increased in recent years due to data availability. Several nonprofit studies (Baber et al. 2002; Brickley and Horn 2002; Gray and Benson 2003; Frumkin and Keating 2010; Hallock 2002; Balsam and Harris 2018) have investigated the associated between pay and performance in nonprofit organizations. For instance, Baber et al. (2002) find that accounting performance measures (e.g. changes in program spending) play a role in determining executive compensation in nonprofit organizations. Gray and Benson (2003) use a sample of 114 directors of small business development centers and also document the supporting evidence for a significant pay-for-performance relation. Furthermore, they report that human capital (i.e. education and experience), organizational size, and organizational affiliation are significantly related to executive compensation. Controlling for education, tenure, size, performance, and affiliation, they also find that female executives receive significantly lower compensation than male executives.

The nonprofit sector offers a unique setting to examine executive compensation due to a non-distribution constraint on the payout of profit to managers. Without shareholders and the threat of takeovers, nonprofit managers are under less compensation oversight compared to their for-profit counterparts, which resulted in several scandals in the nonprofit sector and warranted further monitoring mechanisms and regulations (Ljung 2005). Nevertheless, Dhole et al. (2015) find that contrary to regulation constraining executive compensation, nonprofit executive
compensation surprisingly increased by 6% on average after the California Nonprofit Integrity Act of 2004 was enacted.

Unlike in the for-profit world, nonprofit boards cannot utilize equity compensations to mitigate agency conflicts. Fama and Jensen (1983a, 1983b) point out that given this unique feature, nonprofits rely more on governance mechanisms such as self-perpetuating boards that are distinctly different from those of for-profit corporations to mitigate agency problem. In a study on board and executive compensation in nonprofits, Aggarwal et al. (2012) investigate relations between board size, managerial incentives, and enterprise performance in nonprofit organizations. They provide evidence of a negative association between board size and management incentives.²

Board chair provides guidance for the board of directors and is typically involved in determining executive compensation. Yet little research has been done on how board chair characteristics and board chair-CEO relation influence executive compensation. Berstein et al. (2016) find that CEOs and board chairs often have different perceptions on key governance aspects, including board performance, leadership, diversity, and board meetings which supports the agency theory. Given these differences in two main actors in organizations, whether the relationship between board chair and CEO plays a role in determining executive compensation is an open empirical question. Our study intends to fill the literature gap.

In theory, nonprofit boards of directors should perform mission-setting and oversight functions that enhance organizational accountability. On the contrary, LeRoux and Langer (2016) find that board behavior sometimes falls short. They investigate whether nonprofit boards

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² Aggarwal et al. (2012) use two proxies for managerial incentives. The first one is the sensitivity of compensation to financial performance. The second one is the coefficient of variation of executives’ compensation.
are meeting executive directors' expectations and report a high alignment between board behavior with executive directors' preferences in administration and management tasks. In contrast, for involvement in mission-setting and oversight duties, there is a disconnect between board behavior and executive directors' preferences.

Jäger and Rehli (2012) compare the results of two main and two replicated cases that experience a replacement of the board chair and the executive director, a significant governance change. They find a similar pattern in the governance power relation in all cases during the post replacement: This power relation is characterized by the actors' equivalent capabilities and complementary preferences, which enhances checks and balances between the board chair and the executive director. This suggests that the board chair-CEO relation is an important factor in the nonprofit setting.

As the board chair and CEO develop longer tenure together in the current nonprofit, the level of familiarity between the two parties increases, and this could lead to different outcome. On the one hand, longer tenure together could lead to superior oversight. In this case, the board chair and CEO work more efficiently with each other as they both build more industry expertise (Kesner 1988). The board chair may also feel more comfortable confronting the CEO during difficult situations. On the other hand, the board chair-CEO relation could raise the risk of entrenchment. In this case, the board chair becomes the CEO’s advocate and the CEO could use this relation to her own benefit (Byrd et al. 2010). Thus, we do not have a directional prediction on the association between board chair-CEO relation and executive compensation. Based on the above discussion, our first hypothesis is as follows:

\textit{H1: Board chair-CEO relation is not associated with executive compensation.}
Prior nonprofit research has examined the association between CEO tenure and executive compensation (Gibelman 2000; Brickley et al. 2003; Jobome 2006). In a for-profit study, Deschenes et al (2015) fund that top management compensation is positively associated with the average tenure of outside board members. Board chair and CEO are two main actors in organizations and board is an important governance feature for organizations. However, no existing research has investigated the association between board chair tenure and executive compensation. Thus we expect that board chair tenure may play a role in determining executive compensation. On the one hand, when the board chair’ tenure is short, the board chair may have less power in influencing the decision-making on executive compensation. On the other hand, when the board chair’s tenure is short, he (or she) is more likely to be objective in assessing executive compensation and making recommendations for necessary adjustments on executive compensation. It is unclear which direction board chair tenure plays its role in determining executive compensation. Thus, our second hypothesis is in the null form as well:

\[ H2: \text{Board chair tenure is not associated with executive compensation.} \]

In a for-profit study, Kesner (1988) finds evidence that gender of board directors affects their membership on board committees, including the compensation committee. Given the evidence that gender difference matters, we expect that board chair gender may have an impact on determining executive compensation. Nevertheless, we do not have specific directional prediction on how board chair gender affects executive compensation. Thus we state our third hypothesis in the null form as follows:

\[ H3: \text{Board chair gender is not associated with executive compensation.} \]

Garner and Harrison (2013) report that the negative relation of CEO pay to performance exists for firms with only one executive, the CEO. The evidence suggests that a powerful CEO
with autonomy can harm firm performance, but other executives can mitigate the agency problems. We posit that a board with a single chair may suffer similar negative consequence due to the autonomy possessed by a powerful board chair and expect that co-chairs may mitigate agency problems. However, it is unclear in which direction the board co-chairing affect executive compensation. To be consistent, we state our fourth hypothesis in the null form as well:

\[ H4: \text{Board co-chairing is not associated with executive compensation.} \]

**RESEARCH DESIGN**

Based on our discussion in the previous section, we estimate the following specifications to test our hypotheses:

\[
\begin{align*}
\ln(\text{CEOComp}_{it}) &= \beta_0 + \beta_1 \text{BoardChairCEORelation}_{it} + \beta_2 \text{BoardChairTenure}_{it} + \beta_3 \text{BoardChairGender}_{it} + \beta_4 \text{BoardCoChairs}_{it} + \beta_5 \text{CEOTenure}_{it} + \beta_6 \text{CEOGender}_{it} + \beta_7 \\
&+ \beta_8 \text{BoardIndependence}_{it} + \beta_9 \text{ProgramRatio}_{it} + \beta_{10} \ln(\text{Revenue}_{i,t-1}) + \beta_{11} \ln(\text{UnrestrictedCash}_{i,t-1}) + \beta_{12} \ln(\text{CEOComp}_{i,t-1}) + \text{Year fixed effects} + \varepsilon \\
\end{align*}
\]

whereas

- \( \ln(\text{CEOComp}_{i}) \): the natural logarithm of CEO (highest-paid executive) compensation in year \( t \);
- \( \text{BoardChairCEORelation}_{it} \): 1 indicates neither the board chair nor the CEO are new to their roles in year \( t \), 0 otherwise;
- \( \text{BoardChairTenure} \): the tenure of the board chair;
- \( \text{BoardChairGender}_{i} \): 1 indicates female and 0 indicates male;
- \( \text{BoardCoChairs}_{i} \): 1 indicates board with co-chairs;
- \( \text{CEOTenure}_{i} \): number of the years in the CEO position before year \( t \). 0 indicates the first year as CEO; Tenure goes from 0-5;
- \( \text{CEOGender}_{i} \): 1 indicates female and 0 indicates male;
- \( \text{BoardSize}_{i} \): number of board members in year \( t \);
BoardIndependence: The number of independent board members / the total number of board members;

ProgramRatio: Program expenses / total expenses;

Ln(Revenue_{t-1}): the natural logarithm of total revenue in year t-1;

Ln(UnrestrictedCash_{t-1}): ln((Cash+saving)*(unrestricted net assets/total net assets)) for year t-1

Our variables of interest are BoardChairCEORelation, BoardChairTenure, BoardChairGender, and BoardCoChairs. We have the null-form hypotheses; therefore, we do not have expectations on the sign of these coefficients. Next we provide justifications for the control variables included in our model.

Iliev and Vitanova (2019) document that the increase in CEO pay due to the Dodd-Frank Act is larger for CEOs with higher ownership and longer tenure. Hill and Phan (1991) report that the likelihood that CEO compensation packages will reflect their preferences increases with CEO company tenure perhaps because over time CEOs can strengthen their positions and circumvent monitoring and incentive alignment mechanisms. Thus we use CEO tenure in the model to control for CEO experience, skill, and possible entrenchment.

Oster (1998) find that CEO gender is insignificant in deciding executive compensation. In contrast, after controlling for education, tenure, size, performance, and affiliation, Gray and Benson (2003) report that female executives are compensated significantly less than male executives. Given the mixed results on CEO gender in prior research, we control for CEO gender in the model.

Prior research examines the influence of governance factors such as board size and board independence. For instance, in the for-profit literature (Hermalin and Weisbach 1998) reports that independent directors are likely to provide better monitoring. The results on whether larger boards are better at monitoring is rather mixed (Yermack 1996; Coles et al. 2008; Boone et al.
In a nonprofit study, Aggarwal et al. (2012) investigate associations between board size, managerial incentives, and enterprise performance in nonprofit organizations. They provide evidence of a negative association between board size and management incentives. We include board size and board independence as control variables in our model.

Studies (Baber et al. 2002; Brickley and Horn 2002; Gray and Benson 2003; Frumkin and Keating 2010; Hallock 2002; Balsam and Harris 2018) provide the supporting evidence of pay-for-performance in nonprofit organizations. For instance, Gray and Benson (2003) use a sample of 114 directors of small business development centers and find the supporting evidence for significant pay-for-performance relationship. More specifically, they report that human capital, organizational size, and organizational affiliation are significantly related to executive compensation, after controlling for education, tenure, size, performance, and affiliation. In a nonprofit study, Grasse et al. (2003) find evidence that organization performance (measured by program ratio) affects executive compensation. Oster (1998) also find supporting evidence that organization size and CEO human capital affects executive compensation. Following their studies, we control for organizational size and CEO tenure. Given that prior compensation literature supports a pay-for-performance relationship, we control for organizational performance (measured by program ratio and by total revenue) in our model.

Agarwal et al. (2012) and Hallock (2002) provide supporting evidence that organization size, a proxy for organizational complexity, is an important determinant of executive compensation. More complex organizations, compared to simpler organizations, demand more skill and experience on executives, which leads to a compensation premium. Oster (1998) also
finds evidence that organization size is a strong predictor of executive compensation. Thus, we control for organization size measured by total revenue in our model.

Frumkin and Keating (2010) find CEO compensation is significantly higher when organizations have free cash flows, which is inconsistent with the principle of not distributing profits. Consistent with Balsam and Harris (2018) and Core et al. (2006), we expect when organizations have more free cash flows, it is easier for top management to distribute and increase their own compensation. To control for the impact of “free cash flows”, we add unrestricted cash in our model.

A GuideStar report in 2013 highlights the significant impact that the economy has on nonprofit CEO compensation. Thus we include the fixed year effects to control for the economic condition at different periods. To control for auto-correlation and any other organization-specific factors, we include executive compensation from the previous year in our regression.

RESULTS

Sample Selection

The sample is drawn from all independent Arts organizations (NTEE code A) that have at least two million in assets, total revenues, and total expenses. The focus on one nonprofit sector allows us to do an in-depth analysis on a representative charitable sector while increasing the internal validity of the analysis. We also required organizations to have at least a Bronze level of transparency (i.e. report at least minimum levels of financial information on their Guidestar profile). The filters resulted in a sample of 705 nonprofit organizations (See Table 2). For each sample organization, we downloaded 5 years of board and CEO data resulting in a total of 3,525
organization-year data.\textsuperscript{3} We then merged this dataset with Form 990 financial data obtained directly from the IRS website (SOI data). Due to requiring lagged data for some of the models as well as missing data, the final sample consists of 2,153 organization-year observations.

**Univariate Results**

In Table 3 we present the descriptive statistics. During our sample period, the average CEO compensation for independent arts organizations with at least $2 million in revenue, assets, and expenses is $232,028. The organization-years that the board chair and the CEO have previously worked together for the same nonprofit account for 57\% of our sample. During the 5-year sample period, the average board chair tenure is 1.22 years, 32\% of our sample board chairs are female, and 4\% of the boards have co-chairs. On the CEO side, the average CEO tenure is 1.83 years and 39\% are female. In terms of board governance features, the average board size of our sample is 28 and on average 96\% of board members are independent. The mean program expense ratio for our sample is 77\%. Since we study large arts institutions, it’s no surprise that the average total revenue are over $12 million and the unrestricted portion of the nonprofit’s cash holding is around $1.7 million. All the variables used in this study are listed in Table 1.

In Table 4 we present the correlation table among all our variables. Our main interest is the correlation between CEO compensation and board characteristics. Interestingly, all the variables used in our model are significantly correlated with the CEO compensation. More specifically, the board chair-CEO relation, board chair tenure, board co-chair, CEO tenure, board size, program expense ratio, total revenue, and unrestricted cash are all positively correlated with CEO compensation, while board chair gender (1= female), CEO gender (1= female), and board

\textsuperscript{3} At the time the sample was downloaded, April 2019, Guidestar premium allowed registered users to download the most recent 5 years of board and officer data.
independence are negatively correlated with CEO compensation. The results suggest that our main variable of interest, that the board chair and CEO have worked together before for the same nonprofit, is associated with higher CEO pays. In the next section, we investigate whether this still holds with multivariate regressions.

**Multivariate Results**

In this section, we test the impact of board characteristics on CEO compensation in a multivariate setting. In our hypotheses, the main variables of interests are the board chair-CEO relation, board chair tenure, board chair gender, and board co-chairing. In Table 5, we run OLS regressions of the CEO compensation on board characteristics and other firm variables. We use the natural logarithm of all dollar amounts (including CEO compensation, revenue, and unrestricted cash) to reduce the influence of outliers. We control for year fixed effects, and since we only focus on the independent arts organizations, there is no need to include any industry fixed effects. In column (1) and (2) of Table 5 we present the results when the lag CEO compensation is not included as one of the independent variables. When we include the lag CEO compensation under column (3) and (4), the R² increases from 0.549 to 0.824, suggesting that the independent variables under the last two columns capture most of the cross-sectional variations of CEO compensations.

Using the results under column (2) of Table 5, when the lag CEO compensation is not included, we find that the board chair-CEO relation has a significantly positive impact on CEO compensations. More specifically, if the board chair and CEO have previously worked together for the same nonprofit, the CEO has 7.75% higher compensation than if they have not worked together previously. The results are weakened if we control for lag CEO compensation, but the significance still holds. This suggests that the board chair-CEO relation could raise the risk of
entrenchment as CEOs could use their ties with the board chair to negotiate higher levels of payment, and this would negatively impact the value of other stakeholders of the organization. The relation between board chair tenure of CEO compensation is no longer significant after we control for other board chair and firm characteristics. In terms of the board chair gender, we find that female board chairs are associated with lower CEO compensation in all 4 regressions, but the coefficient is not significant after we control for other variables. The positive relation between co-chairing and CEO compensation loses its significance after we include lag CEO compensation in our regression.

In terms of CEO characteristic, consistent with the evidence from the for-profit literature, we find that CEO tenure is positively associated with CEO compensation, suggesting that longer serving CEOs in our sample enjoy higher compensation than CEOs with a shorter tenure.

Regarding board governance, in column (2) we find that larger boards are associated with higher CEO compensation. However, board size loses its significance when we include the lag CEO compensation in column (4). Interestingly, the board independence variable is not significant in any of the multivariate regressions. These results show that compared to board chair and CEO characteristics, board governance is a less important consideration for CEO compensation.

The results for the program expense ratio are interesting. We find that firms with a lower program expense ratio, that is, firms that devoted a lower percentage of expenses to programs, have higher CEO compensation. These results are counterintuitive, since we expected firms with higher program expense ratio should be more efficient in managing its financials and have better performances. And if there is any pay-for-performance, we should expect these firms to have higher CEO compensation. There are two potential reasons that our results suggest the opposite.
First, program expense ratio may not be an accurate indicator for firm performance to begin with. Studies such as Coupet and Berrett (2019) suggest the program expense ratio is a poor measure of efficiency. Second, our results could also be driven by mechanical relations, since firms with higher program expense ratio, by definition, allocate less expense to management and general expenses where we expect a significant portion of CEO to be allocated.

The results of other control variables are consistent with the previous literature. More specifically, nonprofits with higher lagged revenue and unrestricted cash have higher CEO compensation. Lastly, higher past CEO compensation also leads to higher future compensations. In summary, in Table 5 we find supportive evidence that the board-CEO relation contributes to higher CEO compensation.

CONCLUSIONS

The current study is one of the first to our knowledge to specifically consider the role the board chair plays in setting the compensation of the CEO in the nonprofit sector. Unlike the for-profit sector, where many CEOs act as board chair and CEO, in the nonprofit sector almost all board chairs are independent of the executive function. This allows us to isolate the board chair role and test whether characteristics of the board chair are associated with the level of CEO compensation.

We find a nuanced relation between the board chair and CEO compensation. Univariate results suggest the gender of the board chair, the size of the board, whether the board has co-chairs, the tenure of the board chair, and whether the board chair and CEO have previously worked together are all associated with the total CEO compensation. However, once we run the multivariate analysis, a few key determinants rise to the top. We find a strong association between the board chair and CEO having a prior working relationship and higher levels of CEO
pay. Again, this might be indicative of the board chair (and by extension the board) losing some of their objectivity once a level of familiarity exists between the board chair and CEO. Interestingly, once other known determinants of compensation are controlled for, we find no association between board chair gender and CEO compensation, and only limited evidence that boards with co-chairs pay their CEOs more. We also find evidence that larger boards are associated with higher levels of CEO compensation. This is suggestive of large boards not being as attentive to their governance responsibilities as smaller nimbler boards. In addition, we find that CEO tenure and lagged revenue and unrestricted cash are positively associated with executive compensation. In contrast, program ratio is negatively associated with executive compensation.

Overall, our results suggest stewards of nonprofit organizations should exercise increased care in setting CEO compensation in the presence of governance indicators that might indicate relatively lapse oversight. Specifically, organizations with large boards and more revenues (and unrestricted cash) and those whose board chair and CEO have a cozy relationship should be diligent to ensure their CEO compensation setting practices are well documented, reasonable, and can be defended upon scrutiny. Future studies with a longer time series, could continue to examine the compensation setting practices at nonprofit organizations and determine what characteristics of the board best ensure a just a reasonable CEO compensation package.
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| Variable               | Definition                                                                 |
|-----------------------|-----------------------------------------------------------------------------|
| CEOComp               | Total Compensation for the CEO identified by Guidestar as the principal officer. |
| BoardChairCEORelation | One if neither the board chair nor the CEO are new to their roles.         |
| BoardChairTenure      | The tenure of the board chair.                                              |
| BoardChairGender      | One if the board chair is female zero if male.                              |
| BoardCoChairs         | One if the organization had board co-chairs.                                |
| CETenure              | The tenure of the CEO.                                                      |
| CEOGender             | One if the CEO is female zero if male.                                     |
| BoardSize             | The total of voting board members.                                          |
| BoardIndependence     | The number of independent board members / the total number of board members.|
| ProgramRatio          | The ratio of program expenses to total expenses.                            |
| LagRevenue            | The lag of total revenue.                                                   |
| LagUnrestrictedCash   | The lag of unrestricted cash. Unrestricted cash is defined as the total cash balance multiplied the percentage of net assets that are unrestricted. |
| LagCEOComp            | The lag of CEO compensation.                                               |
Table 2: Sample Section

| Sample description                                                                 | Observations |
|-----------------------------------------------------------------------------------|--------------|
| From Guidestar in April of 2019 we obtained a list of Independent Arts Organizations with at least $2 million in total revenue, total assets, and total expenses. Organizations were also required to have at least achieved a Bronze level of transparency. | 705          |
| Downloaded five years of officer and board data directly from Guidestar.           | 3,525        |
| Less organizations missing officer/board data, or data necessary for the models.   | 1,372        |
| Total Sample                                                                      | 2,153        |
Table 3: Descriptive Statistics

This table reports the summary statistics of board characteristics and firm-specific variables used in the analysis. The sample includes large Independent Arts Organizations from 2012 to 2018. All the variables are described in Table 1.

| Variable            | Obs  | Mean   | Std. Dev. | Min  | Max              |
|---------------------|------|--------|-----------|------|------------------|
| CEOComp             | 2153 | 238,028| 193,953   | 7,615| 3,750,670        |
| BoardChairCEORelation| 2153 | 0.57   | 0.50      | 0.00 | 1.00             |
| BoardChairTenure    | 2153 | 1.22   | 1.16      | 0.00 | 4.00             |
| BoardChairGender    | 2153 | 0.32   | 0.46      | 0.00 | 1.00             |
| BoardCoChairs       | 2153 | 0.04   | 0.19      | 0.00 | 1.00             |
| CEOTenure           | 2153 | 1.83   | 1.27      | 0.00 | 5.00             |
| CEOGender           | 2153 | 0.39   | 0.49      | 0.00 | 1.00             |
| BoardSize           | 2153 | 28.44  | 17.32     | 2    | 260              |
| BoardIndependence   | 2153 | 0.96   | 0.16      | 0.00 | 4.46             |
| ProgramRatio        | 2153 | 0.77   | 0.10      | 0    | 0.99             |
| LagRevenue          | 2153 | 12,300,000 | 24,700,000 | 169,993 | 607,000,000 |
| LagUnrestrictedCash | 2153 | 1,742,826 | 3,216,220  | 325  | 44,100,000      |
Table 4 Correlation Table

This table shows the Pearson correlations among the board characteristics and firm-specific measures. Figures followed by ‘*’ indicate that they are significant within the 5% significance level. The sample includes large Independent Arts Organizations from 2012 to 2018. All the variables are described in Table 1.

|                        | (1)   | (2)   | (3)   | (4)   | (5)   | (6)   | (7)   | (8)   | (9)   | (10)  | (11)  | (12)  |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| **CEOComp (1)**        | 1.00  |       |       |       |       |       |       |       |       |       |       |       |
| **BoardChairCEORelation (2)** | 0.13  | *     |       |       |       |       |       |       |       |       |       |       |
| **BoardChairTenure (3)** | 0.13  | *     | 0.60 * | 1.00  |       |       |       |       |       |       |       |       |
| **BoardChairGender (4)** | -0.07 | *     | -0.02 | -0.02 | 1.00  |       |       |       |       |       |       |       |
| **BoardCoChairs (5)**  | 0.09  | *     | 0.02  | 0.02  | 0.03  | 1.00  |       |       |       |       |       |       |
| **CEOTenure (6)**      | 0.14  | *     | 0.33  | *     | 0.23  | *     | -0.02 | 0.04  | 1.00  |       |       |       |
| **CEOGender (7)**      | -0.08 | *     | -0.01 | -0.00 | -0.00 | -0.02 | 0.00  | 1.00  |       |       |       |       |
| **BoardSize (8)**      | 0.31  | *     | -0.02 | -0.02 | -0.01 | 0.01  | 0.01  | -0.06 | *     | 1.00  |       |       |
| **BoardIndependence (9)** | -0.09 | *     | 0.00  | 0.01  | 0.01  | -0.02 | -0.01 | -0.03 | -0.20 | *     | 1.00  |       |
| **ProgramRatio (10)**  | 0.06  | *     | 0.02  | 0.01  | 0.00  | 0.02  | 0.04  | *     | 0.02  | 0.07  | *     | 0.01  |
| **LagRevenue (11)**    | 0.56  | *     | 0.03  | 0.10  | *     | -0.07 | *     | 0.06  | *     | -0.01 | -0.04 | 0.23  |
| **LagUnrestrictedCash (12)** | 0.47  | *     | 0.04  | 0.06  | *     | -0.06 | *     | 0.05  | *     | 0.02  | -0.04 | 0.11  | *     | -0.06 | *     | 0.10  | *     | 0.54  | *     | 1.00  |
Table 5 Regression Analysis

This table reports the OLS regression results of total CEO compensation on board characteristics and other firm-specific variables. ‘***’, ‘**’, and ‘*’ represent significance at 1%, 5%, and 10% levels, respectively. We control for year fixed effects. The sample includes large Independent Arts Organizations from 2012 to 2018. All variables are described in Table 1. Columns (2) and (4) cluster standard errors by EIN.

| Dependent variable: Ln(CEOComp) | (1)          | (2)          | (3)          | (4)          |
|----------------------------------|--------------|--------------|--------------|--------------|
| BoardChairCEORelation           | 0.0775**     | 0.0775***    | 0.0462**     | 0.0462**     |
|                                  | (3.19)       | (3.89)       | (3.03)       | (2.74)       |
| BoardChairTenure                | 0.00493      | 0.00493      | -0.00766     | -0.00766     |
|                                  | (0.49)       | (0.39)       | (-1.22)      | (-1.05)      |
| BoardChairGender                | -0.0171      | -0.0171      | -0.00861     | -0.00861     |
|                                  | (-0.91)      | (-0.68)      | (-0.73)      | (-0.84)      |
| BoardCoChairs                   | 0.144**      | 0.144**      | 0.0267       | 0.0267       |
|                                  | (3.19)       | (2.71)       | (0.94)       | (1.04)       |
| CEOTenure                       | 0.0701***    | 0.0701***    | 0.0131*      | 0.0131*      |
|                                  | (7.97)       | (6.56)       | (2.32)       | (2.03)       |
| CEOGender                        | -0.0292      | -0.0292      | -0.0154      | -0.0154      |
|                                  | (-1.64)      | (-1.02)      | (-1.37)      | (-1.30)      |
| BoardSize                       | 0.00443***   | 0.00443***   | 0.000733*    | 0.000733*    |
|                                  | (8.16)       | (3.44)       | (2.13)       | (1.74)       |
| BoardIndependence               | -0.0421      | -0.0421      | -0.0238      | -0.0238      |
|                                  | (-0.79)      | (-0.54)      | (-0.64)      | (-0.60)      |
| ProgramRatio                    | -0.436***    | -0.436**     | -0.197***    | -0.197***    |
|                                  | (-4.91)      | (-2.81)      | (-3.46)      | (-3.29)      |
| LnLagRevenue                    | 0.382***     | 0.382***     | 0.0939***    | 0.0939***    |
|                                  | (33.71)      | (18.24)      | (10.63)      | (4.93)       |
| LnLagUnrestrictedCash           | 0.0403***    | 0.0403***    | 0.0135***    | 0.0135***    |
|                                  | (6.40)       | (3.96)       | (3.38)       | (3.50)       |
| LnLagCEOComp                    |               |              |              |              |
|                                  |               |              |              |              |
| _cons                            | 5.785***     | 5.785***     | 1.589***     | 1.589***     |
|                                  | (32.83)      | (17.80)      | (11.88)      | (6.43)       |
| Year Fixed Effect               | YES          | YES          | YES          | YES          |
| Clustered by EIN                | YES          | YES          | YES          | YES          |
| N                                | 2153         | 2153         | 2102         | 2102         |
| adj. $R^2$                       | 0.549        | 0.549        | 0.824        | 0.824        |