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GOVERNANCE FACTORS AFFECTING NONPROFIT ORGANIZATIONS' FINANCIAL HEALTH: THE IMPACT OF BOARD COMPOSITION, POLICIES, RELIGIOSITY, AND SOCIAL CAPITAL

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GOVERNANCE FACTORS AFFECTING NONPROFIT ORGANIZATIONS' FINANCIAL HEALTH: THE IMPACT OF BOARD COMPOSITION, POLICIES, RELIGIOSITY, AND SOCIAL CAPITAL

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No man (or woman) is an island. Growth comes from building on previous discoveries and experiences. Throughout my DBA program, it has been emphasized that we "stand on the shoulders of giants." My success is directly related to the guidance and support of giants who have assisted me in reaching this research milestone called a dissertation. Though thank you is commonly used to express appreciation, it is but a small token of the sincere thanks, as not only am I thankful for the assistance, I am in the debt of countless friends, family members, and colleagues for their inspiration.

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ABSTRACT

Nonprofits have a significant impact on the world around us. They provide services for the common good and are having an increasing influence on the economy over time (Bureau of Labor Statistics, 2014; McKeever & Gatty, 2016; National Center for Charitable Statistics, 2018). There is a consensus among prior studies that effective corporate governance positively impacts the success and financial health of for-profit entities, including both internal (e.g., board size, number of independent directors) and external (e.g., institutional ownership and number of analysts following a firm) governance (Chen, Chung, Hsu, & Wu, 2010; Coles, Daniel, & Naveen, 2008; Eisenberg, Sundgren, & Wells, 1998; Guest, 2009; Moyer, Chatfield, & Sisneros, 1989). This present research shows that governance factors can also positively influence the success of nonprofits.

This study analyzes the impact of internal governance such as board size, the existence of written policies, and presence of an outside audit, as well as external governance factors such as community religiosity and social capital, on a nonprofit organization's financial health. A nonprofit organization with stronger governance levels can expect to have better oversight, as the organization would garner additional attention by community professionals and other interested parties committed to making sure the organization puts its best foot forward in serving the

community. Thus, I expect to find and provide evidence that these factors positively influence a nonprofit organization's financial health.

Keywords: Board of directors, certified audit, external audit, external governance, financial analysis, financial distress, financial health, financial viability, financial vulnerability, Form 990, internal governance, nonprofit, ratio analysis, religiosity, single audit, social capital

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Governance Factors Affecting Nonprofit Organizations' Financial Health: The Impact of Board Composition, Policies, Religiosity, and Social Capital

The United States has seen the number of nonprofit organizations (NPOs) increase from less than half a million in 1987 (Tuckman & Chang, 1991) to over 1.5 million NPOs employing over 14.4 million individuals, according to the National Center for Charitable Statistics (2018). This accounted for over 10% of all U.S. private sector jobs in 2018 (National Center for Charitable Statistics, 2018). Employment has grown substantially from its 2007 level of 10.5 million employees in the United States (Bureau of Labor Statistics, 2014), exceeding 37% employee growth from 2007 to 2018. The NPO sector provides invaluable services to those in need. It is responsible for a large segment of workers in the United States (McKeever & Gatty, 2016). Researchers have not yet found all the factors that influence the ultimate success of organizations in this sector. This paper will analyze specific internal and external governance factors and show their impact on an NPO's financial health.

Much research exists in the for-profit arena, predicting firms' financial health and potential bankruptcy. Fewer studies have examined NPOs' financial health. The NPOs do not have owners or investors, nor do they have opportunities for direct investment with the potential for a profitable monetary return to investors. Any profits generated by the NPO must be used to further support the NPO's mission. The lack of potential investor returns may contribute to the dearth of research within this sector. While NPOs do provide a valuable service, fulfilling the needs of society, to date, NPOs have not attracted the in-depth research of their for-profit counterparts. This study contributes to correcting that deficiency.

As the impact of the NPO sector increases, more research is needed. The Internal Revenue Service (IRS) Form 990 revision of 2008, required to be filed by almost all U.S.

nonprofits of any size, acknowledges the increasing importance of corporate governance in the nonprofit sector. Numerous fields relating to governance were added during this revision. The new Form 990 includes questions asking: the total number of independent board members; were minutes maintained; do written procedures exist relating to document retention, whistleblower, and conflict of interest policies; did management review the Form 990 prior to submission to the IRS; and is there a process to review management compensation. Analysis of the increased Form 990 data adds insights into governance factors impacting an NPO's success and enhances our understanding of how to improve performance in the NPO sector.

Prior nonprofit financial research has used the terms financial vulnerability and financial distress as an inverse proxy for financial health. Gilbert, Menon, and Schwartz (1990) defined financial vulnerability as having cumulative losses over a three-year period. Tuckman and Chang (1991) defined financial distress as the likelihood that an organization would cut back on services after experiencing a financial shock. Trussel and Greenlee (2004) defined financial vulnerability as the reduction in fund balance over a three-year period. Trussel (2003) also used a fund balance definition of financial vulnerability, adding the requirement of a 20% decrease in fund balance over a three-year period. This study consolidated the various financial analysis terms (i.e., vulnerability, distress, and health) into a single label: financial health.

A great deal of private sector corporate research has examined financial performance and corporate governance while attempting to predict the financial health of for-profit organizations. This research helps fill the gap in the NPO area. This study included an analysis of financial ratios, focusing on historical performance to predict future outcomes. Financial ratios represent only one of the tool sets that I applied. This study went beyond the ratios, examining the impact

of environmental factors to ascertain other influences affecting NPO operations and their potential for viability.

I examined the impact of internal governance factors such as the number of independent and total board members, the presence of an outside audit, and the use of specific written policies. This analysis enhanced understanding of additional NPO success factors that can impact the survival rate of these organizations. This study also examined external governance factors, specifically religiosity and social capital, which have not received in-depth study in previous research relating to the nonprofit environment.

Though a multitude of external governance factors can be found in the literature regarding their impact on for-profit entities, nonprofits lack similar investigation. By focusing on religiosity and social capital, this paper chose factors that others associate with organizational success. Social capital has been linked to company growth (Knack & Keefer, 1997). Putnam, Leonardi, and Nannetti (1993) linked social capital to enhanced government performance. Corporate social responsibility research has included social capital in its analysis of internal and external governance factors (Jo & Harjoto, 2011).

Consistent with prior research, corporate governance factors relating to environmental considerations, such as social norms and social cohesion, include religiosity and social capital (Boytsun, Deloof, & Matthyssens, 2011). Boytsun et al. (2011) find informal rules directly impact corporate governance. Religiosity relates to a multitude of positive factors, including enhancing life satisfaction, increasing civic engagement and volunteerism, as well as promoting a reduction in crime rates (Putnam & Campbell, 2012; VanderWeele, 2017). I evaluated positive environmental impacts as they applied to nonprofit success.

Studies attempting to predict financial distress or the risk of bankruptcy or exposing financial vulnerability in the for-profit and NPO arena are presented in the literature review. Few studies have looked at the impact of both the internal and external factors on NPOs. My study helps remedy this gap in the research.

I used data from a series of sources based on the Statistics of Income (SOI) as sourced from the IRS. The National Center for Charitable Statistics (2018) data set was merged with data from Nonprofit Open Data Collective (2019), as managed by Dr. Jesse Lecy, and the governance data set provided by Open990 (Borenstein & Kugelmass, 2019), a nonprofit consultancy. This combination of sources allowed for an in-depth analysis of the variables selected. My final sample consisted of 422,505 firm-year observations from fiscal year 2011 to 2016.

The analysis of religiosity was based on data from the Association of Religion Data Archives (ARDA, 2018). This data set offers a wide range of domestic and global data with over 1,000 data files, including surveys from U.S. and international sources. For social capital, the other external governance factor, research information was derived from Rupasingha, Goetz, & Freshwater's (2018) county-level measures of the social capital data set, housed by Pennsylvania State University's Northeast Regional Center for Rural Development. I used county data available for 2014 (updated every five to eight years). The use of county-level data use was consistent with research conducted by Knack (2002) and Hopkins (2011).

This paper contributes to the accounting, finance, and management literature by analyzing the impact of a series of governance factors, internal and external, related to the NPO's financial health. Previous research has focused on pure financial ratio analysis. This study used

some of the same definitions of financial health from prior literature but broadened the foundation, analyzing other influences on such health.

I examined the relationship between the financial health of NPOs and the number of independent and non-independent board members. I hypothesized that board size does matter for NPOs. Studies on the impact of board size on for-profit entities have yielded conflicting results (Coles et al., 2008; Eisenberg et al., 1998; Guest, 2009). My findings showed that bigger boards and those with more independent board members perform better due to the impact of U.S. board member participation, their influence on increasing fundraising, and the addition of insights from those board members helping from outside the organization.

Other internal governance factors I analyzed included the use of an external audit, which yields additional oversight and input from an outside resource. Associated with an outside audit is the issuance of a management letter, which further highlights potential shortcomings of internal financial controls and exposes other related financial issues. Having this input from experts highlights areas that need further examination by the NPO's management team and board. Having additional written policies, a sign of additional attention by an NPO's management team also yields positive effects.

I reviewed external governance factors, including the degree of religiosity and social capital associated with the home community of the NPO. For-profit studies have found a positive impact from increased social capital, demonstrating enhanced firm value and organizational effectiveness (Gooderham, Minbaeva, & Pedersen, 2010; Tsai & Ghoshal, 1998). In analyzing the social capital ratings based on location, increases in NPO financial health were also found.

Current research in the for-profit arena has examined external governance factors relating to market competition, the impact of external financing costs, and the effects on firm value (Chen et al., 2010). Chen et al.'s (2010) research showed better external governance practices positively impact firm value, reduce agency costs, and enhance attractiveness to potential investors. Additional research has examined the external governance effect on stock prices. Gompers, Ishii, and Metrick (2003) created a Governance Index (GI) based on 24 governance rules specifically relating to takeover exposure and shareholder rights. The GI includes external factors, such as the existence of a variety of state laws controlling business takeovers, as well as internal board and company policies impacting potential takeover candidates. Firms with higher levels of shareholder rights exhibit higher profits, higher firm value, higher sales growth, and lower capital expenditures (Gompers et al., 2003).

Examination of external governance factors for NPOs will aid in evaluating effective environments to maximize an NPO's potential for growth and success. For-profit governance factors relating to the external environment demonstrate the impact such factors have on firms and relate to decision making by managers in these firms. Because NPOs do not have measurable market values and returns to stockholders, the intention of this study included examining factors relating to the external environments where the nonprofits perform their activities. This study chose religiosity and social capital indicators as external governance factors to be analyzed for their impact on NPO governance and health.

According to the Pew Research Center (2015), 80% of the world's population actively affiliates with a religion. Closer to home, a 2017 Gallup survey found 79% of the United States population affiliates actively with a religion (Newport, 2017). In addition to church attendance as a proxy for religious participation, Monsma (2007) included salience and private religious

practices as impactful measures relating to religiosity. Communities with more religiosity and higher religious participation show increased community volunteerism, financial giving, and enhanced cooperation (Graham & Haidt, 2010; Monsma, 2007). I found that NPOs located in areas of greater religiosity show a positive correlation with financial health.

Exploration of internal governance factors, specifically relating to board size in the for-profit environment, exists in the literature (Olson, 2000; O'Regan & Oster, 2005). My contributions bring additional depth to NPO governance research and board impact on financial health through examining additional factors, specifically independent and non-independent board composition, not previously examined. I used a larger data set of over 420,000 records, including a variety of governance factors made available through Form 990 modifications that were previously not available. Additionally, I added factors including use of external audits and written policies to analyze their contributions, extending the literature.

An example of board failures in the nonprofit arena was explored by Hayden (2005). The five major health maintenance organizations experienced major financial challenges in the 1990s. The root cause relates to governance issues and ineffective monitoring of management. My research documents governance factors contributing to enhancing the understanding of influences on an NPO's success or failure.

To my knowledge, this study is the first attempt of its kind integrating NPO financial health analysis with external governance factors. Religiosity and social capital research studies have shown general community benefits, as previously discussed. Relating such factors to NPO success has not been thoroughly examined and was evaluated in the context of an NPO's financial health for this study.

Following this introduction, the next section reviews prior literature relating to financial health, as well as internal and external governance factors related to NPOs. The next section proposes hypotheses, discussing the specific impact of internal and external governance factors contributing to or impeding NPO financial success. The next section shows the research design and empirical results, followed by a section detailing the sample and empirical results together with additional statistical analyses. Finally, implications and limitations are shared while including other potential opportunities for extended research.

Literature Review

The following literature review covers a wide spectrum of influences on the nonprofit sector. Specific areas include the U.S. nonprofit environment, financial health in NPOs, internal governance factors, the economic and societal influence of religiosity on an individual's behavior, and developments relating to social capital and their influence on the environment within which nonprofits operate. These areas were the focus of the hypotheses related to internal and external governance factors on NPO financial health as proposed in next section.

Nonprofit Environment in the United States

Society, especially in the United States, is evolving at an accelerated pace. Buckminster Fuller's Knowledge Doubling Curve from 1982 showed knowledge roughly doubling every century before 1900, evolving to more recent projections showing knowledge doubling every 25 years post-World War II (Milicevic, 2015). In 2006, IBM projected knowledge to be doubling every 11 hours (IBM, 2006), not to mention Moore's Law, originally from 1965, highlighting the accelerated pace of technological change (Moore, 1998). Such change profoundly affects the societal landscape and is shifting politics, economics, education, healthcare, and business. This changing environment will create greater needs that NPOs will need to fill.

NPOs will expand their influence and participation in the U.S. economy to serve community needs created by disruptive technology. The previously mentioned NPO employee growth of 37% since 2007 highlights the expanding impact of this sector. Maximizing the success of NPOs will make a difference in improving society as a whole.

Nonprofit Organizations and Financial Health

Prior studies have used various financial measures and ratios to predict bankruptcy, financial vulnerability, financial sustainability, and financial health (Altman, 1968; Beaver, 1966; Chen & Shimerda, 1981; Edmister, 1972; Gilbert et al., 1990; Lawrence, Pongsatat, & Lawrence, 2015; Ohlson, 1980; Tevel, Katz, & Brock, 2015). Analysis of publicly traded for-profit corporations yields a clear indication of market value through its stock price. Privately held firm valuation is more difficult due to a lack of immediate market access to stock value. Nonprofit analysis is even more complex. Besides not being able to easily obtain a market value of an NPO or its assets, NPOs are also not very easily classified as bankrupt. For-profits are often forced into bankruptcy, whereas the lines for the closure of NPOs are blurred in that they will frequently close without having a formal bankruptcy process. When they fail, NPOs do not have owners from which creditors can take ownership.

Financial distress and financial vulnerability research relating to NPOs is relatively recent. Articles examining NPO financial vulnerability factors have appeared in increasing frequency beginning around 1991 (Chang & Tuckman, 1991; Herman & Renz, 2000; Keating, Fisher, Gordon & Greenlee, 2005; Putnam, 2000; Trussel, 2003; Trussel & Greenlee, 2004; Tuckman & Chang, 1991). Even today, definitions of both financial distress and financial vulnerability are not clear. The nature of NPO entities goes beyond bankruptcy when examining the potential failures of such organizations. Reviewing the evolution of recent investigations into

this sector based on the terms of financial distress, financial vulnerability, financial survivability, and financial sustainability is useful from a historical perspective as these are the terms that have been used in many prior studies discussed in the following paragraphs. For this paper, financial health was the all-encompassing term that I used for all financial success and risk-related terms and was the basis for this study's analysis.

The seminal work relating to financial vulnerability traces back to Tuckman and Chang (1991). Though the authors focused on specific numbers to indicate financial vulnerability, their definition focused on the likelihood of cutting back services when experiencing a financial shock (Tuckman & Chang, 1991). Tuckman and Chang (1991) ranked organizations on their relative ability to absorb financial shocks. Past research has been lacking partially due to NPOs representing a relatively small segment of society, with just over 400,000 active 501(c)(3) nonprofits in 1987. Tuckman and Chang (1991) determined that only 0.1% were severely at risk that year, yet more significantly, 41% were considered at risk. Looking at over 4,700 organizations, Tuckman and Chang (1991) focused on the likelihood of reducing program output from these shocks, not necessarily resulting in bankruptcy or closure; they used four criteria: inadequate equity balances, revenue concentration (constructing an index similar to the Herfindahl Index), low administrative costs, and low or negative operating margins in conducting their analysis. The categories of institutions Tuckman and Chang (1991) investigated include: religious, educational, health care, charitable support, and other, with health care dominating the categories with 41% coverage and religious institutions weighing in at about 1%. The authors discovered that size matters; as total revenues increase, the overall risk drops (Tuckman & Chang, 1991). The risk also drops for NPOs carrying less debt and those less dependent on program services as a revenue source (Tuckman & Chang, 1991).

A second Chang and Tuckman (1991) paper looked further at NPO survivability. The authors examined the ability to avoid program reductions due to cutbacks, impacting the organization's ultimate ability to survive (Chang & Tuckman, 1991). This foreshadows the deeper analysis of NPO performance and risk. Another criterion, revenue diversification, concluded that revenue diversification positively impacts financial stability (Chang & Tuckman, 1991). Chang and Tuckman (1991) also found that increasing expenses and total fund balance positively impacts stability.

Additional research has found that NPOs based in urban areas are more stable, further implying that size and environment both matter (Carroll & Stater, 1999). Carroll ad Stater (1999) also include research about revenue diversification and warnings of potential dilution of resources, using resource dependence theory, when seeking multiple funding sources. Resource dependence theory examines the impact of organizational behavior with influences by external resources used in an organization.

Revenue diversification has been an area of interest to researchers. Questions have arisen regarding the reliability of data submitted with one of the three versions of the IRS Form 990. 990s are required to be filed by virtually all NPOs (excluding religious) reaching a certain revenue level. The current filing threshold requires filing for NPOs having revenues exceeding $50,000. Froelich, Knoepfle, and Pollak (2000) concluded that data on these forms relating to the broader categories of recorded numbers found on audited financial statements, such as totals for assets, liabilities, revenues, and expenses, are reliable; more detailed line items associated with fundraising expenses, total contributions, specific program service revenue, and program specific expenses potentially could be of lesser quality. Their study suggested that limited penalties for improper filing might contribute to potential inaccuracies, fostering less attention to

detail (Froelich, Knoepfle, & Pollak, 2000). Overall, this study confirmed the reliability in allowing for a reasonable comfort level when using Form 990 data for analysis (Froelich, Knoepfle, & Pollak, 2000).

Feng, Ling, Neely, and Roberts (2014) found enhanced reporting accuracy on Form 990s for organizations that pay relatively higher salaries, are larger organizations, and hire external accountants. They highlighted that on average, approximately 33% of the expenses reported by organizations are included in other expenses, reducing the usefulness of this data due to a lack of categorization of these expenses (Feng, Ling, Neely, & Roberts, 2014). This reaffirms the potential issue regarding categorizing expenses accurately. It also confirms that cumulative expenses are being appropriately recorded and that totals are reliable.

Another study by Krishnan, Yetman, and Yetman (2006) had larger questions regarding the validity of data. Questions arose when a significant number of NPOs reported zero fundraising expenses (Krishnan, Yetman, & Yetman, 2006). The study concluded that the negative impact of having a higher administrative expense ratio on fundraising efforts and managerial compensation likely reduces the reporting of such expenses (Krishnan, Yetman, & Yetman, 2006). With 2002 data, using outside accountants was shown to enhance reporting accuracy and reduce misrepresentation (Krishnan, Yetman, & Yetman, 2006). Again, this should not adversely impact analyses when category totals (assets, liabilities, revenues, expenses), as mentioned in the previous study, are used (Feng, Ling, Neely, & Roberts, 2014).

Building upon Tuckman and Chang's research, Greenlee and Trussel (2003) produced another seminal work in the NPO arena and developed a more authoritative definition of financial vulnerability; they examined a for-profit definition of financial vulnerability by Gilbert et al. (1990) based on consecutive periods of negative net income. The authors developed a

model to predict financial vulnerability, using four ratios to aid in their proposed financial vulnerability analysis, including ratios for equity, revenue concentration, administrative cost, and operating margin (Greenlee & Trussel, 2003). Based on these ratios, Greenlee and Trussel (2003) redefined financial vulnerability with a shock-based definition of having a reduction of program expenditures in each of three years. Three out of the four ratios were found to be significant in making such a prediction; the equity ratio was not significant (Greenlee & Trussel, 2003). Their study found 435 organizations exhibiting financial vulnerability and 5,483 not exhibiting such vulnerability (Greenlee & Trussel, 2003).

Trussel and Greenlee (2001) study was enhanced in 2003 by controlling for six NPO segments: arts, education, human services, public benefit, healthcare, and other (Trussel, 2003). Another factor in the 2003 analysis included size based on total assets. A definition of financial vulnerability as a significant reduction of equity (fund balance) over a three-year period was used (Trussel & Greenlee,(2001). They examined the debt ratio, surplus margin, and organization's size in their study (Trussel & Greenlee,(2001).

Trussel (2003) went even further, sampling over 94,000 organizations. The study widened the sector categories to 10 from six and used the National Center for Charitable Statistics data sets accumulating and reporting Form 990 data, basing the definition of financial vulnerability as a 20% decrease in fund balance over a three-year period (Trussel, 2003). Trussel's (2003) updated model made up for shortcomings in previous models. In Greenlee & Trussel (2003), the data set leaned towards the larger NPOs, covering only six sectors rather than the 10 used in Trussel's (2003) revised model.

Ritchie and Kolodinsky's (2003) research successfully reduced the number of ratios for analyzing NPO performance. Using 15 Form 990-line items, the authors applied factor analysis

for the purpose of variable reduction; three factors, using six ratios, emerged (Ritchie & Kolodinksy, 2003). These performance factors are fundraising efficiency, public support, and fiscal performance; these three categories account for 43%, 21%, and 30% of the variance, respectively (Ritchie & Kolodinksy, 2003). Ritchie and Kolodinksy (2003) focused on university foundations, potentially causing some limitations to the generalizability; however, it is useful to see other methodologies in reviewing ratios.

A working paper out of Harvard's JFK School of Government by Keating et al. (2005) examined Altman's (1968) model, Ohlson's (1980) model, and Tuckman and Chang's (1991) model for their effectiveness in the health care arena. The study concluded that the Ohlson O-Score offered the best explanatory power for measuring financial vulnerability (Keating et al., 2005). The Ohlson O-Score, first introduced in 1980, uses nine ratio-based factors to predict financial distress (Ohlson, 1980). Keating et al. (2005) enhanced the model by adding two additional variables and categorizing the risks as insolvency (total liabilities exceeding total assets), financial disruption (25% or greater drop in net assets within a 12-month period), funding disruption (25% or greater drop in total revenues in a 12-month period), and program disruption (25% or greater drop in program expenses in a 12-month period). The results indicated that a time series study would also be potentially beneficial (Keating et al., 2005).

Similarly, Tevel et al. (2015) used the O-Score, Tuckman and Chang's (1991) model, and two other Israel-specific rating agencies' sets of data. The Z-Score was considered for inclusion, but based on the previous paragraph's findings of Keating et al. (2005) with the O-Score being more effective, it was eliminated from consideration (Tevel et al., 2015). The authors developed a new model to improve the prediction of financial vulnerability (Tevel et al., 2015). Unlike Keating et al.'s (2005) analysis, Tevel et al. (2015) did not find the O-Score significant. Their

model used multiple logistic linear regressions and accounted for 45.6% of the variance (Tevel et al., 2015). The Tuckman and Chang (1991) model accounted for 47.9% of the variance and was deemed significant (Tevel et al., 2015). Using stepwise regression, Tevel et al. (2015) narrowed down Tuckman's four-variable model to two predictors (Tuckman & Chang, 1991). The first predicted that organizations with lower levels of administrative expenses and wages were less vulnerable (Tevel et al., 2015). The second predicted that organizations with greater revenue diversification were less vulnerable (Tevel et al., 2015). This is contrary to the theory that increased diversification requires additional resources to develop and maintain, which adversely affects sustainability. Tevel et al.'s (2015) study focused only on Israeli organizations, and with a sample size of 200 arts organizations, was limited in its generalizability.

Earnings management in the nonprofit sector is worthy of conversation. Research in bankruptcy and financial distress issues has been plentiful in the for-profit arena. Research for NPOs, in contrast, has been lacking. Also lacking in NPO research is the topic of financial disclosure management. Scandals, including NPOs such as the Red Cross and United Way, draw attention to the nonprofit sector (Hofmann & McSwain, 2013). Cost misclassification appears to be the largest area of offense with Hofmann and McSwain (2013) highlighting five potential ways to reduce misclassification: the use of outside accountants, the performance of an audit, the use of professional management, additional external monitoring, and increased regulation. It can be argued that donors have the power to inspire adherence to generally accepted accounting principles and proper reporting. Discussions also include the recent major Form 990 changes from 2008 that enhanced reporting of governance, management, and related disclosures. These are key to enhancing our ability to analyze other factors influencing accuracy.

One example of an audit's impact is found in analyzing the going-concern uncertainties in for-profits (Raghunandan & Rama, 1995). The research examined the impact of the introduction of Statement of Auditing Standards No. 59 on reporting organizations in financial distress (Raghunandan & Rama, 1995). Raghunandan and Rama (1995) showed that this new standard increases the attention to, and appropriate identification of, organizations with challenges. Having a framework that guides the audit process highlights the professionalism associated with auditing, providing the opportunity to have an outside party examine a company's financial statements with a critical eye.

Introducing new variables into the financial health mix, Prentice (2016a) investigated environmental variables while combining the four variables previously studied in the field into one construct. Prentice's (2016a) additional factors included gross domestic product, median household income, and regional market share of the NPO. This branching out beyond the pure use of internal numerical ratio analysis used in many previous studies shows the maturing of the research and is consistent with the direction that this paper investigated, namely other influential financial health factors such as governance, religiosity, and social capital. Prentice (2016a) took a fresh and more holistic financial health view, going beyond financial vulnerability and financial distress, while incorporating multiple factors. The analysis went past just examining the financials and broadened the perspectives on what impacts an NPO's financial health (Prentice, 2016a).

In another study, Prentice (2016b) examined the financial measures to see if these measures provide effective indicators of financial health. Prentice (2016b) reviewed 154 financial measures that were narrowed down to 70 unique financial measures. The study applied statistical analysis to validate the effectiveness of the financial measures (Prentice, 2016b).

Using exploratory factor analysis, Prentice (2016b) discovered that the measures did not easily load into expected categories; the study stated that using singular measures to represent multidimensional concepts needs to be considered with extreme caution as each ratio used is not an easy substitute for a similar ratio. Conclusions drawn include: suggesting focusing more on construct validity with additional detail relating to specific implications rather than the broad ratio categorizations of solvency or profitability; using of multiple measures for a construct of interest; and including sensitivity or robustness, should all be a part of the discussion to improve the validity of the results (Prentice, 2016b).

In continuing along the track of financial distress, though from a for-profit perspective, Laitinen and Suvas (2016) added cultural dimensions to their study incorporating Hofstede's original four cultural dimensions. Laitinen and Suvas (2016) examined over one million European firms, focusing on six financial predictors including return on assets (ROA), quick ratio, equity ratio, standard deviation of return on ad spend (ROAS), natural log of total assets, and long-term growth of assets. Hofstede, Hofstede, and Minkov's (2010) cultural dimensions, adding the international perspective, provided moderators in the financial distress prediction models used by Laitinen and Suvas (2016). This added increasing global attention to for-profit and NPO studies.

A recent study, looking at three dimensions of financial vulnerability, examined operational, leverage, and liquidity measures (Andres-Alonso, Garcia-Rodriguez, & Romero-Merino, 2016). The goal of the study was to identify financially vulnerable organizations given what the authors call the slippery and ambiguous nature of financial vulnerability measures (Andres-Alonso et al., 2016). The study emphasized the multidimensional nature of financial vulnerability with three-dimensional model measures (Andres-Alonso et al., 2016). One-

dimensional factors previously used, such as Andres-Alonso et al. (2016) big three, include a reduction in assets (which Andres-Alonso et al. (2016) found to be the best of the three as a standalone factor), revenues, or expenses, which individually did not convey the full picture. Andres-Alonso et al. (2016) also discussed incorporating a time element in the analysis.

Investigations into financial vulnerability and financial health have been leading to investigations of nonprofit effectiveness. Epstein and McFarlan (2011) worked to support the premise that incorporating financial and nonfinancial measures helps to fully evaluate an NPO's performance. The five clusters Epstein and McFarlan (2011) identified include inputs, activities, outputs, outcomes, and impacts. Though the paper focused on the ultimate financial health, with survival being a requirement before an NPO can adequately perform based on its mission, it is worthy to be aware of the flow of research diving deeper into NPO effectiveness (Epstein & McFarlan, 2011).

The nonprofit financial health literature started with tests for financial health based on specific internal financial ratios. More recent evolutions in the for-profit and nonprofit research have added more factors to measure financial health and incorporate time elements into the analyses. The trends in these analyses also appear to be broadening the definitions of success. As NPOs increase their impact on society, both as an employer and a provider of necessary services, a greater variety of measures will assess success. Focusing on internal and external governance broadens the foundation on which to effectively build future analyses.

Governance

Much research into for-profit corporate governance exists. The passage of Sarbanes-Oxley Act of 2002 (SOX) deeply impacted the way publicly traded companies handle their audits and internal operations while helping to employ many more accountants, both within

companies and at public accounting firms that review and audit the books of these organizations. Non-publicly traded companies, along with many NPOs, also were influenced by SOX. Though not mandated to do so, these organizations incorporated many of the SOX provisions for their internal use (Nezhina & Brudney, 2012). Attention to the nonprofit's handling of internal controls, a part of the SOX requirements, changes and improves processes and disclosures for many NPOs. Attention to nonprofit governance to date has been limited in the literature.

Analyzing the board's role in organizational effectiveness in nonprofits, Herman and Renz (2000) executed a set of surveys. They examined board practices from the perception of senior board officers, with additional input by individuals from funding sources (Herman & Renz, 2000). They concluded that organizational effectiveness relates directly to board effectiveness and that improving the performance of the board helps an organization to be more effective (Herman & Renz, 2000).

On a more simplistic note, Olson (2000) examined board effectiveness relating to fundraising at educational institutions. The study found that size matters, with larger boards having higher levels of donations (Olson, 2000). Examining the length of service of board members, Olson (2000) also provided evidence that the longer the tenure of members, the more effective a board is at raising funds. Again, this shows the impact of board influence in helping nonprofits succeed through enhanced revenues.

It is interesting to note that while board size appears to have positive effects in the nonprofit world, a study by Guest (2009) examining for-profits found that in the United Kingdom, larger boards inhibit profitability. This is possibly due to a lack of coordination and communication within such boards or might be specific to the United Kingdom or Europe.

Another European study examined almost 1,000 smaller, privately held Finnish firms (Eisenberg et al., 1998), finding a negative relationship between board size and firm value.

Coles et al. (2008) analyzed the complexity of the firm, looking to show whether it is advantageous to have smaller or larger boards. Debunked was the conventional wisdom that smaller, closer in size to six, and more independent boards are better (Coles et al., 2008). Complex, more diversified firms were found to benefit from a larger board with outside directors due to their increased independence and expertise (Coles et al., 2008). Firms requiring increased internal knowledge, as demonstrated by research and development-intensive firms, benefit from having more insiders (Coles et al., 2008). Both smaller boards and larger boards were found to be optimal (Coles et al., 2008). One size does not fit all.

As nonprofits and for-profits must ultimately make a profit to continue, I anticipated that board size matters for nonprofits. With the motivation of a nonprofit being to provide public benefits rather than returns to stockholders, some for-profit research is helpful. Still, nonprofits have other factors influencing financial success based on board size and composition. This study more deeply examined the impact of board size and other governance factors, internal and external, on the financial success of nonprofits.

Nguyen and Nielsen (2010) examined the impact of the sudden death of an independent board member on firm value. Their study documented that firm value decreases after such a death (Nguyen & Nielsen, 2010). This examination of independent board members went beyond just reviewing total numbers and added another dimension in the examination of the impact of board composition with independent members. An interesting twist to the independent board member conversation occurred when the question changed from the impact of the number of independent board members to the impact of when a change in the number of board members

occurs. Duchin, Matsusaka, and Ozbas (2010) examined the changeover due to changes in the New York Stock Exchange and NASDAQ rules in 1999 and 2003, simultaneous to the time of SOX's implementation in 2002. Findings examining for-profit organizations concluded that outside directors do affect performance (Duchin, Matsusaka, & Ozbas, 2010). The direction of that performance is dependent on the cost required for getting information to outside directors (Duchin, Matsusaka, & Ozbas, 2010). This helps explain why previous studies have found conflicting results on performance when only examining numbers of independent board members. Looking at CEO turnover, with independent board members being in a better position to terminate a CEO than insiders, Weisbach (1988) concluded that firm value increases with a larger presence of independent board members. Brick and Chidambaran (2010) suggested that firm value is enhanced with increases in the number of independent board members and increasing board monitoring activities.

Written policies are another important factor of board governance that can impact board performance. Herman and Renz (2000) evaluated the relationship between 25 board practices and the effectiveness of the organization. Out of 25 board practices, five board practices related to having written policies (Herman & Renz, 2000). Specific practices included selection criteria of board members, attendance at board and committee meetings, dismissal for board absenteeism, roles and powers of the executive committee, and expectations about giving and soliciting (Herman & Renz, 2000). The incidence of all five of these practices is higher in the top 10 NPOs, delineated in the survey data, than in the bottom 10 (N = 64; Herman & Renz, 2000). Herman and Renz (2000) concluded that the more effective organizations use more of the 25 practices highlighted in the study.

Examining the impact of better governance, Harris, Petrovits, and Yetman (2015) found that donations and governmental grant awards to NPOs increase with good governance. The seven factors Harris et al. (2015) examined were: formally documented policies, independent audits and audit committees, independent review of compensation by outside parties, board oversight (e.g., independence), management characteristics (examining internal related parties), accessibility and transparency of financial information, and the existence of written minutes. All factors were positively associated with increasing the donation levels, and all factors were found to be significant in their initial statistical examination (Harris et al., 2015). When performing additional analysis lagging the dependent variable of donations, six of the seven factors were found to be significant (Harris et al., 2015). The adjusted R^2 for the other six factors were relatively close (Harris et al., 2015). The only factor not found to be significant was the inclusion of written minutes (Harris et al., 2015).

John Carver, creator of the Policy Governance® Model, also known as the Carver Model (Carver & Carver, 2001), factored in written policies when working to enhance the effectiveness of boards. Nobbie and Brudney (2003) tested a model including surveys of 341 North American nonprofits and multiple board members. Nobbie and Brudney (2003) confirmed that implementation of the board governance model, with policy implementations including written policies, yielded a perception for those surveyed of enhancing board performance.

In 2007, the Panel on the Nonprofit Sector developed a document containing 33 principles relating to practices that enhance effectiveness and accountability; the document was last updated in 2015 (Independent Sector, 2015). Specific recommendations regarding board size, board independence, whistleblower policies, conflict of interest policies, or document retention policies were not made, but all these factors were included individually as principles

(Independent Sector, 2015). Many of these factors were incorporated into questions asked on the IRS's 2008 major revision to the Form 990.

The Form 990 changed to enhance the ability to analyze governance in nonprofit firms. New questions include the size of the board, the number of independent board members, whether board members were provided with the Form 990 prior to filing, the existence of written policies (e.g., whistleblower, document retention, and conflict of interest), maintenance of minutes, indicator for outside auditor, existence of an audit committee, if a single audit (formally known as an Office of Management and Budget [OMB] A-133 audit) is required and performed, and other additional potentially valuable information. One of the early studies taking advantage of this new data looked at how governance impacts the reporting of charitable expenses and the effect on accuracy (Yetman & Yetman, 2012). Yetman and Yetman (2012) concluded that good governance positively impacts the accuracy of reporting charitable expenses. Examining the influence of other financial health measures on governance is worthy of further investigation.

Certified audits in the United States require an objective outside party to examine the financial statements of an organization and state whether those statements, in the auditor's opinion, appear to reasonably express the results in accordance with GAAP. The Securities and Exchange Commission requires all publicly traded companies to submit audited financials examined by an independent external certified public accountant. Imhoff (2003) raised the question of audit effectiveness relating to board independence and level of board knowledge in the private sector. The SOX legislation increased reporting requirements for publicly traded firms. Enhancing accuracy and reliability and restoring trust in financial statement disclosures used by investors, SOX influenced many NPOs relating to their reporting and disclosures.

Nonprofits do not fall under the oversight of the Securities and Exchange Commission. Many nonprofits are subject to the OMB's Code of Federal Regulations Subpart F, which requires audits of all nonprofits if they receive federal assistance exceeding $750,000, typically defined as funds used for the public benefit (contract funds used internally are not included in this sum). This amount replaced the OMB's Circular A-133 in 2014, which at that time had a $500,000 threshold for requiring external audits. Nonprofits may need third-party audits for a variety of reasons ranging from lender covenants, funding source stipulations, state laws, or any other stakeholders, especially donors, wanting additional validation.

In examining audit impact, research has confirmed that audits have value. Audit quality is positively related to earnings quality and is cost-effective, with audit fees averaging less than .1% of sales (Francis, 2004). Further research by Aikins (2011) found that using internal auditors enhances governmental unit performance, especially regarding internal controls and operational efficiency.

Agency theory, the concept that owners and managers do not always have the same mutual interests when making decisions (Fama & Jensen, 1983), has been addressed in the for-profit literature. Nonprofit agency theory analysis has been limited. Nonprofit motivations that one might consider as more altruistic potentially have alternate influences. The interests of management, donors, and those served are often quite diverse. Boards are in place to ensure the accomplishment of the nonprofit's mission. The additional data now available on the Form 990s is of extreme value in research assessing the influence of various factors influencing financial health.

Brown (2005) discussed the impact of agency theory together with resource dependency theory and group or decision process theory. Brown's (2005) examination revealed that larger

organizations have better board practices along with larger boards. This is consistent with my investigation that further analyzed the size of the board relating to financial health.

Effective governance based on the previous discussion has many flavors, but they all relate to the people and the policies enacted to effectively manage an organization. Factors such as board size, policies, practices, and procedures impact an NPO's operations. Examining the influence of independent board members and specific governance models, such as the Carver and Carver model (2001), have given birth to consultancy practices aimed at improving board and NPO operations. Questions asked on the revised Form 990 further highlight the perceived importance of these and other governance factors. All of these trends point to an increased recognition that internal governance matters, further validating the intent of this paper to more closely examine the impact of these and other factors.

Religiosity

Religious influences on society through the millennia are significant. At the time of the founding of the United States of America in 1776, estimates of European settler religious affiliations indicated 98% were Protestant and 1.8% were Roman Catholic, with 2,500 settlers holding to the Jewish faith (Kosmin & Lachman, 1993, pp. 23–29). Grier (1997) found a positive correlation with the growth of Protestantism in the British colonies and per capita income levels. On a global scale in more modern times, Barro and McClearly (2003) found that religious beliefs positively affect economic growth. According to a Gallup Poll, the religious participation rates in the United States was approximately 56% in 2017, with over the half the survey respondents responding yes to the question asking if they felt religious (Smith, 2018). Globally, as of 2010, approximately 84% of the world's population identified with a religion.

This is expected to increase to 87% by 2050 (Pew Research Center, 2015). One should not underestimate the potential impact on society, and more specifically on nonprofits, of religion.

This form of self-monitoring inspired by religion leads to enforcement of moral rules affecting behavior. An individual's activity within society, with this added extra layer of restraint, helps to influence one's behavior within society positively. This influence on the individual and the community has both an economic and social impact. More recent investigations have shown the impact of religious participation and salience strongly influencing volunteerism and philanthropic giving (Graham & Haidt, 2010; Monsma, 2007).

Social Capital

Boards are not the only place where NPOs are reliant on volunteer community involvement to help them succeed. The impact of other community participants' support is vital. External governance factors previously mentioned have been shown to impact firm value and profitability in the for-profit sector. The social capital environment also impacts success in the NPO sector. Whether it is direct volunteering, financial contributions, or other direct and indirect forms of participation, an NPO does not function in a vacuum. The number of volunteers in the United States was estimated to have increased to 77.13 million people in 2018, an increase of 23% from 2016, with an estimated dollar value of $167 billion (Corporation for National and Community Service, 2018). The contribution of social capital in the NPO arena warrants further examination.

The concept of social capital in modern times has roots in Bourdieu's (1997) theory of practice. Putnam et al. (1993) highlighted the value of social capital, discussing its effect in making a positive difference through nonprofit community engagement as well as impacting democracy as a whole. Balancing the positive elements of social capital, Portes (1998)

enumerated four negatives: restrictions in access to opportunities outside one's network; restrictions to one's individual freedoms; excessive claims on group members; and downward leveling norms as opposed to the encouraging of growth and opportunities. Multiple definitions of social capital exist in the literature. For this paper, the concepts of bonding (between socially homogeneous groups) and bridging (between socially heterogeneous groups) as shared by Putnam (2000) were the focus.

Corporate research has found positive effects of social capital. Examining multinational firms, Tsai and Ghoshal (1998) found enhanced firm values with increases in social capital. Gooderham et al. (2010) studied social capital within larger firms and analyzed social capital's impact. Their study found social capital positively impacts knowledge transfer and organizational effectiveness (Gooderham et al., 2010). Trust and civic cooperation, as analyzed by Knack and Keefer (1997) in the context of social capital, also shows stronger economic performance in society based on cross-country analysis. The authors used responses to the World Values Survey (1997) in their examination (Knack & Keefer, 1997). Fredette and Bradshaw (2012), studying 234 NPOs, showed positive effects of increases in social capital on effective nonprofit governance.

Social capital's influence around the globe appears to make a difference across the spectrum of for-profit, nonprofit, and governmental entities, as well as impacting individual lives. In examining its impact specifically relating to NPOs, the effect was anticipated to be significant. The prior research reinforces the depth of influence. The research contained here contributes to the body of accounting, financial, and management literature affirming this.

The research into nonprofit financial health has been accelerating. New influences beyond the basic financial ratio analysis have been expanding. This further validates the

direction of the research in this paper, including the additional areas of governance and other internal factors influencing financial health and the analysis of external governance such as religiosity and social capital as these factors impact the NPO's ability to effectively serve the community.

Hypotheses Development

Internal Governance Factors

Corporate governance impacts a multitude of factors affecting for-profit companies ranging from valuations (Chen et al., 2010; Chung & Jo, 1996; Goel, 2018; Zheng, 2009) to risk of bankruptcy (Altman, 1977; Emawati, Handojo, & Murhadi, 2018; Hillegeist, Keating, Cram, & Lundstedt, 2004; Miglani, Ahmed, & Henry, 2015; Ohlson, 1980; Theodossiou, Kahya, Saidi, & Philippatos, 1996; Tseng & Hu, 2010). The dearth of nonprofit research is partially due to the lack of a direct profit motive, the inability to accurately determine valuations, and the lack of a clear-cut judgment for establishing the bankruptcy of an NPO. This study evaluated financial health in the nonprofit environment. I examined similar internal governance factors found in the literature of for-profits, including board of director considerations, board policies, and audit influences.

Total board size.

Almost all organizations seek to be successful. Efforts of those individuals designated to carry out the organization's mission determine the success. These designees include internal staff and management, internal (employee) and independent (external) board members, donors, other funding sources, and constituencies these organizations serve. Agency theory (Fama, 1980) shows that not everybody in an organization has the same interests. This could

significantly impact the performance of an organization and strongly influence its financial health. Fama (1980) viewed the board's role as "to scrutinize the highest decision makers within the firm" (p. 294). Fama's (1980) focus was on larger for-profit corporations.

The primary role of the board, according to Minow and Bingham (1993), is to select, monitor, and replace management where necessary. Minow and Bingham (1993) suggested that to accomplish these responsibilities, the majority of members in the ideal for-profit board should be outside members, with key committees such as the auditing, compensation, and board selection being 100% chosen from the outside. Also, within the for-profit world, Zahra and Pearce (1989) highlighted the impact of a board's activities on corporate financial performance by factors such as composition, size, characteristics, structure, and process.

An NPO's success requires strong financial health. If not financially sound, an NPO would likely not have the resources to keep its doors open. Another key factor is organizational effectiveness. Such effectiveness allows the NPO to carry out its mission and function long term. As stated by Herman and Renz (2000), "nonprofit organizational effectiveness is strongly related to board effectiveness" (p. 158). Enhancing the understanding of governance, with my hypotheses specifically examining board effectiveness, will contribute greatly to evaluating factors contributing to an NPO's financial health and success.

Corporate and nonprofit responses to board size varies from smaller is better (Guest, 2009) to larger is better (Olson, 2000), to both can be true (Coles et al., 2008; Duchin et al., 2010). lson's (2000) analysis of higher education institutions have investigated financial performance relating to board size in the nonprofit arena. Olson (2000) suggested the idea that a larger group has more knowledge and resources as well as more access to those resources. Olson (2000) posited that revenues increase with larger board sizes.

Olson's (2000) analysis was limited in two ways. First, Olson (2000) only addressed higher education institutions in the study. Second, Olson (2000) based conclusions on the ability of an organization to attract revenue, and although it is a factor in maintaining financial health, it is not a broad indicator of financial health in the same way that a for-profit attracting investors does not guarantee success. My first hypothesis went wider and deeper into the financial health of an organization specifically relating to board size. Do organizations with increased governance in the form of larger board size show enhanced financial health? My first hypothesis sought to confirm the impact of board size:

H_{1a}**:** Financial health of nonprofits increases with a larger number of board members.

Board size: Independent members.

Fama and Jensen (1983) dove deeper into agency theory, indicating increases in efficiency, even for nonprofits, in separating management and control of the organization. Their emphasis on a wider variety of organizations than Fama's (1980) research reinforced the importance of the board role (Fama & Jensen, 1983). Fama and Jensen's (1983) paper also highlighted independent board members contributions as crucial to an organization's operation.

Board composition ranging from the diversity of its members to representation of major stakeholder groups can significantly impact an organization. Andres-Alonso et al. (2008) reported in their examination of Spanish foundations the need to increase the number and independence of directors at NPOs as the nonprofit grows. Hypothesis 1a addressed the overall board size. Focusing on the number of independent board members, addressed in my next hypothesis, touches on another important characteristic of a board's structure.

The introduction of SOX required enhanced accountability of senior officers of a company and encouraged increases in independent board members on various committees,

specifically including the audit committee. Baysinger and Butler (1985) surmised that independent board members offer better oversight. Many elements of SOX, despite not being a requirement for smaller for-profits or nonprofits, have been implemented in NPOs. These organizations have found that including more independent board members as part of the board increases an organization's return on equity (Baysinger & Butler, 1985). Duchin et al. (2010) discovered that increasing outside board member participation could affect the results of for-profit enterprises positively and negatively, depending on the cost of information required to fully inform such board members. Hypothesis 1b is consistent with efforts in Hypothesis 1a to demonstrate that nonprofits also are positively influenced by increases in outside board size. Increasing scrutiny results from well-connected outside members and donors being a part of enhanced monitoring. NPOs also gain insights into community needs and obtain further reach through the participation of those outside members.

In 2000, Chen and Jaggi (2000) concluded that increasing the number of independent non-executive directors enhances corporate economic performance. Positive impacts include increases in firm compliance and comprehensiveness of disclosures along with enhancements to reporting quality. Chen and Jaggi (2000) posited that these improvements positively influence management's decisions to disclose financial information while better-informing management and the public. This leads us to Hypothesis 1b regarding independent board members.

H_{1b}: Financial health of nonprofits increases with a larger number of independent board members.

Use of written board policies.

For NPOs, formalization of policies is a part of enhancing attention to effective management practices. Prior research by Herman and Renz (2000) highlighted five written

policies having a positive impact on board effectiveness. Harris et al. (2015) studied the impact of multiple factors affecting the level of charitable contributions and awarding of grants. Increasing grants and contributions allows the NPO to better execute its mission.

John Carver's Policy Governance® Model, also known as the Carver Model, linked effective board governance to written policies (Carver & Carver, 2001). I posit in this paper that additional attention to detail by implementing such policies enhances effective organizational oversight, and ultimately, financial health. There are a variety of such policies that boards maintain. Fields relating verification of having written policies are on the Form 990 submissions, including a whistleblower policy, a conflict of interest policy, and a document retention and destruction policy. Other Form 990 questions include: if all governing members were given the final Form 990 before its physical filing; if policies exist relating to joint venture agreements to ensure tax-exempt status (if participating in such activities); and if actions taken by the board or committees are recorded in writing. The Form 990 also asks if governing documents were modified during the year.

Harris et al. (2015) found formal documented written policies to be significant in the amounts of monies raised. This led to the conclusion that policies like these, which increase revenues, positively enhances financial health (Harris et al., 2015). Written policies are also consistent with the Panel of the Nonprofit Sector's *Principles for Good Governance* (Independent Sector, 2015). The original report, released in 2007 and changed in 2015, mentioned having whistleblower, conflict of interest, protection of data, and travel and entertainment expense reimbursement policies as best practices (Independent Sector, 2015). My next hypothesis attempted to examine the existence of such policies and procedures and postulated their positive effects.

H_{1c}: Increased use of written policies increases a nonprofit's financial health.

Use of an outside audit.

The auditing function is a check on the financial systems providing additional oversight. Aikins (2011) found that internal audit activities enhance financial performance in governmental agencies. In the for-profit arena, a CEO's certification, post-SOX, enhances investor perceptions and confidence in the company (Zhang, 2009). Prior research has shown that auditor reputation, competence, and independence also enhance the quality and credibility of the financial statements (Watkins, Hillson, & Morecroft, 2004). Not only do governmental entities require nonprofit audits, donors will often require outside audits as a condition of their donations. Such demands would indicate that there is value to those parties in having an audit performed. Though little appears to have been done directly in the NPO arena, this investigation will help to springboard such an effort.

Signaling theory, introduced by Spence (1973), is also relevant here. Though Spence (1973) related the study to the education level in the job market as a signal ultimately impacting the level of wages, more recent studies have applied the concept in a variety of contexts (Connelly, Certo, Ireland, & Reutzel, 2011). Research by Connelly et al. (2011) included communication by executives when they increase their ownership; board composition when including higher power executives; dividend policy; and overall information asymmetry when not all stakeholders hold all knowledge. Their study focused on information about quality and information about intent (Connelly et al., 2011). Nonprofits undergoing an external audit would enhance the quality of information by providing a professional review by experienced outsiders. This extra review allows for increased scrutiny and further validates the results presented.

A formal audit also includes a management letter suggesting system and/or operational improvements. The potential shortcomings will alert the board and other stakeholders as to potential gaps in existing internal systems. Highlighting these gaps, along with the extra review, provides enhanced information to decision makers, allowing them to be aware of shortcomings and discover challenges. This ultimately improves the internal operations. Increasing communication and attention enhances the ability of an organization to be aware of and address financial system and financial health challenges.

Third parties, including banks or other funding organizations, often demand an independent audit for nonprofits they work with. The U.S. government's OMB requires an audit for any domestic nonprofit spending more than $750,000 in federal funds. The New York Nonprofit Revitalization Act of 2013 further validates the concept of accountability by requiring an audit. This act refined the laws reducing thresholds requiring a review or audit by a CPA for nonprofits. Third-party audits ensure that outsiders perform procedures to verify transactions and review internal controls. This can enhance the comfort level for interested third parties. The ultimate conclusion of these third-parties is that after examination, per the opinion of these outside professionals, the statements appear reasonable. Performance of such an outside audit should influence positively those responsible for reporting the results and overseeing an organization's activities.

Audits appear to make a positive difference. The failure rate of an audit, defined as including SEC sanctions, litigation, business failures, and earnings restatements, is less than 1%. Furthermore, litigation rates against auditors are less than .3% (Francis, 2004). In the same study, Francis (2004) confirmed that earnings quality is positively associated with audit quality.

I posited that based on 99+% success rate of audit in the for-profit arena (Francis, 2004), a professional review enhances the quality in reporting results in the nonprofit sector.

Krishnan et al. (2006) found enhancement of results with outside reviews of NPOs. Misrepresentations in formal reporting declines while recording accuracy increases on Form 990 filings based on such reviews (Krishnan et al., 2006). The extra examination, as provided through an audit, should have a similar positive impact in enhancing accuracy in reporting results. Enhanced data accuracy yields better quality data and ultimately improves decision making. This discussion led to the following hypothesis.

H_{1d}: Participation of a nonprofit in a certified audit increases financial health.

External Governance Factors

Internal governance factors, as detailed in Hypotheses 1a–1d, were posited to have a major impact on the financial health of NPOs. The effect of external governance factors in a for-profit or nonprofits success cannot be discounted. For-profit research has examined external factors and impact on firm performance and market value. Chung and Jo (1996) found a positive relationship between the number of analysts following a company and its market value, as the number of analysts following captures the level of market scrutiny on firm performance and managerial action (Moyer et al., 1989). Similarly, prior for-profit literature has argued that institutional investors tend to monitor and discipline managers to ensure that the firm's investment strategy is consistent with the objective of maximizing long-term value rather than meeting short-term earnings goals (Callen & Fang, 2013; Dobrzynski, 1993; Monks & Minow, 1995).

Nonprofits are not evaluated on their returns on investments or market value. These capital market external factors cannot be used for nonprofit sectors. Operational effectiveness

for NPOs is judged by successfully serving the needs of their constituents based on their missions. The external environment dynamics for nonprofit sectors differ greatly from those of for-profit sectors in relation to an analysis by investors and donors. Perkins and Berkowitz (1986) introduced social norm theory, relating one's own attitude to the acceptance of peer norms. Elster (1988) discussed social norms relating to economics and business, contrasting the rationality of Adam Smith versus the social norms of Emile Durkheim. As NPOs usually exist to serve the society in which they participate rather than to generate profits for owners, it is appropriate to include the influence of social norms theory in the nonprofit world.

Prior literature has separated social norms influences into two categories, normative influences and informational influences (Hsu & Lu, 2004). Through social norm theory, I identified religiosity and social capital as two external governance factors that act as external governance mechanisms able to improve nonprofit performance. Normative influences relate to an individual looking for acceptance from others and conforming one's action accordingly (Boytsun et al., 2011) where gaining this acceptance stems from the personal desire to meet the expectations of others. I saw this as relating to religiosity with a person gaining rewards and avoiding punishment and rejection through fitting in with shared values, consistent with Graham and Haidt (2010) discussing religion as a force that binds individuals through community moral reinforcement. Informational influences are based on accepting the opinions and expectations of others, which ultimately influences one's own opinions (Boytsun et al., 2011). Influenced by one's social environment, this can be perceived as directly relating to social capital associated with the individual.

Impact of religiosity.

Corporate governance factors relating to environmental factors such as social norms and social cohesion include religiosity and social capital (Boytsun et al., 2011). Similar to social capital and consistent with prior research, the benefits of religiosity bear deeper examination. Religiosity was included as an element of social capital by Putnam (2007). Maselko, Hughes, and Cheney (2011) introduced religious social capital as a concept that includes integration with a certain religious group, along with shared experiences and knowledge, and increased community interaction. The activities such as bonding and bridging trust, social support, and group membership have been found to be prevalent (Maselko et al., 2011).

Though there are many factors similar to social capital as shared previously, including increased volunteerism and community involvement, religiosity adds the element of faith to the equation. The idea of a higher power could influence behavior to a higher standard. Religious adherents have been found to be more active in the community as well as with each other (Putnam, 2000). I expected that the added element of religiosity compliments social capital and impacts the success of the NPO. Religiosity was chosen as another external governance factor because of its global influence and potential to impact the success of the NPO.

Anecdotally, in the education setting, it has consistently been shown that Catholic high school students perform better than students in non-religious schools (Price, 2019). Improved results have been shown to not only relate to resources, location, or size, but also to their religious nature, which includes increases in shared values, beliefs, and attitudes. Similar results could be expected in areas of higher religiosity and might similarly impact the NPO environment.

Prior research has linked religion to many benefits in the corporate environment but is extremely limited in the nonprofit arena. Religiosity is linked to a multitude of positive factors, including enhanced life satisfaction, increased civic engagement and volunteerism, and reduced crime rates (Putnam & Campbell, 2012; Ruiter & De Graaf, 2006; VanderWeele, 2017). Monsma (2007) found a positive relationship between higher levels of religiosity and increased propensity towards giving and volunteering; this enhanced effect due to religiosity is also connected with higher attitudes of civic responsibility. Monsma (2007) used the terms responsible citizenship and shared communal responsibility. Noland (2005) also found that religion enhances economic performance. Such positive impacts were further evaluated as they apply to nonprofit success.

Religious life promotes enhancing social and political participation, along with increasing civic engagement (Putnam, 2000). These religious influences affect economic activities within the community and impact the ability of an NPO to succeed. Kovic and Hansli (2017) provided research demonstrating the enhancement of positive attitudes toward nonprofits based on increased religiosity. Religious behavior enhances internal church operations, and religiosity adds to civic life outside the church (Smidt, 1999). Employee performance improvements link to increases in religiosity in the workplace (Osman-Gani, Hashim, & Ismail, 2013). Increases in employee morale and productivity, combined with lower turnover rates, have been found in work environments that include prayer participation (McCarty, 2007).

Prior literature has documented a positive relationship between religiosity and financial reporting quality. For example, McGuire, Omer, and Sharp (2012) provided evidence that organizations in areas with increasing levels of religiosity demonstrate lower rates of financial reporting irregularities. Furthermore, earnings management is less prevalent in areas of higher

religiosity and stronger religious adherence (Montenegro, 2016), including decreases in financial statement misrepresentation, yielding a lower rate of restatements (Dyreng, Mayew, & Williams, 2012). Such indicators in the for-profit sector reflect may be reflected in the nonprofit arena, demonstrating managerial tendencies toward increasing proper recording are likely to be experienced in both camps. Nonprofit health is directly affected by improved financial reporting. Donors and other funders are naturally more comfortable providing funds to an organization that is accurate in its reporting. Being able to plan and make appropriate decisions is dependent on having accurate data on which to base those decisions.

Higher religiosity counties have demonstrated reduced unethical corporate behavior. Securities-related class action lawsuits are less prevalent in religious areas. Additionally, the practice of aggressive earnings management is less frequent in such counties (Grullon, Kanatas, & Weston, 2009). In two U.S. studies, business students that are more religious were found to be more ethical than those who were less religious (Albaum & Peterson, 2006; Kennedy & Lawton, 1998). Business managers in the United States with a higher degree of religious commitment demonstrated higher levels of ethical judgment (Longenecker, McKinney & Moore, 2004).

These findings suggest that higher religious commitment in a community positively influences effective governance, resulting in enhancing financial health and the ability of the NPO to better serve its commitment of providing for the public good. This study intended to verify that idea in proposing the following hypothesis:

H_{2a}: Nonprofits located in areas with higher degrees of religiosity have higher financial health than nonprofits located in areas with lower degrees of religiosity.

Impact of social capital.

Prior research (e.g., Knack & Keefer, 1997) has linked social capital to company growth. King (2004) documented findings regarding the importance of social capital to businesses and business leaders. King (2004) also emphasized the need for nonprofit leaders to foster social capital. Putnam et al. (1993) linked social capital to the enhancement of government performance. Social capital enhances business, knowledge, and innovation performance (Cooke & Wills, 1999). Even corporate social responsibility research has included social capital in its analysis, examining internal and external governance (Jo & Harjoto, 2011).

Nonprofits serve the needs of the public based on its mission. An NPO is integrated into the community through the clientele it serves, the employees that support the organization, the volunteers that assist in providing the services, and the volunteer board members that insure the organization's effectiveness and sustainability. I found social capital definitions integrating trust, civic cooperation, and political participation (Knack & Keefer, 1997; Putnam, 2000) to be consistent with the activities of an NPO within its community. Social capital also has been linked to enhancing economic efficiency, reducing cost due to increasing information access, along with increased honest dealings by reducing information asymmetry, which in turn encourages financial development and lowers the cost of capital (Javakhadze, Ferris, & French, 2016). The added pressure of guilt through potential reputation loss within one's social network adds to the motivation to do right (Kandori, 1992). The combination of sharing information, increases in mutual support, and social network pressure to do no wrong is powerful and anticipated to positively influence financial health.

Enhancing social capital leads to the increase of information sharing and provides built-in monitoring features. More timely data can be obtained based on multiple sources of input. In

addition to the increase in information sharing, there is an increase in performance monitoring. Participating in a more informed network reinforces good behavior as it is more difficult for management to cheat and not be found out. Managers are reluctant to steal or initiate other inappropriate behaviors that would go against social norms. Persons in areas of high social capital are motivated to maintain high standards to help individuals maintain positive reputations.

The role of social capital in NPOs is in its infancy according to Schneider (2009). Schneider's (2009) research emphasized the effect of social capital on an NPO's leadership, maintaining how crucial and impactful it is. The study also reported on prior research indicating investment in social capital produces higher returns while increasing the ability of groups and organizations to meet their goals (Schneider, 2009). With the apparent benefits of enhanced social capital, examination in the context of financial health is warranted.

Knack and Keefer (1997) found stronger societal economic performance within a global context in areas with higher levels of social capital, resulting in increased levels of trust and civic cooperation. Closer to home, Rupasingha et al. (2002) researched a wide cross-section of U.S. counties and found social capital positively impacting economic growth. Furthermore, audit fees are significantly lower in countries with higher social capital (Jha & Chen, 2015). This appears to support the idea that higher social capital countries foster more trust, requiring less audit fieldwork due to lower potential litigation fees. This ultimately saves financial resources for audited NPOs so that they can have more monies to spend elsewhere, contributing to reduced expenses and enhancing financial health. The following paragraphs investigate the role of social capital (H_{2a}) and religiosity (H_{2b}) as external governance mechanisms that positively impact the financial health of NPOs.

Previous nonprofit research has supported the positive influence of social capital on domestic NPOs with larger growth in areas having higher degrees of social capital (Saxton & Benson, 2005). Social capital builds relationships that foster trust and reciprocity, as well as positively influencing society at economic, political, and social levels (Coffee & Geys, 2005). With such an increase in relationships and NPO participation by the community, I inferred that such interaction would impact positively the nonprofit arena.

Putnam (2000) examined trends in American society and addressed social capital relating to engagement in public affairs, community volunteerism, community organizational life, informal sociability, and social trust. Putnam and Campbell (2010) stated that half of the social capital is accounted for by religious affiliations, an environment that would naturally foster such interactions. In examining social capital on philanthropy, Brown and Ferris (2007) found a direct positive relationship between social capital and generosity in giving of both money and time to NPOs.

Social capital also enhances information flow and knowledge transfer. Research has supported information sharing being a mediator between social capital and firm performance (Wu, 2007). Multinational corporations enjoy a competitive advantage and benefit from information sharing through broader networks (Andersson, Forsgren, & Holm, 2015). Better information flow in the corporate world reduces the cost of capital (Lambert, Leuz, & Verrecchia, 2007). For-profit businesses and nonprofit organizations require similar business processes to effectively function and survive, such as boards, managers, employees, strategic plans, and a need to generate positive net income. Social capital impacts on for-profit entities are expected to be similar to NPOs. This study posited that social capital directly influences

financial health through enhanced volunteerism, contributions, and information flow. This led to the next hypothesis:

H_{2b}: Nonprofits located in areas with a higher social capital enjoy better financial health than nonprofits located in areas having lower social capital.

The following research design section further describes the methods for the analysis on the effect of these governance measures as they impact financial health.

Research Design

In this section, the research design is presented. First, key constructs as they relate to the governance factors measuring financial health are discussed, followed by the sources of the secondary data. Next, detailed descriptions of the variables analyzed are presented, followed by the linear regression model with descriptive statistics for data analyzed in my hypotheses.

Governance Measures

I followed prior research in evaluating financial health and examined four primary measures: net income as a percentage of expenses; net assets as a percentage of expenses; return on assets, and net income as a percentage revenue (Altman, 1968; Beaver, 1968; Chang & Tuckman, 1991; Edmister, 1972; Greenlee & Trussel, 2003, Keating et al., 2005; Ohlson, 1980; Prentice, 2016b; Ritchie & Kolodinsky, 2003; Tevel et al., 2015). The four measures were consolidated into two composite measures for further analysis. The first composite measure used decile ranking of the previously mentioned four variables. The second composite measure used principal component analysis (PCA) with these same four variables. Financial and non-financial panel data was drawn from IRS gathered Form 990 tax returns extracted from the period 2011 to 2016.

Data was compiled integrating a series of sources based on the Statistics of Income as sourced from the IRS. The National Center for Charitable Statistics (2018) data set was merged with data from Nonprofit Open Data Collective (2019), as managed by Dr. Jesse Lecy, and the Governance Data Set provided by Open990 (Borenstein & Kugelmass, 2019), a nonprofit consultancy. This combination of sources allowed for an in-depth analysis of the variables selected.

I captured county religiosity through ARDA (2018), also available online. The two measures examined the number of religious congregations per 1,000 capita and the number of religious adherents per 1,000 capita within a metropolitan statistical area (MSA). Congregation refers to a meeting place such as a church, mosque, or temple for religious and networking purposes. Religious adherents include those who regularly attend religious services according to the bylaws of each participating group. The ARDA data set included data on over 344,000 congregations, with over 150 million adherents, covering almost 50% of the U.S. population.

I proxied social capital using the total number of social and civic associations in a geographic location, such as physical fitness facilities, public golf courses, religious organizations, sports clubs, political organizations, professional organizations, business associations, and labor organizations normalized by the total population in a county (Knack, 2002; Hopkins, 2011). The data set is available online on the Pennsylvania State University website (Rupasingha, Goetz, & Freshwater, 2018).

Financial Health of Nonprofit and Empirical Models

My hypotheses were about the effect of internal and external governance measures on the financial health of the nonprofit firm. Many models have been developed over the years to

explain financial health. I used four proxies to capture the financial health of NPOs as previously described and further elaborated on in the following paragraphs.

Savings indicator. The savings indicator (*Saving_Indicator*), as highlighted by Prentice (2016b), is a measure of the saving ratio. It is calculated by dividing total expenses by net income. It highlights the relationship between profits and expenses and is considered a profitability measure.

Markup sustainability. Markup sustainability (*Markup_Sustain*) was also highlighted by Prentice (2016b). As a short-term sustainability measure, this ratio is calculated by adding back depreciation and amortization expense to the net change in unrestricted total assets minus the lag of unrestricted net assets during the year and dividing by total expenses.

Return on assets. The return on assets (*ROA*) is calculated by dividing net income (total revenues – total expenses) by average total assets. Corporate literature has used ROA in analyzing the risk of bankruptcy (Altman, 1968; Beaver, 1966; Ohlson, 1980) as well as general corporate financial health (Barnes, 1987; Chen & Shimerda, 1981). Prior nonprofit research has also included ROA in the analysis of financial health and sustainability (Bowman, 2002; Keating et al., 2005; Laitinen & Suvas, 2016; Ritchie & Kolodinsky, 2003). Based on the aforementioned examples of prior research. The ROA is a mainstream profitability ratio used in the for-profit and nonprofit world.

Profit margin. The profit margin (*Margin*) is a fundamental profitability ratio used globally in financial analysis. It is calculated by dividing net income by total revenue. This is what allows for-profits to provide returns and dividends to their stockholders. This also allows the nonprofit to have a cushion to absorb lean times and potential losses.

Composite measures. To establish a single measure of financial health, I established a composite measure (*Perf_Composite1*). I first decile ranked the four dependent variables. I then summed and scaled by a factor of 40 possible points (10 points each), yielding an index range from 0 to 1.0. I denoted this standardized composite measure as my first overall financial health composite measure (*Perf_Composite1*). This index provided a relatively robust measure of nonprofit financial performance because it averaged across four different continuous measures of financial health. The use of decile rankings to construct a single measure of financial performance also reduced noise in the estimates and mitigated concerns with non-linearity (Francis, LaFond, Olsson & Schipper, 2005; Gray, Koh, & Tong, 2009). In my additional analyses section, I also used PCA to construct a second composite measure (*Perf_Composite2*).

To examine the relationship between governance and financial health of NPOs, I used the following model based on Ohlson (1980), Tuckman and Chang (1991), Tevel et al. (2015), Bowman (2011), Ritchie and Kolodinsky (2003), and Trussel and Greenlee (2004). The regression model included year, sector, and state location fixed effects. Firm and year subscripts were omitted here and in later equations for brevity.

$$Financial\ Health = \beta_0 + \beta_1 Governance + \beta_2 Assets + \beta_3 Leverage + \beta_4 LnAge + \beta_5 LnEmpl + \beta_6 Volunteer + \text{Year Fixed Effects} + \text{Sector Fixed Effects} + \text{State Fixed Effects} + \varepsilon \quad (1)$$

My proposed model used ordinary least squares (OLS) linear regression modeling. I expected this to be the most direct and efficient methodology for testing my hypotheses. This fit well for my study as I: expected a linear relationship between the independent and dependent variables; used both continuous and categorical variables; were able to control for and isolate the effects related to other independent variables; did not expect a perfect correlation (Pearson

correlation coefficient of +1 or -1) between independent variables; and expected to find significance between the independent and dependent variables.

Hierarchical linear modeling (HLM) was considered for use in analyzing the social capital and religiosity hypotheses. The method of HLM uses multiple levels in its analysis so that the nesting of levels yielded deeper insight into the results (Woltman, 2012). While highly useful in the case of nest-able layers, such as students within a school, within a school district, and within a state, my model did not yield itself well to use of similar multiple layers. I examined only two levels relating NPOs within a state or county as they related to degrees of religiosity and social capital and were therefore compelled to reject this technique for my analysis.

Furthermore, Huang (2014) discussed the use of HLM as one of many tools when analyzing clusters of data. Huang (2014) concluded that one size does not fit all. As highlighted by Newman, Newman, and Salzman (2010), similar to the concept of parsimony, a researcher's goal is to answer the research question in the most efficient manner. They suggested HLM may not always be that method (Newman, Newman, & Salzman, 2010).

Financial health was captured by my composite measures (*Perf_Composite1* and *Perf_Composite2*) of four financial health variables: *Saving_Indicator, Markup_Sustain, ROA,* and *Margin*. In my additional analyses section, I also estimated the model using each individual measure of four financial health measures. I used a series of independent variables in the analysis. The log of board size (*LnBoard*) was based on the total number of voting board members and was the proxy for measuring board size. The independent board member construct (*Indp_Ratio*) was measured as independent voting board members divided by total voting board members. The written policy (*Writ_Policy*) was valued between 0 and 3, based on the number of

written policies existing relating to either conflict of interest, whistleblower, or document destruction policies. The presence of all three policies adds up to 3, which is the highest possible value for *Writ_Policy*, whereas the absence of all three policies adds up to 0, which is the lowest possible value for *Writ_Policy*. Audit (*Audit*) was a dummy variable valued at 1 if indicated to have had a formal outside audit and 0 if no audit was conducted. Religiosity (*Religiosity*) was the number of religious congregations per 10,000-person population base within the MSA where the nonprofit is headquartered. Social capital (*SocialCap*) was a measure of the total number of social organizations per 10,000-person population base within a county where the nonprofit is headquartered.

Prior research has included control variables shown to affect financial health. I used two size-related control variables as proxies for size: assets and number of employees. The literature has found that larger organizations generally have better survival rates as they typically have more resources, allowing them a cushion for challenging times (Bruderl & Schussler, 1990; Ohlson, 1980; Tuckman & Chang, 1991). Especially vulnerable are smaller and younger NPOs (Fernandez, 2008). Similar to Keating et al. (2005) and Desai and Yetman (2015), I used total assets (*Assets*) as a proxy for a firm's size. An investigation by Cowling (2004) discovered that size can impact profitability in both directions. Cowling (2004) found that in times of economic upturn, there is an inverse relationship between size and profitability, while in recessionary years the effect is reversed.

I controlled for Leverage (*Leverage*), a long-term solvency ratio, also known as the debt to asset ratio. The expectation was that increasing debt reduces financial health by increasing interest expense and reducing an NPO's solvency (Cite a paper).

I controlled for nonprofit age (*LnAge*), calculating the age of the firm by deducting the year of formation from the current year and adding one to it. I then took the natural log of this age variable to reflect the role of firm age in the model. Firm age is another variable that can go either way with its impact on financial health. The age of an organization reflects a track record of survivability; the older an organization gets, the more experience internally and reputation externally it develops. Besides Fernandez (2008) finding younger NPOs at risk, Gianpaolo, Carrerata, and Poggesi (2012) review of Stinchcombe's (1965) seminal work on the liability of newness reaffirms the additional hazards of being a newer organization. Age can also be a negative factor as the NPO can outgrow its mission or be providing goods and services to meet past needs and not current needs.

I used the number of employees (*LnEmpl*) to control for size. *LnEmpl* was calculated by taking the natural logarithm of the number of employees. Previous research has used revenues or employees as a proxy for size (Calof, 1994; Cavusgil & Naor, 1987). In addition, research relating to size also has discussed size as a proxy for risk and profitability (Becker-Blease, Kaen, Etebari, & Bauman, 2010). A negative relationship between the number of employees and financial health could be expected as increases in employee expenses reduces net income. A positive relationship might also result as more employees means more activity, more potential revenues, and ultimately more profitability.

Volunteers (*Volunteer*) was the percentage of volunteers as related to the total number of employees. Brown and Ferris (2007) hypothesized that both social capital and religiosity have a positive effect on volunteering. It would be natural to extrapolate the effect of volunteerism as it relates to its impact on financial health. Brown and Ferris (2007) also discussed the idea of human capital being developed in meeting the NPO's goals. In a study by Pope, Isely, and

Asamoa-Tutu (2009), over 92% of NPOs claimed to use volunteers. Typical nonprofit boards are also made up of volunteers. The impact of volunteers can be both positive and negative. It is expected that a greater preponderance of volunteers will positively impact financial health based on cost savings associated with unpaid labor. Quantity and quality of volunteers are not considered the same thing. Pope et al. (2009) also mentioned in their study that some of the survey participants felt that their volunteers lacked certain expertise. Having insufficiently trained volunteers might add costs to the organization without gaining a financial health benefit, thus negatively impacting financial results.

The inclusion of year fixed effects in my specification controlled for time-varying macroeconomic factors that might impact the financial health and survivability of the NPO. In their analysis, Burde, Rosenfeld, and Sheaffer (2017) found that education and research and development NPOs were the most viable, followed by religious and philanthropy-oriented NPOs, then recreation and culture NPOs, with health and social work NPOs being the least viable. Given the large data sample, I controlled for the potential effects of various sectors of NPO. Tuckman and Chang (1991) utilized six broad sectors. Trussel (2003) expanded the examination to ten sectors. This is consistent with the National Taxonomy of Exempt Entities (NTEE) classifications used by the IRS on the Form 990, as found in Table 2.

I controlled for state fixed effects. Location directly impacts the nature and performance of NPOs as different locales have different economic, political, and even climate considerations. Hofstede et al. (2010) analysis of cultural dimensions in the prediction of financial distress across twenty-six countries led me to believe that there is value in controlling for geographic location. I analyzed my data and controlled for domestic geographic location based on the state location of the NPO. Hofstede et al. (2010) found variations in NPO financial distress based on

locaion. In a more recent study analyzing impact, Laitinen and Suvas (2016) reaffirmed the effect of location on financial health. Carroll and Stater (2009) found that NPOs in urban areas have higher levels of demand, lower levels of revenue volatility, and greater access to funding opportunities. All variables are defined in the Appendix.

Next, sample details and descriptive statistics are presented, followed by empirical results applying analysis of the hypothesized governance measures on financial health. Specific governance factors investigated include: board size, independent board membership numbers, use of a certified audit, the inclusion of written policies, impact of religiosity, and the influence of social capital.

Sample Description and Empirical Results

Sample Details

Using the integrated data file as described in the previous section, records with incomplete data were removed. My final sample consisted of 422,505 firm-year observation from fiscal year 2011 to 2016. Sample distribution by year is summarized in Table 1. Even though the Form 990 changes began in 2008, it was not until 2010 and 2011 that more complete reporting was found. As expected, the frequency of records steadily increased during the six annual periods, from 31,384 records in 2011 to 94,317 in 2016.

Table 1

Frequency Distribution of Sample by Year

Year	Frequency	%	Average *Perf_Composite1*
2011	31,384	7.43	0.521
2012	55,712	13.19	0.538
2013	71,276	16.87	0.555
2014	80,872	19.14	0.559
2015	88,944	21.05	0.556
2016	94,317	22.32	0.549
Total	422,505	100	0.550

Note. Perf_Composite1 is a composite measure of nonprofit financial performance using decile ranking of four continuous financial health measures: *Saving_Indicator*, *Markup_Sustain*, *ROA*, and *Margin*;

A breakdown by sector based on NTEE codes is presented in Table 2. The largest sector falls within the human services arena, with over 36% of the sample data, which corresponds to more than 150,000 of the 422,505 total records. The next largest sector is health, with just over 17% of NPOs included. Officially, the NTEE classification codes include ten categories. Most religious institutions are not required to file a Form 990. I therefore removed religious institutions from Table 2, leaving nine categories.

Table 2

Frequency Distribution of Sample by Sector

Sector	Frequency	%	Average *Perf_Composite1*
Arts, culture, and humanities	35,234	8.34	0.539
Education	55,098	13.04	0.565
Environment and Animals	17,818	4.22	0.584
Health	73,388	17.37	0.547
Human services	154,105	36.47	0.545
International, Foreign Affairs	7,379	1.75	0.520
Mutual/Membership Benefit	7,777	1.84	0.539
Public and Societal Benefit	71,405	16.90	0.554
Other	301	0.07	0.576
Total	422,505	100	0.550

*Note. Perf_Composite1*is a composite measure of nonprofit financial performance using decile ranking of four continuous financial health measures: *Saving_Indicator*, *Markup_Sustain*, *ROA*, and *Margin*;

Descriptive statistics included in Table 3 display the mean and median for the variables based on the 422,505 valid records. Average board size was almost 15 board members, with independent members, on average, comprising over 90% of the board. The average NPO maintains two out of the three written policies as tracked. About half of the NPOs participate in a certified audit. The average nonprofit experiences a return on assets of .1%, while the profit margin averages 1.7%. The average NPO debt to asset ratio approximates 34%, has an age of just over 40 years, has 148 employees, and has a volunteer to employee ratio of 13:5.

Table 3

Descriptive Statistics

Variable	*N*	Mean	*SD*	Q1	Median	Q3
Board Size	422,505	14.732	12.582	8.000	12.000	17.000
LnBoard	422,505	2.564	0.583	2.197	2.565	2.890
Indp_Ratio	422,505	0.909	0.227	0.950	1.000	1.000
Writ_Policy	422,505	2.081	1.241	1.000	3.000	3.000
Audit	384,459	0.513	0.500	0.000	1.000	1.000
Religiosity	422,505	11.674	5.698	7.334	9.124	14.231
SocialCap	422,505	1.081	0.460	0.784	0.994	1.265
Saving_Indicator	422,505	0.075	0.313	-0.041	0.021	0.110
Markup_Sustain	422,505	0.092	0.297	-0.004	0.038	0.127
ROA	422,505	0.001	0.296	-0.034	0.017	0.085
Margin	422,505	0.017	0.229	-0.043	0.021	0.100
Perf_Composite1	422,505	0.55	0.258	0.325	0.575	0.775
Perf_Composite2	422,505	0	1.808	-1.590	0.106	1.546
Assets (billions USD)	422,505	0.024	0.086	0	0.002	0.009
Leverage	422,505	0.341	0.481	0.035	0.175	0.473
Age	422,505	40.098	31.166	17.000	32.000	53.000
LnAge	422,505	3.421	0.816	2.890	3.497	3.989
Employees	422,505	148.417	394.363	6.000	21.000	94.000
LnEmp	422,505	3.35	1.740	1.946	3.091	4.554
Volunteer	422,505	13.543	40.707	0.051	1.058	7.176

Notes: USD is United States Dollars

I next evaluated my hypotheses based on the proposed model through regression analysis. The focus of this section was initially based on the composite dependent variable, *Perf_Composite1*, as found in Table 5. This variable, as described in the previous section, represents a composite measure of the four individual dependent variables previously chosen to analyze financial health. It uses a decile ranking of the four continuous measures: *Saving_Indicator*, *Markup_Sustain*, *ROA*, and *Margin.* The upcoming paragraphs provide additional analysis, examining these dependent variables as well as incorporating the second composite dependent variable, *Perf_Composite2*, developed using PCA.

Empirical Results

Table 4 reports the regression results of the governance measures on *Perf_Composite1*. As shown in Table 4 Column 1, *LnBoard* had a coefficient of 0.0044 (*t* value = 5.94, *p* value < 0.01), which was statistically significant at the 1% level. This provided evidence for hypothesis H_{1a} that increasing the number of board members increases financial health. Table 4 Column 2 tested the second hypothesis, H_{1b}. The coefficient on *Indp_Ratio* was 0.0093 (*t* value = 5.37, *p* value < 0.01) and was significant at the 1% level. The result suggested that a large number of independent board members increases the independent monitoring over the management and the firm, thereby increasing the financial health of the firm.

The third hypothesis, H_{1c}, predicted the positive impact of using written policies on financial health. Table 4 Column 3 shows a positive coefficient on *Writ_Policy* of 0.0014 (*t* value = 4.07, *p* value < 0.01), which was significant at the 1% level. The result suggested that having written policies, such as whistleblower policies, conflict of interest policies, or document retention policies, increases attention to detail in the management and disciplines the management, thereby positively influencing the nonprofit financial health. Similarly, Table 4

Column 4 tested my fourth hypothesis, H_{1d}, which predicted a positive impact of nonprofits having a certified audit on its financial health. Table 4 Column 4 documents a positive coefficient of 0.0110 on *Audit* (*t* value = 13.02, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having a certified audit positively impacts financial health by providing for an extra review by outside professionals.

The fifth hypothesis, H_{2a}, examined the impact of religiosity on financial health. Table 4 Column 5 supports my hypothesis. The coefficient on *Religiosity* was 0.0003 (*t* value = 3.55, *p* value < 0.01), which was significant at the 1% level. This result suggested that areas with increased religiosity positively impact financial health due to the nature of more religiously observant environments. The sixth hypothesis, H_{2b}, examined the impact of social capital on financial health. Table 4 Column 6 confirms my H_{2b}. The results demonstrated a positive coefficient of 0.0030 for *SocialCap* (*t* value = 2.36, *p* value < 0.05), which was significant at the 5% level. This finding suggested that areas with higher social capital provide the opportunity for enhanced financial health due to increased communication and information as well as a desire to maintain a positive image among peers.

The results on control variables were also consistent with prior research. The *Assets* variable showed a positive coefficient across all six hypotheses at the 1% significance level. This confirmed that larger firms demonstrate increased financially health and survivability (Bruderl & Schussler, 1990; Carroll & Stater, 1999; Ohlson, 1980). The *Leverage* control variable also showed significance at the 1% level, with a negative coefficient across all six hypotheses. Having higher leverage (more debt in relation to total assets) is consistent with lower levels of solvency and higher financial health risks. The *LnAge* variable, as a proxy for the age of an NPO, showed a negative coefficient across all six hypotheses and significance at 1%.

The negative impact of increased age on the financial health of an organization is consistent with the idea that as organizations age, especially nonprofits, there is a higher degree of risk that they do not keep up with the current market conditions or that their original mission is less needed and potentially becomes obsolete.

The *LnEmpl* variable was a gauge of the number of employees. The coefficient was positive and significant at 1% across all hypotheses. More employees would usually indicate more work is being done, which if extrapolated to work related directly to products and services would generate more revenues and ultimately profits. Demonstrating increased service activity would suggest a positive impact on financial health. The final control variable, *Volunteer*, measured the ratio of volunteers to full-time employees, and had positive coefficients but was significant in Table 4 Columns 5 and 6 only.

Table 4

The Effect of Governance on Nonprofit Financial Performance: Dependent Variable = Perf_Composite1

	Governance Measures					
	LnBoard	*Indp_Ratio*	*Writ_Policy*	*Audit*	*Religiosity*	*SocialCap*
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Intercept	0.5592***	0.5598***	0.5661***	0.5704***	0.5650***	0.5648***
	(177.49)	(177.38)	(201.10)	(54.66)	(194.83)	(183.37)
Governance Measures	0.0044***	0.0093***	0.0014***	0.0110***	0.0003***	0.0030**
	(5.94)	(5.37)	(4.07)	(13.02)	(3.55)	(2.36)
Assets	0.2887***	0.2910***	0.2897***	0.2970***	0.2901***	0.2898***
	(72.86)	(73.27)	(73.15)	(70.24)	(73.24)	(73.14)
Leverage	-0.1050***	-0.1054***	-0.1057***	-0.1049***	-0.1056***	-0.1056***
	(-123.97)	(-125.44)	(-125.93)	(-119.16)	(-125.77)	(-125.85)
LnAge	-0.0129***	-0.0122***	-0.0119***	-0.0113***	-0.0121***	-0.0121***
	(-23.09)	(-22.64)	(-22.21)	(-20.17)	(-22.53)	(-22.46)
LnEmpl	0.0023***	0.0025***	0.0022***	0.0015***	0.0026***	0.0026***
	(8.34)	(9.26)	(7.49)	(5.11)	(9.45)	(9.44)
Volunteer	0.0100	0.0148	0.0142	0.0052	0.0186*	0.0178*
	(0.95)	(1.41)	(1.34)	(0.48)	(1.76)	(1.69)
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.0491	0.0491	0.0491	0.0481	0.0491	0.0491
F Statistics	1251.81***	1252.24***	1250.25***	1101.78***	1251.34***	1250.31***
N	422,505	422,505	422,505	384,459	422,505	422,505

Note. The ordinary least squares regression models included sector, year, and state fixed effects, and reported significance was based on robust standard errors of two-tailed tests, adjusted for heteroscedasticity. The *t* values are presented in parentheses under the coefficient estimates. ***, **, and * represent significance at 1%, 5%, and 10% levels, respectively.

Additional Analysis

My first composite measure equally ranked each of four financial performance measures to arrive at a single financial performance index. However, some financial measures may be more relevant than others. To address this issue, I performed PCA to combine the impact of four financial health dimensions into a single component (*Perf_Composite2*). The four measures loaded into only one component, and each measure had a different weight based on its relevance to capture overall nonprofit financial performance. I used Eigen values and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy to determine the components to retain in my analysis and to justify the use of the PCA, respectively. Only one component retained had an Eigen value greater than 1.0. The KMO measure was greater than 0.5 overall for the component. I therefore believed the PCA was reasonable.

Table 5 reports the regression results of my governance measures on *Perf_Composite2*. As reported in Table 5 Column 1, *LnBoard,* had a coefficient of 0.0322 (*t* value = 6.22, *p* value < 0.01), which was statistically significant at the 1% level. This provides evidence for hypothesis H_{1a} that increasing the number of board members increases financial health. Table 5 Column 2 shows the results for my second hypothesis, H_{1b}. The coefficient on *Indp_Ratio* was 0.0568 (*t* value = 4.65, *p* value < 0.01) and was significant at the 1% level. The evidence suggested that a large number of independent board members increases the independent monitoring over the management and the firm, thereby increasing the financial health of the firm.

The third hypothesis, H_{1c}, predicted the positive impact of using written policies on financial health. Table 5 Column 3 shows a positive coefficient of 0.0101 on *Writ_Policy* (*t* value = 4.09, *p* value < 0.01), which was significant at the 1% level. The finding suggested that having written policies such as whistleblower policies, conflict of interest policies, or document

retention policies increases attention to detail among management and disciplines the management, thereby positively influencing the nonprofit financial health. Similarly, Table 5 Column 4 shows the results of my fourth hypothesis, H_{1d}, which predicted a positive impact by the nonprofit having a certified audit on its financial health. Table 5 Column 4 documents a positive coefficient of 0.0732 on *Audit* (*t* value = 12.42, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having a certified audit positively impacts financial health by providing for an extra review by outside professionals.

The fifth hypothesis, H_{2a}, examined the impact of religiosity on financial health. Table 5 Column 5 shows support for my hypothesis. The coefficient on *Religiosity* was 0.0014 (*t* value = 2.42, *p* value < 0.05), which was significant at the 5% level. This result suggested that areas with increased religiosity positively impacts financial health due to the nature of a more religiously observant environment. The sixth hypothesis, H_{2b}, examined the impact of social capital on financial health. Table 5 Column 6 confirms my sixth hypothesis. The results demonstrated a positive coefficient of 0.0153 for *SocialCap* (*t* value = 1.73, *p* value < 0.1), which was significant at the 10% level. This finding suggested that areas with higher social capital provide the opportunity for enhanced financial health due to increased communication and information, as well as a desire to maintain a positive image among peers.

The results on control variables were also consistent with prior research. The *Assets* variable showed a positive coefficient across all six hypotheses at the 1% level of significance. This confirms that larger firms demonstrate increased financially health and survivability (Bruderl & Schussler, 1990; Carroll & Stater, 1999; Ohlson, 1980). The *Leverage* control variable also showed significance at the 1% level, with a negative coefficient across all six hypotheses. Having higher leverage (more debt in relation to total assets) is consistent with

lower levels of solvency and higher financial health risks. The *LnAge* variable, as a proxy for the age of an NPO, showed a negative coefficient across all six hypotheses and significance at 1%. The negative impact of increased age on the financial health of an organization is consistent with the idea that as organizations age, especially nonprofits, there is a higher degree of risk that they do not keep up with the current market conditions or that their original missions are less needed and potentially become obsolete.

The *LnEmpl* variable was a gauge of the number of employees. The coefficient was positive and significant at 1% across all hypotheses. More employees usually indicates more work is being done, which if extrapolated to work related directly to products and services would generate more revenues and ultimately profits. Demonstrating increased service activity would infer a positive impact on financial health. The final control variable, *Volunteer*, measured the ratio of volunteers to full-time employees; it had positive coefficients but was significant in Table 5 Columns 5 and 6 only.

Table 5

The Effect of Governance on Nonprofit Financial Performance: Dependent Variable = Perf_Composite2

	Governance Measures					
	LnBoard	*Indp_Ratio*	*Writ_Policy*	*Audit*	*Religiosity*	*SocialCap*
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Intercept	0.1044***	0.1192***	0.1559***	0.1756**	0.1548***	0.1528***
	(4.73)	(5.39)	(7.92)	(2.42)	(7.62)	(7.09)
Governance Measures	0.0322***	0.0568***	0.0101***	0.0732***	0.0014**	0.0153*
	(6.22)	(4.65)	(4.09)	(12.42)	(2.42)	(1.73)
Assets	2.0362***	2.0514***	2.0438***	2.0978***	2.0455***	2.0440***
	(73.19)	(73.58)	(73.51)	(70.56)	(73.54)	(73.48)
Leverage	-0.7300***	-0.7330***	-0.7348***	-0.7293***	-0.7342***	-0.7344***
	(-123.03)	(-124.55)	(-125.00)	(-118.27)	(-124.87)	(-124.94)
LnAge	-0.0947***	-0.0895***	-0.0879***	-0.0844***	-0.0890***	-0.0888***
	(-24.25)	(-23.72)	(-23.33)	(-21.39)	(-23.60)	(-23.56)
LnEmpl	0.0125***	0.0142***	0.0116***	0.0067***	0.0145***	0.0145***
	(6.47)	(7.43)	(5.74)	(3.31)	(7.58)	(7.58)
Volunteer	0.1006	0.1389*	0.1320*	0.0731	0.1595**	0.1561**
	(1.36)	(1.88)	(1.79)	(0.95)	(2.16)	(2.12)

Variable	*LnBoard* (1) Coeff.	*Indp_Ratio* (2) Coeff.	*Writ_Policy* (3) Coeff.	*Audit* (4) Coeff.	*Religiosity* (5) Coeff.	*SocialCap* (6) Coeff.
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.0486	0.0486	0.0486	0.0477	0.0485	0.0485
F Statistics	1235.47***	1235.29***	1233.75***	1091.14***	1234.38***	1233.77***
N	422,505	422,505	422,505	384,459	422,505	422,505

Note. The ordinary least squares regression models included sector, year, and state fixed effects, and reported significance was based on
robust standard errors of two-tailed tests, adjusted for heteroscedasticity. The *t* values are presented in parentheses
under the coefficient estimates. ***, **, and * represent significance at 1%, 5%, and 10% levels, respectively

I repeated my estimations separately for each of the four individual financial performance measures in Table 6, Table 7, Table 8 and Table 9. Table 6 reports the regression results of my governance measures on *Saving_Indicator*. As reported in Table 6 Column 1, *LnBoard*, had a coefficient of 0.0147 (*t* value = 16.29, *p* value < 0.01), which was statistically significant at the 1% level. This provided evidence for hypothesis H_{1a} that increasing the number of board members increases financial health. Table 6 Column 2 shows the results of testing my second hypothesis, H_{1b}. The coefficient on *Indp_Ratio* was 0.0183 (*t* value = 9.21, *p* value < 0.01) and was significant at the 1% level. The result suggested that the larger the number of independent board members, the greater the firm's financial health due to the increased monitoring from the independent board members.

The third hypothesis, H_{1c}, predicted the positive impact of using written policies on financial health. Table 6 Column 3 shows a positive coefficient of 0.0066 on *Writ_Policy* (*t* value = 15.13, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having more written policies yields greater financial health due to increased attention to detail in the management of the NPO. Similarly, Table 6 Column 4 shows the results of testing my fourth hypothesis, H_{1d}, which predicted having a certified audit would have a positive impact on the nonprofit's financial health. Table 6 Column 4 documents a positive coefficient of 0.0184 on *Audit* (*t* value = 17.68, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having a certified audit positively impacts financial health by providing for an extra review by outside professionals.

The fifth hypothesis, H_{2a}, examined the impact of religiosity on financial health. Table 6 Column 5 supports my hypothesis. The coefficient on *Religiosity* was 0.0011 (*t* value = 9.73, *p* value < 0.01), which was significant at the 1% level. This result suggested that areas with

increased religiosity positively impact financial health due to the nature of a more religiously observant environment. The sixth hypothesis, H_{2b}, examined the impact of social capital on financial health. Table 6 Column 6 confirms my sixth hypothesis. It demonstrates a positive coefficient for *SocialCap* of 0.0096 (*t* value = 5.81, *p* value < 0.01), which was significant at the 1% level. This finding suggested that areas with higher social capital provide the opportunity for enhanced financial health due to increased communication and information, as well as a desire to maintain a positive image among peers.

The results on control variables were also consistent with prior research. The *Assets* variable showed a positive coefficient across all six hypotheses at the 1% level of significance. This confirmed that larger firms demonstrate increased financially health and survivability (Bruderl & Schussler, 1990; Carroll & Stater, 1999; Ohlson, 1980). The *Leverage* control variable also showed significance at the 1% level, with a negative coefficient across all six hypotheses. The regression coefficient was -0.1050 (*t* value = -123.97). Having higher leverage (more debt in relation to total assets) is consistent with lower levels of solvency and higher financial health risks. The *LnAge* variable, as a proxy for the age of an NPO, showed a negative coefficient across all six hypotheses and significance at 1%. The negative impact of increased age on the financial health of an organization is consistent with the idea that as organizations age, especially nonprofits, there is a higher degree of risk that they do not keep up with the current market conditions or that their original missions are less needed and potentially become obsolete.

The *LnEmpl* variable was a gauge of the number of employees. The coefficient was negative and significant at the 1% level across all hypotheses. The sign was contrary to my other models presented thus far. More employees usually indicate more work is being done. More

employees also indicate more overhead, which negatively affects profits and financial health. The final control variable, *Volunteer*, measured the ratio of volunteers to full-time employees; this variable had positive coefficients and was significant at 1% in all six columns of Table 6, except for Columns 5 where it is significant at the 5% level.

Table 6

The Effect of Governance on Nonprofit Financial Performance: Dependent Variable: Saving_Indicator

	Governance Measures					
	LnBoard	*Indp_Ratio*	*Writ_Policy*	*Audit*	*Religiosity*	*SocialCap*
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Intercept	0.1709***	0.1844***	0.1919***	0.1978***	0.1897***	0.1903***
	(41.17)	(44.70)	(50.43)	(16.80)	(48.61)	(45.94)
Governance Measures	0.0147***	0.0183***	0.0066***	0.0184***	0.0011***	0.0096***
	(16.29)	(9.21)	(15.13)	(17.68)	(9.73)	(5.81)
Assets	0.3820***	0.3878***	0.3857***	0.4032***	0.3871***	0.3858***
	(57.73)	(58.39)	(58.31)	(56.84)	(58.41)	(58.21)
Leverage	-0.0879***	-0.0895***	-0.0901***	-0.0891***	-0.0897***	-0.0899***
	(-100.34)	(-102.66)	(-103.21)	(-97.41)	(-102.88)	(-103.10)
LnAge	-0.0163***	-0.0138***	-0.0130***	-0.0134***	-0.0138***	-0.0136***
	(-22.19)	(-19.54)	(-18.57)	(-18.16)	(-19.60)	(-19.39)
LnEmpl	-0.0162***	-0.0154***	-0.0171***	-0.0167***	-0.0153***	-0.0153***
	(-44.70)	(-42.88)	(-44.34)	(-43.77)	(-42.58)	(-42.60)
Volunteer	-0.0592***	-0.0399***	-0.0488***	-0.0410***	-0.0301**	-0.0332***
	(-4.77)	(-3.23)	(-3.94)	(-3.17)	(-2.44)	(-2.69)

Variable	*LnBoard* (1) Coeff.	*Indp_Ratio* (2) Coeff.	*Writ_Policy* (3) Coeff.	*Audit* (4) Coeff.	*Religiosity* (5) Coeff.	*SocialCap* (6) Coeff.
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.0398	0.0394	0.0398	0.0399	0.0395	0.0393
F Statistics	817.15***	810.60***	809.02***	741.62***	809.03***	808.44***
N	422,505	422,505	422,505	384,459	422,505	422,505

Note. The ordinary least squares regression models included sector, year, and state fixed effects and reported significance was based on robust standard errors of two-tailed tests, adjusted for heteroscedasticity. The *t* values are presented in parentheses under the coefficient estimates. ***, **, and * represent significance at 1%, 5%, and 10% levels, respectively.

Table 7 reports the regression results of my governance measures on *Markup_Sustain*. As reported in Table 6 Panel B Column 1, *LnBoard,* had a coefficient of 0.0049 *(t* value = 5.81, *p* value < 0.01), which was statistically significant at the 1% level. This provided evidence for hypothesis H_{1a} that increasing the number of board members increases financial health. Table 6 Panel B Column 2 shows the results from testing second hypothesis, H_{1b}. The coefficient on *Indp_Ratio* was 0.0198 (*t* value = 10.58, *p* value < 0.01) and was significant at the 1% level. The result suggested that the larger the number of independent board members, the greater the firm's financial health due to the increased monitoring from the independent board members.

The third hypothesis, H_{1c}, predicted the positive impact of using written policies on financial health. Table 7 Column 3 shows a positive coefficient of 0.0037 on *Writ_Policy* (*t* value = 8.87, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having more written policies yields greater financial health due to increased attention to detail in the management of the NPO. Similarly, Table 7 Column 4 shows the results of testing my fourth hypothesis, H_{1d}, which predicted a positive impact of having a certified audit on the nonprofit's financial health. Table 7 Column 4 documents a positive coefficient of 0.0144 on *Audit* (*t* value = 14.45, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having a certified audit positively impacts financial health by providing for an extra review by outside professionals.

The fifth hypothesis, H_{2a}, examined the impact of religiosity on financial health. Table 7 Column 5 shows support for my hypothesis. The coefficient on *Religiosity* was 0.0014 (*t* value = 13.78, *p* value < 0.01), which was significant at the 1% level. This result suggested that areas with increased religiosity positively impact financial health due to the nature of a more religiously observant environment. The sixth hypothesis, H_{2b}, examined the impact of social

capital on financial health. Results shown in Table 7 Column 6 confirmed mu sixth hypothesis. Findings demonstrated a positive coefficient for *SocialCap* of 0.0112 (*t* value = 7.30, *p* value < 0.01), which was significant at the 1% level. This finding suggested that areas with higher social capital provide the opportunity for enhanced financial health due to increased communication and information as well as a desire to maintain a positive image among peers.

The results on control variables were also consistent with prior research. The *Assets* variable showed a positive coefficient across all six hypotheses at the 1% level of significance. This confirmed that larger firms demonstrate increased financially health and survivability (Bruderl & Schussler, 1990; Carroll & Stater, 1999; Ohlson, 1980). The *Leverage* control variable also showed significance at the 1% level, with a negative coefficient across all six hypotheses. Having higher leverage (more debt in relation to total assets) is consistent with lower levels of solvency and higher financial health risks. The *LnAge* variable, as a proxy for the age of an NPO, showed a negative coefficient across all six hypotheses and significance at the 1% level. The negative impact of increased age on the financial health of an organization is consistent with the idea that as organizations age, especially nonprofits, there is a higher degree of risk that they do not keep up with the current market conditions or that their original missions are less needed and potentially become obsolete.

The *LnEmpl* variable was a gauge of the number of employees. The coefficient was negative and significant at 1% across all hypotheses. This model was consistent with the last model but varied in sign from the other four. More employees usually indicate more work is being done. More employees also indicate more overhead, which negatively affects profits and financial health. The final control variable, *Volunteer*, measured the ratio of volunteers to full-

time employees; it had positive coefficients and was significant at 1% in all six columns of Table 7, except for Column 5, where it is significant at 5%.

Table 7

The Effect of Governance on Nonprofit Financial Performance: Dependent Variable = Markup_Sustain

	Governance Measures					
	LnBoard	*Indp_Ratio*	*Writ_Policy*	*Audit*	*Religiosity*	*SocialCap*
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Intercept	0.1321***	0.1246***	0.1372***	0.1574***	0.1276***	0.1300***
	(33.94)	(32.25)	(38.53)	(13.43)	(35.05)	(33.64)
Governance Measures	0.0049***	0.0198***	0.0037***	0.0144***	0.0014***	0.0112***
	(5.81)	(10.58)	(8.87)	(14.45)	(13.78)	(7.30)
Assets	0.2783***	0.2823***	0.2797***	0.2883***	0.2821***	0.2802***
	(39.72)	(40.16)	(39.89)	(38.92)	(40.22)	(39.95)
Leverage	-0.0793***	-0.0794***	-0.0801***	-0.0799***	-0.0796***	-0.0798***
	(-88.81)	(-89.72)	(-90.44)	(-86.09)	(-89.96)	(-90.24)
LnAge	-0.0069***	-0.0063***	-0.0057***	-0.0051***	-0.0064***	-0.0062***
	(-10.02)	(-9.54)	(-8.68)	(-7.40)	(-9.68)	(-9.35)
LnEmpl	-0.0085***	-0.0083***	-0.0092***	-0.0095***	-0.0081***	-0.0081***
	(-24.56)	(-24.10)	(-24.80)	(-25.95)	(-23.65)	(-23.71)
Volunteer	-0.0788***	-0.0756***	-0.0783***	-0.0777***	-0.0637***	-0.0681***
	(-6.62)	(-6.38)	(-6.59)	(-6.24)	(-5.38)	(-5.75)
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.0293	0.0295	0.0294	0.0286	0.0297	0.0294
F Statistics	617.37***	619.98***	615.71***	537.82***	621.98***	617.26***
N	422,505	422,505	422,505	384,459	422,505	422,505

Note. The ordinary least squares regression models included sector, year, and state fixed effects and reported significance was based on robust standard errors of two-tailed tests, adjusted for heteroscedasticity. The *t* values are presented in parentheses under the coefficient estimates. ***, **, and * represent significance at 1%, 5%, and 10% levels, respectively.

Table 8 reports the regression results of my governance measures on *ROA*. As reported in Table 8 Column 1, *LnBoard,* had a coefficient of 0.0040 (*t* value = 4.65, *p* value < 0.01), which was statistically significant at the 1% level. This provided evidence for hypothesis H_{1a} that increasing the number of board members increases financial health. Table 8 Column 2 shows results from the test of my second hypothesis, H_{1b}. The coefficient on *Indp_Ratio* was 0.0354 (*t* value = 14.02, *p* value < 0.01) and was significant at the 1% level. The result suggested that the larger the number of independent board members, the greater the firm's financial health, due to the increased monitoring from the independent board members.

The third hypothesis, H_{1c}, predicted the positive impact of using written policies on financial health. Table 8 Column 3 shows a positive coefficient of 0.0020 on *Writ_Policy* (*t* value = 4.83, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having more written policies yields greater financial health due to increased attention to detail by the management of the NPO. Similarly, Table 8 Column 4 shows the results of testing my fourth hypothesis, H_{1d}, which predicted a positive impact of having a certified audit on the nonprofit's financial health. Table 8 Column 4 documents a positive coefficient of 0.0223 on *Audit* (*t* value = 23.98, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having a certified audit positively impacts financial health by providing for an extra review by outside professionals.

The fifth hypothesis, H_{2a}, examined the impact of religiosity on financial health. Table 8 Column 5 shows *Religiosity* was not significant. The sixth hypothesis, H_{2b}, examined the impact of social capital on financial health. Table 8 Column 6 shows *SocialCap* was not significant.

The results on control variables were also consistent with prior research. The *Assets* variable showed a positive coefficient across all six hypotheses at the 1% level of significance.

This confirmed that larger firms demonstrate increased financially health and survivability (Bruderl & Schussler, 1990; Carroll & Stater, 1999; Ohlson, 1980). The *Leverage* control variable also showed significance at the 1% level, with a negative coefficient across all six hypotheses. Having higher leverage (more debt in relation to total assets) is consistent with lower levels of solvency and higher financial health risks. The *LnAge* variable, as a proxy for the age of an NPO, showed a negative coefficient across all six hypotheses and significance at the 1% level. The negative impact of increased age on the financial health of an organization is consistent with the idea that as organizations age, especially nonprofits, there is a higher degree of risk that they do not keep up with the current market conditions or that their original mission is less needed and potentially becomes obsolete.

The *LnEmpl* variable was a gauge of the number of employees. The coefficient was positive and significant at 1% across all hypotheses. The coefficient returned to positive territory in this model. Having more employees would infer more work is being done, which if extrapolated to work related directly to products and services would generate more activity, revenues, and ultimately profits. Increased service activity suggests a positive impact on financial health. The final control variable, *Volunteer*, measured the ratio of volunteers to full-time employees and was not significant on Table 8 across all six columns.

Table 8

The Effect of Governance on Nonprofit Financial Performance: Dependent Variable = ROA

	Governance Measures					
	LnBoard	*Indp_Ratio*	*Writ_Policy*	*Audit*	*Religiosity*	*SocialCap*
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Intercept	0.0197***	-0.0035	0.0251***	0.0221	0.0282***	0.0284***
	(5.00)	(-0.84)	(7.28)	(1.62)	(8.01)	(7.67)
Governance Measures	0.0040***	0.0354***	0.0020***	0.0223***	-0.0001	-0.0007
	(4.65)	(14.02)	(4.83)	(23.98)	(-0.65)	(-0.50)
Assets	0.0718***	0.0780***	0.0728***	0.0933***	0.0725***	0.0725***
	(25.63)	(27.14)	(26.02)	(30.07)	(25.89)	(25.92)
Leverage	-0.1790***	-0.1786***	-0.1796***	-0.1785***	-0.1796***	-0.1796***
	(-76.54)	(-77.09)	(-77.33)	(-73.31)	(-77.30)	(-77.31)
LnAge	-0.0068***	-0.0067***	-0.0059***	-0.0060***	-0.0060***	-0.0060***
	(-9.62)	(-9.55)	(-8.42)	(-8.07)	(-8.59)	(-8.59)
LnEmpl	0.0117***	0.0119***	0.0114***	0.0102***	0.0120***	0.0120***
	(34.32)	(35.13)	(32.59)	(28.36)	(35.48)	(35.46)
Volunteer	0.0041	0.0021	0.0065	-0.0009	0.0102	0.0103
	(0.33)	(0.17)	(0.53)	(-0.07)	(0.83)	(0.84)
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.0841	0.0848	0.0841	0.0845	0.0840	0.0840
F Statistics	387.07***	384.83***	382.45***	354.46***	382.42***	382.44***
N	422,505	422,505	422,505	384,459	422,505	422,505

Note. The ordinary least squares regression models included sector, year, and state fixed effects and reported significance was based on robust standard errors of two-tailed tests, adjusted for heteroscedasticity. The *t* values are presented in parentheses under the coefficient estimates. ***, **, and * represent significance at 1%, 5%, and 10% levels, respectively.

Table 9 reports the regression results of my governance measures on *Margin*. As reported in Table 9 Column 1, *LnBoard,* had a coefficient of 0.0103 (*t* value = 15.09, *p* value < 0.01), which was statistically significant at the 1% level. This provided evidence for hypothesis H_{1a} that increasing the number of board members increases financial health. Table 9 Column 2 shows the results of testing my second hypothesis, H_{1b}. The coefficient on *Indp_Ratio* was 0.0162 (*t* value = 9.98, *p* value < 0.01) and was significant at the 1% level. The result suggested that the larger the number of independent board members, the greater the firm's financial health due to the increased monitoring from the independent board members.

The third hypothesis, H_{1c}, predicted the positive impact of using written policies on financial health. Table 9 Column 3 shows a positive coefficient of 0.0012 on *Writ_Policy* (*t* value = 3.67, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having more written policies yields greater financial health due to increased attention to detail in the management of the NPO. Similarly, Table 9 Column 4 shows the results of testing my fourth hypothesis, H_{1d}, which predicted a positive impact of having a certified audit on the nonprofit's financial health. Table 9 Column 4 documents a positive coefficient of 0.0138 on *Audit* (*t* value = 18.30, *p* value < 0.01), which was significant at the 1% level. This finding suggested that having a certified audit positively impacts financial health by providing for an extra review by outside professionals.

The fifth hypothesis, H_{2a}, examined the impact of religiosity on financial health. Table 9 Column 5 shows support for my hypothesis. The coefficient on *Religiosity* was 0.0006 (*t* value = 8.30, *p* value < 0.01), which was significant at the 1% level. This result suggested that areas with increased religiosity positively impact financial health due to the nature of a more religiously observant environment. The sixth hypothesis, H_{2b}, examined the impact of social

capital on financial health. Table 9 Column 6 reveals a confirmation of my sixth hypothesis, demonstrating a positive coefficient for *SocialCap* of 0.0052 (t value = 4.47, p value < 0.01), which was significant at the 1% level. This finding suggested that areas with higher social capital provide the opportunity for enhanced financial health due to increased communication and information as well as a desire to maintain a positive image among peers.

The results on control variables were also consistent with prior research. The *Assets* variable showed a positive coefficient across all six hypotheses at the 1% level of significance. This confirmed that larger firms demonstrate increased financially health and survivability (Bruderl & Schussler, 1990; Carroll & Stater, 1999; Ohlson, 1980). The *Leverage* control variable also showed significance at the 1% level, with a negative coefficient across all six hypotheses. Having higher leverage (more debt in relation to total assets) is consistent with lower levels of solvency and higher financial health risks. The *LnAge* variable, as a proxy for the age of an NPO, showed a negative coefficient across all six hypotheses. All six hypotheses showed significance at varying levels. On Table 9, significance of 1% is found in Column 1. Significance of 5% is found in Columns 2, 5 and 6. Significance at 10% is found in Columns 3 and 4. The negative impact of increased age on the financial health of an organization is consistent with the idea that as organizations age, especially nonprofits, there is a higher degree of risk that they do not keep up with the current market conditions or that their original missions are less needed and potentially become obsolete.

The *LnEmpl* variable was a gauge of the number of employees. The coefficient was positive and significant at 1% across all hypotheses. More employees allows for more work to be accomplished. This should increase the amount of products and services provided, which would generate more revenues and should ultimately increase profits. Increased service activity

suggests a positive impact on financial health. The final control variable, *Volunteer*, measured the ratio of volunteers to full-time employees; it had positive coefficients and was significant at the 1% level in all columns of Table 9.

Table 9

The Effect of Governance on Nonprofit Financial Performance: Dependent Variable = Margin

	Governance Measures					
	LnBoard	*Indp_Ratio*	*Writ_Policy*	*Audit*	*Religiosity*	*SocialCap*
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Intercept	-0.0168***	-0.0104***	0.0023	-0.0027	-0.0025	-0.0016
	(-5.46)	(-3.36)	(0.84)	(-0.28)	(-0.89)	(-0.54)
Governance Measures	0.0103***	0.0162***	0.0012***	0.0138***	0.0006***	0.0052***
	(15.09)	(9.98)	(3.67)	(18.30)	(8.30)	(4.47)
Assets	0.1738***	0.1784***	0.1760***	0.1918***	0.1772***	0.1763***
	(42.88)	(43.92)	(43.48)	(44.07)	(43.77)	(43.55)
Leverage	-0.0674***	-0.0684***	-0.0689***	-0.0677***	-0.0686***	-0.0688***
	(-73.15)	(-74.98)	(-75.35)	(-70.92)	(-75.08)	(-75.23)
LnAge	-0.0030***	-0.0013**	-0.0009*	-0.0009*	-0.0012**	-0.0011**
	(-5.51)	(-2.46)	(-1.77)	(-1.69)	(-2.29)	(-2.10)
LnEmpl	0.0031***	0.0036***	0.0034***	0.0024***	0.0037***	0.0037***
	(11.53)	(13.65)	(11.81)	(8.55)	(14.02)	(13.97)
Volunteer	0.0598***	0.0725***	0.0739***	0.0694***	0.0795***	0.0776***
	(6.69)	(8.13)	(8.26)	(7.47)	(8.92)	(8.71)

	LnBoard	*Indp_Ratio*	*Writ_Policy*	*Audit*	*Religiosity*	*SocialCap*
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.0296	0.0293	0.0291	0.0297	0.0292	0.0291
F Statistics	517.91***	509.04***	506.62***	463.66***	511.68***	507.73***
N	422,505	422,505	422,505	384,459	422,505	422,505

Note. The ordinary least squares regression models included sector, year, and state fixed effects and reported significance was based on robust standard errors of two-tailed tests, adjusted for heteroscedasticity. The *t* values are presented in parentheses under the coefficient estimates. ***, **, and * represent significance at 1%, 5%, and 10% levels, respectively.

Implications, Limitations, and Future Research

Prior literature has examined internal and external governance factors in the for-profit environment relating to financial health (Chen et al., 2010; Coles et al., 2008; Moyer et al., 1989). Research addressing the nonprofit sector regarding internal governance factors has been limited. A notable exception would include research by Hodge and Piccolo (2005) regarding board involvement and financial vulnerability. There is even less research investigating external governance relating to maximizing an NPO's opportunity to succeed. I contributed to reducing this gap with my research while enhancing the ability of NPOs to execute their missions and better serve their communities.

Regarding board size, I found evidence that size does matter. Although prior for-profit research documents has found mixed results on the effect of size (Brown, 2005; Coles et al., 2008; Eisenberg et al., 1998; Guest, 2009, O'Regan & Oster, 2005), my research indicated that larger boards make a difference in an NPO's viability and success. Adding board members enhances oversight and donations as many nonprofit boards encourage, and some even require, donations by board members in addition to their board participation. Extra eyes allow for additional review and insight towards strategy and direction.

Increasing the number of independent board members also positively boosts financial health. Similar to for-profits (Brick & Chidambaran, 2010; Coles et al., 2008; Duchin et al., 2010; Weisbach, 1988), nonprofits benefit from independent board members bringing independent monitoring, insights, and skills that go beyond the capabilities of the internal staff at an NPO. This allows for a broader knowledge base of potentially diverse ideas that can help an NPO stay current, increase ideas regarding opportunities, promote new initiatives, and build community awareness.

I investigated the impact of having written policies to determine whether the existence of these policies enhances an NPO's financial health. My analysis confirmed the positive impact of having such policies in place as previous preliminary research has confirmed (Herman & Renz, 2000; Nobbie & Brudney, 2003). The effort in establishing such policies and documenting them represents a commitment of organizational resources to improving internal processes. The energy used in drafting and implementing shows attention to detail within an organization. As an example, having a conflict of interest policy signals an awareness by the NPO in wanting to provide services in an above-board and ethical manner, which leads to stakeholders having more confidence in the organization. Such policies not only prevent ethical challenges that could have negative publicity if violated but also provide a clear response of what needs to be done in case of such violation. Positive impact comes from preventing such conflicts.

Whereas all publicly traded companies in the United States require a certified audit, official requirements only pertain to NPOs that reach certain levels of federal funding or those having potential bank covenants or donor requirements. I argued, as research has found in the for-profit environment (Francis, 2004, Raghunandan & Rama, 1995), that having an independent audit increases accountability for internal personnel preparing financial statements and allows for additional financial and operational insights to the organization being audited. Auditors, upon their completion of the audit, not only state an opinion on the status of the financial records but also include a management letter highlighting additional areas for process and operational improvement. The empirical findings of my research demonstrated a positive impact on financial health by having an outside audit.

The two external governance factors, religiosity and social capital, were chosen based on social norm research. Social norms in the social sciences and business arenas investigate

normative and informational influences (Boytsun et al., 2011; Elster, 1989), as these have been found to be the root sources of social norms impact. Religiosity, based on the social norm of normative influence, with the overriding desire to fit in, has been found to increase volunteerism and levels of donations, as well as deeper levels of commitment to the greater good, yielding enhanced NPO performance (Barro & McClearly, 2003; Graham & Haidt, 2010; Monsma, 2007; Putnam & Campbell, 2010; VanderWeele, 2017). This norm is related to conformity in doing what others expect, together with the fear of rejection by going against the grain. It reinforces positive behaviors, bringing about actions that make a positive difference within the NPO. This results in enhanced financial health.

Similarly, examination of community levels of social capital yields a positive correlation between increasing community social capital and enhancing financial sustainability. Previous research has demonstrated the positive benefits of social capital (Fredette & Bradshaw, 2012; Gooderham et al., 2010; Jo & Harjoto, 2011; Knack & Keefer, 1997; Putnam et al., 1993; Tsai & Ghoshal, 1998). Communities having increased levels of interaction, communication, and knowledge exchange, as found in areas with higher social capital, have shown a positive impact on financial health for NPOs located in these areas.

This study contributes to helping NPO stakeholders, including scholars, managers, executives, auditors, donors, and those served, helping them better understand the factors that can contribute to the financial health of NPOs. This ultimately improves the NPO's ability to be able to execute its mission and support community needs. It also demonstrates the effect of specific governance factors that contribute to NPO success. Internal governance factors, especially as they relate to board size and the number of independent board members, support the expansion of boards to facilitate viability. Added oversight by having an external audit and

increasing formalization of policies also demonstrates a positive impact on NPO success. Additionally, locating in areas with higher levels of religiosity and social capital positively contributes to an NPO's financial health.

Some limitations are related to the data set selected. The databases featuring Form 990 data cover more than 90% of the asset values of nonprofits, which means 10% of the asset value base was not included. There are four specific 990 forms: 990, 990-EZ, 990-N, and 990-PF. The required specific form to file is based on NPO size, and in the case of the 990-PF, private foundations must file the PF version. This study only utilized the data of those filing the Form 990, the most comprehensive of the forms, which included the necessary data fields allowing for my analysis. It is only used by NPOs meeting a minimum size threshold. The dataset was limited in its inclusion of smaller nonprofits. With 10 broad categories covered, I did examine a wide variety of nonprofit industries. My sample was exclusive to the United States. There may be limitations on the global application of findings. An additional limitation lies in the lack of measurement on the motivating factors for volunteers. For example, Pope et al. (2009) suggested that "when the benefits of volunteering are ignored, individual passions can diminish, and volunteers fade away" (p. 187). It would be of help for future scholars to examine whether benefits (e.g., material goods) in return for volunteers' time and effort have a positive impact on an NPO's financial health.

There are many areas ripe for further internal governance research. These might include a closer examination of board member characteristics, including specific backgrounds, skills, and diversity characteristics regarding its members. Considerations regarding the firms conducting audits warrant potential further investigation such as: fees paid as a percentage of revenues, the

size of the audit firm, NPO experience of the audit firm and/or audit partner in charge of the audit, and the tenure of the auditors.

Opportunities abound for additional external governance research. Other factors beyond social capital and religiosity factors addressed in this study ripe for further research include: the effect of political leanings, conservative versus liberal, in a community; the levels of wealth within a community as a gauge for capacity to contribute financially; the degree of pet ownership in a community as a gauge for compassion; the effect of the different major religions and/or sects within those religions; integration of bond rating agencies' analyses as they relate to nonprofit financial health; the impact of a state's legal environment and restrictions on NPO success; and the influence of revenue diversification. Recent changes in the tax law might also be interesting to investigate as to their impact. Additional dependent variable consideration could include further examination of program service revenue as a percentage of total revenue as a potential indicator of financial health. As the needs for nonprofit organizations continue to grow and as the services they provide the community also increase, so will the need for further research in enhancing the NPO's ability to serve and survive, ultimately making the world a better place for everyone.

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Appendix

Variable Definitions

LnBoard	=	the natural logarithm of number of voting governing body members;
Indp_Ratio	=	the ratio of independent voting governing body members to total voting governing body members;
Writ_Policy	=	the new 2008 Internal Revenue Service Form 990 asks whether the nonprofit has adopted formal written conflict of interest, whistleblower, and document destruction policies. Written policy is a linear combination (i.e., from zero to three) of the number of these policies a nonprofit has reported voluntarily, adopting Yetman and Yetman (2012);
Audit	=	equal to 1 if the nonprofit receives a financial statement audit, and 0 otherwise;
Religiosity	=	total number of religious congregations per 10,000 population into a metropolitan statistical area (MSA) where the firm is headquartered;
SocialCap	=	the standardized measure of the social capital calculated as total number of social organizations available per 10,000 population in the county where the nonprofit is headquartered (Rupasingha et al., 2006);
Saving_Indicator	=	calculated as total net income divided by total expense in the current year;
Markup_Sustain	=	markup sustainability calculated as unrestricted net assets minus lag of unrestricted net assets plus depreciation and depletion divided by total expense of the current year;
ROA	=	return on assets calculated as net income of the current year divided by total assets at the end of the year;

Margin	=	total margin ratio calculated as net income as a percentage of total revenue;
Perf_Composite1	=	a composite measure of nonprofit financial performance using decile ranking of four continuous financial health measures: *Saving_Indicator*, *Markup_Sustain*, *ROA*, and *Margin*;
Perf_Composite2	=	a second composite measure of nonprofit financial performance using principal component analysis (PCA) of four continuous financial health measures: *Saving_Indicator*, *Markup_Sustain*, *ROA*, and *Margin*;
Assets	=	total assets (in billions of U.S. dollars) at the end of year;
Revenue	=	total revenue (in billions of U.S. dollars) in the current year;
Leverage	=	nonprofit leverage calculated as total liability divided by total assets at the end of year;
LnAge	=	the natural logarithm of number of nonprofit age;
LnEmpl	=	the natural logarithm of number of nonprofit employees;
Volunteer	=	total number of nonprofit volunteers divided by total number of employees;

VITA

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