

Audits, governance, trust, and nonprofit creditworthiness—Some preliminary insights

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ABSTRACT

Nonprofit organizations lack access to equity markets and frequently rely on debt financing for organizational expansion opportunities. However, little is known about the decision making process of lenders when evaluating nonprofit creditworthiness. While prior research suggests that two, voluntary financial oversight mechanisms (audits and strong governance) are associated with better nonprofit reporting, it is not clear how these mechanisms influence creditor decision making. Results of an experimental investigation revealed that participants made higher creditworthiness assessments for nonprofits with strong versus weak governance characteristics and for nonprofits that had received a financial statement audit. Moreover, a complimentary relationship existed between governance and audits such that participants were more likely to recommend extending credit to a nonprofit with both strong governance and a financial statement audit than either good governance or an audit alone. Finally, the relationship between governance and audits and creditworthiness assessments was mediated by perceptions of financial reporting trustworthiness.

Keywords: Cost of Capital; Creditworthiness; Nonprofit Audit; Nonprofit Governance; Trust

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INTRODUCTION

Despite their importance to the U.S. economy (and in contrast to their for-profit counterparts), nonprofits generally lack access to equity markets and often rely exclusively on debt financing to pursue large capital investment opportunities or expansion initiatives (Yetman 2006). However, little is known about how potential lenders evaluate a nonprofit organization's creditworthiness—especially in relation to the perceived trustworthiness of financial information—and the lack of existing research in this area is the motivation for this study. Specifically, we explore the notion that a nonprofit organization can communicate their trustworthiness and, in turn, creditworthiness to potential lenders by adopting two financial reporting oversight mechanisms that are generally voluntary in the nonprofit sector: financial statement audits and strong governance by an organization's board of directors.

Importantly, nonprofits are not subject to the strict governance requirements mandated by the Sarbanes-Oxley Act of 2002 (SOX), nor are nonprofits universally required to undergo a financial statement audit (Vermeer, Raghunandan, and Forgione 2006; Vermeer, Raghunandan, and Forgione 2009; Copley 2015; Tysiac 2016), with one study reporting that only 67% of nonprofits received an audit (Ostrower 2007). Nevertheless, evidence suggests that both audits and good governance are positively associated with higher quality nonprofit financial reporting (Keating, Parsons, and Roberts 2008; Yetman and Yetman 2012). However, it is not clear how adopting these financial reporting best practices may influence a lender's perceptions of organizational trustworthiness or willingness to extend credit given the voluntary nature of these practices in the nonprofit sector.¹ To gain insight in this regard, we conduct an experimental investigation using a case study focusing on the effects of audits and strong governance as two organizational strategies that may influence the perceived trustworthiness—and, in turn, creditworthiness—of nonprofit financial information.²

Participants were asked to assume the role of a loan officer at a large, regional bank and were provided background information about a hypothetical nonprofit organization that was in the process of applying for financing to purchase a building for the expansion of their no-cost childcare service for low-income families. Participants received identical background and financial information for the nonprofit, but were either informed that the financial information was audited or unaudited depending on their experimental condition. Additionally, participants read information indicating that the organization's board of directors either exhibited strong or weak governance characteristics (e.g., financial expertise of board members, independence of board, etc.). Utilizing a 2x2 design, participants were randomly assigned to one of four conditions by crossing the two independent variables (i.e., audited versus unaudited financial statement and strong versus weak governance). Participants were then asked to indicate the likelihood that they would recommend approving a loan to the nonprofit and what annual interest rate they recommended should be charged.

The results indicated that participants were significantly more likely to extend credit to a nonprofit when governance was strong than when governance was weak, or if audited financial

¹ For the purposes of this study, audits and governance attributes are assumed to be voluntary financial reporting oversight mechanisms available for use by nonprofit organizations. However, notable exceptions do exist to the voluntary nature of these practices, including state statutory regulations or Single Audit requirements for entities expending more than \$750,000 of federal funds in a year (Tysiac 2016).

² Institutional Review Board approval was obtained from the institution where this experiment was conducted prior to data collection or researcher contact with participants.

information was provided instead of unaudited information. Moreover, we found that governance and audits function in a complimentary capacity such that willingness to extend credit was significantly higher when participants received audited financial information and learned that governance was strong than in any other treatment condition. Strong governance was also associated with a reduction in the potential creditor's required annual interest rate, but no similar reduction in cost of capital was observed for undergoing a financial statement audit.

The premise investigated in this study is that both auditing and strong governance represent voluntary oversight mechanisms that a nonprofit may use to communicate their trustworthiness to potential creditors. To this end, a path analysis confirmed that both audits and strong governance are positively and significantly related to a measure of financial reporting trustworthiness which, in turn, influences assessments of creditworthiness. These findings are consistent with previous research on trust in other business transactions which suggests that trust can be engendered when one entity communicates their integrity, task competence, and ethics to the other, and that such perceptions of trustworthiness can lead to decreased negotiation conflicts, continuous relationships, and lower transaction costs (Fulmer and Gelfand 2012).

The remainder of the paper is organized as follows. First, background literature is reviewed and hypotheses are presented. Next, the methodology used in this study is described, results are specified, and a discussion of the findings is presented. The final section presents concluding remarks, limitations of the present research, and avenues for future investigation.

BACKGROUND AND HYPOTHESES

In an effort to decrease real or perceived risks associated with creditworthiness, a nonprofit organization may employ trust building strategies to communicate their financial reporting veracity to potential creditors. Because of the diversity in governance quality across nonprofit organizations (Ostrower 2007; AICPA 2013), and the fact that nonprofits are not universally required to undergo a financial statement audit (Ostrower 2007; Vermeer, et al. 2009), nonprofit organizations have the opportunity to voluntarily differentiate themselves by employing good governance practices and/or obtaining a financial statement audit. Issues associated with these trust building strategies are explored in the remainder of this section.

Nonprofit Governance

Despite the public policy implications for prudent (as well as imprudent) stewardship, nonprofit entities are exempt from establishing many of the governance practices mandated for their publicly traded, for-profit counterparts (Vermeer et al. 2006). Moreover, nonprofits have not been immune to highly publicized governance failures and accounting scandals (Vermeer et al. 2009). For these reasons, both for-profit and nonprofit organizations seek to mitigate risks associated with their financial reporting processes that arise from improper oversight or conflicts of interest. The extant literature often views conflicts of interest as agency problems between owners and managers, that is, principals and agents, respectively (Jensen and Meckling 1976; Fama and Jensen 1983). While owners in the for-profit sector are often identified as shareholders, partners, or sole proprietors, owners in the nonprofit sector are not as easily specified. Hoffmann and McSwain (2013) note that a unique manifestation of the principal/agent relationship in the nonprofit sector is that there are, in essence, two principals: the charity's beneficiaries, and its donors. Additionally, the existence of dual principals could result in more

information asymmetry in the nonprofit sector than in for-profit organizations (Hoffmann and McSwain 2013). This dynamic underscores the importance of strong board of director oversight in a nonprofit setting, particularly as it relates to the use of organizational resources and financial reporting. Yet, governance in the nonprofit sector is unique with multiple dynamics that are not present in the for-profit boardroom. For example, the governance mandates of SOX are applicable only to for-profit, publicly traded entities and do not extend to the nonprofit sector. In this regard, research to date suggests that the oversight of boards varies significantly in practice in the nonprofit industry (AICPA 2013; Vermeer et al. 2006); with little more than half of nonprofits reporting that their board of directors took a very active oversight role in financial matters (Ostrower 2007).

Given the unique risks associated with the nonprofit sector, creditors might distrust any nonprofit governance practices touted to function as an effective oversight mechanism (i.e., the board may be perceived to lack any real power over management's activities). Moreover, it is unclear which factors associated with nonprofit financial performance are evaluated by potential creditors. For example, it is possible that perceptions of liquidity or solvency drive most creditworthiness assessments, and not characteristics associated with nonprofit governance. Nevertheless, extant research indicates that strong governance is associated with more accurate nonprofit financial reporting (Yetman and Yetman 2012), and that governance features such as the presence of board members with financial expertise, the presence of audit committees, and the number of nonprofit board members are all associated with better governance quality and outcomes in general (Defond, Hann, and Hu 2005; Stewart and Munro 2007; Aggarwal, Evans, and Nanda 2012). Thus, strong nonprofit governance should increase trustworthiness and reduce perceived financial reporting risks. Greater trustworthiness, in turn, should lead to higher assessments of creditworthiness and lower costs of capital. In contrast, the opposite would be expected if nonprofit governance is perceived to be weak. Accordingly, this prediction is formally presented below as hypothesis one (in the alternative form) as:

H1: Potential creditors will assess higher ratings of nonprofit creditworthiness when governance is strong than when governance is weak.

Nonprofit Audits

While audits do not diminish an entity's operational risks, they do reduce information risk associated with the organization's financial statements (Arens, Elder, Beasley, and Hogan 2016). A reduction in information risk manifests itself in tangible ways. For example, prior research suggests that nonprofit financial reporting quality is positively associated with receiving a financial statement audit (Keating et al. 2008; Yetman and Yetman 2012), and donors value the audit function as evidenced by a positive correlation between audits and contribution revenue (Harris et al. 2015). Accordingly, undergoing an audit should increase perceived financial trustworthiness and reduce perceptions of risks associated with the reliability of financial information. Because audited information should be perceived as more trustworthy, *ceteris paribus*, financial statement audits likely increase perceptions of nonprofit creditworthiness. In contrast, the opposite would be expected if financial statements were not audited. Accordingly, this prediction is formally presented below as hypothesis two (in the alternative form) as:

H2: Potential creditors will assess higher ratings of nonprofit creditworthiness when a nonprofit has received a financial statement audit than when no audit was conducted.

To varying degrees, the influence of good governance has been shown to function in a complimentary capacity with the audit process. For example, although boards are responsible for monitoring an organization's management, practically speaking, they rely on auditors to affect this oversight process (Adams, Hermalin, and Weisbach 2010). Additionally, Carcello, Hermanson, and Ye (2011) note that good governance features are associated with more appropriate auditor-client relationships and improved audit outcomes in for-profit settings. Given this relationship, it is reasonable to expect a complimentary relationship between audits and good governance such that nonprofit organizations with both audited financial statements and strong governance characteristics should be perceived as more creditworthy than a nonprofit entity having either an audit or good governance alone. Thus, the cumulative benefits associated with obtaining an audit and having strong organizational governance should induce potential creditors to make their highest assessments of creditworthiness when both audits and strong governance are present, compared to the mere presence of strong governance alone or audits alone. Accordingly, this prediction is formally presented below as hypothesis three (in the alternative form) as:

H3: Potential creditors will assess higher ratings of nonprofit creditworthiness when governance is strong and the nonprofit has received a financial statement audit than when governance is weak and an audit has been conducted, or when governance is strong and no audit has been conducted.

Interorganizational Trust

Trust has been defined using two primary dimensions: "...*positive expectations of trustworthiness*, which generally refers to perceptions, beliefs, or expectations about the trustee's intention and being able to rely on the trustee, and *willingness to accept vulnerability*, which generally refers to suspension of uncertainty...or an intention or a decision to take risk and to depend on the trustee" (Fulmer and Gelfand 2012, 1171). With respect to interorganizational trust, Fulmer and Gelfand (2012) note that when one organization trusts another, this relationship is characterized by decreased negotiation conflicts, the continuation of relationships (even when failures occur) and decreased transaction costs between entities. Thus, it is reasonable to expect that nonprofits who are able to communicate their financial reporting trustworthiness to potential creditors will enjoy increased loan approval likelihood and lower costs of capital.

Antecedents to interorganizational trust include perceptions of the trustee's integrity, task competence, and adherence to business ethics (Palanski and Yammarino 2009; Gullett, Do, Canuto-Carranco, Brister, Turner, and Caldwell 2009; Kasper-Fuehrer and Ashkanasy 2001; Fulmer and Gelfand 2012). Specifically, a potential lender needs to be able to trust that a borrower has provided a faithful and accurate portrayal of their financial information, and task competence means that a trustee is capable of performing the technical attributes of such a function correctly (Gullett et al. 2009). Relatedly, Palanski and Yammarino (2009) define integrity as consistency between an organization's words and actions, and argue that an organization's integrity is positively associated with stakeholder trust. Because promises of integrity could be either implied or overt (Palanski and Yammarino 2009), a nonprofit

organization should be able to increase their perceived financial trustworthiness by voluntarily employing measures to communicate that their financial information is accurate and reliable. Finally, Kasper-Fuehrer and Ashkanasy (2001) note that in addition to maintaining appropriate ethical standards, an entity must also be able to effectively communicate their trustworthiness to others in order for trust to be established.

Collectively, in a creditworthiness setting, prior research suggests that a nonprofit entity can increase their perceived trustworthiness by enacting voluntary measures that verify and communicate their competence, integrity, and ethics to potential creditors. The premise of the current study is that obtaining a voluntary financial statement audit and voluntarily enacting strong governance characteristics should allow a nonprofit organization to communicate their financial reporting competence, the consistency between their implicit promises to repay debt and their ability to do so, and their adherence to appropriate ethical standards (e.g., compliance with generally accepted accounting principles, laws, and regulations).

Both audits and strong boards of directors are voluntary forms of independent verification in most nonprofit reporting environments, and evidence suggests that such verifications can enhance decision maker trust (Parkinson 1975; Weiss 2015). The voluntary nature of audits and governance quality is a notable departure from the publically traded, for-profit business environment where both audits and strong governance are statutorily mandated. Accordingly, potential lenders should perceive financial information as relatively more trustworthy if a nonprofit can effectively differentiate their integrity, competence, and ethical standards through the adoption of these oversight mechanisms. In turn, increased trust should lead to the higher likelihood of credit approval and a lower cost of capital. Accordingly, this prediction is formally presented below as hypothesis four (in the alternative form) as:

H4: Perceptions of financial reporting trustworthiness will mediate the relationship between financial statement auditing and strong governance and assessments of nonprofit creditworthiness.

METHODOLOGY

Participants

Ninety-three upper-division students (50.5% female) enrolled in a nonprofit and governmental accounting course participated in the study. Self-reported demographic information indicated that 95.7% of participants had taken an intermediate accounting course, 53.8% had taken an auditing course, and 94.6% were accounting majors. Collectively, these educational characteristics indicated that participants possessed the requisite knowledge to complete the tasks presented in the experimental instrument. Moreover, a one-way ANOVA (untabulated) indicated that there were no demographic characteristic differences between experimental treatment conditions (all $ps > 0.05$, two tailed).

Experimental Instrument

All participants received experimental materials that asked them to assume that they were the Vice President of Commercial Lending at Regional Bank, and were in the process of reviewing a loan application for a hypothetical 501(c)(3) nonprofit child care provider who

offered no cost, need-based child care to area families. Specifically, participants learned that: the nonprofit operates five child care locations in the region; had been in continuous operation since its founding in 1978; and had relied almost exclusively on private donations to generate revenue. Moreover, the participants were informed that the nonprofit had been a client of the bank for several years and was in the process of applying for a \$1,500,000, 40-year fixed rate loan to purchase and renovate a building in a neighboring county to open a sixth daycare center in order to meet growing demand. Participants were also informed that members of the bank's staff had compiled summarized financial and background information about the nonprofit based on interviews conducted with nonprofit management and reviews of the nonprofit's loan application documents. Specifically, the financial information consisted of a statement of position and statement of activities as well as several financial ratios. With respect to these ratios, hypothetical industry averages were also provided as benchmarks for the most recent year of the financial information presented. A comparison of industry average ratios to the nonprofit's ratios indicated that the organization was quantitatively similar to industry averages. Importantly, there were no financial or background information content differences between experimental conditions.

Independent Variables

The independent variables investigated in this study were whether the nonprofit had received a financial statement audit manipulated at two levels (audited, unaudited); and the strength of the nonprofit organization's governance manipulated at two levels (strong, weak). Thus a 2x2, between subjects, experimental design was employed by crossing the factors financial statement audit and strength of governance. Participants were randomly assigned to one of four experimental treatment conditions: audited financial statements—strong governance, audited financial statements—weak governance, unaudited financial statements—strong governance, or unaudited financial statements—weak governance. After participants reviewed the general background information described above, they received summarized financial statement information from the nonprofit organization (audited or unaudited) followed by information about the nonprofit's governance characteristics (strong or weak).

Financial statement audits

As previously discussed, audits are not universally required in the nonprofit sector and evidence suggests that about two-thirds of nonprofit entities obtain a financial statement audit (Ostrower 2007). Accordingly, the presence of a financial statement audit was manipulated by including an unmodified independent auditor's report for the financial statements of the entity and by marking all financial information "audited" in the experimental instrument. Conversely, in the unaudited financial statement condition, no independent auditor's report was included in the experimental materials and all financial information was marked "unaudited." The presence or absence of a financial statement audit was the only manipulation of financial reporting between participants across treatment conditions.

Strength of nonprofit governance

Strength of nonprofit governance was manipulated based on findings from prior research by providing information about the nonprofit's board of directors and the board's financial reporting oversight function (Aggarwal et al. 2012; Defond et al. 2005; Stewart and Munro 2007; Yetman and Yetman 2012). Specifically, governance characteristics associated with more accurate financial reporting practices were identified and these features were included in the strong governance condition but were excluded from the weak governance condition.

In the strong governance condition, participants were told that: the nonprofit's board consists of 14 voting members; all board members are independent of management; all board members receive monthly financial statements from the bookkeeper; and, the nonprofit has a finance committee that is primarily responsible for the oversight and monitoring of the financial reporting process. Specifically, the finance committee consists of three members, one of whom is a financial expert with an extensive accounting background while the other finance committee members work in the financial services industry. The finance committee reviews and approves all financial reporting policies and procedures, meets quarterly to review financial reporting policies and appropriateness of quarter ending financial statements. Moreover, at least one member of the finance committee meets with the bookkeeper and management to review the financial reports on a monthly basis. Additionally, participants were told that the full board reviews and approves the organization's annual financial statements, reviews and approves the annual budget and regularly monitors budget-to-actual results. Finally, participants were told that the nonprofit has adopted formal conflict of interest, whistleblower, and document retention/destruction policies that all board members and employees must sign annually.

In the weak governance condition, participants were told that: the board has only 10 members; some members of the organization's management sit on the board; the board has no finance committee or formal process for monitoring the financial reporting process; and, there are no financial experts on the board. However, participants were also told that all board members receive monthly financial statements and that the board is considering drafting formal conflict of interest, whistleblower, and document retention policies, but have not yet done so. Finally, participants were informed that the board primarily provides strategic direction for the organization. Importantly, nowhere in the experimental instrument were participants told that governance was strong or weak, but instead were required to infer the relative quality of organizational governance from the manipulations described above.

Dependent Variables

Participants completed the experimental instrument by responding to two dependent variable questions designed to measure perceptions of the nonprofit's creditworthiness, followed by additional post-experimental questions. With respect to the dependent variable measures, participants were first asked to indicate the likelihood that they would recommend approving the loan using a 101 point scale (0 = very unlikely, 50 = somewhat likely, 100 = very likely). Participants next reported the annual interest rate they would recommend if the loan were approved, after being told that loans of a similar nature usually have an annual interest rate ranging from 3.5% to 8.5%, depending on the loan's risk profile. Thus, these two measures capture participants' overall perception of creditworthiness, and provide a means of quantifying cost of capital differences between treatment conditions.

RESULTS

Manipulation Checks

Participants responded to post-experimental manipulation check questions designed to capture their understanding of the experimental treatment condition they received. Specifically, participants were asked to indicate their perception of the quality of the board of directors as a governing body using an eleven point scale (0 = very weak, 10 = very strong). Participants receiving the strong governance manipulation rated board quality significantly higher (mean = 7.72) than participants receiving the weak governance manipulation (mean = 5.43) ($p < 0.001$, two tailed). This indicates the successful manipulation of board strength was effective between experimental conditions. Participants were also asked to rate their agreement with the statement that the nonprofit's financial statements had been audited by an independent CPA firm (0 = strongly disagree, 10 = strongly agree). The participants who received audited financial information rated their agreement significantly higher (mean = 9.15) than participants who received unaudited financial information (mean = 1.79) ($p < 0.001$, two tailed). This indicates the successful manipulation of the presence of audited financial information was effective between experimental conditions.

Likelihood of Loan Approval

Recall that participants were asked to indicate the likelihood that they would approve a loan to the organization (0 = very unlikely, 100 = very likely). Figure 1 (Appendix) presents an estimated marginal means plot of responses by treatment condition. The audited financial statements—strong governance condition had the highest likelihood of loan approval (mean = 83.52), followed by the unaudited financial statements—strong governance condition (mean = 69.25), then the audited financial statements—weak governance condition (mean = 68.78), and finally the unaudited financial statements—weak governance condition had the lowest likelihood of loan approval (mean = 67.17).

Panel A of Table 1 presents the results of a 2 x 2 ANOVA with the following factors: governance (strong, weak) and financial statement audit (audited, unaudited). Panel B of Table 1 reports means and standard error by treatment condition. As expected, the results indicate a significant main effect for governance (H1) with participants in the strong governance group (mean = 76.39) indicating they were more likely to suggest approving the loan than participants in the weak governance group (mean = 67.98) [$F_{1,89} = 5.14$, $p = 0.013$, one tailed]. As predicted, the results also indicate an audit main effect (H2), with participants indicating they would be more likely to suggest approving the loan when the nonprofit provides audited financial information (mean = 76.15) than when it provides unaudited financial information (mean = 68.21) [$F_{1,89} = 4.59$, $p = 0.018$, one tailed]. We also observe a significant interaction between strength of governance and financial statement auditing [$F_{1,89} = 2.92$, $p = 0.046$, one tailed].

Panel C of Table 1 presents the results of T-test comparisons of treatment conditions designed to test H3. Recall that H3 predicts participants in the audited—strong governance condition would indicate significantly higher loan approval recommendations than participants in either the audited—weak governance condition or the unaudited—strong governance condition. The results support H3 with participants in the audited—strong governance condition (mean = 83.52) indicating they were significantly more likely to suggest loan approval than participants in

both the audited—weak governance condition (mean = 68.78) [$T_{27.96} = 2.66, p = 0.007$, one tailed], and the unaudited—strong governance condition (mean = 69.25) [$T_{33.99} = 3.34, p = 0.001$, one tailed].

Annual Interest Rate

Participants were told that loans of this nature usually have an annual interest rate ranging from 3.5% to 8.5%, depending on risk, and were asked to recommend the annual interest rate they believed would be appropriate if the loan were approved. Moreover, this question was designed to quantify any differences in the cost of capital for the nonprofit organization in the case scenario. Figure 2 presents an estimated marginal means plot by treatment condition. The audited financial statements—strong governance condition had the lowest recommended interest rate (mean = 4.87%), followed by the unaudited financial statements—strong governance condition (mean = 5.09%), then the unaudited financial statements—weak governance condition (mean = 5.59%), and finally the audited financial statements—weak governance condition had the highest average recommended interest rate (mean = 5.68%).

Panel A of Table 2 presents the results of a 2 x 2 ANOVA for recommended annual interest rates with the following factors: governance (strong, weak) and financial statement audit (audited, unaudited). Panel B of Table 2 presents means and standard error by treatment condition. As expected, the results indicate a significant main effect for governance, with participants in the strong governance group recommending a significantly lower annual interest rate (mean = 4.98%) than participants in the weak governance group (mean = 5.64%) [$F_{1,89} = 6.75, p = 0.006$, one tailed], further supporting H1. In contrast, the results do not support H2, with participants in the audited financial statements group recommending an annual interest rate (mean = 5.28%) that was not statistically different from participants in the unaudited group (mean = 5.34%) [$F_{1,89} = 0.06, p = 0.401$, one tailed]. We also did not observe an interaction between governance and financial statement auditing [$F_{1,89} = 0.36, p = 0.276$, one tailed].

Panel C of Table 1 presents the results of T-test comparisons of treatment conditions designed to test H3. Consistent with H3, participants in the audited—strong governance condition (mean = 4.87%) recommended a significantly lower annual interest rate than participants in the audited—weak governance condition (mean = 5.68%) [$T_{44} = 2.33, p = 0.013$, one tailed]. Unexpectedly, however, the results did not indicate a significant difference between the audited—strong governance condition and the unaudited—strong governance condition (mean = 5.09%) [$T_{45} = 0.70, p = 0.245$, one tailed]. This pattern of treatment condition means is consistent with the results of the ANOVA which indicated a significant main effect for strength of governance, but no main effect for auditing or interactive effect between the independent variables. When considered collectively with the results presented in Table 1, these findings suggest that both audits and governance behave in a complementary capacity to influence lending decisions, while strong governance alone may explain more variation in a nonprofit's expected cost of capital.

The Mediating Role of Financial Trustworthiness

Although the results supported the hypothesized relationships between audits and organizational governance on decisions about whether to extend credit to a nonprofit borrower, it is not clear—prima facie—what causal mechanism was associated with this finding. For

example, strong governance in a nonprofit setting may be viewed as a means of providing organizational direction and improving the prospects of long-term financial viability through fundraising and strategic initiatives. However, the expectation investigated in this study (and presented formally as hypothesis four) is that both auditing and strong governance would lead decision makers to assess nonprofit financial information as more trustworthy relative to an organization without audited financial information or without sufficient board of director oversight of the financial reporting process. These expectations are consistent with prior nonprofit research indicating that auditing is positively associated with both financial reporting quality and donation revenue (Keating et al. 2008; Yetman and Yetman 2012; Harris et al. 2015), and that good governance is associated with more accurate financial reporting and decreased fraudulent activity (Chen 2016; Yetman and Yetman 2012; Harris, Petrovits, and Yetman 2016). In turn, perceptions of increased financial trustworthiness should increase participants' assessments of nonprofit creditworthiness. To investigate these anticipated relationships, a path analysis was conducted.

In order to facilitate the path analysis it was first necessary to develop a measure of the perceived trustworthiness of the nonprofit's financial information. Specifically, participants were asked to indicate their agreement with a statement that the nonprofit's financial information was accurate and reliable (0 = strongly disagree, 10 = strongly agree) as a post-experimental question. This question was designed to capture both the "positive expectations of trustworthiness" and "willingness to accept vulnerability" dimensions of trust defined in Fulmer and Gelfand (2012), and appears as the mediating variable *Trustworthiness* in the path model. Figure 3 presents the results of the path analysis with standardized regression coefficients reported for the paths. The model presents the mediating role of *Trustworthiness* between the predictor variables *Strength of Governance* (0 = weak governance and 1 = strong governance) and *Audit* (0 = unaudited and 1 = audited), and assessments of nonprofit creditworthiness (*Likelihood of Loan Approval* and *Recommended Annual Interest Rate*, respectively) as the outcome variables.

Goodness of fit for the model was established through the following statistics. First, there was an insignificant χ^2 (df = 5) value of 6.347, $p = 0.274$ (Cheung and Rensvold 2002). Second, the Tucker-Lewis Index of 0.965 and the comparative fit index of 0.983 were in excess of 0.9 and 0.95, respectively (Bentler and Bonett 1980; Hu and Bentler 1999). Finally, the root mean square error approximation of 0.054 was below the 0.06 level of significance (Hu and Bentler 1999). As anticipated, the analysis indicates a positive and significant relationship between *Strength of Governance* and *Trustworthiness* (0.336, $p < 0.001$), and between *Audit* and *Trustworthiness* (0.437, $p < 0.001$), as well as a positive and significant relationship between *Trustworthiness* and *Likelihood of Loan Approval* (0.425, $p < 0.001$). Figure 3 also reports a negative and significant relationship between *Likelihood of Loan Approval* and *Recommended Annual Interest Rate* (-0.530, $p < 0.001$). Collectively, the results of the path analysis support H4 and indicate that both strong governance and audits increased participants' assessments that the nonprofit's financial information was trustworthy, which caused them to make higher

assessments of the likelihood that they would extend credit to the nonprofit.³ In turn, participant's loan approval likelihood assessments influenced their recommendation for the cost of capital associated with financing the nonprofit.

DISCUSSION

The results indicate that participants made higher creditworthiness assessments of a hypothetical nonprofit organization that exhibited stronger (versus weaker) governance characteristics. Specifically, strong governance is associated with increased loan approval recommendations and an average 66 basis point reduction in the cost of capital. Thus, the effect of governance on perceived creditworthiness supports H1. The results also suggest an audit main effect for decisions about whether to lend money to a nonprofit organization, but no audit main effect is present for decisions about the associated interest rates for these loans. Thus, H2 is only partially supported. It was also noted that auditing and strong governance appear to function as compliments when creditors make decisions about whether to offer a loan to nonprofit organizations, but that governance alone appears to drive decisions about the associated cost of capital. This pattern of results suggest that potential lenders view both audits and governance as evidence of financial reporting trustworthiness when making decisions about whether to extend credit to a nonprofit organization. However, the nature of auditing dictates that it is somewhat reactive in nature while effective organizational governance offers a proactive mechanism for strategic directions and ongoing financial oversight. This may explain why participants placed relatively less emphasis on the audit function when making decisions about recommended annual interest rates once they had established the preliminary creditworthiness of the nonprofit entity in this scenario.

The results also indicated that strong governance and audits function in a complimentary capacity when participants formed their decision about whether to extend credit to a nonprofit organization. However, only strong governance had a favorable influence on the recommended cost of capital for nonprofit debt. The theory presented in this study also posits that because of the voluntary nature of audits and good governance for many nonprofit organizations, strong governance and audited financial statements communicate financial trustworthiness to potential creditors. A path analysis confirmed that perceptions of financial reporting trustworthiness mediated the relationship between governance and audits and the likelihood that participants would extend credit to the nonprofit organization, and this initial assessment of creditworthiness was inversely related to the recommended annual interest rate in the path model.

CONCLUSION

This study experimentally investigated the effects of two, voluntary, attributes of nonprofit financial reporting oversight on perceptions of creditworthiness. Specifically, this

³ Mediation was established by significant ($p < 0.05$, two tailed) indirect effects of *Audit* and *Governance* on *Likelihood of Loan Approval* through *Trustworthiness* (Zhao, Lynch, and Chen 2010). Utilizing Model 4 from the SPSS "PROCESS" macro developed by Dr. Andrew Hayes (Hayes 2013), a 10,000 iteration bootstrap mediation analyses yielded indirect effects (unstandardized) for *Audit* (controlling for *Governance*) and *Governance* (controlling for *Audit*) of 6.70, 5% (two-tailed), CI: 2.21 to 12.39, and 4.96, 5% (two-tailed), CI: 1.57 to 10.55; respectively.

study explored how obtaining a financial statement audit and instituting strong organizational governance practices influence potential creditors' loan approval likelihood assessments and recommendations for an associated annual interest rate. Notably, the authors are not aware of any prior research examining judgment and decision making in a nonprofit creditworthiness setting.

In an experimental setting, strength of governance and the presence of a financial statement audit were manipulated for a hypothetical nonprofit entity where participants were asked to assess organizational creditworthiness. The results show both strong governance and the presence of financial statement auditing were generally associated with increased perceptions of nonprofit creditworthiness. Specifically, participants were significantly more likely to recommend approving a loan—and recommended a lower annual interest rate—for a nonprofit organization with strong versus weak governance characteristics. Participants were also more likely to recommend loan approval when the nonprofit provided audited financial information compared to identical, unaudited financial information. Moreover, auditing and strong governance functioned in a complimentary capacity when participants evaluated the likelihood they would recommend extending credit to the nonprofit organization. Specifically, potential creditors were significantly more likely to recommend extending credit when the nonprofit organization had both strong board of director oversight and received a financial statement audit than when the organization had either strong governance or an audit alone. However, when participants were asked to determine the cost of capital for extending credit to the nonprofit organization, only the presence of strong governance significantly reduced their recommended annual interest rate. This may be the case because while auditing reduces information risk associated with retrospective GAAP compliance, board of director oversight represents a proactive approach to improving financial trustworthiness and enhancing an organization's probable future viability. Finally, a path analysis indicated that both strong governance and financial statement audits increased participant perceptions of nonprofit financial reporting trustworthiness which, in turn, caused them to recommend issuing a loan to the nonprofit organization in our investigation. As anticipated, their recommendation for loan approval was inversely related to their recommendation for the loan's annual interest rate.

This research is subject to limitations that provide opportunities for future research. First, upper-division students enrolled in a nonprofit and governmental accounting class were utilized as participants in this study. While participant demographic characteristics indicate that they possessed the requisite knowledge to appropriately evaluate and complete the experimental task, it is not clear how results may have differed if actual loan officers working in a commercial lending capacity had been used. Second, this study investigates perceptions of creditworthiness for a nonprofit that received funding almost exclusively through donation revenues. While this scenario is representative of many nonprofits, some nonprofit organizations (e.g., hospitals) frequently generate revenue from fee-for-service transactions, much like their for-profit counterparts. It is not clear how the assessments of creditworthiness documented in this study might differ between different types of nonprofit organizations.

REFERENCES

Adams, R. B., B. E. Hermalin, and M. S. Weisbach. 2010. The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature* 48 (1): 58-107.

- Aggarwal, R. K., M. E. Evans, and D. Nanda. 2012. Nonprofit boards: Size, performance and managerial incentives. *Journal of Accounting and Economics* 53 (1): 466-487.
- American Institute of Certified Public Accountants (AICPA). 2013. *Audit & Accounting Guide: Not-For-Profit Organizations*. New York, NY: AICPA.
- Arens, A., R. Elder, M. Beasley, and C. Hogan. 2016. *Auditing and Assurance Services: An Integrated Approach*, 16th edition. Prentice Hall: Upper Saddle River, NJ.
- Bentler, P. M., and D. G. Bonett. 1980. Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin* 88:588-606.
- Carcello, J. V., D. R. Hermanson, and Z. Ye. 2011. Corporate governance research in accounting and auditing: Insights, practice implications, and future research directions. *Auditing: A Journal of Practice & Theory* 30 (3): 1-31.
- Chen, Q. 2016. Director monitoring of expense misreporting in nonprofit organizations: The effects of expense disclosure transparency, donor evaluation focus and organization performance. *Contemporary Accounting Research*, 33 (4): 1601-1624.
- Cheung, G. W., and R. B. Rensvold. 2002. Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling* 9 (2):233-255.
- Copley, P.A. 2015. *Essentials of Accounting for Governmental and Not-for-Profit Organizations*, 12th ed. McGraw Hill Education.
- DeFond, M. L., R. N. Hann, and X. Hu. 2005. Does the market value financial expertise on audit committees of boards of directors? *Journal of Accounting Research* 43 (2): 153-193.
- Fama, E. F., and M. C. Jensen. 1983. Separation of ownership and control. *The Journal of Law and Economics* 26 (2): 301-325.
- Fulmer, C. A., and M. J. Gelfand. 2012. At what level (and in whom) we trust: Trust across multiple organizational levels. *Journal of Management* 38 (4): 1167-1230.
- Gullett, J., L. Do, M. Canuto-Carranco, M. Brister, S. Turner, and C. Caldwell. 2009. The buyer-supplier relationship: An integrative model of ethics and trust. *Journal of Business Ethics* 90: 29-341.
- Harris, E., C. Petrovits, and M. Yetman. 2015. The effect of nonprofit governance on donations: Evidence from the revised form 990. *The Accounting Review* 90 (2): 579-610.
- _____. 2016. Why bad things happen to good organizations: The link between governance and asset diversions in public charities. *Journal of Business Ethics* (Forthcoming).
- Hayes, A. F. 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: Guilford Press.
- Hofmann, M. A., and D. McSwain. 2013. Financial disclosure management in the nonprofit sector: A framework for past and future research. *Journal of Accounting Literature* 32 (1): 61-87.
- Hu, L., and P. M. Bentler. 1999. Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling* 6 (1): 1-55.
- Jensen, M. C., and W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (4): 305-360.
- Kasper-Fuehrer, E. C., and N. M. Ashkanasy. 2001. Communicating trustworthiness and building trust in interorganizational virtual organizations. *Journal of Management*, 27: 235-254.
- Keating, E. K., L. M. Parsons, and A. A. Roberts. 2008. Misreporting fundraising: How do nonprofit organizations account for telemarketing campaigns? *The Accounting Review* 83 (2): 417-446.

- Ostrower, F. 2007. *Nonprofit Governance in the United States: Findings on Performance and Accountability from the First National Representative Study*. Washington, D.C. The Urban Institute. Available at: http://www.urban.org/research/publication/nonprofit-governance-united-states/view/full_report. (Accessed October 17, 2017).
- Palanski, M. E., and F. J. Yammarino. 2009. Integrity and leadership: A multi-level conceptual framework. *The Leadership Quarterly*, 20: 405-420.
- Parkinson, T. L. 1975. The role of seals and certifications of approval in consumer decision-making. *The Journal of Consumer Affairs* 9 (1): 1-14.
- Stewart, J., and L. Munro. 2007. The impact of audit committee existence and audit committee meeting frequency on the external audit: Perceptions of Australian auditors. *International Journal of Auditing* 11 (1): 51-69.
- Tysiac, K. 2016. 11 tips for success with single audits: *Journal of Accountancy*: 222 (5): 40-47.
- Vermeer, T. E., K. Raghunandan, and D. A. Forgione. 2006. The composition of nonprofit audit committees. *Accounting Horizons* 20 (1): 75-90.
- _____. 2009. Audit fees at U.S. non-profit organizations. *Auditing: A Journal of Practice & Theory* 28 (2): 289-303.
- Weiss, J. N. 2015. From Aristotle to Sadat: A short strategic persuasion framework for negotiators. *Negotiation Journal* 31 (3): 211-222.
- Yetman, R. J. 2006. Borrowing and debt. In *Financing Nonprofits: Putting Theory into Practice*, edited by D. R. Young. 243-268. Lanham, MD: AltaMira Press.
- Yetman, M. H., and R. J. Yetman. 2012. The effects of governance on the accuracy of charitable expenses reported by nonprofit organizations. *Contemporary Accounting Research* 29 (3): 738-767.
- Zhao, X., J. G. Lynch Jr., and Q. Chen. 2010. Reconsidering Baron and Kenny: Myth and truths about mediation analysis. *Journal of Consumer Research* 37 (2): 197-206.

ACKNOWLEDGMENTS

For this project, Dr. Lauck received funding through his Chase Bank Endowed Professorship while Dr. Luehlhing received funding through his George E. Breazeal Family Endowed Professorship. Both endowed professorships are made available through the State of Louisiana Board of Regents Support Funds.

APPENDIX: FIGURES AND TABLES

Figure 1: Likelihood of Loan Approval by Treatment Condition

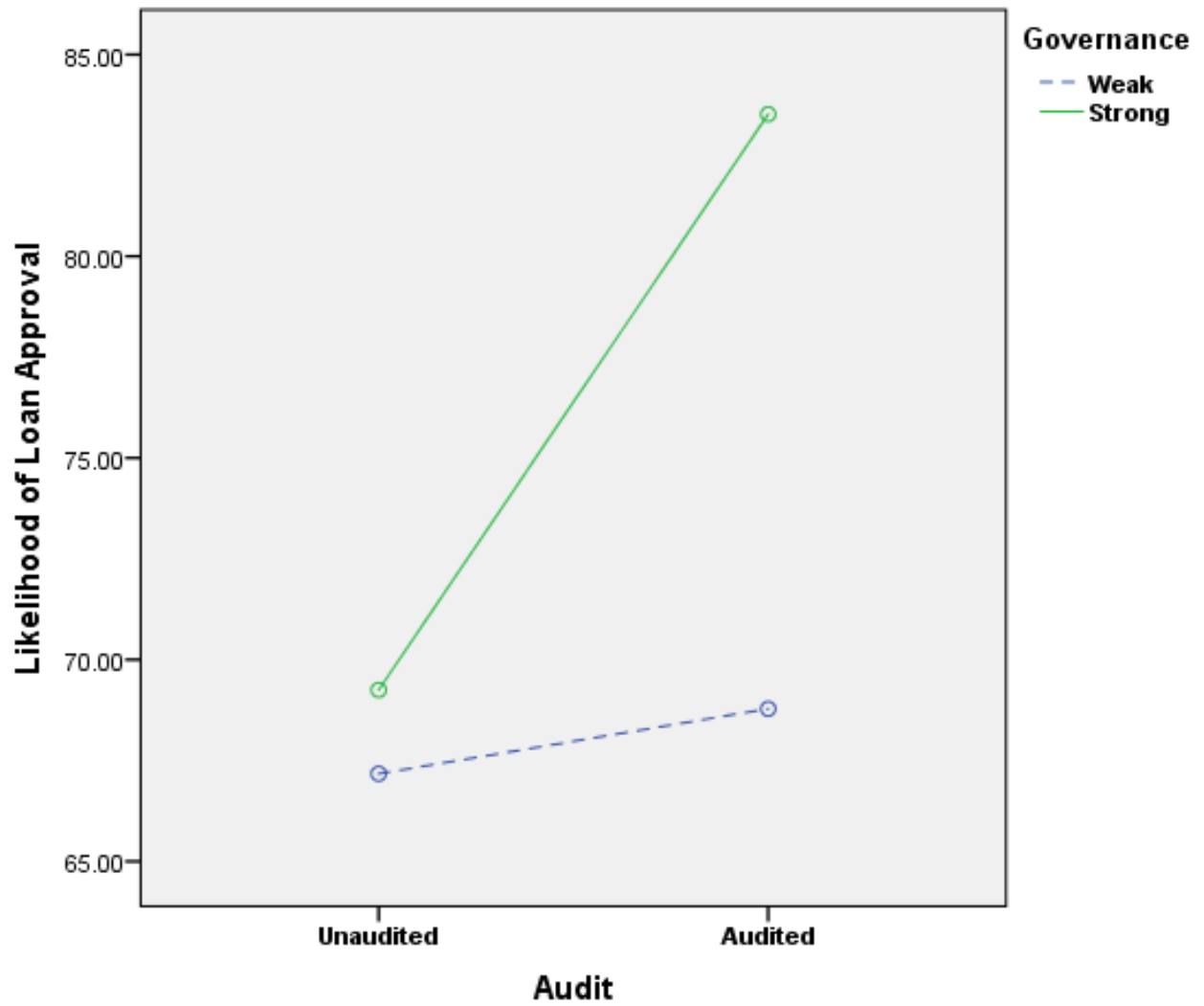


Figure 2: Recommended Annual Interest Rate by Treatment Condition

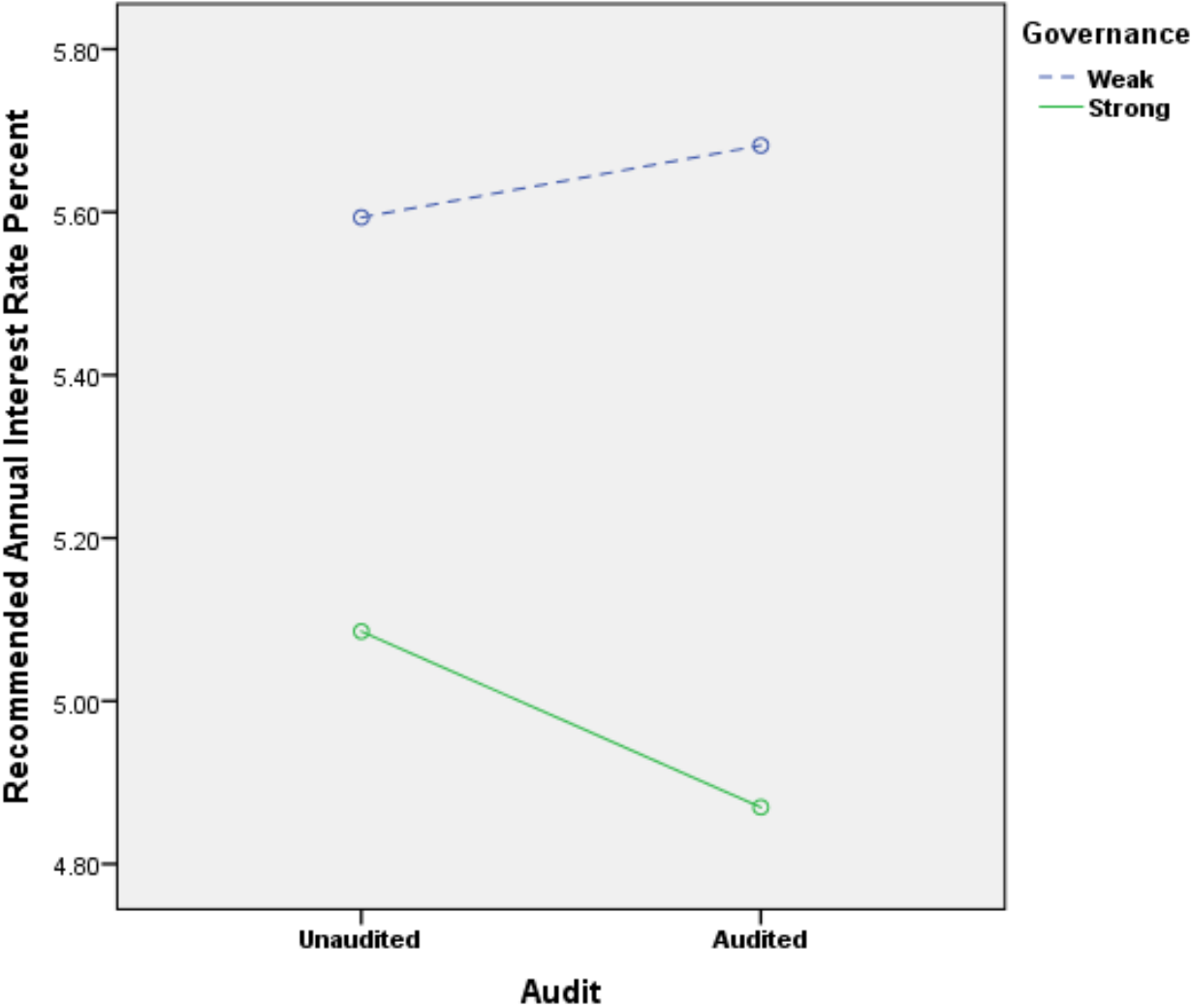
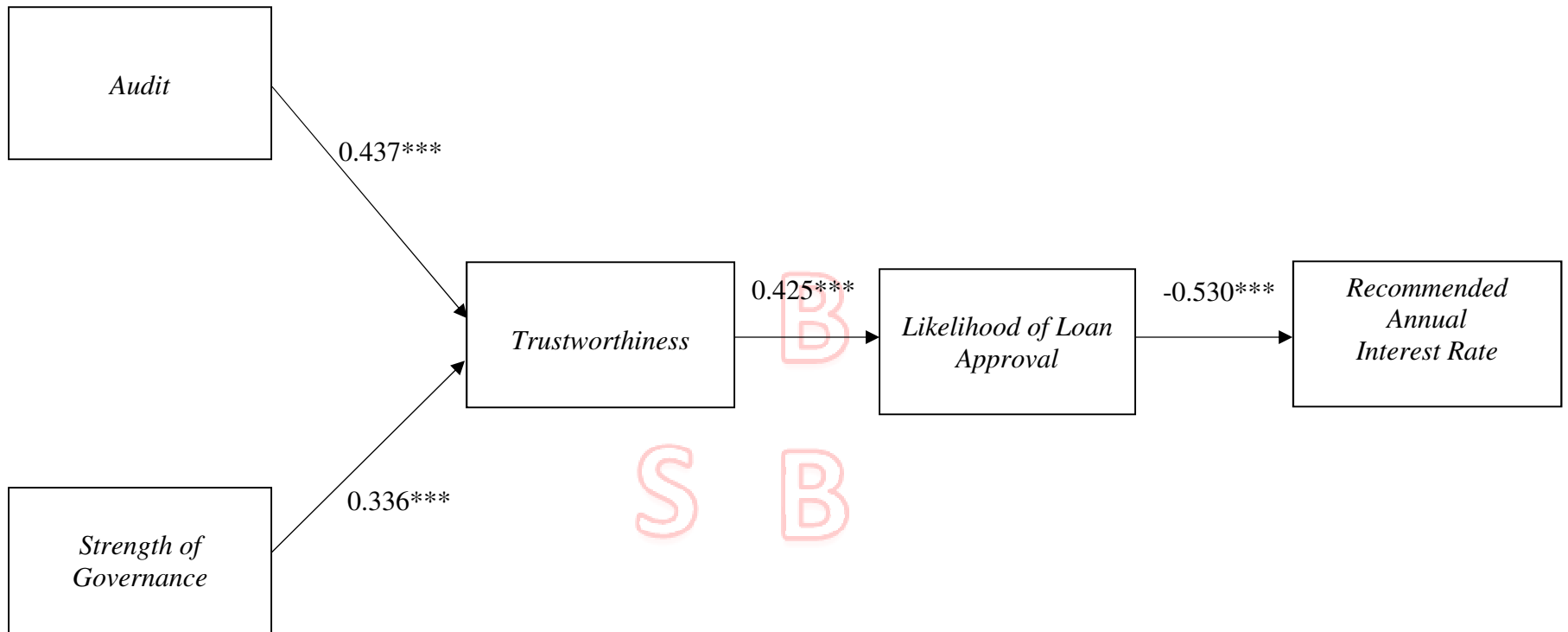


Figure 3: Path Analysis



*** Represents statistical significance at the 1% level, two tailed.

Table 1: Effects of Governance and Audit on Likelihood of Loan Approval

Panel A: Two-Way Analysis of Variance					
Dependent Variable = Likelihood of Loan Approval^a	df	SS	MS	F-statistic	p-value
<i>Governance</i>	1	1642.94	1642.94	5.14	0.013
<i>Audit</i>	1	1465.35	1465.35	4.59	0.018
<i>Audit X Governance</i>	1	931.73	931.73	2.92	0.046
<i>Error</i>	89	28437.46	319.52		

Panel B: Likelihood of Loan Approval: Means, (SE), [n], {Cell}			
	Strong Governance	Weak Governance	
Audited Financial Statements	83.52 (3.73) [23] {A}	68.78 (3.73) [23] {B}	76.15 (2.64) [46]
Unaudited Financial Statements	69.25 (3.65) [24] {C}	67.17 (3.73) [23] {D}	68.21 (2.61) [47]
	76.39 (2.61) [47]	67.98 (2.64) [46]	

Panel C: Comparisons of Groups		
Comparisons	t-statistic	p-value
Audited—Strong Gov. {A} vs. Audited—Weak Gov. {B}	$T_{27.96} = 2.66$	0.007
Audited—Strong Gov. {A} vs. Unaudited—Strong Gov. {C}	$T_{33.99} = 3.34$	0.001
Audited—Weak Gov. {B} vs. Unaudited—Weak Gov. {D}	$T_{44} = 0.27$	0.396
Unaudited—Strong Gov. {C} vs. Unaudited—Weak Gov. {D}	$T_{45} = 0.42$	0.338

^a Participants indicated the likelihood that they would recommend approving the loan using a 101 point scale (0 = Very Unlikely to 100 = Very Likely).

All p-values are reported one tailed.

Table 2: Effects of Governance and Audit on Recommended Annual Interest Rate**Panel A: Two-Way Analysis of Variance**

Dependent Variable =
Recommended Annual
Interest Rate ^a

	df	SS	MS	F-statistic	p-value
<i>Governance</i>	1	10.13	10.13	6.75	0.006
<i>Audit</i>	1	0.10	0.10	0.06	0.401
<i>Audit X Governance</i>	1	0.54	0.54	0.36	0.276
<i>Error</i>	89	133.47	1.500		

Panel B: Recommended Annual Interest Rate: Means, (SE), [n], {Cell}

	<u>Strong Governance</u>	<u>Weak Governance</u>	
Audited Financial Statements	4.87 (0.26) [23] {A}	5.68 (0.26) [23] {B}	5.28 (0.18) [46]
Unaudited Financial Statements	5.09 (0.25) [24] {C}	5.59 (0.26) [23] {D}	5.34 (0.18) [47]
	4.98 (0.18) [47]	5.64 (0.18) [46]	

Panel C: Comparisons of Groups

<u>Comparisons</u>	<u>t-statistic</u>	<u>p-value</u>
Audited—Strong Gov. {A} vs. Audited—Weak Gov. {B}	$T_{44} = 2.33$	0.013
Audited—Strong Gov. {A} vs. Unaudited—Strong Gov. {C}	$T_{45} = 0.70$	0.245
Audited—Weak Gov. {B} vs. Unaudited—Weak Gov. {D}	$T_{44} = 0.22$	0.414
Unaudited—Strong Gov. {C} vs. Unaudited—Weak Gov. {D}	$T_{45} = 1.38$	0.088

^a Participants indicated the annual interest rate they would recommend if the loan was approved.

All p-values are reported one tailed.