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# The Relationship Between Internal Controls, Unfavorable Financial Statement Audit Opinions, and Nonprofit Financial Performance

Gwen Rachel Bedell Gadbois  
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# Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

Gwen R. Bedell Gadbois

has been found to be complete and satisfactory in all respects,  
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the review committee have been made.

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Walden University  
2025

Abstract

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Opinions, and Nonprofit Financial Performance

by

Gwen R. Bedell Gadbois

MS, St. Joseph's College, 2018

BS, University of Maine at Augusta, 2009

Doctoral Study Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Business Administration

Walden University

December 2025

## Abstract

Executives of nonprofit organizations face fiscal and operational challenges due to limited resources, threatening long-term viability. Weak internal controls and financial reporting systems can stem unfavorable Single Audit opinions and reduced funding, concerning to auditors and fiscal agencies. Grounded in resource dependency theory, the purpose of this quantitative ex post facto secondary data analysis was to examine whether financial performance differed by audit opinion and internal control indicators among U.S. nonprofits receiving federal aid. Data included 158 U.S. nonprofits that received \$750K–\$7M in federal aid in 2021 with qualified, adverse, or disclaimer audit opinions. A three-way analysis of variance revealed a significant main effect of audit opinion,  $F(2, 143) = 3.31, p = .039, \eta^2 = .04$ , and a significant main effect of internal controls of major programs,  $F(2, 143) = 3.15, p = .046, \eta^2 = .04$ . A three-way interaction among audit opinion, internal controls over financial reporting, and internal controls of major programs significantly predicted financial performance  $B = -4.27, t(151) = -2.58, p = .011$ . A two-way interaction among internal control opinions also predicted performance  $B = 7.14, t(151) = 2.33, p = .021$ . The regression model was significant,  $F(6, 151) = 3.19, p = .006, R^2 = .11$ ; the predictors explained 11% of the variance in financial performance. Unfavorable opinions and internal control failures resulted in lower performance overall. Recommendations for nonprofit executives include strengthening internal controls to improve audit outcomes and sustain federal support. Implications for positive social change include the potential for nonprofit executives to implement effective internal controls, thereby improving nonprofit performance and delivering critical social services.

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## Dedication

I dedicate this achievement to my family, whose unwavering support has sustained my lifelong pursuit of a doctorate in business and accounting. To my parents, Tom and Estelle Gore, who instilled in me the belief that education is always time and money well spent. To my mémère, Lucielle Cote, and the entire Gadbois in-law family, who encouraged me at every turn. To my loving husband, Eric—my steadfast partner—who stood by my side through countless degrees, career progressions and life challenges. In this final stage especially, he understood the time and sacrifice this journey required, continually inspiring me and celebrating every milestone along the way. I am profoundly grateful for his support. To my amazing children, Michael and Emma Bedell, who likely cannot remember a time when I wasn't in school—thank you for your patience, positivity, and pride in my achievements. Though this journey often took time and resources away from our days together, your understanding and encouragement have meant the world to me. I am eternally grateful to be your mom.

I also extend my deepest thanks to those who shaped my professional path. To Charles Carrigan, CPA—a gifted forensic accountant who took me under his wing early on, believed in my potential, and opened doors I never imagined possible. To Brenda McAleer, whose support across decades has made her a true champion for women in our field. To Thomas Giordano, CPA—mentor, colleague, and friend—who has been my sounding board for over 15 years and a motivating force behind in my academic and career pursuits. To my running group, the 3Ms, for listening and encouraging me.

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## Section 1: Foundation of the Study

Nonprofit organizations are crucial for maintaining economic stability and delivering essential social services to communities (Dell et al., 2022). Unlike profit-driven businesses, these organizations depend on support from constituents through donations, private grants, and government assistance. The competition for government funding among nonprofits is fierce, and successful applicants must adhere to strict financial reporting requirements. When a nonprofit receives federal funding exceeding \$750,000 in a fiscal year, it must undergo a Single Audit conducted by an independent Certified Public Accounting firm (Dell et al., 2023; Office of the Inspector General, 1996). This audit evaluates the fairness of financial statements, internal controls over financial reporting, and the management of major programs. Organizations that receive unfavorable audit opinions or demonstrate internal control deficiencies risk losing federal funding, potentially jeopardizing their ability to continue operations (Feng, 2020).

### **Background of the Problem**

Nonprofit organizations grapple with financial and operational hurdles that cast doubt on their long-term viability (Sevak & Baker, 2022; Shenkir & Walker, 2018). Typically understaffed and resource-constrained, these entities often lack larger corporations' robust decision-making, control, and reporting systems (Butler & Ghosh, 2015; Dong et al., 2021; Dyer et al., 2020). Essential control mechanisms, such as accounting information systems for accurate financial recording and reporting, as well as management-established internal controls to protect assets and deter fraud, are frequently inadequate (Bracci et al., 2022; Dyck et al., 2024; Schwartz et al., 2022). The absence of

proper control systems may compromise the reliability of financial statements, potentially leading to unfavorable audit opinions (Tjen et al., 2020; Trung et al., 2024; Yang et al., 2022). For nonprofit organizations subject to Single Audits, unfavorable opinions can increase operational costs and potential funding losses due to non-compliance with regulatory requirements (Bradley et al., 2022; Edmonds et al., 2020; Strickett et al., 2022). Audit opinions, therefore, are of utmost concern for nonprofit managers.

The failure rate of nonprofit organizations within their first decade of operation is approximately 30% (National Center on Charitable Statistics, 2023). This results in significant economic repercussions, as evidenced by increased unemployment and the loss of essential services addressing critical social issues. The financial impact of nonprofit organizational failure is substantial, potentially resulting in an annual loss of \$2 trillion in spending (National Council on Nonprofits, 2024). This trend highlights a general business problem: some nonprofit business leaders in the United States fail to implement effective internal controls over financial reporting, exposing their organizations to unfavorable financial statement audit opinions and financial underperformance, ultimately jeopardizing their sustainability and mission fulfillment.

### **Problem and Purpose**

The specific business problem was that some U.S. nonprofit business leaders did not understand if differences existed in the financial performance of nonprofit organizations based on financial statement audit opinions, internal controls over financial reporting, and internal controls of major programs. Therefore, this quantitative ex post facto secondary data analysis examined whether differences existed in the financial

performance of U.S. nonprofit organizations based on financial statement audit opinions, internal controls over financial reporting, and internal controls of major programs.

This study was primarily of interest to U.S. nonprofit leaders responsible for internal controls over financial reporting and the management of major programs, which relied on significant federal support and donor contributions to sustain operations through ongoing assistance (Harris et al., 2022). Specifically, nonprofit organizations that received over \$750,000 annually from federal sources were subject to the Single Audit Act. Managers of organizations that received federal funds at this level must comprehend the implications of unfavorable audit findings, including the potential disruption of future funding and detrimental donor perceptions, thereby questioning the nonprofit's ability to continue as a viable entity (Larsen & Thorsrud, 2022; Stühlinger, 2022).

### **Population and Sampling**

The quantitative, ex post facto design was appropriate for my research project because the study's population included U.S. nonprofit organizations (excluding healthcare entities, governmental units, and tribal organizations) that received between \$750,000 and \$7,000,000 in federal support in 2021 and had a Single Audit financial statement audit opinion other than unqualified (unmodified).

The variables of interest in this study included three independent categorical variables: (a) financial statement audit opinion, (b) internal controls over financial reporting, and (c) internal controls of major programs. The study had one dependent ratio variable, financial performance, measured as return on assets (ROA), and was tested using three-way analysis of variance (ANOVA). The sample size of the study, 158

observations ( $F$  test, ANOVA: fixed effects, special, main effects and interactions, effect size = .25, probability = .05, power = .80, numerator  $df = 2$ , number of groups = 3), was determined using a G\*Power as defined by Faul et al. (2007). All data elements were presented in Single Audit Reports and/or Form 990, archived on a publicly accessible website. Thus, data collection did not necessitate personal interaction with the population or sample organizations.

### **Nature of the Study**

Qualitative research is used to explore and understand the depth of human experiences, perceptions, and behaviors, shedding light on how and why phenomena impact individuals' lives rather than focusing on quantitative measures (Firestone, 1987). In contrast, quantitative studies are designed to investigate causal relationships between variables, requiring large sample sizes to achieve statistical significance (Maxwell, 2019). Quantitative studies provide summaries that can be generalized to the broader population through inferential sample data analysis, utilizing reliable and valid statistical methods (Bougie & Sekaran, 2019). The quantitative approach, particularly when using historical secondary data sets, allows for study replication, analysis, and confirmation of findings (Corner, 2002). This methodology was suitable for my study as it aimed to determine relationships between independent and dependent variables and offered a systematic and objective means of investigating such connections. Therefore, I rejected the qualitative and mixed-methods approach.

Quantitative research offers various design approaches suited to specific research objectives and constraints. Experimental and quasi-experimental designs are employed

when dealing with hypothetical variables or non-random samples to address a gap in research, and are not appropriate for Doctor of Business Administration (DBA) studies which aim to solve actual business problems (Tzavara & O'Donnell, 2021). For comparing individuals or groups, researchers frequently utilize causal-comparative and correlational designs (Bougie & Sekaran, 2019). The ex post facto design holds value in social science research as it precludes the manipulation of historical data, variables, or participant entities, thereby enhancing the integrity of the study. This design is also well-suited for examining relationships between dependent and independent variables without implying causation (Silva, 2012). Selecting an appropriate research design was crucial, as it directly impacted the validity and reliability of the study's findings, ultimately shaping the conclusions drawn from the research.

### **Research Questions**

RQ1: What differences in the financial performance of U.S. nonprofit organizations, if any, exist based on financial statement audit opinion (qualified vs. adverse vs. disclaimer)?

RQ2: What differences in the financial performance of U.S. nonprofit organizations, if any, exist based on internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses)?

RQ3: What differences in the financial performance of U.S. nonprofit organizations, if any, exist based on internal controls of major programs (no deficiencies vs. significant deficiencies vs. material weaknesses)?

RQ4: What interaction, if any, occurs between the financial statement audit opinions (qualified vs. adverse vs. disclaimer), internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses), and internal controls of major programs (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations?

RQ5: What interaction, if any, occurs between the financial statement audit opinions (qualified vs. adverse vs. disclaimer) and internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations?

RQ6: What interaction, if any, occurs between the financial statement audit opinions (qualified vs. adverse vs. disclaimer) and internal controls of major programs (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations?

RQ7: What interaction, if any, occurs between internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) and internal controls of major programs (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations?

### **Hypotheses**

$H_01$ : There are no differences in the financial performance of U.S. nonprofit organizations based on financial statement audit opinion.

$H_{a1}$ : There are significant differences in the financial performance of U.S. nonprofit organizations based on financial statement audit opinion.

$H_02$ : There are no differences in the financial performance of U.S. nonprofit organizations based on internal controls over financial reporting.

$H_{a2}$ : There are significant differences in the financial performance of U.S. nonprofit organizations based on internal controls over financial reporting.

$H_03$ : There are no differences in the financial performance of U.S. nonprofit organizations based on internal controls of major programs.

$H_{a3}$ : There are significant differences in the financial performance of U.S. nonprofit organizations based on internal controls of major programs.

$H_04$ : No interaction occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer), internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses), and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

$H_{a4}$ : There is an interaction that occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer), internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses), and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

$H_05$ : No interaction occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls over financial reporting (no

deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations.

*H<sub>a5</sub>*: There is an interaction that occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations.

*H<sub>06</sub>*: No interaction occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

*H<sub>a6</sub>*: There is an interaction that occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

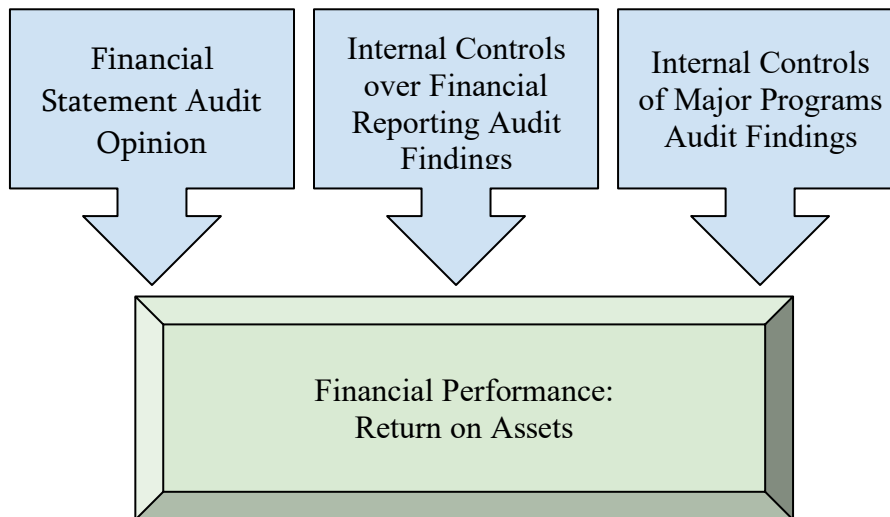
*H<sub>07</sub>*: No interaction occurs between the internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) and the internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

*H<sub>a7</sub>*: There is an interaction that occurs between internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

## Theoretical Framework

The theoretical foundation of this study rested on the resource dependency theory, introduced by Pfeffer and Salancik (1978). Resource dependency theory posited that an organization's survival was intrinsically linked to its capacity to acquire and sustain essential resources from its environment. For nonprofit organizations, these external resources primarily consisted of funding from governmental agencies and support from volunteers and donors (Froelich, 1999). While resource scarcity is a challenge faced by all organizations, it was particularly acute for nonprofits, which relied heavily on governmental funding and private donations (Abdurakhmonov et al., 2021). Consequently, organizations that failed to maintain these external resource contributions faced a significant risk of failure, underscoring the critical importance of resource management and diversification in the nonprofit sector.

Figure 1 presents the potential relationship between the independent study variables, financial statement audit opinion, internal controls over financial reporting audit findings, and internal control of major programs audit findings, and the nonprofit organization's dependent variable, financial performance.

**Figure 1***Independent and Dependent Study Variables*

The logical connection between the presented framework and the nature of this study were multifaceted. Nonprofits' substantial reliance on governmental funding emphasized the critical need for adherence to financial reporting rules, regulations, and best practices in internal controls (Garven & Scarlata, 2021; Mohsen et al., 2022; Siegel, 2014). Auditors identify internal control failures as significant deficiencies or material weaknesses, which may seriously affect the operating capacity of the organization (Mintz & Miller, 2023). These reported failures have the potential to result in unfavorable audit opinions which must be disclosed to governmental agencies, and therefore jeopardize future funding, and increase the risk of organizational failure or nonperformance.

In this context, the resource dependency theory provided a valuable framework for assessing how financial performance was predictable based on other indicators of organizational stability and effectiveness (Amin et al., 2021; Arvidson & Linde, 2021).

This theoretical lens underscored the importance of maintaining robust internal controls and financial reporting practices, which were essential for securing the resources necessary for organizational survival and success in the nonprofit sector.

### **Operational Definitions**

*Adverse financial statement audit opinion:* An adverse opinion states that the financial statements do not present fairly the financial position, results of operations, or cash flows of the entity in conformity with generally accepted accounting principles (GAAP; Public Company Accounting Oversight Board [PCAOB], 2017b).

*Disclaimer financial statement audit opinion:* A disclaimer of opinion states that the auditor does not express an opinion on the financial statements (PCAOB, 2017b).

*Internal controls over financial reporting:* Processes and procedures set out by the governing board and management designed to provide reasonable assurance for the preparation of reliable, conforming financial statements, which are based on records that accurately and fairly reflect the necessary transactions of the entity, including authorized receipts and expenditures. These procedures are also designed to provide reasonable assurance for the prevention, timely detection, and correction of any unauthorized acquisition, use, or disposition of the entity's assets that could have a material effect on the financial statements (PCAOB, 2007).

*Internal controls of major programs:* Processes and procedures established by management that conform to the limitations and adhere to the exclusions in the law or Uniform Guidance for Federal Awards (U.S. Comptroller General, 2019).

*Qualified (modified) financial statement audit opinion:* A qualified opinion states that, except for the effects of the matter(s) to which the qualification relates, the financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows of the entity in conformity with GAAP (PCAOB, 2017b).

*Return on assets (ROA)* measures how effectively an organization uses its assets to generate positive returns by comparing net income, or the change in fund balance for nonprofits, to average total assets (Gallo, 2016).

*Single audit:* A required independent annual audit of non-federal entities and tribes that expend \$750,000 or more of Federal Financial Assistance in a fiscal year (Office of the Inspector General, 1996).

*Unqualified (unmodified) financial statement audit opinion:* An unqualified opinion states that the financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows of the entity in conformity with GAAP (PCAOB, 2017a).

## **Assumptions, Limitations, and Delimitations**

### **Assumptions**

Assumptions in research are beliefs accepted as true without empirical evidence, influencing both data and statistical analyses (Verma & Abdel-Salam, 2019). In this study, I have made assumptions for several key aspects. I have posited that resource dependency theory provides the most suitable framework for evaluating the data and addressing the specific business problem. I have assumed that given identical information and procedures, auditors would render consistent opinions on financial statement audits,

internal controls over financial reporting, and internal controls of major programs. I have assumed that a sample of 158 U.S. nonprofit organizations (excluding governmental, tribal, and healthcare entities) adequately represented the population distribution. Lastly, I have assumed that nonprofit financial performance can be effectively measured using ROA. These assumptions guided the problem definition, variable identification, and overall research approach, which provided a foundation for the study's methodology and analysis.

### **Limitations**

In conducting this study, I acknowledged several inherent methodological limitations, including the observation that a relationship did not prove causality (Gershman & Ullman, 2023). As with all research, potential weaknesses may influence outcomes and conclusions (Chenail, 2011; Keserlioglu et al., 2019). The stratified sample of 158 U.S. nonprofit organizations (excluding governmental, tribal, and healthcare entities) from 2021 may lack full representativeness of the broader nonprofit sector and consequently limited the generalizability to domestically operated U.S. nonprofits. This sampling approach excluded organizations that were required to file Single Audits but failed to comply during the data collection period, therefore it potentially omitted critical cases of nonperformance. Furthermore, the dataset reflected economic conditions that lingered following the COVID-19 pandemic (2020–2021), which may not have represented typical operational environments. Finally, although ROA served as a standard financial health metric in nonprofit research, its utility to predict long-term organizational viability remains contested, as this measure captures only a one-year financial snapshot

rather than sustained performance trends. These constraints highlighted the need for caution when I interpreted the results and suggested opportunities for future research using expanded samples across diverse economic conditions.

### **Delimitations**

Delimitations are essential in research as they narrow the study's focus by establishing boundaries for data collection (Theofanidis & Fountouki, 2018). This study's population was confined to U.S. nonprofit organizations that filed a Single Audit in 2021, received between \$750,000 and \$7,000,000 in federal funding, were issued a qualified/modified, adverse, or disclaimer financial statement audit opinion, and operated as service entities (excluding governmental, tribal, and healthcare organizations). These delimitations served multiple purposes. They reduced the study's scope to a manageable size and ensured the inclusion of organizations with all the required independent and dependent variable data points. Furthermore, they minimized the potential for including dissimilar nonprofit organizations and data irrelevant to the variables of interest.

However, these boundaries may restrict the applicability of the study's results to other U.S. nonprofit organizations. Specifically, the findings may not be generalized to organizations established immediately before the pandemic or those formed during or after 2021, the financial reporting year under review. This trade-off between focused analysis and broader applicability is a common challenge in research design, which highlighted the need for careful interpretation, and identified potential follow-up studies with different parameters.

## **Significance of the Study**

### **Contribution to Business Practice**

Nonprofit organizations are characterized by their labor-intensive nature, and heavy reliance on highly motivated staff who are deeply and personally committed to specific community services (Seiler & Bortnowska, 2024). However, these organizations often face significant challenges to maintain appropriate staffing levels to fulfill their mission. A variety of factors contribute to this constant struggle, which include (a) insufficient information technology, (b) competition from for-profit entities, (c) lower-than-average compensation and benefits, (d) limited opportunities for career advancement, and (e) lack of mentorship programs.

These challenges often force nonprofits to fill critical leadership roles, including those in accounting and oversight, with fewer or underqualified staff members (Banta et al., 2022; Bereznoi, 2014; Heifetz & Laurie, 1997). This staffing predicament may have profound implications for the organization's financial management. Inadequate internal controls over financial reporting and major programs may result in deficient financial statement reporting (Bakarich & Baranek, 2020; Bauer et al., 2020). The research highlighted the critical nature of these interconnections, as unfavorable audit opinions and identified internal control failures may result in a loss of funding and consequently jeopardize an organization's operational continuity.

This study offered significant contributions to the existing literature by exploring the intricate relationships between internal controls over financial reporting, their impact on independent audit report opinions, and the subsequent effects on financial

performance in nonprofit organizations (Weickgenannt et al., 2021; Yunus et al., 2022). The findings of this study were particularly relevant to U.S. nonprofit business leaders responsible for maintaining robust internal controls over financial reporting. By illuminating the potential consequences of inadequate internal controls and unfavorable audit outcomes, this research provided valuable insights that can shape strategic decision-making and risk management practices within the nonprofit sector.

### **Implications for Social Change**

This study contributed to the existing literature by addressing nonprofit financial performance. It may inform organizational best practices and methods to aim to enhance the long-term sustainability of organizations providing essential social services (Neely et al., 2023; Pfiffner et al., 2021; Santhosh & Baral, 2015). Nonprofit managers rely heavily on federal support and donor gifts to secure the resources necessary to address pressing social issues such as homelessness, hunger, and educational and health inequalities. The research findings may guide nonprofit managers in improving their organizational practices by elucidating the critical relationship between effective internal controls over financial reporting and financial statement audit opinions.

The implications of this study's findings extend beyond operational efficiency, potentially contributing to positive social change and the betterment of human conditions. By bolstering performance and long-term survival, the research may indirectly support organizations addressing critical social issues such as homelessness, poverty, food insecurity, educational interventions, employment readiness, and mental health crises (Katzenstein & Chrispin, 2011; Luke & Chu, 2013). This ripple effect underscored the

broader societal impact of robust financial management practices in the nonprofit sector and highlighted the interconnectedness of organizational performance and social welfare.

### **A Review of the Professional and Academic Literature**

This quantitative ex post facto correlational study investigated the relationship between internal controls, unfavorable financial statement audit opinions, and financial performance among U.S. nonprofits receiving federal support. Organizations that received \$750,000 or more in federal funding annually must file a Single Audit, which includes opinions on financial statements, internal controls over financial reporting, and internal controls of major programs (Peterson et al., 2021). The study measured financial performance using ROA, which evaluated the change in net fund balance (revenues less expenditures) relative to average total assets.

After a comprehensive literature review, the resource dependency theory emerged as this study's most suitable theoretical framework. This framework provided a lens through which to assess the connection between unfavorable audit assessments (including financial statement audit opinions, internal controls over financial reporting, and internal controls of major programs) and nonprofit financial performance. These connections were assessed using an ANOVA approach, which allowed for a nuanced examination of how internal control deficiencies and unfavorable audit opinions impacted a nonprofit's financial health and resource management capabilities.

In this section, I highlight the history and scholarly literature of resource dependency theory, the methods researchers used to apply it, the importance of recognizing how the theory was used to develop sound financial reporting and internal

controls in nonprofit organizations, and the variables used to measure financial performance in my study.

### **Literature Search Strategy**

To prepare for this quantitative ex post facto secondary data analysis study, I examined the existing literature and discovered a variety of resources related to my study. The resources used in my study include ProQuest, Academic Research Complete, Federal Audit Clearinghouse, GuideStar, Google Scholar, Sage Journals, Walden Library, ABI/Inform Collection, and Science Direct. I limited the timeframe to scholarly sources published between 2019 and the present. However, when evaluating the theoretical framework, resource dependency theory, for this study, I expanded the research to include the historical development of the theory predating 2019.

The databases and reference documents contained significant information about the theoretical framework and variables related to this study. To find appropriate resources, the search terms I used singly and in combination include: *internal controls*, *internal controls over financial reporting*, *internal control weakness(es)*, *internal control deficiencies*, *material weakness(es)*, *significant deficiencies*, *qualified audit opinion(s)*, *modified audit opinion(s)*, *adverse audit opinion(s)*, *disclaimer audit opinion(s)*, *unfavorable audit opinion(s)*, *financial statement audit*, *Single Audit*, *governmental funding*, *governmental support*, *nonprofit organization(s)*, *nonprofit entity(ies)*, *not-for-profit*, *nonprofit financial performance*, *nonprofit finances*, *nonprofit failure*, and *return on assets*.

For this study, I utilized data from the Federal Audit Clearinghouse, applying specific filters to create a focused dataset. The selection criteria included fiscal year 2021, Single Audit type, financial statement audit opinions of qualified, adverse, or disclaimer, and auditee location encompassing all U.S. states and the District of Columbia. To refine the dataset further, I excluded governmental, tribal, and healthcare entities. To ensure comparability among organizations and to better assess the relationships between variables, I narrowed the scope to include only organizations that received federal assistance ranging from \$750,000 to \$7,000,000.

In conducting this study, I engaged in an exhaustive review of the relevant literature, encompassing seminal research on the foundation theory, key studies on resource dependency theory, and current applications of resource dependency theory. Additionally, my review of the literature considered studies that considered similar variables under consideration. Although 145 resources were used in conducting my literature review, including seminal works, there were 104 peer-reviewed articles. To enhance validity and relevancy, I achieved the use of least 80% (84) of the sources from peer-reviewed articles published from 2019–2024.

### **Theoretical Framework: Resource Dependency Theory**

I chose the resource dependency theory to assess the connections between unfavorable audit assessments: (a) financial statement audit opinion, (b) internal controls over financial reporting, and (c) internal controls of major programs and nonprofit financial performance. Pfeffer and Salancik (1978) pioneered resource dependency theory, which posited that an organization's survival hinges on its capacity to acquire and

sustain essential resources from its environment. For nonprofit organizations, these external resources primarily consist of funding from governmental agencies and support from volunteers and donors. Resource dependency theory provided a robust lens through which to analyze how nonprofits' financial performance was influenced by its ability to manage resources effectively, particularly in the face of unfavorable audit assessments.

Nonprofit leaders are responsible for effectively generating external resources and efficiently utilizing resources to deliver mission-driven services. Ionescu and Haralambie (2023) emphasized that to achieve efficiency, nonprofit managers must maintain a keen awareness of their operating expenses by establishing goals and objectives and subsequently measuring performance against these targets. The production of timely, accurate, and reliable financial statements was paramount for nonprofit and for-profit organizations (Desai et al., 2022; Domotor, 2023; Pobrić, 2022). However, preparing financial statements that accurately reflected actual results necessitated sound internal controls over financial reporting. Furthermore, for recipients of federal funding, effective internal controls of programs were crucial to survival (Ding et al., 2021; Ji, 2019). These internal control mechanisms ensured the integrity and reliability of financial information, which was essential for maintaining stakeholder trust and organizational accountability.

### ***Resource Dependency Theory***

Pfeffer and Salancik (1978) are widely recognized as the seminal authors of resource dependency theory among scholars in the field. However, the foundations of this theory can be traced back to Emerson's (1962) work on power dynamics in relationships between entities. Emerson proposed a "power-dependent" model, asserting that Entity A

wields power over Entity B when A controls resources crucial to B that are not readily available elsewhere and that B's dependence on A is not absolute but contingent on B's willingness to accept this dynamic. Essentially, both entities could simultaneously hold power over each other, leading to interdependence.

The most significant contribution from Emerson (1962) was his insight that power relationships are not "zero-sum" games. Emerson's concept of interdependent relationships particularly applies to the dynamics between U.S. nonprofit organizations (Entity A) and the federal government (Entity B). This study demonstrated that nonprofit organizations rely heavily on federal funding, and at the same time, the federal government depends on these organizations to address social issues and provide services it cannot directly deliver. This nuanced understanding of power dynamics laid the groundwork for the more comprehensive resource dependency theory later developed by Pfeffer and Salancik (1978). However, resource dependency theory extends beyond this bilateral relationship, positing that a nonprofit engages with multiple parties, each involving some degree of dependency.

Nonprofit organizations typically maintain varying levels of dependence with a wide array of supporting entities. These supporters may include federal assistance programs, individual donors, public corporations, and private companies (Sproul et al., 2024). This multifaceted network of relationships underscores the complexity of resource dependency for nonprofits, highlighting that they operate within a one-to-many framework rather than a simple one-to-one relationship.

**Resource Availability.** Nonprofit organizations must secure adequate resources to deliver their services effectively. These resources encompass personnel, physical assets, and financing, which can be obtained through public and private contributions (Froelich, 1999). The recent global pandemic underscored organizations' vulnerability to supply chain disruptions, resulting in significantly reduced or wholly halted access to critical resources while simultaneously experiencing an increased demand for services.

Effective managers implement strategies to monitor and evaluate their supply chain continuously, ensuring that critical resources are obtained at the lowest cost while maintaining quality standards (Zimmer, 2018). Additionally, they establish contingency plans, including backup suppliers, to mitigate the impact of potential disruptions (Scholten et al., 2020). This proactive approach to resource management is crucial for nonprofit organizations to maintain operational resilience and continue fulfilling their missions, even in the face of unforeseen challenges.

Nonprofit organizations face significant obstacles in securing their two most crucial resources: human capital and financial support. These resources are essential for organizational sustainability but are increasingly difficult to obtain. The competition for skilled personnel has reached unprecedented levels, with nonprofits vying against both private and public sector employers that often offer more attractive compensation packages, including higher salaries, superior benefits, flexible work arrangements, professional development opportunities, and more apparent paths for career advancement (Cooke et al., 2019). The balance of power between opposing parties is crucial in resource allocation (Cestari et al., 2022; Cheng & Yang, 2019). These variations are

primarily influenced by broader economic conditions and the political landscape, creating additional concern for nonprofits.

**Management of Resources.** Effective resource management is a critical responsibility of organizational leaders in the nonprofit sector. This involves implementing resource collection, distribution, and allocation assessment strategies aligned with the organization's goals and objectives (Porter, 2008). Resource collection strategies focus on identifying potential sources of income, including private donations, public contributions, and government funding. Distribution strategies are crafted to optimize service delivery to reach the maximum number of beneficiaries.

The assessment of resource allocation evaluates both the effectiveness of resource acquisition (considering factors such as quantity, diversity, and predictability) and the efficiency of distribution (measuring the number of beneficiaries served, the amount of resources distributed, and overall productivity). The overarching goal is to ensure the organization's long-term sustainability (Carlsson-Wall et al., 2015). In practice, nonprofits' achievement of resource management is mixed.

**Nonprofit Organizations' Exhibit Resource Dependency.** Nonprofit organizations heavily rely on external funding to sustain their daily operations. While some nonprofits may generate minimal revenue through service provision (e.g., YMCA charging for gym memberships or childcare services), the vast majority depend entirely on discretionary contributions from donors and government agencies. This financial structure necessitates that nonprofit managers and boards thoroughly understand the conditions attached to resource provision and maintain transparency in their operations

(Beasley et al., 2023; Bernstein, 2014; Campbell, 2022). Nonprofits that lack appropriate tracking mechanisms risk losing funding from many vital sources.

Funding given to nonprofits often comes with specific stipulations. Donors may restrict their contributions to specific services or recipient groups, while government agencies might require financial attestations or audits as proof of appropriate expenditure (Lauck & Bhattacharjee, 2023). When unauthorized spending occurs, nonprofits may be obligated to repay funds, lose the ability to bid on future funding opportunities, and even jeopardize their long-term survival (Carniel & Lee, 2023). The consequences of failing to adhere to these spending restrictions or to produce the required documentation can be severe.

### **Evaluation of Resource Dependency Theory and Financial Sustainability**

Organizational leaders are responsible for managing resources effectively and efficiently to ensure financial stability. The resource dependency theory offered a valuable framework for evaluating nonprofit managerial decision-making to enhance financial performance, transparency, and long-term sustainability (Erickson, 2021; Guercini & Freeman, 2023). Resource dependency theory provided insights into how organizations identify and acquire resources while elucidating the advantages and inherent risks associated with resource dependence. This theoretical lens allowed for a comprehensive analysis of the strategies employed by nonprofit organizations in their resource management practices, offering a deeper understanding of the complex dynamics involved in securing and allocating critical resources.

Nonprofit organizations heavily rely on external resources, including government agencies and private and public donors. A proven track record of success demonstrated through longevity, resource distribution, and compliance audits can lead to more predictable future receipts for these organizations (Hoffman et al., 2021). However, external factors such as economic fluctuations, pandemic events, technological shifts, or reductions in government funding can increase the risk of nonprofit failure (Darwiesh et al., 2022). To mitigate these risks and ensure sustainability, nonprofit managers must develop and implement strategies that expand resource availability and enhance the potential for additional and continued revenue streams (Manivannan et al., 2023). Without consistent financial inflows, nonprofits face rapid dissolution, potentially creating gaps in social service programs, leading to human suffering. Resource dependency theory suggests proper planning may prevent such outcomes, emphasizing the importance of strategic resource management in the nonprofit sector.

### **Alternate Theories to the Theoretical Framework**

Alternatively, two prominent governance theories featured in nonprofit research were the stewardship and agency theories. These theories focus on organizational accountability (Manthei et al., 2023; Northouse, 2022; Schillemans & Bjurstrøm, 2020). The agency theory, introduced in 1975 by Mitnick (2021), addressed the paradoxical relationship between agent managers and the principal organizations they serve. This theory highlighted the inherent conflict between acting in the organization's best interest and pursuing personal gains, emphasizing the need for effective management oversight to ensure trustworthy behavior that benefits the organization and the leader.

In contrast, the stewardship theory, proposed by Davis et al. in 1997, challenged the agency theory's assumptions. It posited that managers, executives, and staff, as organizational stewards, should collaborate with the governing board to achieve altruistic goals while prioritizing ethical, moral, and trustworthy decision-making over personal ambitions (Simpkins et al., 2021). This perspective emphasized the potential for alignment between individual and organizational interests in nonprofit governance.

Recent research has expanded the theoretical framework for studying nonprofit organizations, incorporating stakeholder, benefits, and complexity theories. These theories examined the relationship between revenues and management behavior (García-Ramos & Díaz, 2021; Liu, 2023). The benefits theory, proposed by Weisbrod in 1977, suggested that nonprofit organizations complement private and public sectors by offering alternative solutions to problems that governments cannot address directly, whereas Freeman's (1984) stakeholder theory argued that organizations should consider input from all stakeholders in their management decisions, including customers, suppliers, employees, shareholders, and the broader community so that by addressing the concerns of a broad group, the organization was more likely to achieve long-term sustainability (Löhde et al., 2021; Mansell, 2013; Zhang, 2011). These complementary theories provided valuable perspectives for understanding the complex dynamics of nonprofit management and its role in society.

A review of literature also examined the correlation between the independent variables and the dependent variables. Petrovits et al. (2011) studied the complexity of funding source requirements by analyzing the relationship of independent variables (a)

nonprofit size, (b) growth, (c) going concern risk, and (d) audit firm, and its correlation with the dependent variable, internal control infraction. The results indicated that growth, going concern risk and audit firm were significant predictors of internal control infraction ( $R^2 = .36$ ,  $n = 44,353$ ,  $p < .01$ ). However, nonprofit size was not a predictor of internal control infraction in this study. Similarly, Arshad et al. (2013) conducted multiple linear regression to analyze nonprofit size as a predictor of internal control failures ( $n = 234$ ). The results indicated nonprofit size does not have a significantly positive relationship with internal control infraction ( $\beta = 0.039$ ,  $p < .001$ ).

Additionally, in an earlier study by Keating et al. (2005), the chi-square tests concluded there was an association between smaller organizations and a significantly higher level of internal control failure, and that firm size was a significant predictor of internal control infraction,  $\chi^2(1, n = 506) = 30.4$ ,  $p < .01$ . Finally, Carlslaw et al. (2012) concluded smaller (i.e., less than \$1M in revenue) and high-risk nonprofits (i.e., having multiple federal programs and complex requirements) tend to receive mixed opinions, such as an unmodified financial statement opinion and a modified opinion on internal controls over financial reporting or programs. The mixed findings from these studies by Petrovits et al. (2011), Arshad et al. (2013), and Keating et al. over the past 20 years was a motivating factor for conducting a follow-up study and specifically designing research questions that further explored the correlation between like predictor variables and nonprofit performance.

## **Independent Variables**

### ***Internal Controls Over Financial Reporting***

Internal controls over financial reporting encompass a comprehensive set of processes implemented by an organization's board of directors, management, and staff. These controls are designed to provide reasonable assurance that financial statements are prepared in accordance with applicable standards, more specifically GAAP. Although financial reporting is a primary focus, internal controls also address operational efficiency and compliance with laws and regulations.

The Committee of Sponsoring Organizations of the Treadway Commission authorized an integrated framework for designing and evaluating internal controls in 1992. Over the past four decades, this framework has undergone several updates to reflect technological advancements, evolving business environments, and new regulatory requirements. The resulting integrated internal control framework is a robust tool for organizations to ensure compliance with external financial reporting regulations and maintain the integrity of their financial processes.

Organizations receiving federal funding exceeding \$750,000 annually must undergo a Single Audit conducted by an independent certified public accountant. This audit must include an evaluation of the organization's internal controls over financial reporting (Kelly & Tan, 2017; Qiubo & Yuju, 2020). The assessment outcomes are categorized as (a) no deficiencies, (b) significant deficiencies, and (c) material weaknesses.

A material weakness indicates a flaw in the organization's control system, creating a reasonable possibility of uncorrected or undetected material misstatements in financial statements. While less severe, a significant deficiency, individually or in combination with other deficiencies, represents an internal control issue important enough to warrant attention from those overseeing financial reporting. Organizations may simultaneously have significant deficiencies and material weaknesses (Kartikasari et al., 2022; Radu & Segalin Zanella, 2023). The desired result is to have no deficiencies.

The internal control assessment results are reported to the federal government through the Single Audit. Identified deficiencies, whether significant or material, require a corrective action plan and follow-up testing in subsequent years to monitor persistence. Nonprofit organizations with recurring internal control deficiencies risk loss of federal and private donor funding (Lamothe & Shen, 2023; Mayer, 2023). Nonprofit managers must design, implement, and monitor their internal control framework to avoid unfavorable audit findings.

### ***Internal Controls of Major Programs***

Internal controls of major programs share similarities with those over financial reporting but focus specifically on controls related to significant federally funded programs within an organization. Organizations receiving federal funding exceeding \$750,000 annually must undergo a Single Audit conducted by an independent certified public accountant, including an internal controls assessment for these major programs (Kelly & Tan, 2017; Qiubo & Yuju, 2020). The assessment outcomes are (a) no deficiencies – the desired result, (b) significant deficiencies, and (c) material weaknesses.

As previously noted, an organization may simultaneously have significant deficiencies and material weaknesses in its internal controls of major programs (Kartikasari et al., 2022; Radu & Segalin Zanella, 2023). The results of this assessment are also reported to the federal government through the Single Audit. Any identified deficiencies, whether significant or material, necessitate a corrective action plan and follow-up testing in subsequent years to monitor recurrence. Nonprofit organizations with recurring deficiencies in internal controls of major programs face the risk of losing federal funding in future years (Lamothe & Shen, 2023; Mayer, 2023). Managers need robust systemwide internal controls and program-specific processes and procedures to protect future federal funding.

### ***Financial Statement Audit Opinions***

Financial statement audit opinions, issued by independent certified public accountants, evaluate the fairness of financial statements and their compliance with GAAP—the standard rules for recording transactions and reporting operational results for U.S. nongovernmental entities. Financial statements that adhere to GAAP receive a “clean,” unmodified, or unqualified audit opinion. However, if financial statements contain material misstatements or fail to comply with GAAP standards, auditors may issue a qualified, adverse, or disclaimer of opinion (Cowle & Rowe, 2022; Gilles et al., 2021; Zaman & Holm, 2012). Nonprofit managers must plan, implement, and monitor their financial reporting systems to achieve an unmodified opinion.

Nonprofit organizations receiving over \$750,000 in annual federal funding must undergo an independent financial statement audit known as the “Single Audit.” The

resulting audit report must be submitted to the government through the Federal Audit Clearinghouse (D'Amico, 2023). Unfavorable audit opinions can significantly impact an organization's eligibility for federal funding in subsequent years, potentially jeopardizing its financial stability and operational capacity.

## **Dependent Variable**

### ***Financial Performance***

Financial performance in organizations can be evaluated through various financial ratios (Zarei et al., 2020). Among these, ROA has emerged as a standard metric for assessing organizational financial performance. ROA is calculated by comparing the net change in fund balance (the difference between revenues and expenditures) to the total average assets. ROA is beneficial as it measures how effectively an organization utilized its assets and resources to generate a positive change in net assets (Kang, 2019). For nonprofit organizations, demonstrating efficient use of resources, including those provided by federal funding, can serve as compelling evidence of positive financial performance and potentially enhance an organization's prospects for securing future federal funding.

## **Transition**

The nonprofit sector faces significant challenges, with approximately 30% of organizations failing within their first decade of operation (National Center on Charitable Statistics, 2023). This high failure rate has far-reaching consequences, disrupting the economy through increased unemployment and the loss of crucial services addressing major social issues. From a financial standpoint, nonprofit organizational failure could

potentially result in losing \$2 trillion in annual spending (National Council of Nonprofits, 2023). A contributing factor to this issue is that some U.S. nonprofit business leaders fail to implement effective internal controls over financial reporting and major programs. This oversight can lead to unfavorable financial statement audit opinions and poor financial performance (Stewart et al., 2021). Such shortcomings jeopardize the organization's financial stability and ability to secure future funding.

This study primarily targeted U.S. nonprofit business leaders responsible for internal controls over financial reporting and major programs. It focused on organizations heavily reliant on federal support and donor gifts for operational sustainability, specifically those receiving more than \$750,000 annually from federal sources subject to the Single Audit Act. The research employed a correlational quantitative ex post facto secondary data analysis approach. Its primary objective is to investigate potential differences in the financial performance of U.S. nonprofit organizations based on three key factors: (a) financial statement audit opinion, (b) internal controls over financial reporting, and (c) internal controls of major programs. By examining these relationships, the study aims to provide insights into how these auditing outcomes and control factors may influence nonprofit organizations' financial health and performance. This research could offer valuable guidance for nonprofit leaders to enhance their financial management practices and maintain compliance with federal regulations.

My research addressed a gap in the current literature by conducting a quantitative study to examine the difference between the financial performance of U.S. nonprofits receiving federal assistance over \$750,000 annually and financial statement audit

opinions and assessments of internal controls. In the next section, I address the research context, the data collection process, and the methodology used to ensure the study's findings are accurate, reliable, and valid internally and externally.

## Section 2: The Project

This correlational quantitative ex post facto research project evaluated the relationship between internal controls, unfavorable financial statement audit opinions, and financial performance among U.S. nonprofits receiving federal support over \$750,000 annually. Before collecting the data for this study, I considered my potential bias in the research, the data sources, the research design, including population and sampling, the data collection and analysis process, and the steps necessary to meet internal and external validity standards. In this section, I outline the research, data gathering and analysis, and the methods I used to confirm the reliability of the study data.

### **Purpose Statement**

This correlational quantitative ex post facto secondary data analysis study examined if differences existed in the financial performance of U.S. nonprofit organizations based on financial statement audit opinions, internal controls over financial reporting, and internal controls of major programs. Based on unfavorable financial statement audit opinions (qualified, adverse, disclaimer), financial performance was measured as ROA. Internal controls were categorized as no deficiency, a significant deficiency, or a material weakness.

### **Role of the Researcher**

In performing an ex post facto secondary data analysis study, this researcher approached research planning, data collection, and interpretations based on secondary rather than primary data. There are distinct advantages of using secondary data, including developing research questions, hypotheses, population sensitivities, and efficiencies in

data collection and analysis (Dunn et al., 2015). Since my research used historical data from nonprofit organizations rather than human subjects, I ensured adherence to the guidelines of *The Belmont Report* (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979), which called for informed, fair and ethical treatment of human subjects participating in a research study. However, there are notable disadvantages this researcher must be aware of, such as (a) bias in adjusting data collection and analysis methods to achieve statistically significant results and (b) using past data to predict study findings.

In a quantitative research study examining secondary data, the researcher should identify and select data tangent to the research topic. Before I evaluated the differences in nonprofit financial performance, financial statement audit opinions, and deficiencies in internal controls, I developed the research questions and hypotheses examined in this study. In the live study, collected the Single Audit data objectively and without preconceived notions from relevant historical studies that may have otherwise influenced the results of my study.

The role of the researcher includes selecting methods that ensure the reliability and validity of the data (Verma & Abdel-Salam, 2019). The researcher should establish a process to confirm that the study data is accurate, complete, and appropriate to address the questions and hypotheses and that the dataset does not exhibit errors or omissions. In completing this research study, I evaluated and processed the data to confirm that it is accurate, complete, and appropriate and provided valuable information to the decision-

making process. These characteristics demonstrate validity and reliability from which I observed relationships between the variables in the study.

My professional background in nonprofit organizations and governmental entities subject to the Single Audit provided a basis to analyze and interpret the information correctly and develop reasonable conclusions from this research. I am a certified public accountant and certified fraud examiner with experience acting as chief financial officer for nonprofit and governmental agencies receiving federal funding, and I have also acted as an auditor and accounting educator. In these roles, I have been responsible for financial reporting and internal controls over financial reporting as the auditee, and as the auditor/forensic accountant/fraud examiner. As the auditee, I have certified Single Audits in the Federal Audit Clearinghouse between 2014 and 2025. Drawing on this experience and my expertise in accounting, I selected variables from the Single Audit related to nonprofit financial performance.

Researchers must also adhere to ethical standards in pursuing essential and relevant issues and selecting research methods to achieve the study's objectives (Zyphur & Pierides, 2017). While an ethical framework applies to human subjects, because my study used secondary data from a public data set, the ethical framework, challenges, and compliance measures do not apply to my research. Nonprofit organizations are required to provide copies of the Single Audit as requested. These reports are also available publicly for organizations receiving significant federal funding. Additional data if needed, such as total assets, for nonprofits may be obtained from GuideStar.

## **Participants**

In this correlational, quantitative ex post facto secondary data analysis study, I did not use primary data or data from human beings. This project used secondary data previously collected (e.g., archival) and publicly available from a national dataset. The Single Audit data I collected in this study includes financial statement audit opinions, assessments of internal controls, and financial performance metrics, including ROA. Single Audit data available through the Federal Audit Clearinghouse is provided by auditors who act as independent certified public accountants. Using this dataset provided increased efficiency in the collection and higher quality, more reliable, and valid data.

## **Research Method and Design**

### **Research Method**

In the preliminary stage of study planning, a researcher selects the type of study to be conducted: qualitative, quantitative, or mixed method (Yin, 2018). Quantitative studies are appropriate for testing hypotheses that assess the effect of independent (predictor) variables on dependent (control) variables (Bougie & Sekaran, 2019). Quantitative data is measured numerically and subsequently analyzed using statistical and graphical techniques that can be used to draw inferences from the sample and generalize those findings to the greater population (Saunders et al., 2019).

In this research study, I used numerical data to test the hypotheses and examine if differences existed in and between nonprofit financial performance (dependent variable), financial statement audit opinions, and internal control deficiencies (independent variables). This numerical data was then used for statistical analysis and graphical

techniques to draw inferences from the sample ( $N = 158$ ). Based on these results, generalizations were applied to the population of U.S. nonprofit organizations.

Researchers in qualitative studies assess how individuals perceive their environment and daily life experiences (Yin, 2018). They typically require the researcher to collect active data, including categorical and non-numerical data (Rose & Johnson, 2020). Since qualitative studies require direct researcher input, there is an increased potential for bias and impaired objectivity. My study of secondary data research used numerical data and did not measure individuals' perceptions; therefore, a qualitative study was not appropriate.

A mixed-method approach requires the researcher to integrate qualitative and quantitative methods (Saunders et al., 2019). This approach benefits researchers by allowing them to evaluate qualitative (categorical, non-numerical) and quantitative (numerical) data while minimizing the limitations of a single study. However, my study of secondary data used numerical data and did not measure individuals' perceptions, so a mixed-method study was not appropriate.

### **Research Design**

Quantitative studies may use one of four research designs to examine the relationship between independent and dependent variables (Bougie & Sekaran, 2019). The four research designs include descriptive, correlational, quasi-experimental, and experimental. Research using a descriptive design is appropriate when evaluating experiences at specific dates and times. The descriptive design is best for acquiring information about a phenomenon in a unique setting without compromising the variables.

Because I did not measure descriptive data points in my secondary data analysis study, it was not appropriate to use a descriptive design.

Researchers use experimental designs to examine whether a cause-and-effect relationship exists between variables (Saunders et al., 2019). They also use quasi-experimental designs to explore causal relationships (Bleske-Rechek et al., 2015; Yin, 2018). My secondary data analysis of Single Audit data points examined whether differences and/or correlations existed rather than cause-and-effect. As a result, it was not appropriate for my study to use an experimental or quasi-experimental design.

In my study, I researched the relationship and differences in and between three independent variables (financial statement audit opinion, internal controls over financial reporting, and internal controls of major programs) and one dependent variable (financial performance measured as ROA). Researchers use correlational tests as practical statistical techniques to examine the interdependencies between variables. The correlation coefficient measures the degree of linearity between the variables. My secondary data analysis study used the Federal Audit Clearinghouse Single Audit database to obtain variables and test the relationship between sets of variables. Because the research questions I developed address the relationship between variables, the correlational design was most appropriate for my study.

### **Population and Sampling**

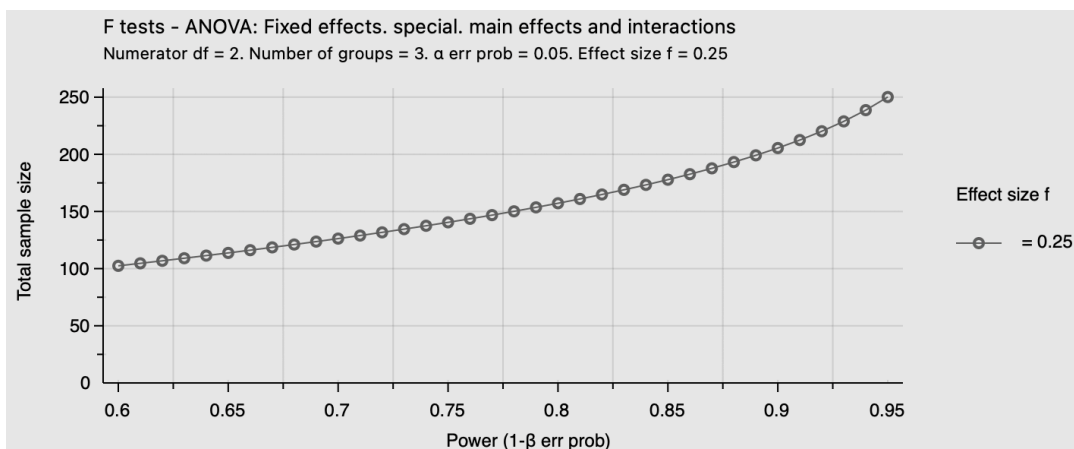
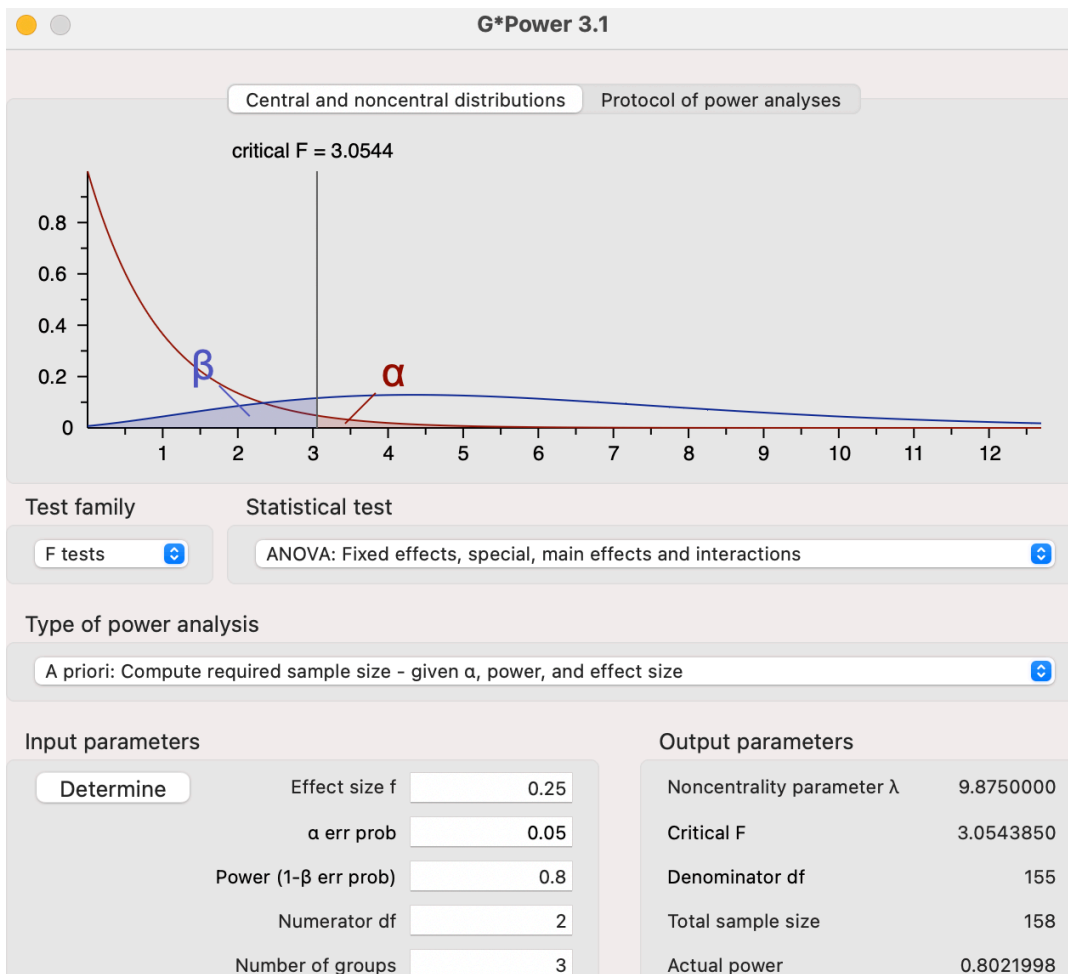
The Federal Audit Clearinghouse contains over 45,000 Single Audits for the 2021 fiscal year. Single Audits are required for all entities receiving more than \$750,000 annually in federal assistance, including nonprofits, governmental agencies, and tribal

units. Purposeful sampling was used to identify U.S. nonprofit organizations for further consideration in the study to exclude governmental agencies, tribal units, and medical-nonprofit organizations, and then narrowed the search to eliminate entities receiving more than \$7,000,000 annually. The target population of 186 nonprofits aligns with the research questions because the population includes nonprofit organizations that may exhibit the relationships between independent variables (financial statement audit opinion, internal controls assessments) and the dependent variable (financial performance).

Researchers use sampling techniques to conduct a study efficiently. They reduce the costs associated with data collection and the time required to analyze the data using a small subset of the larger population (Saunders et al., 2019). Purposeful sampling involves intentionally selecting organizations from the greater population based on business type, location, or a financial metric (federal award amount, total assets, etc.). After employing purposeful sampling and the desired G\*Power significance, ( $F$  test, ANOVA: fixed effects, special, main effects and interactions, effect size = .25, probability = .05, power = .80, numerator  $df = 2$ , number of groups = 3), I identified 158 organizations to be included in the study (see Figure 2).

Figure 2

*G\*Power Output to Determine Sample Size and Power Significance*



### **Ethical Research**

This study was limited to the nonprofit organizations that filed a 2021 Single Audit as of August 1, 2025, the time at which the Institutional Review Board (IRB) formally approved this research study (IRB Approval No. 08-01-25-1190251). In recent years, there has been a marked interest in the field of research ethics (Armond et al., 2021; Ellestad & Winton, 2023; Frechtling & Boo, 2012). Consent to use private data has been of utmost concern for researchers to ensure that individually identifiable information remains safe, secure, and anonymous. In this study, nonprofit organizational data is publicly available through a federal database rather than individually identifiable data. Moreover, these organizations voluntarily consent to distributing their data in a publicly available online database. As such, their consent to participate in this study was not required. However, organizations remain entitled to the protections afforded participants in the conduct of ethical research.

To ensure unbiased results, I assigned each nonprofit organization a file number equal to its Federal Employer Identification Number (FEIN) when I conducted this study. I then masked the entity's name when analyzing the data to eliminate the potential for biased reporting. I used SPSS data collection and analysis software to capture data for each nonprofit and then generated descriptive data analytics and graphs to develop inferences (Green & Salkind, 2017).

### **Data Collection Instruments**

A data collection instrument is a software, algorithm, or tool designed to gather, measure, and analyze information related to a specific research topic or study (U.S.

Census Bureau, 2009). These instruments are essential for collecting data efficiently and accurately from various sources, including surveys, interviews, observations, and electronic systems (O'Donohue, 2017). Data collection instruments help researchers and organizations consolidate information in a single place, save time and money, ensure accuracy, and use data more effectively. The choice of data collection instruments depends on the research methodology, the type of data needed, and the specific context of the study.

For this research, I used high-quality secondary data drawn from the 2021 Single Audit reports submitted to the Federal Audit Clearinghouse, accessible via the U.S. Census Bureau's electronic database (<https://www.fac.gov>). The U.S. Census Bureau is a department of the Federal Statistical System responsible for producing accurate data about the U.S. economy and its constituents. The necessary dataset was extracted from Federal Audit Clearinghouse system and subsequently confirmed through visual inspection of variables of interest within these Single Audit reports, and as needed from GuideStar for prior year total assets.

Research variables can be measured on a scale from least to most informative; from nominal/categorical, ordinal, interval to ratio (Bougie & Sekaran, 2019). I used categorical and ratio variables in this study to measure independent and dependent criteria. An entity's financial statement audit opinion, an independent variable, was measured on a categorical scale as qualified, adverse, or disclaimer. An entity's assessment of internal controls over financial reporting, as well as an entity's assessment of internal controls of major programs, as independent variables were measured

separately on a categorical scale, with no deficiencies, some significant deficiencies, or some material weaknesses. An entity's financial performance, the dependent variable, was measured as returns on assets and calculated on a ratio scale. These data points were extracted from a purposeful sampling of U.S. nonprofit organizations in 2021, excluding governmental agencies, tribal units, and healthcare entities. Walden's IRB approved this quantitative, ex post facto secondary data analysis on August 1, 2025.

### **Data Collection Technique**

The validity of a study's findings depends on the data collection techniques researchers use to maintain the accuracy and integrity of the underlying information (Olmsted, 2024). There are substantial benefits to using secondary data, including the accessibility of a large-scale national dataset and the ease of collecting data that individual researchers would find difficult to gather independently. These advantages allow the researcher to spend more time engaged in data analysis, interpretation of data, and development of findings to answer new questions (Kelly et al., 2024). This study used Single Audit data, verified by independent auditors, from approximately 158 domestic nonprofit organizations receiving between \$750K and \$7M in federal funding in fiscal year 2021, as well as Tax Form 990 data, available on GuideStar, as needed to confirm prior year total assets.

### **Data Collection Issues**

When I collected and evaluated the data, I encountered issues such as incomplete data or errors in the database reporting process. From a research standpoint, scholars strive for 100% accuracy. However, data errors do happen (Chai, 2020). To minimize

data errors, researchers that examine secondary data sources strive to use high-quality, verified data (Wang et al., 2023). Data collected from the Federal Audit Clearinghouse has been prepared by independent certified public accountants, attested to by the auditee organization, and finally accepted by the General Services Office of the U.S. government following a review. Multiple parties have verified Single Audit information, which provides high-quality data.

In this study, certain inconsistencies were identified between the Single Audit database generated by the Federal Audit Clearinghouse and the audit opinion verified through visual inspection of corresponding Single Audit reports. Entities that demonstrated such inconsistencies were excluded from the sample selection. Additionally, some Single Audit reports did not include prior-year financial data. When the missing data point—total assets—was also unavailable through public inspection of Form 990 filings on GuideStar, the entity was omitted from analysis. Finally, several entities received disclaimer financial statement audit opinions, and their corresponding Single Audits reports lacked sufficient financial data for inclusion in the study.

### **Data Analysis**

A researcher must consider the method of data analysis that is most appropriate for the study in consideration of the objectives and variables of interest. Therefore, prior to engaging in data analysis of the raw quantitative data, I evaluated the possible methods and techniques available to me that would yield the highest research quality. According to Saunders et al. (2019), when conducting data analysis, researchers should follow a systematic process that includes (a) stating clear theoretical hypotheses, (b) assessing

psychometric properties, (c) plotting and analyzing variable distributions, (d) preparing scatterplots to assess the fitness of hypotheses, (e) investigating outliers, (f) interpreting parameters and effect size, (g) determining statistical significance, and (h) replicating the study to confirm findings.

After developing the seven hypotheses for this study, I gathered the secondary numerical data from a sufficient sample of recent Single Audits. This allowed me to use data analysis techniques that identify trends and outliers and infer generalizations about the population to meet research quality standards. ANOVA is a highly accepted analytical method among researchers that tests the relationship of multiple independent variables and one dependent variable (Adamson & Prion, 2014). In this study, I investigated the relationship between financial performance as a dependent variable and (a) financial statement audit opinions, (b) deficiencies in internal controls over financial reporting, and/or (c) deficiencies in internal controls of major programs.

### **Research Questions and Hypotheses**

RQ1: What differences in the financial performance of U.S. nonprofit organizations, if any, exist based on financial statement audit opinion (qualified vs. adverse vs. disclaimer)?

$H_0$ 1: There are no differences in the financial performance of U.S. nonprofit organizations based on financial statement audit opinion.

$H_a$ 1: There are significant differences in the financial performance of U.S. nonprofit organizations based on financial statement audit opinion.

RQ2: What differences in the financial performance of U.S. nonprofit organizations, if any, exist based on internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses)?

$H_02$ : There are no differences in the financial performance of U.S. nonprofit organizations based on internal controls over financial reporting.

$H_{a2}$ : There are significant differences in the financial performance of U.S. nonprofit organizations based on internal controls over financial reporting.

RQ3: What differences in financial the performance of U.S. nonprofit organizations, if any, exist based on internal controls of major programs (no deficiencies vs. significant. deficiencies vs. material weaknesses)?

$H_03$ : There are no differences in the financial performance of U.S. nonprofit organizations based on internal controls of major programs.

$H_{a3}$ : There are significant differences in the financial performance of U.S. nonprofit organizations based on internal controls of major programs.

RQ4: What interaction, if any, occurs between the financial statement audit opinions (qualified vs. adverse vs. disclaimer), internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses), and internal controls of major programs (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations?

$H_04$ : No interaction occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer), internal controls over financial reporting (no

deficiencies vs. significant deficiencies vs. material weaknesses), and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

*H<sub>a4</sub>*: There is an interaction that occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer), internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses), and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

RQ5: What interaction, if any, occurs between the financial statement audit opinions (qualified vs. adverse vs. disclaimer) and internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations?

*H<sub>05</sub>*: No interaction occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations.

*H<sub>a5</sub>*: There is an interaction that occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations.

RQ6: What interaction, if any, occurs between the financial statement audit opinions (qualified vs. adverse vs. disclaimer) and internal controls of major programs

(no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations?

*H<sub>0</sub>6*: No interaction occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

*H<sub>a</sub>6*: There is an interaction that occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

RQ7: What interaction, if any, occurs between internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) and internal controls of major programs (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations?

*H<sub>0</sub>7*: No interaction occurs between the internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) and the internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

*H<sub>a</sub>7*: There is an interaction that occurs between internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations.

## **Methods of Analysis**

To ensure validity, reliability, and research quality, a researcher must choose the appropriate statistical method (Mishra et al., 2019). Additionally, the researcher must choose the statistical test appropriate for the data type, considering the hypotheses and the measurements to be captured. Statistical tests include nonparametric tests for categorical data that lack normal distribution and parametric tests for numerical data that adhere to normal distribution (Saunders et al., 2019). In this study, I used categorical and ratio parametric data as independent and dependent variables and deployed three-way ANOVA to assess the relationship and differences between the variables.

The ANOVA procedure provided regression analysis and analysis of variance for one dependent variables by one or more factor (i.e., predictor, independent) variables (Adamson & Prion, 2014). The factor variables divide the population into groups. Using a general linear model procedure, a researcher can test null hypotheses about the effects of factor variables on the means of various groupings of a joint distribution of dependent variables. The researcher can also investigate interactions between factors and the effects of individual factors (Dawson, 2014).

In this study, I have cleaned and refined the data by downloading the Single Audit clearinghouse dataset directly from the Federal Audit Clearinghouse and then filtering the results to examine only audit reports for 2021 with a qualified, adverse or disclaimer financial statement audit opinion. I further refined the population by eliminating governmental, tribal and healthcare entities. To enhance comparability of nonprofits for size, I limited the population to entities that received between \$750,000 and \$7,00,000 in

federal support in 2021. The final dataset included 186 entities for analysis in SPSS and used entity EIN to mask organizational identity. The SPSS independent categorical variables included internal control deficiencies (significant, material or none) and financial statement audit opinion (qualified, adverse or disclaimers), which were examined relative to the dependent ratio variable, financial performance.

### **Inferential Results Interpretation**

A researcher must evaluate the accuracy of the collected data, ensure it represents the chosen sample, and draw inferences connecting the sample to the study's general population. Researchers use inferential statistics to generalize sample data, drawing on calculated degrees of certainty, subject to the quality of the data (Sheard, 2018). Poor quality data is evident when there is missing data, invalid data measurement, or errors in researcher interpretation that impact sample reliability. High-quality data is critical in conducting credible research studies and drawing inferences from the data and tests (Olmsted, 2024). By using manual and statistical methods to evaluate sample data, a researcher can evaluate how well inferences can be derived from the sample population and applied to the general study's population.

Statistical analysis relies on three key indicators,  $p$  values, effect sizes, and confidence intervals (CI) to interpret results accurately. The  $p$  value quantifies the probability of observing results as extremes as those obtained if the null hypothesis were true, indicating there is no difference between groups. A small  $p$  value (e.g.,  $<.05$ ) suggests the data are unlikely under the null hypothesis, whereas a large  $p$  value (e.g., greater than  $.05$ ) indicates that the observed results are not statistically significant (e.g.,

there is not sufficient evidence to reject the null hypothesis as the results could have happened by chance.) However,  $p$  values do not indicate the size or importance of an effect, and they are sensitive to sample size.

Effect size measures the magnitude of the relationship between variables or differences between groups, independent of sample size, to address practical significance. An effect size of 0.25 indicates a small-to-medium effect that can detect noticeable differences between groups. The larger the effect size, the more substantial the impact or difference. Effect size helps researchers understand the practical significance of their findings beyond merely being statistically relevant.

Confidence intervals provide a range of plausible values for the true effect size. They reveal the precision of estimates and aid in understanding  $p$  values. Researchers historically and consistently set the confidence interval at 95%, which represents the numerical range, which upon repeated sampling, will contain the true value 95% of the time. Using the 95% confidence interval is an unbiased, practical and simple way to establish a cutoff for rejecting the null hypothesis.

In this sample study of 158 nonprofits, I used three-way ANOVA to analyze the relationship between the predictor variables and the dependent variable. The three-way ANOVA is appropriate when researchers want to understand whether the mean differences among groups and the dependent variable has happened by chance. Although the multivariate analysis of variance (MANOVA) extends this analysis when two or more dependent variables exist (Adamson & Prion, 2014), because this study has only one

dependent ratio variable, financial performance measured as ROA, deploying the three-ANOVA was best.

A three-way ANOVA requires six key assumptions to ensure the validity of its results: (a) normality, (b) homoscedasticity, (c) independence of observation, (d) no significant outliers, (e) continuous dependent variable and (f) categorical independent variables (Emerson, 2022). Violating these assumptions can affect the reliability of the ANOVA results, potentially increasing the risk of Type I or Type II errors (Hoekstra et al., 2012). Accordingly, before engaging in any statistical analysis of my research data, I analyzed the assumptions in greater detail to ensure validity and to reduce the possibility of violating the assumptions thereby impacting the reliability of the findings.

In my review of the assumptions in Section 3, I conducted testing to confirm that (a) the dependent variable was continuous (it was measured at the interval or ratio level); (b) each of the three independent variables were categorical with at least two independent groups; (c) the observations were independent (meaning there is no relationship between observations within or across groups); (d) the data did not contain significant outliers, (e) the dependent variable was approximately normally distributed for each combination of the groups of the three independent variables; and, (f) there was homogeneity of variances across these groups.

Statistical testing was performed using  $F$  test, ANOVA: fixed effects, special, main effects and interactions. In this study, I used the three-way ANOVA to generate descriptive statistics alongside inferential output and regression modeling. Although providing identical results for the same model, the ANOVA partitioned the variance into

components attributed to each term while the regression estimated coefficients for these terms. A three-way ANOVA was expressed as a regression model to represent the main effects of three categorical factors (A = opinions on internal controls over financial reporting, B = opinions on financial statements, and C = opinions on internal controls of programs) and their interactions. The regression formula was:

$$Y = \mu + \alpha_i + \beta_j + \gamma_k + (\alpha\beta)^{ij} + (\alpha\gamma)^{ik} + (\beta\gamma)^{jk} + (\alpha\beta\gamma)^{ijk} + \varepsilon$$

$\mu$ : Overall mean response

$\alpha_i, \beta_j, \gamma_k$ : Main effects of factors A, B, and C at levels  $i, j, k$

$(\alpha\beta)^{ij}, (\alpha\gamma)^{ik}, (\beta\gamma)^{jk}$ : Two-way interaction effects

$(\alpha\beta\gamma)^{ijk}$ : Three-way interaction effect

$\varepsilon$ : Error term (assumed normally distributed with constant variance)

The  $F$  test ANOVA is designed to test the null hypothesis that all group means are equal, while the fixed effects approach assumes that the levels of the independent variables were intentionally chosen by the researcher rather than randomly selected. Main effects refer to the isolated impact of each independent variable on the dependent variable, without considering the influence of other independent variables. Interactions, on the other hand, capture the combined effect of two or more independent variables on the outcome.

The testing of 158 sample nonprofits used an effect size of .25, a confidence interval (i.e., significance level, probability) of .05, and a statistical power of .80. Power ( $p$  values) quantify the probability of observing results as extremes as those obtained if the null hypothesis were true, indicating there is no difference between groups. A small  $p$

value (e.g.,  $< .05$ ) suggests the data are unlikely under the null hypothesis, while a large  $p$  value (e.g.,  $> .05$ ) indicates that the observed results are not statistically significant (e.g., there is insufficient evidence to reject the null hypothesis as the results could have happened by chance.) Researchers use confidence intervals to determine the precision of estimates and aid in understanding  $p$  values. A confidence interval of 95% represents the numerical range, which upon repeated sampling, will contain the true value 95% of the time, and among researchers it is held to be an unbiased, practical and simple manner to establish a cutoff for rejecting the null hypothesis.

An effect size of 0.25 indicates a small-to-medium effect that can detect noticeable differences between groups. Effect size measures quantify the magnitude of relationships or differences in statistical analyses, complementing significance tests like  $p$  values. Key parameters include  $R^2$ ,  $\eta^2$  (eta squared), and  $\omega^2$  (omega squared), each with distinct interpretations and applications:

$R^2$  The proportion of variance in the dependent variable explained by the independent variables in a regression model.

$\eta^2$  The proportion of total variance attributed to a factor in ANOVA.

$\omega^2$  A less biased estimator of population variance explained, preferred for small samples and in unbalanced designs.

In Section 3, my testing incorporated the power values, confidence levels and effect sizes stated above. By carefully selecting these three metrics for statistical testing, I have established a robust framework for rigorous and replicable analysis. This framework

enables researchers to confidently generalize findings from the sample to the broader population (Perugini et al., 2018).

### **Study Validity**

Research validity and reliability are inherent to quality research standards. Before conducting a study, researchers must ensure the validity and reliability of the data, collection method, analytical processes, and reporting. Reliability refers to the consistency and stability of the measuring instrument, while validity indicates that the instrument, technique, or process accurately measures the intended concept (Bougie & Sekaran, 2019). In this study, I employed ANOVA, a valid approach for simultaneously testing significant differences between groups relative to one dependent variable. Reliability was demonstrated by maintaining consistent measurement methods and criteria throughout the study, including clear variable definitions and data categorization procedures, ensuring replicability through repeat testing.

### **Transition and Summary**

In Section 2, I discussed the data collection method used in this ex post facto secondary data quantitative study to examine the differences, if any, in the financial performance of domestic nonprofit organizations that existed based on the (a) financial statement audit opinion, (b) deficiencies in internal control over financial reporting, and/or (c) deficiencies in internal control of major programs. Researchers are responsible for considering the study's objectives, components, and variables of interest when selecting the method, design, source(s) of data, population, and sample size, and the steps taken to eliminate or reduce potential bias that would otherwise interfere with achieving

research quality. Research quality exhibits credibility, validity, and reliability (Bougie & Sekaran, 2019). After discussing the theoretical framework for this study, resource dependency, the next section of this research project presents the findings from descriptive statistics, confirm tests of assumptions, and draw conclusions from inferential statistics, explain practitioner application, discuss implications for positive social change, and offer recommendations for future use. This research may benefit domestic nonprofit organizations, with special consideration for organizations that rely heavily on federal funding to provide ongoing social services.

### Section 3: Application to Professional Practice and Implications for Change

#### **Introduction**

The purpose of this correlational quantitative ex post facto secondary data analysis study was to examine if differences existed in the financial performance of U.S. nonprofit organizations based on financial statement audit opinions, internal controls over financial reporting, and internal controls of major programs. Based on unfavorable financial statement audit opinions (qualified, adverse, disclaimer), financial performance was measured as ROA, which compares the net change in fund balance (revenues less expenditures) to average total assets. Internal controls were categorized as no failures, a significant deficiency, or a material weakness. The targeted population was U.S. nonprofit organizations, excluding governmental, tribal, and healthcare facilities, that filed a Single Audit in 2021, that received between \$750,000 and \$7,000,000 in federal funding, and were issued a qualified/modified, adverse, or disclaimer financial statement audit opinion.

After performing descriptive statistics, generating multiple linear regression modeling and making inferential statistics obtained from the sample, this study produced mixed results. I accepted the null hypothesis in three instances ( $H_{02}$ ,  $H_{05}$ , and  $H_{06}$ ), and accepted the alternate hypothesis in four instances ( $H_{a1}$ ,  $H_{a3}$ ,  $H_{a4}$ , and  $H_{07}$ ). In the succeeding section of this chapter, I reported on the descriptive statistics, tests of assumptions, and inferential statistics analyzed in this correlational quantitative study. I included applications to professional practice, recommendations for action, identify

opportunities for further research, implications for social change, and the conclusions of this study.

### **Presentation of the Findings**

An important aspect of all research is the presentation of study findings. In this subsection, I present descriptive statistics, assumptions tested, and inferential statistics from this study. Assisted by IBM SPSS Statistics (Version 29) software, I used multilinear regression analysis to examine the relationship between financial statement audit opinions, internal controls over financial reporting and internal controls of major programs, and financial performance measured by ROA. SPSS was also used to conduct tests for multiple linear regression and proved all assumptions were met by performing residual statistics to confirm no outliers, generating histogram and p-plot charts to confirm normality, as well as a scatterplot to confirm homogeneity of variances.

The results indicated significant differences in financial performance based on financial statement audit opinion ( $p = .039$ ) and internal controls of major programs ( $p = .046$ ). A significant interaction was also found between audit opinion, internal controls over financial reporting, and internal controls of major programs in predicting financial performance ( $p = .011$ ). The overall regression model was statistically significant,  $F(6,151) = 3.19, p = .006$ ; however, it was not a strong predictor of ROA. The set of predictors collectively explained a small but significant portion of the variance in financial performance ( $R = .34, R^2 = .11, \text{Adjusted } R^2 = .08$ ). Only two interaction terms were significant predictors: two-way interaction of ICFR x ICMP ( $p = .021$ ), and the three-way interaction among FSAO, ICFR and ICMP ( $p = .011$ ). In practical terms, the

combined co-occurrence of the three dependent variables indicated a significant negative effect,  $p = .011$ , on financial performance.

### **Descriptive Statistics**

The stratified sample included 158 U.S. non-profits receiving between \$750,000 and \$7 million in federal funding in 2021 according to Single Audit reports. I collected independent and dependent variable data from the Federal Audit Clearinghouse, which catalogued findings on the financial statement audit opinion, internal controls over financial reporting, internal controls of major programs, and provided financial data needed to calculate ROA. In a few instances, I obtained the data from Form 990 available through GuideStar, a highly reliable published dataset of IRS returns.

In Table 1, I present the between-subjects factors in this study; 92% of the nonprofits ( $n = 146$ ) had qualified financial statement audit opinions, four nonprofits had adverse opinions, and eight nonprofits had a disclaimer of opinion. Over 48% of the nonprofits ( $n = 76$ ) had deficiencies in internal controls over financial reporting. The incidence of internal control deficiencies increased to 67% ( $n = 106$ ) for audits of major programs.

**Table 1***Between-Subjects Factors*

| Factor  | Value | Label                  | <i>n</i> |
|---|-------|------------------------|----------|
| Financial Statement Audit Opinion                       | 1     | Qualified              | 146      |
|   | 2     | Adverse                | 4        |
|   | 3     | Disclaimer             | 8        |
| Deficiency-Internal Control over<br>Financial Reporting | 0     | None                   | 82       |
|   | 1     | Significant deficiency | 13       |
|   | 2     | Material weakness      | 63       |
| Deficiency-Internal Control of Major<br>Programs        | 0     | None                   | 106      |
|   | 1     | Significant deficiency | 9        |
|   | 2     | Material weakness      | 43       |

In Table 2, I present the descriptive statistics for the dependent variable, financial performance measured as ROA, relative to the independent variables, financial statement audit opinion, deficiencies in internal controls over financial reporting, and deficiencies in internal controls of major programs.

**Table 2***Descriptive Statistics*

| Financial statement<br>audit opinion | Deficiency-internal control over<br>financial reporting | Deficiency-internal control<br>of major programs | <i>M</i> | <i>SD</i> | <i>N</i> |
|--------------------------------------|---|--|----------|-----------|----------|
| Qualified                            | None  | None   | 6.2596   | 12.58360  | 75       |
|                                      |   | Significant deficiency                           | 1.6900   | .         | 1        |
|                                      |   | Material weakness                                | -2.3767  | 9.37331   | 3        |
|                                      |   | Total  | 5.8738   | 12.46856  | 79       |
|                                      | Significant deficiency                                  | None   | 4.2933   | 9.39748   | 6        |
|                                      |   | Significant deficiency                           | 1.4400   | 1.87350   | 3        |
|                                      |   | Material weakness                                | .6300    | 7.79569   | 4        |
|                                      |   | Total  | 2.5077   | 7.45853   | 13       |
|                                      | Material weakness                                       | None   | 12.7168  | 20.23863  | 19       |
|                                      |   | Significant deficiency                           | 2.4360   | 13.88757  | 5        |
|                                      |   | Material weakness                                | 12.0733  | 21.40467  | 30       |
|                                      |   | Total  | 11.4074  | 20.31787  | 54       |
|                                      | Total   | None   | 7.3685   | 14.29294  | 100      |
|                                      |   | Significant deficiency                           | 2.0211   | 9.87713   | 9        |
| Material weakness                    |   | 9.6646   | 20.12475 | 37        |          |
| Total                                |   | 7.6208   | 15.76297 | 146       |          |
| Adverse                              | None  | None   | -3.5300  | .         | 1        |
|                                      |   | Total  | -3.5300  | .         | 1        |
|                                      | Material weakness                                       | None   | 7.4900   | .         | 1        |
|                                      |   | Material weakness                                | -11.1600 | 24.01335  | 2        |
|                                      |   | Total  | -4.9433  | 20.10625  | 3        |
|                                      | Total   | None   | 1.9800   | 7.79232   | 2        |
|                                      |   | Material weakness                                | -11.1600 | 24.01335  | 2        |
|                                      |   | Total  | -4.5900  | 16.43189  | 4        |
|                                      | Disclaimer  | None   | None     | 2.4150    | 4.22143  |
| Total                                |   |  | 2.4150   | 4.22143   | 2        |
| Material weakness                    |   | None   | 17.3000  | 12.10567  | 2        |
|                                      |   | Material weakness                                | -17.0825 | 14.23023  | 4        |
|                                      |   | Total  | -5.6217  | 21.58821  | 6        |
| Total                                |   | None   | 9.8575   | 11.34212  | 4        |
|                                      |   | Material weakness                                | -17.0825 | 14.23023  | 4        |
|                                      |   | Total  | -3.6125  | 18.68902  | 8        |
| Total                                | None  | None   | 6.0355   | 12.40914  | 78       |
|                                      |   | Significant deficiency                           | 1.6900   | .         | 1        |
|                                      |   | Material weakness                                | -2.3767  | 9.37331   | 3        |
|                                      |   | Total  | 5.6748   | 12.29935  | 82       |
|                                      | Significant deficiency                                  | None   | 4.2933   | 9.39748   | 6        |
|                                      |   | Significant deficiency                           | 1.4400   | 1.87350   | 3        |
|                                      |   | Material weakness                                | .6300    | 7.79569   | 4        |
|                                      |   | Total  | 2.5077   | 7.45853   | 13       |
|                                      | Material weakness                                       | None   | 12.8959  | 19.00878  | 22       |
|                                      |   | Significant deficiency                           | 2.4360   | 13.88757  | 5        |
|                                      |   | Material weakness                                | 7.5431   | 22.81087  | 36       |
|                                      |   | Total  | 9.0070   | 20.94424  | 63       |
|                                      | Total   | None   | 7.3608   | 14.05907  | 106      |
|                                      |   | Significant deficiency                           | 2.0211   | 9.87713   | 9        |
|                                      |   | Material weakness                                | 6.2079   | 21.25777  | 43       |
| Total                                |   | 6.7428   | 16.11413 | 158       |          |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

The results from Table 2 revealed that overall, the mean ROA scores varied depending on audit opinion and the presence of control deficiencies. Organizations that received a qualified opinion generally reported higher financial performance ( $M = 5.87$ ,  $SD = 12.47$ ,  $n = 79$ ) versus those that received adverse ( $M = -4.59$ ,  $SD = 16.43$ ,  $n = 4$ ) or disclaimer opinions ( $M = -3.61$ ,  $SD = 18.69$ ,  $n = 8$ ). Across internal control conditions, organizations with no weaknesses demonstrated the highest average ROA ( $M = 7.36$ ,  $SD = 14.06$ ,  $n = 106$ ), whereas those with significant deficiencies ( $M = 2.02$ ,  $SD = 9.88$ ,  $n = 9$ ) or material weaknesses ( $M = 6.21$ ,  $SD = 21.26$ ,  $n = 43$ ) tended to perform worse or show greater variability.

Similarly, within the qualified opinion group, entities with no ICFR or ICMP failures exhibited higher mean financial performance ( $M = 6.26$ ,  $SD = 12.58$ ,  $n = 75$ ), whereas performance decreased when material weaknesses were reported ( $M = -2.38$ ,  $SD = 9.37$ ,  $n = 3$ ). Among those with a material weakness, ROA remained positive overall ( $M = 9.01$ ,  $SD = 20.94$ ,  $n = 63$ ), particularly when no ICFR or ICMP issues were reported ( $M = 12.90$ ,  $SD = 19.01$ ,  $n = 22$ ). Overall, these descriptive results suggest that financial performance tends to be higher for entities with qualified audit opinions and fewer internal control deficiencies, while performance is lower and more variable among entities with adverse or disclaimer opinions and material control weaknesses.

In Table 3, I present the tests of between-subjects effects, which examined whether there were significant differences in the dependent variables, financial performance measured as ROA, between different independent variables, financial statement audit opinion (“FSAO”), internal controls over financial reporting (“ICFR”),

internal controls of major programs (“ICMP”). With this test, each nonprofit only contributed data to one group or condition, and the effects measured thus compare average scores across separate groups. The purpose was to determine whether the differences observed between separate groups were likely due to the experimental condition rather than by chance alone. For each effect, the value in the significance column indicated if there was a meaningful difference between groups, which suggested the independent variables have a significant impact on the dependent variable. The significance level was set at 95%, therefore any value below 5% ( $p < .05$ ) was statistically significant and demonstrated a genuine effect or difference between groups, and consequently the null hypothesis would be rejected. Conversely, if the  $p$  value is greater than .05, the effect was not statistically significant, such that any observed differences were potentially due to random chance. The results from Table 3 indicated that there was a statistically significant relationship between financial statement audit opinion and financial performance ( $p = .039$ ), and between internal controls of major programs and financial performance ( $p = .046$ ), so the null hypothesis was rejected in those instances, and the alternative hypothesis was accepted. For all other effects between the financial statement audit opinion and the dependent variables, the  $p$  value was greater than .05 and therefore no statistically significant relationship was demonstrated. Partial eta squared reported the proportion of variance in the dependent variable, financial performance, that was explained by the independent variables, financial statement audit opinion, deficiencies in internal controls over financial reporting and deficiencies in

internal controls of major programs. Eta squared values of .01, .06, and .14 (or greater) are often considered small, medium, and large effects, respectively.

**Table 3**

*Tests of Between-Subjects Effects*

| Source             | Type III SS           | df  | MS      | F     | Sig. | Partial $\eta^2$ |
|--------------------|-----------------------|-----|---------|-------|------|------------------|
| Corrected Model    | 5463.692 <sup>a</sup> | 14  | 390.264 | 1.581 | .091 | .134             |
| Intercept          | 38.525                | 1   | 38.525  | .156  | .693 | .001             |
| FSAO               | 1636.549              | 2   | 818.274 | 3.314 | .039 | .044             |
| ICFR               | 575.603               | 2   | 287.801 | 1.166 | .315 | .016             |
| ICMP               | 1557.043              | 2   | 778.521 | 3.153 | .046 | .042             |
| FSAO X ICFR        | 74.552                | 2   | 37.276  | .151  | .860 | .002             |
| FSAO X ICMP        | 1495.677              | 2   | 747.838 | 3.029 | .051 | .041             |
| ICFR X ICMP        | 288.807               | 4   | 72.202  | .292  | .882 | .008             |
| FSAO X ICFR X ICMP | .000                  | 0   | .       | .     | .    | .000             |
| Error              | 35303.725             | 143 | 246.879 |       |      |                  |
| Total              | 47951.045             | 158 |         |       |      |                  |
| Corrected Total    | 40767.417             | 157 |         |       |      |                  |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> R Squared = .134; Adjusted R Squared = .049.

The results from Table 3 revealed that the overall model was not statistically significant,  $F(14, 143) = 1.58, p = .091, \eta^2 = .13$ , which indicated that the combined factors did not explain a significant amount of variance in financial performance. However, there were significant main effects of FSAO and ICMP on financial performance. Specifically, the main effect of FSAO was significant,  $F(2, 143) = 3.31, p = .039, \eta^2 = .04$ , which suggested that levels of FSAO differed in their impact on ROA. Similarly, the main effect of ICMP was significant,  $F(2, 143) = 3.15, p = .046, \eta^2 = .04$ , which indicated that financial performance varied significantly across levels of ICMP. In contrast, the main effect of ICFR was not significant,  $F(2, 143) = 1.17, p = .315, \eta^2 = .02$ ,

which suggested that ICFR did not independently influence ROA. There was a marginally significant interaction between FSAO and ICMP,  $F(2, 143) = 3.03, p = .051, \eta^2 = .04$ , which indicated a possible moderating effect of ICMP on the relationship between FSAO and financial performance. However, the FSAO  $\times$  ICFR interaction,  $F(2, 143) = 0.15, p = .860, \eta^2 = .002$ , and the ICFR  $\times$  ICMP interaction,  $F(4, 143) = 0.29, p = .882, \eta^2 = .01$ , were not significant. The three-way interaction among FSAO, ICFR, and ICMP was not tested due to insufficient degrees of freedom. Overall, these results suggested that FSAO and ICMP each have independent, small-to-moderate effects on financial performance, and that the influence of FSAO on ROA may depend somewhat on levels of ICMP. The omega squared statistic, a less biased estimator of population variance explained that is preferred for smaller samples or unbalanced designs, was not used in this analysis. Instead, eta squared was reported for consistency with prior studies and for ease of interpretation since this study had a large sample size and a balanced design.

I further analyzed each independent variable to develop additional statistical findings through the examination of estimates of marginal means and pairwise comparisons. In Tables 4 and 5, I present the estimates and pairwise comparisons, respectively, of the financial statement audit opinion on financial performance. In Tables 6 and 7, I present the estimates and pairwise comparisons, respectively, of failures in internal controls over financial reporting on financial performance. In Tables 8 and 9, I present the estimates and pairwise comparisons, respectively, of failures in internal controls of major programs on financial performance.

**Table 4***Estimates: Financial Statement Audit Opinion*

| Financial Statement Audit Opinion | <i>M</i>            | <i>SE</i> | 95% Confidence interval |             |
|-----------------------------------|---------------------|-----------|-------------------------|-------------|
|                                   |                     |           | Lower bound             | Upper bound |
| Qualified                         | 4.351               | 2.695     | -.975                   | 9.678       |
| Adverse                           | -2.400 <sup>a</sup> | 8.281     | -18.769                 | 13.969      |
| Disclaimer                        | .877 <sup>a</sup>   | 5.856     | -10.697                 | 12.452      |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> Based on modified population marginal mean.

As shown in Table 4, entities that received a qualified audit opinion had the highest estimated financial performance ( $M = 4.35$ ,  $SE = 2.70$ , 95% CI  $[-0.98, 9.68]$ ). Organizations that received an adverse opinion exhibited the lowest estimated mean performance ( $M = -2.40$ ,  $SE = 8.28$ , 95% CI  $[-18.77, 13.97]$ ), whereas those with a disclaimer opinion showed a near-zero mean performance ( $M = 0.88$ ,  $SE = 5.86$ , 95% CI  $[-10.70, 12.45]$ ). Although the confidence intervals overlap considerably—indicating no statistically significant mean differences among audit opinion groups—the direction of means suggested that organizations with qualified opinions tend to perform better financially than those with adverse or disclaimer opinions. This pattern was consistent with the earlier ANOVA findings, which confirmed a significant main effect of FSAO on financial performance,  $F(2, 143) = 3.31$ ,  $p = .039$ ,  $\eta^2 = .04$ .

**Table 5***Pairwise Comparisons*

| (I) Financial<br>Statement Audit<br>Opinion | (J) Financial<br>Statement<br>Audit Opinion | Mean<br>difference    |        |                   | 95% Confidence interval for<br>difference <sup>c</sup> |             |
|---|---|-----------------------|--------|-------------------|--|-------------|
|   |   | (I-J)                 | SE     | Sig. <sup>c</sup> | Lower bound  | Upper bound |
| Qualified                                   | Adverse                                     | 6.751 <sup>a</sup>    | 8.709  | .439              | -10.463  | 23.966      |
|   | Disclaimer                                  | 3.474 <sup>a</sup>    | 6.446  | .591              | -9.268   | 16.216      |
| Adverse                                     | Qualified                                   | -6.751 <sup>b</sup>   | 8.709  | .439              | -23.966  | 10.463      |
|   | Disclaimer                                  | -3.277 <sup>a,b</sup> | 10.142 | .747              | -23.326  | 16.771      |
| Disclaimer                                  | Qualified                                   | -3.474 <sup>b</sup>   | 6.446  | .591              | -16.216  | 9.268       |
|   | Adverse                                     | 3.277 <sup>a,b</sup>  | 10.142 | .747              | -16.771  | 23.326      |

*Note.* Based on estimated marginal means. Dependent Variable: Financial Performance-

Return on Assets.

<sup>a</sup> An estimate of the modified population marginal mean (J). <sup>b</sup> An estimate of the modified population marginal mean (I). <sup>c</sup> Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

As shown in Table 5, none of the pairwise comparisons were statistically significant. The mean difference between entities with Qualified versus Adverse opinions was 6.75 ( $SE = 8.71, p = .439, 95\% \text{ CI } [-10.46, 23.97]$ ). The mean difference between Qualified and Disclaimer opinions was 3.47 ( $SE = 6.45, p = .591, 95\% \text{ CI } [-9.27, 16.22]$ ). Finally, the mean difference between Adverse and Disclaimer opinions was  $-3.28$  ( $SE = 10.14, p = .747, 95\% \text{ CI } [-23.33, 16.77]$ ). These results suggested that the type of financial statement audit opinion was not associated with significant differences in financial performance in this sample. The confidence intervals for all comparisons included zero, which further indicated no reliable differences.

**Table 6***Estimates: Failure-Internal Control Over Financial Reporting*

| Failure-Internal Control over<br>Financial Reporting | <i>M</i>           | <i>SE</i> | 95% Confidence interval |             |
|--|--------------------|-----------|-------------------------|-------------|
|  |                    |           | Lower bound             | Upper bound |
| None   | .892 <sup>a</sup>  | 5.302     | -9.589                  | 11.372      |
| Significant deficiency                               | 2.121 <sup>a</sup> | 4.536     | -6.845                  | 11.087      |
| Material weakness                                    | 3.396 <sup>a</sup> | 3.575     | -3.669                  | 10.462      |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> Based on modified population marginal mean.

As shown in Table 6, financial performance was slightly higher for entities with material weaknesses in ICFR ( $M = 3.40$ ,  $SE = 3.58$ , 95% CI [-3.67, 10.46]) compared with those with significant deficiencies ( $M = 2.12$ ,  $SE = 4.54$ , 95% CI [-6.85, 11.09]) and those reporting no internal control failures ( $M = 0.89$ ,  $SE = 5.30$ , 95% CI [-9.59, 11.37]). However, the wide and overlapping confidence intervals indicate that these differences were not statistically significant, consistent with the earlier ANOVA results showing no main effect of ICFR on financial performance,  $F(2, 143) = 1.17$ ,  $p = .315$ ,  $\eta^2 = .02$ . Overall, these findings suggested that the presence or severity of internal control failures over financial reporting did not have a meaningful impact on organizations' financial performance as measured by ROA.

**Table 7***Pairwise Comparisons*

| (I) Failure-<br>Internal Control<br>over Financial<br>Reporting | (J) Failure-Internal<br>Control over Financial<br>Reporting | Mean<br>difference<br>(I-J) | SE    | Sig. <sup>c</sup> | 95% Confidence<br>interval for difference <sup>c</sup> |                |
|---|---|-----------------------------|-------|-------------------|--|----------------|
|   |   |                             |       |                   | Lower bound  | Upper<br>bound |
| None  | Significant deficiency                                      | -1.230 <sup>a,b</sup>       | 6.977 | .860              | -15.022  | 12.563         |
|   | Material weakness   | -2.505 <sup>a,b</sup>       | 6.394 | .696              | -15.144  | 10.135         |
| Significant<br>deficiency                                       | None  | 1.230 <sup>a,b</sup>        | 6.977 | .860              | -12.563  | 15.022         |
|   | Material weakness   | -1.275 <sup>a,b</sup>       | 5.775 | .826              | -12.690  | 10.140         |
| Material<br>weakness  | None  | 2.505 <sup>a,b</sup>        | 6.394 | .696              | -10.135  | 15.144         |
|   | Significant deficiency                                      | 1.275 <sup>a,b</sup>        | 5.775 | .826              | -10.140  | 12.690         |

*Note.* Based on estimated marginal means. Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> An estimate of the modified population marginal mean (I). <sup>b</sup> An estimate of the modified population marginal mean (J). <sup>c</sup> Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

As shown in Table 7, none of the pairwise comparisons were statistically significant ( $p > .05$ ). Specifically, entities with no ICFR failures did not differ significantly from those with significant deficiencies,  $M_{diff} = -1.23$ ,  $SE = 6.98$ ,  $p = .860$ , 95% CI [-15.02, 12.56], nor from those with material weaknesses,  $M_{diff} = -2.51$ ,  $SE = 6.39$ ,  $p = .696$ , 95% CI [-15.14, 10.14]. Similarly, the difference between significant deficiencies and material weaknesses was also not significant,  $M_{diff} = -1.28$ ,  $SE = 5.78$ ,  $p = .826$ , 95% CI [-12.69, 10.14]. These results indicated that the severity of internal control failures over financial reporting was not associated with significant differences in financial performance, consistent with the overall non-significant main effect of ICFR in the ANOVA.

**Table 8***Estimates: Failure-Internal Control of Major Programs*

| Failure-Internal Control of<br>Major Programs | <i>M</i>            | <i>SE</i> | 95% Confidence interval |             |
|---|---------------------|-----------|-------------------------|-------------|
|   |                     |           | Lower bound             | Upper bound |
| None  | 6.706 <sup>a</sup>  | 4.036     | -1.271                  | 14.684      |
| Significant deficiency                        | 1.855 <sup>a</sup>  | 6.485     | -10.964                 | 14.675      |
| Material weakness                             | -3.583 <sup>a</sup> | 3.674     | -10.845                 | 3.679       |

*Note.* Dependent Variable: Financial Performance-Return on Assets

<sup>a</sup> Based on modified population marginal mean.

As shown in Table 8, the estimated marginal mean financial performance was highest for organizations with no ICMP failures ( $M = 6.71$ ,  $SE = 4.04$ , 95% CI [-1.27, 14.68]), followed by those with significant deficiencies ( $M = 1.86$ ,  $SE = 6.49$ , 95% CI [-10.96, 14.68]), and lowest for those with material weaknesses ( $M = -3.58$ ,  $SE = 3.67$ , 95% CI [-10.85, 3.68]). However, the overlapping confidence intervals suggested that these differences were not statistically significant, consistent with prior ANOVA results, which indicated no significant main effect of ICMP on financial performance,  $F(2, 143) = 3.15$ ,  $p = .046$ ,  $\eta^2 = .042$  (approaching significance but not strong). Overall, these findings indicated that the severity of internal control failures over major programs showed a trend toward lower financial performance but did not produce statistically reliable differences in this sample.

**Table 9***Pairwise Comparisons*

| (I) Failure-<br>Internal Control<br>of Major<br>Programs | (J) Failure-Internal<br>Control of Major<br>Programs | Mean<br>difference<br>(I-J) | SE    | Sig. <sup>c</sup> | 95% Confidence<br>interval for difference <sup>c</sup> |                |
|--|--|-----------------------------|-------|-------------------|--|----------------|
|  |  |                             |       |                   | Lower<br>bound   | Upper<br>bound |
| None   | Significant deficiency                               | 4.851 <sup>a,b</sup>        | 7.639 | .526              | -10.248  | 19.950         |
|  | Material weakness                                    | 10.290 <sup>a,b</sup>       | 5.457 | .061              | -.498  | 21.077         |
| Significant<br>Deficiency                                | None   | -4.851 <sup>a,b</sup>       | 7.639 | .526              | -19.950  | 10.248         |
|  | Material weakness                                    | 5.439 <sup>a,b</sup>        | 7.454 | .467              | -9.295   | 20.172         |
| Material<br>Weakness                                     | None   | -10.290 <sup>a,b</sup>      | 5.457 | .061              | -21.077  | .498           |
|  | Significant deficiency                               | -5.439 <sup>a,b</sup>       | 7.454 | .467              | -20.172  | 9.295          |

*Note.* Based on estimated marginal means. Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> An estimate of the modified population marginal mean (I). <sup>b</sup> An estimate of the modified population marginal mean (J). <sup>c</sup> Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

As shown in Table 9, no pairwise differences reached conventional statistical significance at the  $p < .05$  level. Organizations with no ICMP failures had higher financial performance than those with material weaknesses, with a mean difference of 10.29,  $SE = 5.46$ ,  $p = .061$ , 95% CI [-0.50, 21.08]. This difference approached significance but did not meet the threshold. Differences between no ICMP failures and significant deficiencies ( $M_{diff} = 4.85$ ,  $SE = 7.64$ ,  $p = .526$ ) and between significant deficiencies and material weaknesses ( $M_{diff} = 5.44$ ,  $SE = 7.45$ ,  $p = .467$ ) were nonsignificant. Overall, these results suggested that the severity of ICMP failures did not produce statistically reliable differences in financial performance,

although the comparison between no failures and material weaknesses indicated a potential trend toward lower financial performance with more severe ICMP failures.

In Table 10, I present the two-way interaction between Financial Statement Audit Opinion (FSAO) and failures in Internal Control over Financial Reporting (ICFR) on financial performance.

**Table 10**

*Interaction: Financial Statement Audit Opinion X Failure-Internal Control Over Financial Reporting*

| Financial Statement Audit Opinion | Failure-Internal Control over Financial Reporting | <i>M</i>            | <i>SE</i> | 95% Confidence interval |             |
|-----------------------------------|---|---------------------|-----------|-------------------------|-------------|
|                                   |   |                     |           | Lower bound             | Upper bound |
| Qualified                         | None  | 1.858               | 6.078     | -10.156                 | 13.872      |
|                                   | Significant deficiency                            | 2.121               | 4.536     | -6.845                  | 11.087      |
|                                   | Material weakness                                 | 9.075               | 2.801     | 3.539                   | 14.612      |
| Adverse                           | None  | -3.530 <sup>a</sup> | 15.712    | -34.589                 | 27.529      |
|                                   | Significant deficiency                            | . <sup>b</sup>      | .         | .                       | .           |
|                                   | Material weakness                                 | -1.835 <sup>a</sup> | 9.622     | -20.854                 | 17.184      |
| Disclaimer                        | None  | 2.415 <sup>a</sup>  | 11.110    | -19.547                 | 24.377      |
|                                   | Significant deficiency                            | . <sup>b</sup>      | .         | .                       | .           |
|                                   | Material weakness                                 | .109 <sup>a</sup>   | 6.804     | -13.340                 | 13.558      |

*Note.* Dependent Variable: Financial Performance-Return on Assets

<sup>a</sup> Based on modified population marginal mean. <sup>b</sup> This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

The results from Table 10 revealed that for organizations with no ICFR failures, the estimated mean financial performance ranged from 1.86 (*SE* = 6.08) to 2.42 (*SE* = 11.11), depending on combinations with other unreported factors. Organizations with a significant deficiency in ICFR had an estimated mean of 2.12 (*SE* = 4.54). Organizations

with a material weakness in ICFR had higher estimated financial performance in one observed combination (9.08,  $SE = 2.80$ ) but lower in others ( $-1.84$ ,  $SE = 9.62$ ;  $0.11$ ,  $SE = 6.80$ ), reflecting variation across factor combinations. Finally, some combinations of factor levels were not observed in the sample (denoted by “.b”), meaning the corresponding population marginal means could not be estimated.

In Table 11, I present the two-way interaction between Financial Statement Audit Opinion (FSAO) and failures in Internal Controls of Major Programs (ICMP) on financial performance.

**Table 11**

*Interaction: Financial Statement Audit Opinion X Failure-Internal Control of Major Programs*

| Financial Statement Audit Opinion | Failure-Internal Control of Major Programs | <i>M</i>             | <i>SE</i> | 95% Confidence interval |             |
|-----------------------------------|--|----------------------|-----------|-------------------------|-------------|
|                                   |  |                      |           | Lower bound             | Upper bound |
| Qualified                         | None                                       | 7.757                | 2.526     | 2.763                   | 12.750      |
|                                   | Significant deficiency                     | 1.855                | 6.485     | -10.964                 | 14.675      |
|                                   | Material weakness                          | 3.442                | 4.113     | -4.688                  | 11.572      |
| Adverse                           | None                                       | 1.980 <sup>a</sup>   | 11.110    | -19.982                 | 23.942      |
|                                   | Significant deficiency                     | <sup>b</sup>         | .         | .                       | .           |
|                                   | Material weakness                          | -11.160 <sup>a</sup> | 11.110    | -33.122                 | 10.802      |
| Disclaimer                        | None                                       | 9.857 <sup>a</sup>   | 7.856     | -5.672                  | 25.387      |
|                                   | Significant deficiency                     | <sup>b</sup>         | .         | .                       | .           |
|                                   | Material weakness                          | -17.083 <sup>a</sup> | 7.856     | -32.612                 | -1.553      |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> Based on modified population marginal mean. <sup>b</sup> This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

The results of Table 11 indicated that for organizations with a Qualified audit opinion, estimated marginal means indicated that financial performance was highest when no ICMP failures were present ( $M = 7.76$ ,  $SE = 2.53$ , 95% CI [2.76, 12.75]) and lower when either a significant deficiency ( $M = 1.86$ ,  $SE = 6.49$ , 95% CI [-10.96, 14.68]) or a material weakness ( $M = 3.44$ ,  $SE = 4.11$ , 95% CI [-4.69, 11.57]) was reported. Organizations with an Adverse audit opinion showed lower financial performance, with means of 1.98 ( $SE = 11.11$ , 95% CI [-19.98, 23.94]) for no ICMP failures and -11.16 ( $SE = 11.11$ , 95% CI [-33.12, 10.80]) for a material weakness; the combination of an Adverse opinion and a significant deficiency was not observed. Among organizations

with a Disclaimer audit opinion, performance was 9.86 ( $SE = 7.86$ , 95% CI [-5.67, 25.39]) when no ICMP failures occurred and decreased to -17.08 ( $SE = 7.86$ , 95% CI [-32.61, -1.55]) in the presence of a material weakness; the significant deficiency condition was also unobserved in this group. Overall, these results suggested that the negative impact of ICMP failures on financial performance was most pronounced for organizations with Disclaimer opinions and material weaknesses, whereas other combinations showed wide confidence intervals overlapping zero, which indicated no statistically reliable differences. Several factor-level combinations were not observed, limiting interpretation for those groups.

In Table 12, I present the two-way interaction between failures in Internal Controls over Financial Reporting (ICFR) and failures in Internal Controls of Major Programs (ICMP) on financial performance, measured as ROA.

**Table 12**

*Interaction: Failure-Internal Control over Financial Reporting X Failure-Internal*

*Control of Major Programs*

| Failure-Internal<br>Control over<br>Financial Reporting | Failure-Internal<br>Control of Major<br>Programs | <i>M</i>            | <i>SE</i> | 95% Confidence interval |             |
|---|--|---------------------|-----------|-------------------------|-------------|
|   |  |                     |           | Lower bound             | Upper bound |
| None  | None   | 1.715               | 6.443     | -11.021                 | 14.451      |
|   | Significant<br>deficiency                        | 1.690 <sup>a</sup>  | 15.712    | -29.369                 | 32.749      |
|   | Material weakness                                | -2.377 <sup>a</sup> | 9.072     | -20.308                 | 15.555      |
| Significant<br>Deficiency                               | None   | 4.293 <sup>a</sup>  | 6.415     | -8.386                  | 16.973      |
|   | Significant<br>deficiency                        | 1.440 <sup>a</sup>  | 9.072     | -16.492                 | 19.372      |
|   | Material weakness                                | .630 <sup>a</sup>   | 7.856     | -14.899                 | 16.159      |
| Material Weakness                                       | None   | 12.502              | 6.526     | -.398                   | 25.402      |
|   | Significant<br>deficiency                        | 2.436 <sup>a</sup>  | 7.027     | -11.454                 | 16.326      |
|   | Material weakness                                | -5.390              | 4.635     | -14.553                 | 3.773       |

*Note.* Dependent Variable: Financial Performance-Return on Assets

<sup>a</sup> Based on modified population marginal mean.

The results of Table 12 revealed that mean ROA values varied slightly across combinations of internal control failures, however, the 95% confidence intervals overlapped substantially, which suggested that none of the observed differences were statistically significant. Specifically, organizations with no internal control failures in either area had an adjusted mean ROA of  $M = 1.72$  (95% CI [-11.02, 14.45]). When nonprofits exhibited material weaknesses in both ICFR and ICMP, ROA was lowest ( $M = -5.39$ , 95% CI [-14.55, 3.77]). Conversely, nonprofits with a material weakness in ICFR but no ICMP failure had the highest average ROA ( $M = 12.50$ , 95% CI [-0.40, 25.40]). However, because all confidence intervals included zero, none of these group differences

reached statistical significance. These findings suggested that failures in internal control over financial reporting and major programs, whether isolated or combined, did not significantly affect financial performance (ROA).

In Table 13, I present the three-way interaction between Financial Statement Audit Opinions (FSAO), failures in Internal Controls over Financial Reporting (ICFR), and failures in Internal Controls of Major Programs (ICMP) on financial performance, measured as ROA.

**Table 13**

*Interaction: Financial Statement Audit Opinion X Failure-Internal Control Over  
Financial Reporting X Failure-Internal Control of Major Programs*

| Financial<br>Statement<br>Audit Opinion | Failure-Internal<br>Control over<br>Financial<br>Reporting | Failure-Internal<br>Control of Major<br>Programs | <i>M</i>     | <i>SE</i> | 95% Confidence<br>interval |                |
|---|--|--|--------------|-----------|----------------------------|----------------|
|   |  |  |              |           | Lower<br>bound             | Upper<br>bound |
| Qualified                               | None   | None   | 6.260        | 1.814     | 2.673                      | 9.846          |
|   |  | Significant deficiency                           | 1.690        | 15.712    | -29.369                    | 32.749         |
|   |  | Material weakness                                | -2.377       | 9.072     | -20.308                    | 15.555         |
|   | Significant<br>deficiency                                  | None   | 4.293        | 6.415     | -8.386                     | 16.973         |
|   |  | Significant deficiency                           | 1.440        | 9.072     | -16.492                    | 19.372         |
|   |  | Material weakness                                | .630         | 7.856     | -14.899                    | 16.159         |
|   | Material<br>weakness                                       | None   | 12.717       | 3.605     | 5.592                      | 19.842         |
|   |  | Significant deficiency                           | 2.436        | 7.027     | -11.454                    | 16.326         |
|   |  | Material weakness                                | 12.073       | 2.869     | 6.403                      | 17.744         |
| Adverse                                 | None   | None   | -3.530       | 15.712    | -34.589                    | 27.529         |
|   |  | Significant deficiency                           | <sup>a</sup> | .         | .                          | .              |
|   |  | Material weakness                                | <sup>a</sup> | .         | .                          | .              |
|   | Significant<br>deficiency                                  | None   | <sup>a</sup> | .         | .                          | .              |
|   |  | Significant deficiency                           | <sup>a</sup> | .         | .                          | .              |
|   |  | Material weakness                                | <sup>a</sup> | .         | .                          | .              |
|   | Material<br>weakness                                       | None   | 7.490        | 15.712    | -23.569                    | 38.549         |
|   |  | Significant deficiency                           | <sup>a</sup> | .         | .                          | .              |
|   |  | Material weakness                                | 11.160       | 11.110    | -33.122                    | 10.802         |
| Disclaimer                              | None   | None   | 2.415        | 11.110    | -19.547                    | 24.377         |
|   |  | Significant deficiency                           | <sup>a</sup> | .         | .                          | .              |
|   |  | Material weakness                                | <sup>a</sup> | .         | .                          | .              |
|   | Significant<br>deficiency                                  | None   | <sup>a</sup> | .         | .                          | .              |
|   |  | Significant deficiency                           | <sup>a</sup> | .         | .                          | .              |
|   |  | Material weakness                                | <sup>a</sup> | .         | .                          | .              |
|   | Material<br>weakness                                       | None   | 17.300       | 11.110    | -4.662                     | 39.262         |
|   |  | Significant deficiency                           | <sup>a</sup> | .         | .                          | .              |
|   |  | Material weakness                                | 17.083       | 7.856     | -32.612                    | -1.553         |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> This level combination of factors is not observed, thus the corresponding population marginal mean is not estimable.

The results of Table 13 revealed that organizations with a Qualified audit opinion showed wide variation in ROA depending on internal control quality. Within this group, organizations with no internal control weaknesses demonstrated relatively higher performance ( $M = 6.26$ , 95% CI [2.67, 9.85]) compared to those with material weaknesses ( $M = -2.38$ , 95% CI [-20.31, 15.56]). Those with material weaknesses in both ICFR and ICMP under a Qualified opinion had the lowest mean ROA overall. For organizations with an Adverse audit opinion, mean ROA values were generally lower and highly variable. For example, those with no internal control weaknesses had  $M = -3.53$  (95% CI [-34.59, 27.53]), while those with material weaknesses in both ICFR and ICMP had a slightly higher  $M = 11.16$ , though confidence intervals remained wide and overlapped zero, which indicated no statistically significant difference. Among organizations with a Disclaimer of opinion, ROA outcomes again varied by internal control condition. The highest mean ROA was observed for those with material weaknesses in both ICFR and ICMP ( $M = 17.08$ , 95% CI [-32.61, -1.55]), though this interval crosses zero, which suggested that the effect was not significant. Overall, the confidence intervals for all groups were wide and overlapping, which indicated substantial variability in ROA and no statistically significant three-way interaction among audit opinion type, internal control over financial reporting, and internal control of major programs.

### **Tests of Assumptions**

In conducting research, it is important to ensure that the results from statistical analyses are valid. Conditions in the dataset such as outliers, a lack of normality and/or

violations in homogeneity of variances could result in significant and unrealized consequences on the study's findings and validity. Validity in this study required that I perform a series of test to confirm adherence to the six fundamental assumptions of multiple linear regressions. Table 14 outline the assumptions, described how each was measured, and the results of the test, which included references to supporting tables and figures. There were no violations as shown, which indicated that multiple linear regression analysis was appropriate for my dataset.

**Table 14**

*Assumptions Tested for the Regression Model*

| Assumption                      | Description   | Result              |
|---------------------------------|---|---------------------|
| 1. Level of measurement         | Dependent variable is continuous (interval/ratio level).                          | Met                 |
| 2. Independent groups           | Each of the three IVs is categorical with $\geq 2$ groups.                        | Met                 |
| 3. Independence of observations | Observations are independent within and across groups.                            | Met                 |
| 4. Outliers                     | No significant outliers detected.   | Met; see Table 15   |
| 5. Normality                    | Dependent variable approximately normally distributed for each group combination. | Met; see Figure 3,4 |
| 6. Homogeneity of variance      | Variances are equal across groups (Levene's test n.s.).                           | Met; see Figure 5   |

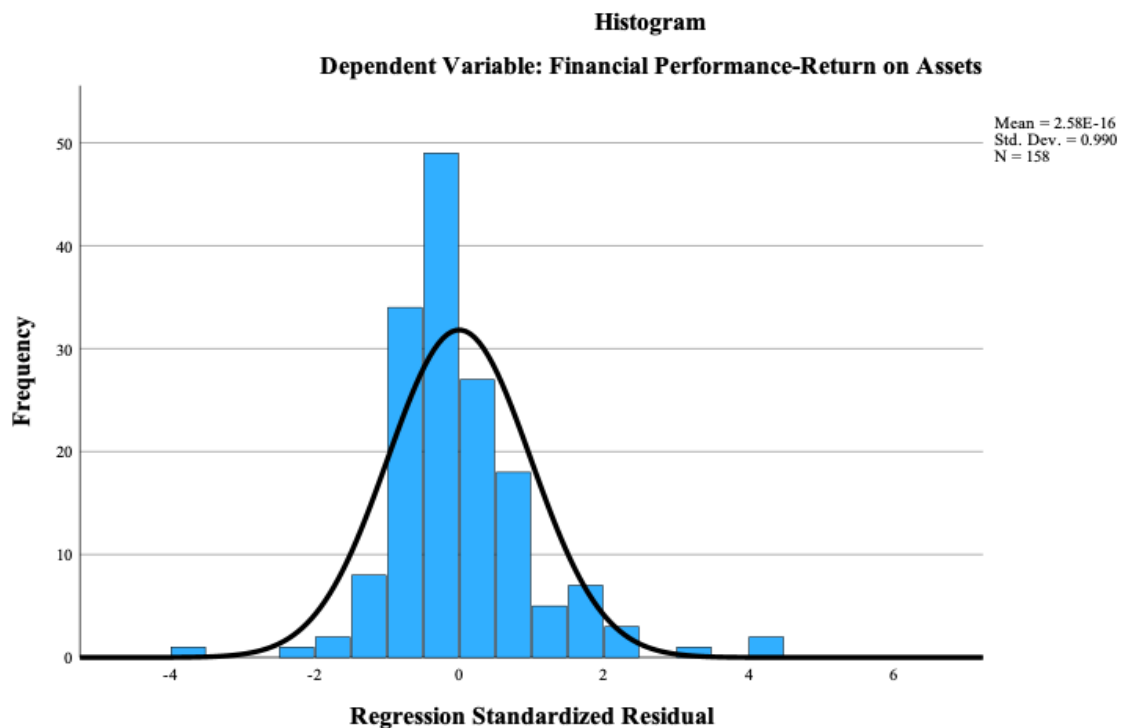
In Table 15, I present the residual statistics to test for outliers in my dataset.

**Table 15***Residuals Statistics*

|                          | Minimum   | Maximum  | <i>M</i> | <i>SD</i> | <i>N</i> |
|--------------------------|-----------|----------|----------|-----------|----------|
| Predicted Value (PV)     | -8.1614   | 13.5511  | 6.7428   | 4.07564   | 158      |
| Std. Predicted Value     | -3.657    | 1.670    | .000     | 1.000     | 158      |
| Standard Error of PV     | 1.447     | 5.762    | 2.326    | .933      | 158      |
| Adjusted Predicted Value | -10.1777  | 14.8420  | 6.7300   | 4.13512   | 158      |
| Residual                 | -56.62552 | 68.25889 | .00000   | 15.59020  | 158      |
| Std. Residual            | -3.597    | 4.336    | .000     | .990      | 158      |
| Stud. Residual           | -3.642    | 4.417    | .000     | 1.005     | 158      |
| Deleted Residual         | -58.03269 | 70.83382 | .01287   | 16.06794  | 158      |
| Stud. Deleted Residual   | -3.797    | 4.712    | .004     | 1.028     | 158      |
| Mahal. Distance          | .333      | 20.044   | 2.981    | 4.026     | 158      |
| Cook's Distance          | .000      | .184     | .008     | .023      | 158      |
| Centered Leverage Value  | .002      | .128     | .019     | .026      | 158      |

Residual and influence diagnostics were examined to assess potential outliers in the regression model. The standardized residuals ranged from -3.60 to 4.34, and studentized deleted residuals ranged from -3.80 to 4.71, indicating a few cases exceeded the  $\pm 3.5$  guideline for potential outliers. However, Cook's Distance values (max = .18) and leverage values (max = .13) were below conventional thresholds (Cook's  $D < 1.0$ ; leverage  $< .13$ ), which indicated that no cases exerted undue influence on the model. Additionally, Mahala Nobis distances ranged from .33 to 20.04, below the critical  $\chi^2(6) = 22.46$ ,  $p < .001$ , which further suggested the absence of multivariate outliers. Overall, the data met the assumption of no influential outliers.

In Figure 3, I present the results of the tests for normality using a histogram.

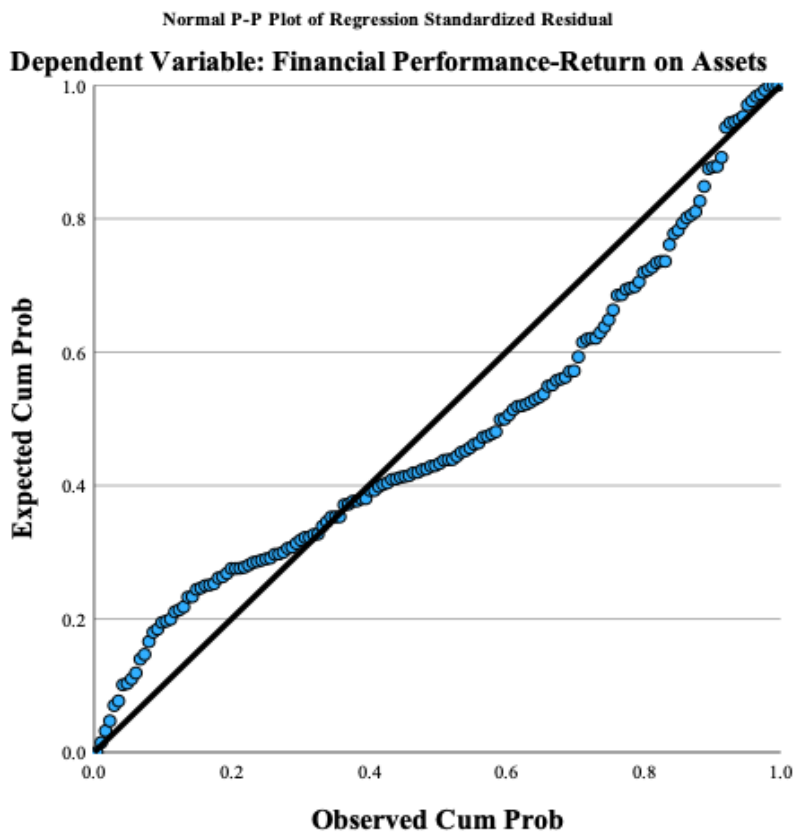
**Figure 3***Histogram of Regression Standardized Residual*

As shown in Figure 3, examination of the histogram of standardized residuals indicated that the residuals were approximately normally distributed, with a mean near zero ( $M = 2.58E-16$ ,  $SD = 0.99$ ). The distribution was roughly symmetric, and the normal curve closely followed the observed frequencies, which indicated that the assumption of normality was met.

In Figure 4, I present the results of the test for normality using P-P Plots.

**Figure 4**

*Normal P-P Plot of Regression Standardized Residual*

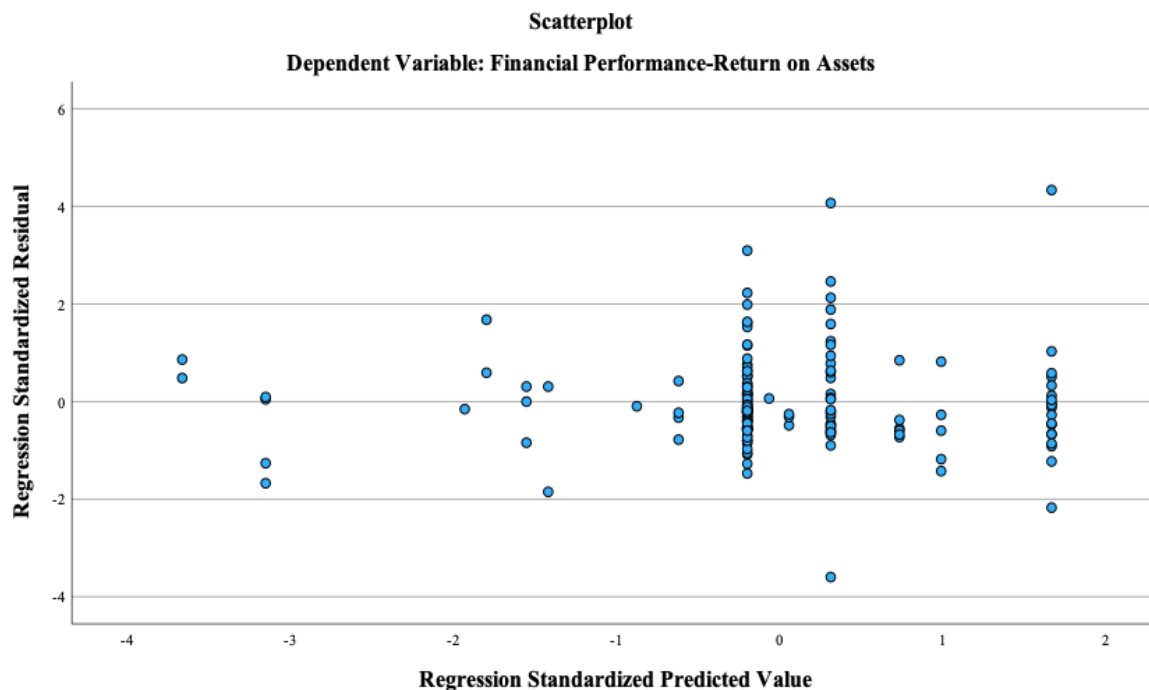


As shown in *Figure 4*, the normal P–P plot of standardized residuals showed that the points closely followed the diagonal line, which indicated that the residuals were approximately normally distributed. Only minor deviations were observed at the tails, which suggested no substantial departures from normality. Together with the histogram results, these findings support the assumption of normality for the regression analysis.

Figure 5 presents a scatterplot of the results of test for homogeneity of variances.

**Figure 5**

*Scatterplot of Regression Standardized Predicted Value*



As shown in Figure 5, the assumption of homogeneity of variances was assessed by examining a scatterplot of standardized residuals against standardized predicted values. The residuals were randomly and evenly distributed around the zero line, showing no discernible pattern or funnel shape. This indicated that the variance of residuals was constant across predicted values, which supported the assumption of homoscedasticity.

### **Inferential Results**

A multiple regression analysis was conducted to examine whether financial statement audit opinion, failures in internal control over financial reporting, and failures in internal control of major programs jointly predicted financial performance measured as

ROA. In Table 16, I present the model summary of this multiple linear regression analysis.

**Table 16**

*Regression Analysis Model Summary*

| Model | R                 | R Square | Adjusted R Square | SE of the estimate |
|-------|-------------------|----------|-------------------|--------------------|
| 1     | .335 <sup>a</sup> | .113     | .077              | 15.47891           |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> Predictors: (Constant), FSAO X ICFR X ICMP, Financial Statement Audit Opinion, Failure-Internal Control over Financial Reporting, Failure-Internal Control of Major Programs, ICFR X ICMP, FSAO X ICFR.

The results indicated that the overall model was statistically significant,  $R = .34$ ,  $R^2 = .11$ , and adjusted  $R^2 = .08$ , which suggested that approximately 11.3% of the variance in the financial performance was explained by the predictors. After adjusting for the number of predictors, the adjusted  $R^2$  dropped to .08, which revealed the true explanatory power is approximately 7.7%. The standard error of the estimate was 15.48, which indicated the average distance that the observed values fall from the regression line. In practical terms, the model accounted for a small portion of variance in financial performance, which indicated that financial statement audit opinion, failures in internal controls over financial reporting, and failures in internal controls of major programs were not strong predictors of nonprofit financial performance.

In Table 17, I present the ANOVA results of the multiple linear regression, which was conducted to examine whether the independent variables (audit opinions and failures

in internal controls) and their interaction terms significantly predicted the dependent variable, nonprofit financial performance.

**Table 17**

*Analysis of Variance*

| Model |            | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>Sig.</i>       |
|-------|------------|-----------|-----------|-----------|----------|-------------------|
| 1     | Regression | 4588.310  | 6         | 764.718   | 3.192    | .006 <sup>a</sup> |
|       | Residual   | 36179.108 | 151       | 239.597   |          |                   |
|       | Total      | 40767.417 | 157       |           |          |                   |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

<sup>a</sup> Predictors: (Constant), FSAO X ICFR X ICMP, Financial Statement Audit Opinion, Failure-Internal Control over Financial Reporting, Failure-Internal Control of Major Programs, ICFR X ICMP, FSAO X ICFR.

The results of Table 17 revealed that the overall regression model was statistically significant,  $F(6, 151) = 3.19, p = .006$ , which indicated that the set of predictors collectively explained a small, but significant portion of the variance in financial performance. In practical terms, although the model reached statistical significance, the effect size was modest, which suggested that while audit opinions and failures in internal controls were related to financial performance, other factors likely contributed more strongly to the explanation of the variance in ROA.

In Table 18, I present the coefficients for the multiple regression model which informed how the dependent variable significantly contributed to the predictability of financial performance (ROA).

**Table 18***Coefficients*

| Model |   | Unstandardized coefficients |           | Standardized coefficients | <i>t</i> | Sig. |
|-------|---|-----------------------------|-----------|---------------------------|----------|------|
|       |   | <i>B</i>                    | <i>SE</i> | <i>B</i>                  |          |      |
| 1     | (Constant)  | 8.678                       | 5.844     |                           | 1.485    | .140 |
|       | Financial Statement Audit Opinion                 | -2.662                      | 5.252     | -.076                     | -.507    | .613 |
|       | Failure-Internal Control over Financial Reporting | -.307                       | 4.696     | -.018                     | -.065    | .948 |
|       | Failure-Internal Control of Major Programs        | -5.430                      | 3.817     | -.299                     | -1.423   | .157 |
|       | FSAOXICFR   | 2.630                       | 3.798     | .230                      | .692     | .490 |
|       | ICFRXICMP   | 7.136                       | 3.066     | .744                      | 2.327    | .021 |
|       | FSAOXICFRXICMP                                    | -4.368                      | 1.693     | -.669                     | -2.580   | .011 |

*Note.* Dependent Variable: Financial Performance-Return on Assets.

As shown in Table 18, an inspection of the individual predictors revealed that only two interaction terms were statistically significant predictors of financial performance. The interactions between ICFR and ICMP was a positive and significant predictor,  $B = 7.14$ ,  $t(151) = 2.33$ ,  $p = .021$ , which indicated that when failures in both ICFR and ICMP co-occurred, financial performance tended to increase. The three-way interaction among FSAO, ICFR and ICMP was a negative and significant predictor,  $B = -4.37$ ,  $t(151) = -2.58$ ,  $p = .011$ , which indicated that the combined effect was associated with a decrease in financial performance. All other predictors and two-way interactions were not statistically significant (all  $p > .05$ ). The constant term ( $B = 8.68$ ,  $p = .14$ ) was also not significant, which indicated that when all predictors are zero, the model's intercept does not differ significantly from zero.

The final unstandardized regression equation was:

$$\text{ROA} = 8.68 - 2.66(\text{FSAO}) - 0.31(\text{ICFR}) - 5.43(\text{ICMP}) + 2.63(\text{FSAO} \times \text{ICFR}) + 7.14(\text{ICFR} \times \text{ICMP}) - 4.37(\text{FSAO} \times \text{ICFR} \times \text{ICMP})$$

*Note:* Two interaction terms—ICFR X ICMP ( $p = .021$ ) and FSAO X ICFR X ICMP ( $p = .011$ )—were statistically significant predictors of ROA.

### **Analysis Summary**

The purpose of this study was to examine if differences existed in the financial performance of U.S. nonprofit organizations based on financial statement audit opinions, internal controls over financial reporting, and internal controls of major programs. I used a correlational quantitative ex post facto secondary data analysis design as it best fit the purpose of the study and conducted between-subjects tests, analyzed estimated marginal means and performed two and three-way interaction analysis to measure the effect of independent variable(s) on the dependent variable.

The results of the descriptive statistics suggested that financial performance tends to be higher for entities with qualified audit opinions and fewer internal control deficiencies, while performance was lower and more variable among entities with adverse or disclaimer opinions and material control weaknesses.

The results of between-subjects effects revealed that the overall model was not statistically significant,  $F(14, 143) = 1.58, p = .091, \eta^2 = .13$ , which indicated that the combined factors did not explain a significant amount of variance in financial performance. However, there were significant main effects of FSAO and ICMP on financial performance. Specifically, the main effect of FSAO was significant,  $F(2, 143) = 3.31, p = .039, \eta^2 = .04$ , which suggested that levels of FSAO differed in their impact on ROA. Similarly, the main effect of ICMP was significant,  $F(2, 143) = 3.15, p = .046, \eta^2 =$

.04, which indicated that financial performance varied significantly across levels of ICMP. Overall, these results suggested that FSAO and ICMP each have independent, small-to-moderate effects on financial performance, and that the influence of FSAO on ROA may depend somewhat on levels of ICMP.

The results of estimated marginal means revealed that entities with a qualified audit opinion had the highest estimated financial performance ( $M = 4.35$ ) while organizations with an adverse opinion exhibited the lowest estimated mean performance ( $M = -2.40$ ), whereas those with a disclaimer opinion showed a near-zero mean performance ( $M = 0.88$ ). In practical terms, the direction of means suggested that organizations with qualified opinions tend to perform better financially than those with adverse or disclaimer opinions. In a separate analysis of marginal means, financial performance was slightly higher for entities with material weaknesses in ICFR ( $M = 3.40$ ) compared with those with significant deficiencies ( $M = 2.12$ ) and those reporting no internal control failures ( $M = 0.89$ ), which suggested that the presence or severity of internal control failures over financial reporting did not have a meaningful impact on organizations' financial performance as measured by ROA. In a third analysis of the estimated marginal mean, financial performance was highest for organizations with no ICMP failures ( $M = 6.71$ ), followed by those with significant deficiencies ( $M = 1.86$ ), and lowest for those with material weaknesses ( $M = -3.58$ ), indicated that the severity of internal control failures over major programs showed a trend toward lower financial performance, but did not produce statistically reliable differences in this sample.

However, in all three estimated marginal mean tests, the overlapping confidence intervals suggested that these differences were not statistically significant.

In three separate tests, no pairwise differences reached conventional statistical significance at the  $p < .05$  level. These results suggested that the type of financial statement audit opinion was not associated with significant differences in financial performance in this sample. These results also indicated that the severity of internal control failures over financial reporting was not associated with significant differences in financial performance. Overall, these results suggested that the severity of ICMP failures did not produce statistically reliable differences in financial performance, although the comparison between no failures and material weaknesses indicates a potential trend toward lower financial performance with more severe ICMP failures.

This study also included three separate tests to assess two-way interaction effect. For organizations with no ICFR failures, the estimated mean financial performance ranged from 1.86 ( $SE = 6.08$ ) to 2.42 ( $SE = 11.11$ ), while organizations with a significant deficiency in ICFR had an estimated mean of 2.12 ( $SE = 4.54$ ), and organizations with a material weakness in ICFR had mixed results with higher and lower means. For organizations with a qualified audit opinion, estimated marginal means indicated that financial performance was highest when no ICMP failures were present ( $M = 7.76$ ,  $SE = 2.53$ ), and lower when either a significant deficiency ( $M = 1.86$ ,  $SE = 6.49$ ) or a material weakness ( $M = 3.44$ ,  $SE = 4.11$ ) was reported. Organizations with an adverse audit opinion showed lower financial performance, with means of 1.98 ( $SE = 11.11$ ) for no ICMP failures, and  $-11.16$  ( $SE = 11.11$ ) for a material weakness; the combination of an

adverse opinion and a significant deficiency was not observed. Among organizations with a disclaimer audit opinion, financial performance was 9.86 ( $SE = 7.86$ ) when no ICMP failures occurred and decreased to  $-17.08$  ( $SE = 7.86$ ) in the presence of a material weakness; the significant deficiency condition was also unobserved in this group. Overall, these results suggested that the negative impact of ICMP failures on financial performance was most pronounced for organizations with disclaimer opinions and material weaknesses. In a final two-way interaction test, the results of the mean ROA values varied slightly across combinations of internal control failures, however, the 95% confidence intervals overlapped substantially, which suggested that none of the observed differences were statistically significant. In practical terms, failures in internal control over financial reporting and major programs, whether isolated or combined, did not significantly affect financial performance (ROA).

This study also allowed for a three-way interaction test to assess if the relationship between independent variables and a dependent variable change depending on the level of a third independent variable. The results revealed that organizations with a qualified audit opinion showed wide variation in ROA depending on internal control quality. Organizations with no internal control weaknesses demonstrated relatively higher performance ( $M = 6.26$ , 95% CI [2.67, 9.85]) compared to those with material weaknesses ( $M = -2.38$ , 95% CI [-20.31, 15.56]). As expected, those with material weaknesses in both ICFR and ICMP under a qualified opinion had the lowest mean ROA overall. For nonprofits with an adverse audit opinion, mean ROA values were generally lower and highly variable, though confidence intervals remained wide and overlapped

zero, which indicated no statistically significant difference. Among nonprofits with a disclaimer of opinion, ROA outcomes again varied by internal control condition, though this interval crossed zero, which suggested that the effect was not significant. Overall, the confidence intervals for all groups were wide and overlapping, which indicated substantial variability in ROA and no statistically significant three-way interaction among audit opinion type, internal control over financial reporting, and internal control of major programs.

Additionally, this study employed multiple linear regression analysis to examine how “financial statement audit opinions”, “internal controls over financial reporting”, and “internal controls of major programs” as independent variables relate to “financial performance” measured as ROA as the dependent variable. The results indicated that the overall model was statistically significant,  $R = .34$ ,  $R^2 = .11$ , and adjusted  $R^2 = .08$ , which suggested that approximately 11.3% of the variance in the financial performance was explained by the predictors. After adjusting for the number of predictors, the adjusted  $R^2$  dropped to .08, which revealed the true explanatory power is approximately 7.7%. The standard error of the estimate was 15.48, which indicated the average distance that the observed values fall from the regression line. In practical terms, the model accounted for a small portion of variance in financial performance, which indicated that financial statement audit opinion, failures in internal controls over financial reporting, and failures in internal controls of major programs were not strong predictors of nonprofit financial performance.

The ANOVA results revealed that the overall regression model was statistically significant,  $F(6, 151) = 3.19, p = .006$ , which indicated that the set of predictors collectively explained a small, but significant portion of the variance in financial performance. In practical terms, although the model reached statistical significance, the effect size was modest, which suggested that while audit opinions and failures in internal controls were related to financial performance, other factors likely contributed more strongly to the explanation of the variance in ROA.

An inspection of the individual predictors in the Coefficients table revealed that only two interaction terms were statistically significant predictors of financial performance. The interactions between ICFR and ICMP was a positive and significant predictor,  $B = 7.14, t(151) = 2.33, p = .021$ , which indicated that when failures in both ICFR and ICMP co-occurred, financial performance tended to increase. The three-way interaction among FSAO, ICFR and ICMP was a negative and significant predictor,  $B = -4.37, t(151) = -2.58, p = .011$ , which indicated that the combined effect was associated with a decrease in financial performance. All other predictors and two-way interactions were not statistically significant (all  $p > .05$ ). The constant term ( $B = 8.68, p = .14$ ) was also not significant, which indicated that when all predictors are zero, the model's intercept does not differ significantly from zero.

The final unstandardized regression equation was:

$$\text{ROA} = 8.68 - 2.66(\text{FSAO}) - 0.31(\text{ICFR}) - 5.43(\text{ICMP}) + 2.63(\text{FSAOXICFR}) + 7.14(\text{ICFRXICMP}) - 4.37(\text{FSAOXICFRXICMP})$$

*Note:* Two interaction terms—ICFR  $\times$  ICMP ( $p = .021$ ) and FSAO  $\times$  ICFR  $\times$  ICMP ( $p = .011$ )—were statistically significant predictors of ROA.

Prior to performing multiple linear regression, I tested and confirmed adherence to the six fundamental assumptions of multiple linear regressions, with no violations detected. The six assumptions assessed include (a) the dependent variable is continuous (it can be measured at the interval or ratio level); (b) each of the three independent variables are categorical with at least two independent groups; (c) the observations are independent (meaning there is no relationship between observations within or across groups); (d) the data does not contain significant outliers, (e) the dependent variable is approximately normally distributed for each combination of the groups of the three independent variables; and, (f) there is homogeneity of variances across these groups. This testing was necessary to ensure the findings of the study were valid, reliable and generalizable.

Referring to the original seven hypotheses, I have concluded as follows:

$H_{a1}$ : There are significant differences ( $p = .039$ ) in the financial performance of U.S. nonprofit organizations based on financial statement audit opinion, and I therefore reject the null hypothesis and accept the alternate.

$H_{02}$ : There are no significant differences in the financial performance of U.S. nonprofit organizations based on internal controls over financial reporting, and I therefore accept the null hypothesis.

$H_{a3}$ : There are significant differences ( $p = .046$ ) in the financial performance of U.S. nonprofit organizations based on internal controls of major programs, and I therefore reject the null hypothesis and accept the alternate.

*H<sub>a4</sub>*: There is a significant interaction ( $p = .006$ ) that occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer), internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses), and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations, and I therefore reject the null hypothesis and accept the alternate.

*H<sub>05</sub>*: No significant interaction occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) in predicting the financial performance of U.S. nonprofit organizations, and I therefore accept the null hypothesis.

*H<sub>06</sub>*: No significant interaction occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer) and internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations, and I therefore accept the null hypothesis.

*H<sub>17</sub>*: There is a significant interaction ( $p = .021$ ) that occurs between the internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses) and the internal controls of major programs in predicting the financial performance of U.S. nonprofit organizations, and I therefore reject the null hypothesis and accept the alternate.

The outcome of this study supported other recent research conducted by Biehl et al. (2024) who conducted a systematic review of 94 empirical accounting and finance studies that examined the “real effects” of financial reporting – how financial reporting

influences capital market participation, resource allocation, and broader input/output markets. The review found that consistent evidence that higher-quality financial reporting, including audits and internal controls, was positively associated with more efficient resource allocation. Additionally, the research validated the importance of internal controls over financial reporting to achieve stronger real effects across the organization.

### **Applications to Professional Practice**

U.S. nonprofits are resources constrained and vulnerable to collapse. While nonprofits contribute \$2 trillion annually, 30% will fail in the first decade of operation. This study demonstrated that poor financial performance is associated with unfavorable financial statement audit opinions and failures in internal controls over financial reporting and major programs. This suggests that nonprofits lack an understanding and/or sufficient resources to implement effective internal controls to prevent unfavorable audit findings, which unnecessarily jeopardize future federal funding. Nonprofits would benefit from an investment of resources, including personnel, technology and training, to address these deficiencies. With sufficient resources and effective implementation, nonprofits may be positively impacted through the achievement of improved financial performance, fewer deficiencies in internal controls, and increased federal funding.

### **Implications for Social Change**

This study is significant for social change. According to De la Sablonnière (2017), social change describes it as the alteration or transformation of societal structures and institutions, including changes to the economic, technological, and cultural frameworks

of a society. It involves significant shifts in human interactions and relationships that impact cultural and social institutions over time, resulting in lasting and profound consequences for society. The outcome of this study has the potential to transform how social institutions operate and deliver critical resources to people facing dire circumstances due to a shortage of affordable housing, food insecurity, access to education, unemployment, mental health crises, and other daily living needs. Nonprofits provide a gap in resources when the government is unable to deliver services directly. In recognition of the role of U.S. nonprofits, the federal government provides financial resources to nonprofit organization to fill the void. However, for nonprofits to continue addressing social needs, they must ensure access to federal funding which is directly dependent on single audit findings. Nonprofits that invest in proper accounting procedures and effective internal controls improve their long-term viability, and thereby positively impacts the lives of society's most vulnerable members.

### **Recommendations for Action**

In this study, my fundamental objective was to demonstrate if there was a link among U.S. nonprofits between poor financial performance and unfavorable audit opinions and/or failures in internal controls. The specific business problem was that that some U.S. nonprofit business leaders do not understand if differences exist in the financial performance of nonprofit organizations based on financial statement audit opinions, internal controls over financial reporting, and internal controls of major programs. This study reveals that some financial performance is negatively associated

with unfavorable audit opinions and failures in internal controls. I have three recommendations for action considering the study's findings.

First, the nonprofit managers should be required to complete a comprehensive annual training on best practices in nonprofit accounting as well as internal controls over financial reporting and major programs. Second, the government should require that nonprofit organizations receiving federal funding be required to complete this annual training and reimburse nonprofits for the training cost. Third, Certified Public Accounting firms that provide auditing services to the nonprofit sector develop and administer, for a fee, a robust annual training program that provides education and training on how to implement and monitor an effective accounting and internal control plan. Together, these parties will create a balanced 3-legged stool that ensures a solid foundation for nonprofit viability and the continued delivery of critical resources to the public's most needy participants.

### **Recommendations for Further Research**

Though the result of this study showed a clear and convincing relationship between poor financial performance and unfavorable audit opinions and internal control failures, the study needs some modification before generalizing the conclusions to the U.S. nonprofit sector. This study was limited to organizations that filed a Single Audit in 2021, excluding governmental, tribal and healthcare organizations. Due the pandemic, some nonprofits did not file a Single Audit and therefore were excluded from analysis. Additionally, the challenges associated with the pandemic that were unrelated to the independent variables considered in this study, caused some nonprofit organizations to

fail and be excluded from analysis. Finally, the study excluded governmental (e.g., schools, local municipalities), tribal and healthcare entities which deliver a substantial amount of social programming, and these entities face the same challenges as nonprofits when it comes to appropriate staffing, accounting systems and effective internal control programs. Future studies could be expanded to analyze nonprofit organizations over a three-to-five-year time span to assess trends and analyze recurrent findings. Additionally, future studies should consider the inclusion of or be targeted to healthcare, tribal and local government agencies.

### **Reflections**

My academic and professional background is in accounting. My practice has been devoted to forensic accounting, auditing, fraud examination and nonprofit/governmental business advisory services. Therefore, I wanted a DBA course of study that would complement my academic and professional background. My first consideration was to analyze the performance of governmental and nonprofit agencies in relation to financial statement audit opinions and assessments of internal controls. However, as I examined that consideration, I realized that my goal as a DBA student was to identify a financial problem facing nonprofit and governmental business leaders and solve a problem. I reconsidered what I wanted to study and leveraged my experience in forensic accounting, auditing in combination with my experience serving the nonprofit and governmental sector.

My experience in forensic accounting and auditing revealed that nonprofit and governmental organizations in particular struggle with sound financial reporting systems

and due to resource constraints also lack effective internal controls. I feel one of my responsibilities as a human being and educated accountant is to share my knowledge with organizations to assist them in developing reliable accounting systems and implementing best practices to safeguard the assets of the organization. I understand that when a nonprofit is operating well, it will deploy much needed resources to address societal shortcomings, such as homelessness, poverty, food insecurity, unemployment, mental and healthcare needs. To this end, I decided to do an ex post quantitative secondary data analysis.

After sharing this plan with my chair, he advised me to refine the scope of my study to organizations that received an unfavorable audit opinion, and to exclude governmental units, health care facilities and tribal units. He also advised me to limit the scope of the study to a single year, and to target a sample with like-size nonprofits in the United States. Although I was disappointed to exclude schools from my study, since this area is in wheelhouse, I understand that including governmental and tribal units in the study could create unintended obstacles that would delay my study. By refining my scope to a single year, rather than several years, I would also eliminate statistical challenges associated with trend analysis. Finally, by removing healthcare entities, I would have a more “like-kind” sized sample to analyze develop inferential findings. After much consideration and refinement, I am pleased with the scope of the study and happy to be able to share my findings with the nonprofit sector to assist them in improving their long-term financial viability by understanding the negative impact of unfavorable audit opinions and internal control deficiencies.

## Conclusion

Nonprofit organizations are crucial for maintaining economic stability and delivering essential social services to communities (Dell et al., 2022). Unlike profit-driven businesses, these organizations depend on support from constituents through donations, private grants, and government assistance. The competition for government funding among nonprofits is fierce, and successful applicants must adhere to strict financial reporting requirements, including the submission of an annual Single Audit that assesses the entities financial reporting and internal control systems. With 30% of U.S. nonprofits failing in the first decade, and considering these organizations providing \$2 trillion in annual support, the purpose of my study was to examine if there was a link between poor financial performance and unfavorable audit opinions and internal control deficiencies. I examined financial performance as ROA and analyzed Single Audit Reports to uncover the reasons for unfavorable audit opinions and deficiencies in internal controls. The findings were mixed.

The study confirmed that there are significant differences ( $p = .039$ ) in the financial performance of U.S. nonprofit organizations based on financial statement audit opinion, as well as significant differences ( $p = .046$ ) in the financial performance of U.S. nonprofit organizations based on internal controls of major programs. The study also confirmed that there is a significant interaction ( $p = .011$ ) that occurs between the financial statement audit opinion (qualified vs. adverse vs. disclaimer), internal controls over financial reporting (no deficiencies vs. significant deficiencies vs. material weaknesses), and internal controls of major programs in predicting the financial

performance of U.S. nonprofit organizations. However, the study did not find statistically significant differences in the financial performance of U.S. nonprofit organizations based on internal controls over financial reporting. The overall regression model was statistically significant,  $p = .006$ ; however, it was not a strong predictor of ROA. The set of predictors collectively explained a small, but significant portion of the variance in financial performance. Only two interaction terms were significant predictors: two-way interaction of ICFR x ICMP, and the three-way interaction among FSAO, ICFR and ICMP. In practical terms, the combined co-occurrence of the three dependent variables indicated a significant negative effect,  $p = .011$ , on financial performance.

The results of this study suggest that U.S. nonprofit leaders must understand that the long-term viability of nonprofits, including critical federal funding, is contingent upon the implementation of sound financial reporting and effective internal controls systems.

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