EXAMINING THE SUFFICIENCY AND APPROPRIATENESS OF AUDIT EVIDENCE IN THE UNITED STATES BANKING AND SECURITIES INDUSTRIES

by

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Abstract
The substratum of performing an effective and value-added audit engagement centers on the ability of qualified professionals to gather, assess and draw inferences from audit evidence independently. Generally Accepted Auditing Standards (GAAS) in the United States instruct auditors to design and implement audit procedures to gain relevant audit evidence to sustain the opinion conveyed in the auditor's report (AS 1105.03). This research examined the scope of audit evidence sufficiency and appropriateness in the United States banking and securities industries. The thesis aimed at enriching the existing body of knowledge on auditing in the target industries. Specifically, the thesis investigated the relationships between the sufficiency and appropriateness of audit evidence and six designated variables or elements: the quality of audit opinions, the source of audit evidence, management assertions, the reliability of audit evidence, internal control systems, and audit report quality. I used a quantitative approach to collect a variety of observations from crucial groups of professionals in the target industries. I collected responses from external auditors, bank examiners, and securities examiners through an internet-based survey. The responses related to respondents’ experiences and assessments of audit evidence and the designated study variables. I performed statistical assessments on the collected data to test designed hypotheses and establish whether they were supported by respondent data. Through the hypothesis tests, I determined that statistically significant relationships exist between audit evidence and the above-cited variables and developed recommendations for improvements to the general practice of business, potential application strategies, and implications for further study. A central recommendation is enhancing Auditing Standard (AS) 1301 Communications with Audit Committees to streamline the exchange of audit evidence data between external auditors and bank and securities examiners.
Key words: audit evidence, sufficient audit evidence, appropriate audit evidence, audit in financial sector, bank examinations, securities compliance examination.
Dedication

I am making the first dedication to God for affording me the resilience and courage to undertake and achieve advanced education at the doctoral level. I also dedicate this work to my father Siba Guilavogui who inspired and nurtured my resolve and passion for continuous learning. I am grateful to him for instilling the core values of commitment and courage in me. I am also appreciative of my family, friends, and academic advisors who assisted me throughout this process.
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Section 1: Foundation of the Study

Auditors gather numerous types of evidence during their engagements to express opinions on financial statements and evaluate the risk factors associated with their audit entities. Byrnes et al. (2018) explained that the main objective of auditing is to determine the compliance of an entity’s financial statements and examine its practices or performance related to the generally accepted accounting principles (GAAP). The complexity of auditing the management of financial resources and the need to keep public trust in fiduciary responsibilities required that auditors understand the importance of transparency and cultivate an environment of confidence in their services and operations (Palermo et al., 2017). As a result, auditors must comply with the principles of technical proficiency and professional standards to perform an informed auditing process and reinforce the public trust in the financial statements issued by the entities they audit (Tepalagul & Lin, 2015). The Auditing Standards Board (ASB) of the American Institute of Certified Public Accountants (AICPA) recommended that auditors design and apply procedures aimed at obtaining sufficient appropriate audit evidence to support their opinions (AICPA, AU-C Section 500).

This research included the sufficiency and appropriateness of evidence obtained by auditors as it relates to the quality of audit opinions in the United States banking and securities industries, thus contributing to the body of knowledge in the auditing field in the United States. I examined the relationship between sufficient appropriate audit evidence and of six selected factors, which included: the quality of audit opinions, the source of audit evidence, management assertions, the reliability of audit evidence, internal control systems, and audit report quality in the United States banking and securities industries. I developed the main research question backed by five secondary questions to explore the above designated factors. The main question
focused on studying the relationship between sufficient appropriate audit evidence on the quality of audit opinion in the United States banking and securities industries. In contrast, the secondary questions focused on exploring the other six factors. I developed six hypotheses to examine the primary and secondary research questions and customized and used a survey instrument previously designed by the International Federation of Accountants (IFAC) to assemble respondent data for analysis and interpretation.

I collected opinions from external auditors, bank examiners, and securities examiners. The participants had immediate consultative expertise and supervisory responsibilities within the target industries. Participants offered their responses about the relationships between the specified study factors or variables. I completed statistical analyses on the assembled data to investigate whether the hypotheses in the study were supported and validated by participants’ responses. The tests of the hypothesis concluded a statistically significant relationship between sufficient appropriate audit evidence and the quality of audit opinion. The tests also results indicated a statistically significant relationships between sufficient appropriate audit evidence and the other variables in the study, which were: the quality of audit opinions, the source of audit evidence, management assertions, the reliability of audit evidence, internal control systems, and audit report quality.

I used the study’s results to develop proposals for professional practice, potential application strategies, and recommendations for further studies. A major suggestion is to introduce a continuous forum of exchange between external auditors, bank examiners, and securities examiners to address gaps between the consultative nature of audit activities and the enforcement aspects of supervisory oversight. This suggestion involved the establishment of direct collaborative partnerships between external auditors and examiners to devise strategies in
which audits and supervisory oversight processes receive vital supports from each other. I advised that the audit process in the target industries serves as an early alert system for supervisory organizations to help address the constraints auditors might encounter during their engagements in the target industries. The paragraphs and sections below discuss the foundation of the study, the project, and the application to professional practice.

**Background of the Problem**

The auditor's opinion provided a crucial role in building stakeholders' trust in the auditee and the audited organization's services to stakeholders. For example, the United States Securities and Exchange Commission (SEC) criticized auditors for not detecting fraud in financial statements during annual audit engagements (Williams, 2017). Karkaci and Ertas, (2017), argued that the SEC had issued multiples informational releases on cases in which it initiated enforcement actions against auditors for their connections to misstated financial reports.

Some of the most notable cases included the Bernard Madoff scandal. A small audit firm composed of one partner was responsible for the certification of financial statements presented to the SEC (Azim & Azam, 2016). In the case of Bernard Madoff, the SEC found that the auditor allowed the fraudulent practices by falsely identifying, in the annual audit reports, that he performed the annual audits of his client’s financial statements in accordance with generally accepted auditing standards (GAAS) (Murphy & Hogan, 2016). The auditor stated on the yearly filings that the firm abided by the requirements to maintain auditor independence and applied the procedures for retaining securities, which was not the case (Williams, 2017). The auditor also specified that the auditee's financial statements were following generally accepted accounting principles (GAAP) (Azim & Azam, 2016). According to Williams (2017), a further indication related to an adequate review of the auditee's internal controls, including asset retention controls,
The inexistence of inadequacies in the financial records was not the case. The SEC noted that the auditor was aware that the auditee regularly distributed annual audit reports to clients. The entity filed its reports with the SEC and other regulators (Murphy & Hogan, 2016). The SEC officers discovered all these statements were substantially false because the auditor did not conduct a significant audit of the auditee and did not implement procedures to confirm auditee's values on behalf of its clients even existed (Williams, 2017).

The SEC officers further noted that the auditor intended to perform minimum audit procedures on specific accounts to give the impression that the firm was conducting an audit and did not document the audit findings and conclusions as necessary (Murphy & Hogan, 2016). According to Azim and Azam (2016), if adequately declared, these financial statements, together with the information provided by the auditee regarding the required reserves, would have demonstrated that the auditee owed tens of billions of dollars in additional debt to its clients and, therefore, was insolvent. The SEC officers found that the auditor also did not perform audit procedures regarding the auditee's internal controls and had no basis to state that the auditee had no material misstatements (Williams, 2017). Apprehensive that his work for the auditee would be subject to peer review, the auditor misled the American institute of certified public accountants (AICPA, 2019) for years and denied having done any audit engagement (Murphy & Hogan, 2016).

The Lehman Brothers case is another example in which auditors could not obtain sufficient audit evidence to support their opinions in the annual statements. Burke (2019) explained that Lehman found a flaw in the language of accounting standards relating to repurchase agreements and took advantage of it. Lehman’s professionals did not recognize liabilities for these asset transactions, removed the assets from its balance sheet, and used the cash
received to pay other debts, effectively reducing its debt (Wiggins et al., 2019). According to Burke (2019), repurchase agreements are agreements in which one party (the transferor) transfers an asset to another party (the transferee) as collateral for a short-term cash loan while agreeing to repay the cash plus interest and resume the guarantee at a specific time.

Wiggins et al. (2019) argued that the redemptions severely skewed the auditee’s leverage and even reduced it while paying the debts at the end of each quarter. However, stakeholders were not aware of the auditee’s factual circumstances. The auditors did not see Lehman's funds for the purchase agreements at the beginning of each quarter, which increased Lehman’s debt. Auditors who were responsible for detecting fraud and irregular accounting practices and disclosing them to the public and interested parties failed to report (Grove et al., 2017). The auditors did not detect or report the improprieties occurring at Lehman and continued to certify the flawed annual financial statements (Wiggins et al., 2019).

Inappropriate accounting practices at Fannie Mae, for example, were other instances in which auditors failed to obtain sufficient and appropriate evidence to support their opinions in annual statements. In this case, the auditee (Fannie Mae) misrepresented its financial statements from 1998 to 2004 (Frame, et al., 2015). The auditee stated estimated that the restatement of its financial statements for the years ended December 31, 2003, and for the quarters ended 30 June 2004 and March 31, 2004, resulted in a reduction of at least $11 billion in net earnings previously reported (Thomas & Van Order, 2018). Despite dominant position in the financial market, the auditee's internal controls were inadequate, given the size, complexity, and sophistication of its operations (Frame et al., 2015). The auditors’ failure in critical areas highlighted the vital need for senior management to continually assess internal controls as their business grows (Solomon & Zaring, 2015).
The accounting professionals at SEC noted that two accounting principles were essential to Fannie Mae's business: the recognition of non-refundable fees and the costs associated with loans, known as Financial Accounting Standard 91 or FAS 91, and the recognition of derivative instruments and covered activities, known as FAS 133 (Thomas & Van Order, 2018). Under FAS 91, the SEC found that at the end of 1998, the auditee’s senior management intentionally manipulated earnings to obtain the highest possible bonus payment (Solomon & Zaring, 2015). In addition, senior management determined that certain expenses would not be recognized even though GAAP required that they should receive recording (Frame et al., 2015). At the same time, management made a series of additional inappropriate adjustments to the entity's income statement to achieve the objective of inflated earnings per share necessary to generate maximum returns (Thomas & Van Order, 2018).

Frame et al. (2015) indicated that under FAS 91, corporations must account for loan fees, premiums, and discounts as an adjustment over the term of the applicable loans. For similar loan groups, a corporation may use prepaid estimates to calculate the effective interest rate of the loans and determine the portion of such expenses and related items recognized in the income statement. If the actual prepayments differ from the estimates, or if the estimates change, then the entity must adjust net investment in the loans with a compensatory entry in the income statement. Solomon and Zaring (2015) concluded that from 2000 to 2004, the staff at Fannie Mae incorrectly used a threshold to determine when it would record some of these adjustments in its income statement. If the amount recorded did not exceed the limit calculated by the corporation, Fannie Mae did not register the amount. This practice was an inappropriate deviation from GAAP and had the effect of reducing earnings volatility (Thomas & Van Order, 2018).
Under FAS 133, without an adequate basis in the relevant accounting standards, Fannie Mae sought to integrate the vast majority of its transactions into a simplified method of applying hedge accounting that assumed no inefficiency in the hedging relationship (Solomon & Zaring, 2015). Assuming that no inefficiency existed, the staff at Fannie Mae avoided measuring and recording in its income statement the difference between the change in the value of its derivatives and the change in the value of the items covered by the derivatives (Frame et al., 2015). Thus, the transactions in question were not eligible for such treatment under FAS 133.

According to Solomon and Zaring (2015), one of the reasons Fannie Mae’s staff adopted this approach was that they did not have adequate systems or personnel to comply with the provisions of FAS 133, particularly with provisions that require periodic evaluation of effectiveness and measurement of inefficiency. If Fannie Mae’s staff had applied such conditions, this would have resulted in the volatility of the income statement that the corporation's management would have avoided (Thomas & Van Order, 2018). Most of Fannie Mae's planned restatement of, at least, an $11 billion reduction in net income reported in financial statements resulted from its inadequate hedge accounting (Frame et al., 2015). All these accounting improprieties were ongoing while the auditors continued to issue unqualified audit opinions on the annual statements filed by Fannie Mae.

The instances of irregular accounting practices at the American International Group (AIG) illustrate how auditors failed to obtain sufficient and appropriate audit evidence to support their opinions. The SEC found that starting in December 2000 and March 2001, AIG accountants entered into two fictitious reinsurance transactions with another financial entity that had no economic substance, but that AIG professionals designed the improper addition of $500 million in the fourth quarter of 2000 and the first quarter of 2001 (Markham, 2015). In addition, the SEC
noted that in 2000, AIG professionals made a transaction with a reinsurance entity to hide subscription losses (Lessambo, 2018). As a result, AIG incorrectly converted 200 million in its general insurance business into capital losses or investments. The accountants from AIG established an offshore reinsurer, to which it finally sold approximately 50 reinsurance contracts for benefits (Markham, 2015). Although AIG accountants had overall possession of the established entity, it did not consolidate its financial results with its own and took steps to hide its control from regulators (Lessambo, 2018). AIG fraudulently improved its financial results based on accounting irregularities (Markham, 2015). The auditor's responsibility to exercise the due diligence required collecting and assessing sufficient and appropriate audit evidence that supports the audit opinion; this was not the case with the staff at AIG.

In another case against Bancorp, the SEC found that between April 2012 and September 2014, Bancorp did not correctly classify individual loans and did not charge the appropriate reserves for individually impaired loans. The two improprieties led the company to materially underestimate its provision for losses relating to loans and leases (Abrams, 2016). During this same period, Bancorp also failed to develop or maintain internal accounting controls to maintain credit files and identify distressed debt restructuring (Masulis et al., 2018). As a result of these failures, Bancorp's understated its estimate for losses on loans and leases for 2010 through 2013 by approximately $138.6 million. In addition, reserve for losses on loans and leases for 2012 and 2013 by more than 70 percent (Dervan, 2015).

According to the SEC's officers’ order against the executives of this institution, they knew or should have known that the risk ratings of individual loans had not been revalued, lowered, or depreciated, despite the indicators of financial difficulties (Masulis et al., 2018). However, the officers used the ratings to estimate the provision for losses on loans and leases.
Another official responsible for maintaining the Bancorp credit files did not provide reasonable assurance that the data contained the necessary and updated documentation and did not provide the institution’s audit committee with sufficient information on debt restructuring (Dervan, 2015).

Bishop et al. (2019) noted that another SEC case revealed that a Crowe LLP audit team identified the risk of fraud at one of its auditees but failed to take the following actions:

- Design and apply audit procedures to detect undisclosed obligations for corporate payroll taxes.
- Appropriately recognize and audit transactions between related parties within the entity.
- Gain sufficient and appropriate audit evidence to address these fraud risks, support revenue recognition, and support the audit opinion.
- Assess real doubts about the company's ability to continue its operations; and
- Make a proper review of the quality of the commitment.

The SEC officers determined that the auditors were not independent due to a continuous, direct business relationship with the auditee (Hallman et al., 2018). In addition, the audit deficiencies occurred despite the participation of the auditors’ national office, which was aware of the high-risk nature of the mission and the inability to obtain adequate evidence (Overseas, 2018). The SEC officers further stated that the auditors had violated the numerous audit and reporting requirements, including the anti-fraud provisions and engagement in inappropriate business conduct (Hallman et al., 2018).

DeFond et al. (2016) indicated that a review of the cases illustrates that the most pervasive issue in most circumstances was the auditor's failure to collect sufficient and
appropriate evidence. These instances involved insufficient evidence in areas such as asset valuation, asset ownership, and management representations. DeFond et al. (2016) noted that the SEC found that auditors did not apply GAAP pronouncements at all or failed to use them correctly. In other cases, examiners found auditors found at fault for not adequately assessing inherent risks and adjusting the audit program to address the assessed level of risk (Goldman et al., 2017). Karkaci and Ertas (2017) persisted that audit issues included the inability of auditors to exercise due diligence and adequate professional skepticism, excessive dependence on management assertions as audit evidence, and failing to confirm audit evidence relating to debt and asset accounts.

According to Goldman et al. (2017) regulatory entities also found issues relating to the non-recognition of transactions between related parties and assuming that internal controls existed or were active, when in fact, they were not. All the above-noted issues feed into the auditor’s inability to gather sufficient appropriate audit evidence to support the opinion issued on audited financial statements. The purpose of this study is to examine issues related to the sufficiency and appropriateness of the audit evidence. The study also encompasses determining the impact of these factors on the quality of the audit opinion for audit reports issued in the target industries.

**Problem Statement**

The general problem addressed was auditors’ failure to collect sufficient and appropriate evidence to form an independent and objective opinion. Before developing a relevant and accurate opinion, auditors must examine any information initially received from the auditee (Glover et al., 2018; Zuca, 2015). Goldman et al. (2017) posited that the quality and pertinence of audit evidence depended on auditors’ professional judgment, technical proficiency, and the
application of accounting principles. Enforcement actions from the Securities and Exchange Commission (SEC) have revealed that large financial institutions in the United States generally have unqualified audit opinions on annual filings. However, despite the unqualified audit opinions, inadequate financial practices have permeated their internal practices (Middlemiss et al., 2015).

Sirois et al. (2018) recognized the need for further research relating to studying the sufficiency and appropriateness of audit evidence and its influence on the quality of audit reports. The specific problem addressed was that auditors in the United States banking and securities industries often failed to obtain sufficient appropriate audit evidence to support the quality of their audit opinions. Through this quantitative correlation study, I examined the main independent variables of (a) sufficiency and appropriateness of audit evidence and the main dependent variable of (b) quality of audit opinions. I obtained data from auditors and bank examiners to study how sufficient and appropriate audit evidence influenced the quality of audit opinions in the United States banking and securities industries.

**Purpose Statement**

The purpose of this quantitative correlation study was to examine the relationship between the sufficiency and appropriateness of audit evidence obtained by auditors in the United States banking and securities and the quality of audit opinion. The research served as reference material to reinforce audit procedures as they relate to the sufficiency and appropriateness of audit evidence and deliver empirical data gathered from auditors and examiners. The results assisted in strengthening best practices in financial institutions’ audits and reinforcing the public’s trust in audited financial statements for corporations operating in the United States securities and banking industries.
Research Questions

The problem that prompted this study was the need to study the sufficiency and appropriateness of audit evidence to form independent and objective audit opinions. Specifically, the problem hinged on deficiencies that affected the collection of sufficient appropriate audit evidence to support the quality of audit opinions in the United States banking and securities industries. I developed the main research question to investigate this problem, which states as follows: How does sufficient and appropriate audit evidence influence the quality of audit opinion in United States securities and banking industries? I explored this central question through the collection of data using a Likert-type questionnaire. The data was gathered from professional auditors and examiners using a public survey. Other relevant research questions established to investigate in the main questions were as follows:

Research Question 1: To what extent, if any, is there a relationship between the source of audit evidence and the quality of sufficient appropriate audit evidence?

Research question 2: To what extent, if any, is there a relationship between management assertions and sufficient appropriate audit evidence?

Research Question 3: To what extent, if any, is there a relationship between sufficient and appropriate audit evidence and the quality of audit opinion?

Research Question 4: To what extent, if any, is there a relationship between the reliability of audit evidence and the effectiveness of internal control systems?

Research Question 5: To what extent, if any, is there a relationship between the audit evidence and the quality of the audit report?
Hypotheses

The following hypotheses were tested in this study.

Hypothesis 1

H_{01}: There is no statistically significant relationship between the source of audit evidence and the quality of sufficient appropriate audit evidence.

H_{a1}: There is a statistically significant relationship between the source of audit evidence and the quality of sufficient appropriate audit evidence.

Hypothesis 2

H_{02}: There is no statistically significant relationship between management assertions and sufficient appropriate audit evidence.

H_{a2}: There is a statistically significant relationship between management assertions and sufficient appropriate audit evidence.

Hypothesis 3

H_{03}: There is no statistically significant relationship between sufficient and appropriate audit evidence and the quality of audit opinion.

H_{a3}: There is a statistically significant relationship between sufficient and appropriate audit evidence and the quality of audit opinion.

Hypothesis 4

H_{04}: There is no statistically significant relationship between the reliability of audit evidence and the effectiveness of internal control systems.

H_{a4}: There is a statistically significant relationship between the reliability of audit evidence and the effectiveness of internal control systems.

Hypothesis 5
H05: There is no statistically significant relationship between the reliability of audit evidence and the quality of the audit report.

Ha5: There is a statistically significant relationship between the reliability of audit evidence and the quality of the audit report.

Hypothesis 6

H06: There is no statistically significant relationship between the quality of the audited entity’s financial systems and sufficient appropriate audit evidence.

Ha6: There is a statistically significant relationship between the quality of the audited entity’s financial systems and sufficient appropriate audit evidence.

Nature of the Study

Creswell and Creswell (2017) explained that there are generally three methods for consideration in research: qualitative, quantitative, and mixed method. The selected method for this thesis was the quantitative method. The acceptable designs were descriptive, correlational, and causal comparative. The chosen design for this study is correlational. I chose the quantitative approach because the current research aimed to explore the descriptive analysis of characteristics across variables and answer questions about the relationships between variables to quantify, clarify, forecast, corroborate, or test the association between sufficient appropriate audit evidence and the quality of audit evidence. I did not attempt to form ideas from related bodies of knowledge as often done in qualitative research. Mixed research was often explanatory and generally comprised two phases: an initial phase of qualitative discovery about a given subject of study, followed by a quantitative data collection phase (Snelson, 2016). I focused on quantitative data and the study of the relationship between variables. Therefore, a mixed research method was not appropriate.


**Research Paradigms**

The literature review has shown that researchers use paradigms to illustrate the critical set of principles shared by scientists. According to Raweh et al. (2021), researchers viewed paradigms as the collective set of tenets concerning the manners in which questions are recognized and studied in a specific area of scientific research. Paradigms identify how researchers perceive the world and consequently go about performing their research. Baškarada and Koronios (2018) indicated that paradigms are the schools of thought, standpoints, philosophy, or collection of common values that drive the connotations or interpretation of research data. Kankam (2019) explained that research paradigms fundamentally echo researchers’ thoughts about their environment. Kankam (2019) explained the conceptual principles and philosophies that structure how researchers understand the world and how they construe and perform inside that world.

Mitchell (2018) described paradigms are crucial because they offer ideas and standards, which, for researchers in a specific school of thought, impact what they should study, how they should perform or examine their subject of inquiry. In addition, paradigms shape how researchers should interpret and disseminate their research findings. Baškarada and Koronios (2018) remarked that paradigms identify researchers’ theoretical alignment and guide the choice of approach and methodologies. Researchers suggested numerous paradigms through the years (Baškarada & Koronios, 2018). However, for the purpose of the current thesis, I reviewed paradigms grouped under three primary categories: interpretivism constructivism, pragmatism, and positivism.

Patra and Bustami (2016) indicated that proponents of interpretivist constructivism prefer qualitative research. Advocates of interpretivist constructivism assert that detailed, methodical,
and hypothetical responses to complex human challenges are impractical to establish (Kelly et al., 2018). Kelly et al. (2018) contended that each social and historical condition is unique, distinctive, and entails evaluating specifically characterized structures and conditions. Ling (2017) indicated that interpretivist stresses that individual’s view and construe societal conditions based on the philosophical stances. Thus, understandings individual rather than developed or enforced from elsewhere. According to Arnold et al. (2018), interpretivist constructivism relate to theoretical philosophies. Individuals are purposeful and imaginative in their accomplishments and dynamically create their societal environment. Supporters of this approach believe in the active and shifting condition of culture and recognize that there could be various understandings of a phenomena influenced by people’s historic or communal viewpoint (Patra & Bustami, 2016). Given the qualitative nature of this paradigm, I did not apply the paradigm for the study.

Kelly et al. (2018) explained that pragmatic theorists endeavor to identify research methods that involve shared qualities of various other paradigms and mixed procedures that could permit a blend of approaches. Maarouf (2019) noted that pragmatism encourages integrated techniques as a practical approach to comprehend human behavior. This paradigm promotes an interactive epistemology, a pluralistic realism ontology that holds that there is no solitary certainty, and all persons have their particular and exclusive understandings of reality (Raweh et al., 2021). Furthermore, pragmatism supports a mixed approach to research, where researchers merge quantitative and qualitative research methods. In the current thesis, I studied quantitative data to specifically perform quantitative analysis and address research questions relevant to a large group of respondents (Ling, 2017). I did not intend to use and mix the qualities of various other research methods.
According to Arnold et al. (2018), positivism began on what the recognition in research practices as the systematic approach of investigative studies. Arnold et al. (2018) mentioned that research, examination, and explanation based on knowledge should be the foundation for identifying human conduct. Consequently, the single genuine method of broadening awareness and human understanding. The logical process entails a course of investigation applied to study statements and to address inquiries (Kelly et al., 2018). Raweh et al. (2021) indicated that research established in this paradigm depends on inferential reasoning, development of hypotheses, assessment of established hypotheses, presentation of functional explanations, and the application of statistical analysis tools to confirm representations and draw inferences.

Baškarada and Koronios (2018) posited that positivism intends to deliver clarifications and achieve projections based on quantifiable results. The quantifiable results through the collection of demonstrable practical data supports the selected theoretical context and enables researchers to test formulated hypotheses (Baškarada & Koronios, 2018). Ling (2017) observed that positivism supports the utilization of quantitative research approaches as the substratum for the scholar’s aptitude for accuracy in portraying research constraints. Positivism entails the analysis, collection, examination, and interpretation of quantitative data to comprehend and appreciate relationships rooted in the examined information (Kankam, 2019). I developed several hypotheses, collected, and tested quantitative data to address those hypotheses and develop research findings for interpretation. Therefore, the research aligned with positivism as the relevant school of thought for the study.

Design

This quantitative research was correlational in design which, relates to establishing a relationship between two closely related variables (sufficiency and appropriateness of audit
The quality of audit opinion in the United States banking and securities industries and detected changes. This research method establishes logical relationships between at least two different variables (Curtis et al., 2016). Without assuming a priori differences in aspects, this study endeavored to find a connection between the sufficiency and appropriateness of audit evidence and the quality of audit opinions related to specific industries in the United States. Researchers used this quantitative research technique to correlate two or more variables using mathematical analysis instruments (Rahi, 2017).

Umstead and Mayton (2018) clarified, the patterns, relationships, and trends between the variables are studied in a correlational design as they exist in their natural structure. The impact of one of these variables on the other considers the modification of the relationship between the two variables (Curtis et al., 2016). In correlational research, Curtis et al. (2016) theorized that a researcher could assess the validity of a brief extraversion test by administering it to a large group of respondents along with an extended extraversion test that has already proven to be valid. Then, the investigator can verify if the respondents' scores in the short test are strongly correlated with their ratings in the extended test. The consideration of the test scores causes the other, so there is no manipulation of the independent or dependent variables. The other reason why I chose a correlational study instead of an experiment is that the statistical relationship of interest is causal. However, the researcher cannot manipulate the independent variable because it is impossible, impractical, or unethical (Curtis et al., 2016).

In a given correlational study, Cook (2015) posited that researchers could postulate that the number of routine interactions people experience affects the amount of physical and psychological indicators. Researchers cannot manipulate the number of regular communications their respondents' knowledge (Cook, 2016). The researcher have to settle for measuring a
specific number of interactions and the number of indicators using self-report questionnaires (Cook, 2016). Sekaran and Bougie (2016) indicated that a common mistake among beginning researchers is that correlational research should involve two quantitative variables, such as scores in two extroversion tests. However, the defining characteristic of correlational study is that among the measured variables, neither is manipulated nor is this true regardless of whether the variables are quantitative or categorical (George, 2019).

Groeneveld et al. (2015) emphasized that the defining characteristic of correlational research is that no manipulated variables. In regard to the results, it does not matter how or where the variable measurements emerged (Curtis et al., 2016). For example, a researcher can have the respondents come to a laboratory to complete a computerized digit retracement task and an automated risk decision-making task and then evaluate the relationship between the respondents' scores in the two tasks (Rodgers et al., 2017). Alternatively, a researcher could interview patients in a controlled environment, ask them about their attitudes towards the environment and the services provided to them, and then evaluate the relationship between these two variables. According to Edmonds and Kennedy (2016), both studies would be correlational because of unmanipulated variables. However, because some data collection methods (i.e., surveys and questionnaires) are strongly associated with the current correlational research, used during the data gathering stage.

Descriptive research is in a narrative form because the researcher has no control over the variable under study (Nassaji, 2015). According to Willis et al. (2016), descriptive studies can be characterized only as of the effort to determine, describe, or identify facts that exist. Correlational researchers attempt to establish the existence or nonexistence of a correlation between two or multiple variables (Umstead & Mayton, 2018). Descriptive analysis was not the
best method appropriate for the current study because descriptive studies were observational and not primarily aimed at assessing the strength and direction of a relationship between two or more variables (Willis et al., 2016). In contrast, the current correlational study specifically aims at achieving that objective. Furthermore, Sekaran and Bougie (2016) explained that an essential characteristic of descriptive research is that, while it can use a series of variables, a single variable is sufficient to conduct a descriptive study, while correlational research needs a minimum of two variables.

Descriptive research was not appropriate in the current context. The present study described and discussed the independent variables (Sufficiency and appropriateness of audit evidence) and the dependent variable (the quality of audit opinion). However, the research was not to observe and describe a phenomenon as typically explored in descriptive analyses (Sekaran & Bougie, 2016). Baldwin (2018) emphasized that a descriptive study is more suitable when the research objective is to detect or identify classifications, rates of recurrences, characteristics, and tendencies. Sekaran and Bougie (2016) indicated that researchers used this quantitative research technique to gain a broad overview of the subject of study. The current study went beyond obtaining a general understanding of the research subject. I studied the specific association between the sufficiency and appropriateness of audit evidence and the quality of audit opinion in the United States banking and securities industries. Therefore, a descriptive study design was not appropriate for the current study.

Causal comparative, another method of quantitative research, was not appropriate for this study. After all, this study did not seek to conclude the cause-and-effect equation between two or more variables, for example, in cases where one variable is dependent on another independent variable, was typical in causal-comparative research (Samii, 2016). Baldwin (2018) indicated
that causal-comparative research is occurs regardless of the relationship between two or more variables. While the current study specifically substantiates or invalidates the relationship between the sufficiency and appropriateness of audit evidence and the quality of audit opinion, I did not seek to establish a causal-comparative relationship between these variables. Therefore, a causal-comparative method was not appropriate in this instance.

According to Creswell and Clark (2017), quasi-experimental research typically originated from one or multiple theories. Usually, approaches that had not received approval in the past are mere suppositions (Sheremeta, 2018). The experimental research method was not suitable because the current study did not manipulate the variables to prove or invalidate the expected result, as is generally done in experimental or quasi-experimental research (Gass, 2015). More importantly, Watson and de Wit (2018) postulated that experimental research is carried out in a controlled environment, which is not the case in this research. I collected data through surveys and questionnaires, and the results did not support the null hypothesis.

**Method**

For this study, I chose a quantitative approach that involves a questionnaire, as described by Walton et al. (2017). I collected survey data from auditors and financial institutions examiners who specifically audited or supervised banking and securities services institutions in the United States. Quantitative research applying statistical processes to refine and show the patterns that emerge from the data under study (Creswell & Creswell, 2017). Quantitative research includes separating data into units or smaller categories based on concepts or logical units (Almalki, 2016). This type of research, explores the descriptive analysis of characteristics across variables or answers questions about the relationships between variables to quantify, clarify, forecast, corroborate, or test a given phenomenon (Bryman, 2017. Quantitative research was appropriate
for the current study because I attempted to verify or confirm assumptions tested by inferential reasoning.

An objective of quantitative methods was to reduce variability. The reduction in variability also decreases bias and focuses on specific variables (Edmonds & Kennedy, 2016). The primary purpose of quantitative research is to quantify data (Bryman, 2017). The quantitative approach offered the possibility of generalizing the results of a sample to an entire population of interest and measuring the impact of various points of view from a given sample to a specific population (Almalki, 2016). A quantitative research approach was best suited to study the relationship between two or more variables (Creswell & Creswell, 2017). I explored the relationship between sufficient appropriate audit evidence and the quality of audit opinions in audit reports issued in the American banking and securities industries. To meet the study's objectives, the researcher needs to select the most appropriate design (McCusker & Gunaydin, 2015). The researchers should use a quantitative model that focused on a primary research question and a particular data collection and analysis (Patten & Newhart, 2017) through a research questionnaire.

According to Creswell and Creswell (2017), qualitative research was particularly appropriate for gaining a thorough understanding of underlying reasons and motivations. Edmonds and Kennedy (2016) posited that qualitative research often generated ideas for subsequent quantitative analysis. The goal of qualitative research was not a measurement but discovery (Nassaji, 2015). Therefore, I did not use qualitative research to verify or confirm assumptions (Snelson, 2016), the case in the current study. The goal of qualitative research was to discover and understand experiences and the meaning of social experiences and phenomena (Weis & Willems, 2017). The study included measurable variables; therefore, I did not choose
qualitative methods, which primarily involved the study of social experiences or discovery. This study did not include answering questions about experiences, values, and perspectives, most often from the participant's point of view, as would qualitative research.

A qualitative method was not appropriate to this research because it was not about researching philosophies, attitudes, and normative behavior concepts typical of qualitative studies (Creswell & Creswell, 2017). Almalki (2016) explained that qualitative studies characteristics includes semi-structured or structured interviews to seek opinions on a specific topic or with key respondents to obtain general information or an institutional perspective. Snelson (2016) posited qualitative studies also use comprehensive interviews to understand a condition, experience, or event from a personal point of view through government reports, media articles or websites, to learn more about distributed or isolated knowledge. Thus, quantitative research was different from quantitative research methods aimed at gathering numerical data and generalizing it to groups of people or entities or explaining a particular element of study (Snelson, 2016).

According to Almalki (2016), mixed research was appropriate when the researcher needed to validate results using quantitative and qualitative data sources. Researchers can use a contemporary design to compare the effects of qualitative and quantitative data (Creswell & Clark, 2017). Creswell and Creswell (2017) indicated that this type of research involved collecting two kinds of data, assessing the information using analogous constructs, and comparing the results. Edmonds and Kennedy (2016) theorized that mixed research transforms qualitative data into quantitative scores or presents the two forms of data together. Both types of data can validate each other and create a basis for concluding the study (McKim, 2017). The
current study does not validate qualitative research through quantitative data or compare qualitative data to quantitative data.

Edmonds and Kennedy (2016) asserted that mixed methods based on philosophical hypotheses relevant to qualitative and research methods reflecting quantitative approaches. Snelson (2016) posited mixed research techniques involved philosophical assumptions that guide the direction of data collection and analysis and the blending of qualitative and quantitative methods at many stages of the research process. Research in mixed methods was particularly appropriate when the researcher wished to validate or corroborate the results obtained by another method (McKim, 2017). Mixed research is suitable when the researcher use one method (Snelson, 2016). For example, mixed methods is necessary when minimal information exist about a topic. The mixed method is crucial to learn variables through quantitative research and explore variables with a large sample using quantitative analysis (Creswell & Clark, 2017). This study does not inform another method or build on the results of other approaches. No construction drawn from the theory about a particular phenomenon, as would a mixed method. Therefore, the use of a mixed method was not appropriate in this case.

**Summary of the Nature of the Study**

In summary, I chose a quantitative approach because it was best suited to study the variables in the current research. I used a correlational design because the goals in this research were to describe and predict the correlational association between the sufficiency and appropriateness of audit evidence and quality of audit opinion in the United States banking and securities industries. Specifically, this study described the strength and direction of the relationship between these two variables.
Another reason why I used the correlational design rather than an experiment or other quantitative methods such as descriptive or causal comparative was that the statistical relationship of interest was not supposed to be causal, and the research did not manipulate the independent variable because it was impossible or impractical to do so (Umstead & Mayton, 2018). Edmonds and Kennedy (2016) explained that correlation is habitually employed to establish the reliability and validity of variables in quantitative studies.

An additional strength of correlational research was that its external validity was often superior to that of experimental research. A trade off existed between internal validity and external validity (Rahi, 2017). According to Sheremeta (2018), as new controls adds to the experiments, internal validity increased, but often to the detriment of external validity. On the other hand, correlational studies generally had low internal validity because nothing was manipulated or controlled (Privitera, 2018), while the external validity was higher due to the absence of manipulating the study’s variables. As Curtis et al. (2016) posited, no elements or variables were manipulated or controlled in a correlational study, therefore expected results reflect the actual relationships that occur in a live environment.

**Theoretical Framework**

Audit theories discussed herein provide a general framework for understanding the concept related to the current study. Enofe et al. (2015) theorized that one of the reasons for a serious and thorough investigation into the possibility and nature of audit theory is the hope that it brings solutions to stakeholders, or at least signs of solutions to issues may affect the organization. Also, audit theory attempts to explain why some of the critical assumptions and concepts of auditing are important (Ramamoorti et al., 2017). Audit theories also revealed some of the principles that shaped auditing practice and established an outline that helped recognize
Theoretical Framework Model

Figure 1. Theoretical Framework - Relationships between concepts.

Theories

Four main theories constituted the key tenets driving the theoretical framework under the current thesis. Those theories comprised the policeman theory, the lending credibility theory, the theory of inspired confidence, and the assurance theory. Each theory provided a foundational basis that the underpinning thoughts that shaped the thesis. The paragraphs below provides a discussion of each theory and its relevance to the thesis.
**The Policeman Theory**

The first theory discussed in this framework was the policemen theory. According to the policeman theory, the auditor has the authority to investigate, detect, and deter fraud (Hayes et al., 2014). Although auditors have focused on providing reasonable assurance and verifying the reliability and fairness of financial statements, proponents of this theory emphasized that auditors must play the watchman role in preserving stakeholders’ assets (Enofe et al., 2015). Detection of fraud was a significant responsibility of auditors under this theory. The responsibility continues to increase in significance because of recent financial scandals that auditors receive criticism for not detecting and preventing (Ramamoorti et al., 2017).

**The Lending Credibility Theory**

The second theory discussed in the current framework is the lending credibility theory. According to Hayes et al. (2014), the lending credibility theory informed that auditing’s primary function is to lend credibility to statements of financial operations. From this point of view, auditors provided credibility in the form of the services that they performed for their auditees (Ramamoorti et al., 2017). Audited financial statements contain fundamentals that increase users’ confidence of financial statements in the figures presented by the auditee’s management (Dennis, 2015). The perception is that users derived benefits from greater credibility (Olaoye et al., 2019). The quality of investment founded on accurate decisions improves (Stein, 2017). This theory implied that auditees used audited financial statements to strengthen stakeholders’ trust in their performance (Olaoye et al., 2019).

**The Inspired Confidence Theory**

The third theory included in the current framework is the theory of inspired confidence. Hayes et al. (2014) explained that Limperg developed the theory of inspired confidence in 1932.
Akhidime (2018) clarified that the theory of inspired confidence targeted the demand as well as the supply of audit services. Olaoye et al. (2019) posited that audit services predicates on the interest of third-party stakeholders in organizations. Under this theory, interested parties required accountability from an organization in which the parties had vested interests (Dennis, 2015). The organization's effectiveness reflects through the financial statements provided to stakeholders (Akhidime, 2018). However, the provided information may misconstrue to conceal inadequate performance or significant losses (Rosyadi & Budding, 2017). Therefore, proponents of this theory suggested that external third parties who did not have direct control of the organization must review the financial statements before sending them to stakeholders (Cordos, 2019).

**The Assurance Theory**

The fourth and last theory included in the current framework was the assurance theory. Assurance services were services in which auditors examined practices and assertions and expressed their conclusion about the consistency and reliability of the practices and statements (Hayes et al., 2014). Nwaobia et al. (2016) explained assurance as services provided by an independent expert to increase the value of decision-making information. Under this concept, auditing is an instrument that strengthened the decision-making process (Kumar & Sharma, 2015). Thus, parties responsible for business decisions turned to audit to obtain certifications that enhance the dependability and significance of information on which they based their decisions (Nwaobia et al., 2016).

**Actors**

The main actors in the thesis comprised respondents and the industries under study. The respondents included external auditors, bank examiners, and securities examiners. In the context of this study, external dedicated auditors audit professionals who perform external audits through
the independent or unbiased examination of the records of financial operations and results prepared by organizations (Manita et al., 2020). In the context of the current study, those organizations need auditing organizations or auditees. Appelbaum et al. (2018) noted that the leading purpose of an external audit engagement is to substantiate that audited organizations’ accounting records convey a true and accurate reflection of the organizations’ financial conditions and that their financial statements are organized presented in conformity with applicable laws and accounting standards. Hooda et al. (2018) indicated that external auditors enhance value by detecting areas in which organizations can improve their efficacy and those in which controls and practices might be rendered more efficient.

Another group of actors comprise of bank examiners and securities examiners. Bank examiners, also recognized as financial examiners, assess banks or financial institutions to preserve the safety and soundness of their operations and enforce compliance with federal and state laws (Calomiris & Carlson, 2018). According to Shanks (2017), bank examiners coordinate examinations and evaluate compliance management systems before drawing conclusions and establishing ratings for examined institutions. Vanatta (2020) stated that bank examiners’ prerogatives go beyond external auditors due to their authority to enforce compliance with laws and regulations. Epstein (2017) indicated that bank examiners safeguard public interest through the federal and state officials in charge of assuring financial organizations.

Vanatta (2020) stated that securities examiners perform examinations of securities and charters and their associated records to determine lawfully submitted securities for sale. Esen and Yaman (2021) mentioned that securities examiners perform examinations about the registration of investment advisors and their agents of securities and broker-dealers. Makvand et al. (2019) clarified that securities examiners review notices of intent to offer securities and contracts for
trade, assess financial statements and other relevant evidence to determine that such securities meet legal and regulatory requirements. Kubic (2021) asserted that they also financial audit records about securities to establish whether the sale of securities violates laws, would result in fraud, or would be contrary to the public interest. The other actors in the study are financial institutions and organizations involved in the sale, trade, or exchange of securities.

**Variables**

This study had seven variables consisting of one independent variable: audit evidence sufficiency and appropriateness, and six dependent variables: (1) quality of audit opinions (2) the source of audit evidence, (3) management assertions, (4) the reliability of audit evidence, (5) internal control systems, and (6) audit report quality. DeFond et al. (2016) theorized that an audit system and procedures based on the adequate collection and analysis of sufficient appropriate audit evidence are vital to avoid weak reporting and errors in an entity's records and reports and facilitate the understanding of those reports for the public at large or the non-expert. Gu et al. (2019) posited that systematic analysis of an entity's operations and the maintenance of rigorous internal controls through the collection and analysis of evidence can prevent and detect various forms of fraud and other accounting irregularities if the evidence is sufficient and appropriate during routine procedures. Deterrence can be a vital element of this process.

Suppose an entity was known to have a dynamic and thorough audit system. In that case, the entity's reputation can serve as a deterrent in preventing an employee or a third party from attempting to defraud it (Nisansala & Menike, 2018). Nikolova et al. (2016) postulated that the cost of an investment instrument or a bank deposit mainly was composed of the risk associated with said deposit or investment instrument. If an instrument involved high risk, an investor needed a higher rate of return to invest. Therefore, a need exist to have a satisfactory audit
process to preserve the integrity of the systems that governed the investment instrument or the bank deposit.

Malsch and Salterio (2015) suggested that stable control structures reflects through the existence of audit processes. The standard control structures includes the characterization of the collection and assessment of sufficient appropriate audit evidence. Reduced forms of risk in an enterprise environment, includes the risk of material misstatement of financial reporting and the risk of fraud and misappropriation of assets. The risk can also exist relates to the optimal production of management reports or assertions due to insufficient information on the entity's operations. Without the application of procedures to facilitate the gathering and evaluation of sufficient appropriate audit evidence, it was difficult for external stakeholders and regulatory entities to feel at ease about the quality of the audit opinion, as the elements of an audit are often complex and challenging to measure (Saha & Roy, 2017).

**Relationships Between Theories, Actors, and Variables**

The above discussed theories had a direct correlation to the independent and dependent variables in the current thesis. The policeman theory motivated the auditors to gather sufficient and appropriate evidence that would adequately support the auditors’ judgment and, eventually, the auditor’s opinion. The sufficiency and appropriateness of audit evidence, under the policeman theory, guards against moral hazards, concealment of information, and the potential for fraud and deception (Rosyadi & Budding, 2017). From this point of view, collecting sufficient and appropriate audit evidence was a way of deterring the auditee from falsifying financial statements or detecting fraudulent activities that affect stakeholders’ assets (De Paula, 2016).
The lending credibility theory relationship with the variable in the study stemmed from the need to improve public trust in the financial information provided by the auditee. External stakeholders were not privy to the internal operations of the organizations in which they invested (De Paula, 2016). Data published by the auditee were the main ways in which stakeholders learned about the auditee’s performance. Therefore, the auditor's ability to collect sufficient appropriate audit evidence to support the opinion associated with the published financial statement was the primary way for the auditees to maintain trust with their stakeholders (Coffie et al., 2018). For Rosyadi and Budding (2017), auditors expected to enhance stakeholders’ supervisory authority. Recent updates have given auditors the ability to review and report on internal controls (William Jr, et al., 2016). Also, the auditor’s work perceives as a mechanism that strengthens the auditee’s efficiency and quality of services, which in turn result in higher public credibility in the auditee (Coffie et al., 2018).

The inspired confidence theory impacted the variables of audit evidence sufficiency and appropriateness and the quality of audit opinion. Ajao et al. (2016) indicated that proponents of this theory hypothesized that auditing provides valuable information for investors to make decisions. For example, Stein (2017) noted that the observation of future cash flows correlates with the information in the financial statements. As a result, the audit reviewed by investors to improve the quality of public confidence in the audited financial report. Inspired confidence theorists emphasized that investors require trustworthy financial information to determine market values that support rational investment decisions (Cordos, 2019). Building investors' trust in financial statements required collecting sufficient and appropriate audit evidence that supports the financial statements furnished to the public, which in turn helped reduce risks, improve the investment decision-making process, and enhance profits (Lee et al., 2016).
The assurance theory also impacted the variables in the current study. An audit expectations provide decision-makers with the means of improving their business decisions (Simnett et al., 2016). The auditor must collect sufficient appropriate audit evidence that accurately reflects the auditee’s conditions to help stakeholders make informed decisions (Ajao et al., 2016). Auditors can improve the quality of input data by finding errors and making employees more cautious when preparing records (William Jr et al., 2016). More accurate data improved internal decision-making. Coffie et al. (2018) opined that using reliable financial data for credit and investment analysis or regulatory decisions would also reflect positively on the decision-making process. According to Kumar and Sharma (2015), the publicly available information may have a significant bearing on the prices of the traded asset. Therefore, adverse or unqualified audit opinions had the potential to affect how the public decided to invest in a particular entity.

**Summary of the Research Framework**

In summary, audit evidence sufficiency and appropriateness must support the auditors' opinion, while the procedures applied must support and indicate how the auditor arrived at the audit opinion (Cipriano et al., 2017). The theories discussed in the sub-section explain how the variable under study relates to the existing body of knowledge. Auditors played and continue to perform many roles, starting from the need to detect and deter fraudulent or inadequate practices to ensuring that decision-makers have sufficient and adequate data to make an informed decision in their business activities (Olaoye et al., 2019). Therefore, auditors should ensure that they considered that these procedures were satisfactorily suitable to obtain sufficient and appropriate audit evidence (Osman et al., 2016).
Bronson et al. (2017) asserted that auditors must also consider the relevance and reliability of the information used as evidence. Setyaningrum (2017) indicated that during an audit, the auditor is always responsible for obtaining and evaluating evidence using a variety of procedures (inspection, observation, confirmation, recalculation, or analytical procedures) to form an audit opinion. Therefore, obtaining audit evidence (sufficient and appropriate) is one of the most critical steps that auditors must take and is essential in defining the overall standard for evidence (Crucean, 2019).

Setyaningrum (2017) explained that auditors must properly document audit evidence to ensure that the purpose of the audit has achieved. If the fulfillments of the objectives does not occur, the audit working papers must contain documentation explaining the departure (Patra & Bustami, 2016). Garcia-Blandon and Argiles (2015) indicated that auditors must document and gather audit evidence of essential matters in preparing the report. The opinion expressed and any other evidence that the audit occurred under applicable auditing standards. The audit report can construe as the result of a significant fiduciary mission, which should allow any user to understand the level of risk posed by the audited entity (Malau et al., 2019). Therefore, the audit must support effective procedures applied to gather sufficient appropriate evidence to reach an accurate and relevant audit opinion.

**Definition of Terms**

The definitions in this subpart included a description of the key terms used throughout the paper. The process was not an exhaustive search of all the terms contained in the current research. However, the list showed explanations of terms that the reader may not be familiar with or unclear and need clarification to facilitate the reader’s comprehension.
Audit: Veridiana (2019) explained that the term audit generally refers to the objective and independent assessment and inspection of the practices, financial statements, or performance of an entity. An audit performance ensures that an organization’s financial records, methods, and performance are a fair and accurate reflection of the transactions they intend to represent in all material aspects (Dai & Handley-Schachler, 2015).

Audit Evidence: Audit evidence represents the facts and materials gathered to review financial transactions, internal control practices, and other factors required for the certification of financial statements by an auditor (Public Company Accounting Oversight Board, 2017).

Sufficiency of audit evidence: Sufficiency of audit evidence is the quantity of evidence (PCAOB, 2017). Audit evidence should occur sufficiently when used by the auditor to form a judgment (Crucean, 2019). The amount of evidence required depends on the auditor's risk assessment (PCAOB, 2017).

Appropriateness of audit evidence: Appropriateness of audit evidence is the qualitative nature of audit evidence, that is, its significance and dependability (Beasley, 2015). Appropriate audit evidence requires relevance and reliability when supporting the auditor’s opinion and conclusions (PCAOB, 2017).

Audit opinion: An audit opinion is a written statement of the fairness of the presentation of the financial statements that go along with the audited entity’s financial statements (Crucean, 2019). The opinion of the must represent an audit of the procedures and records used to produce the financial statements. The view on the existence or lack of material misstatement in the financial reports should occur (Veridiana, 2019).

Securities: the term securities refers to financial instruments with a specific monetary value (Beasley, 2015). They also represent a property position in a publicly traded company,
through shares, a creditor relationship with a government agency or corporation characterized by the possession of bonds from that entity, or property rights represented by options (Veridiana, 2019).

*Accounting records:* Accounting records are statements of financial accounts, journal entries, and associated records, such as bank statements, payments, and transactions relating to electronic funds transfers (Beasley, 2015). They also include computerized systems, contractual agreements, general and auxiliary ledgers, as well as accounting adjustments to financial statements not reflected in journal entries (Veridiana, 2019). In addition, physical data in paper format, cost allocations schedules, computations, reconciliations, and disclosures statements also considered accounting records (Zuca, 2015).

*Analytical procedures:* Analytical procedures are comparisons of the financial statements presented by an entity against the auditor's expectations (PCAOB, 2017). One example is to compare estimated interest expense for the year with actuals (Appelbaum et al., 2018). If the actual interest expense diverges considerably from expectations, the auditor may need an explanation from the audited entities’ responsible officials to substantiate the difference (Appelbaum et al., 2018).

*Completeness of Management assertions:* Completeness of management assertions refers to whether an auditee’s governing officials made complete and accurate affirmations to auditors (Appelbaum et al., 2018). For example, whether management affirmations about debts or purchases of goods and services fully includes the financial statements provided to auditors (Veridiana, 2019).

*Control environment:* The Control environment is the understanding, approach, and actions of the board, management, owners, and other stakeholders within the audited entity about
the importance of controls (Christensen et al., 2016). The control environment is also the
observation of rules relating to the separation of duties, objectivity, independence, and the
commitment to establish and follow effective policies, procedures, and practices (Chevers et al.,
2016).

**Independence:** Independence means an absence of bias both in appearance and in the way
of thinking (Church et al., 2018).

**Inherent risks:** Inherent risks are internal weaknesses that may affect an entity, a class of
transactions, or a group of organizations depending on their organizational structure, area of
operation, or line of business (Chevers et al., 2016).

**Management representations:** Management representations are assertions, statements, or
affirmations made by an auditee’s governing officials about the organization’s condition and
practices (Church et al., 2018).

**Material weakness:** The meaning of material weakness is the substantial deficiency in
internal controls (Chevers et al., 2016). In addition, it means that a significant error or
inadequacy exists in the auditee’s financial reports or organizational practices (Church et al.,
2018).

**Misstatement:** Misstatement is a lack of accuracy (Gaynor et al., 2016). A misstatement is
the difference between reported quantities, affirmations, or disclosures of an item and the actual
quantities, affirmations, or disclosures (Chevers et al., 2016).

**Competence:** Competence refers to an auditor's initial training, technical knowledge, and
professional proficiency (Andiola et al., 2018).

**Reasonable assurance:** Reasonable assurance refers to the rationality and objectivity of
the auditor’s judgment (Griffiths, 2016). The process shapes the auditor’s decision based on
professional experience related to the sufficiency and appropriateness of the evidence reviewed to justify and support an opinion (Gaynor et al., 2016).

*A relevant statement*: A relevant statement is a statement in the financial statements that presents a reasonable opportunity to directly relate to the item under audit (PCAOB, 2017).

*Reliability*: Reliability is the consistency, dependability, or trustworthiness of a statement or financial record (PCAOB, 2017).

*Risk assessment*: Griffiths (2016) defined risk assessments as the audit procedures used to understand the entity and its environment to identify and assess its risks. It also relates to evaluating potential material inaccuracies, whether due to fraud or error, that are relevant to the financial statements and initial claims made by the auditee (Griffiths, 2016).

**Assumptions, Limitations, Delimitations**

This subsection discussed the assumptions, limitations, and delimitations in the current study. The assumptions examined the postulates under which I performed the analysis. The limitations provided a view of the constraints that affected the study. Finally, the delimitations identified the perspectives applicable to the study and the ones that were not relevant. These elements receive discussion in the paragraphs below.

**Assumptions**

Assumptions were premises that shaped the analysis process in this study. The first assumption was that auditors in the banking and securities sectors often approached the audit process by performing a high-level examination that did not explore specific underlying elements of risks (Ghosh et al., 2017). Substantive tests of sufficiency and appropriateness of audit evidence were often not performed as an integral part of auditing (Bratten et al., 2019). The assumption here was that quality audit evidence, even if slight, may be sufficient in some
situations, with quality attained, the less evidence was needed. Griffiths (2016) indicated that a large amount of audit evidence cannot replace insufficient evidence of poor quality. The issues of audit evidence sufficiency cannot receive correction simply by increasing the amount of evidence (Baker et al., 2017).

The second assumption in this study was that audits in the target industries did not always entail a comprehensive review of the internal controls of the audited entities (Chamoun & Van Greuning, 2018). The assumption is that auditors conducted a limited analysis of internal controls when auditing large banks and complex securities firms in the United States. Bratten et al. (2019) emphasized that independent audits were an essential element of corporate governance and can improve the effectiveness of the review and supervision process. In the current study, I posited that a limited review of the internal control framework weakened this governance process. The periodic unaudited reports that served as a basis for compiling the data published in annual financial statements were not always reliable (Lee et al., 2016). Quarterly reports were an indispensable part of the advance alerting system; however, they were unaudited meaning that their reliability are questionable (Sekaran, & Bougie, 2016). The assumption here was that independent auditors did not thoroughly review the accuracy of the data contained in quarterly reports that were significant parts of annual reports.

The third assumption was related to the professional proficiency limitations that may affect the quality of audits processes in the U.S banking and securities industries. This assumption adopted that auditors did not always understand the systems they audited or had limited practical knowledge of the information necessary to obtain sufficient and appropriate audit evidence during their tasks, particularly in a highly sensitive and computerized environment (Garcia-Blandon, & Argiles, 2015). Shaikh et al. (2018) explained that the evidence
produced in a computerized accounting system had different characteristics from traditional or manual accounting systems. Therefore, auditors needed proficient skills to understand how to gain and analyze audit data in a computerized environment, which may be lacking in some instances.

**Limitations**

The limitations covered in the paragraphs below include an explanation that the potential constraints that may affect the current study. In any scientific research, there are limitations, and this study did not escape them. The data source comprised the opinions of different groups of auditors and financial examiners in the United States banking and securities industries. The most obvious limitation in this study was the production of limited number of respondents from generalizations. Weis and Willems (2017) clarified that generalization was an essential concept in any research that defined the process of developing general understanding, which applied to all the components of a unit (population) while learning only from a subset of these elements (sample). Like most models, generalization was an ideal, an objective to be achieved, rather than an accurate description of what was happening in real-world occurrences. McGlade et al. (2019) indicated that researchers most often needed an explicitly accessible population from which sampled participants before making any assumption of generalizing from a sample. Even available populations linked to hypothetical target populations were most often widespread and unarticulated (Cook, 2015).

According to McGlade et al. (2019), in most cases, the identity of the population depends on the characteristics of the sample are relevant eligibility criteria. In other words, the actual starting point was often the sample, not the population. This study addressed this limitation by determining how much can be applied to represent the entities of the target groups within the
banking and securities sectors in the United States as a whole. Responses came from various fields of examiners and auditors who operated in major regulatory entities, audit firms, and financial institutions in the United States. Another limitation related to the influences of individual perceptions when completing the data gathering questionnaire. Respondents may not be encouraged to provide accurate and honest answers. A limitation that affected internal and external auditors was that some of them did not feel comfortable providing responses that reflected unfavorably on the organizations they serve. The anonymous character of the questionnaire addressed this limitation. Respondents may also not have a clear understanding of the reasons for a given response because they lack knowledge on the subject. There also may be data errors due to the lack of answers to some of the questions.

Another limitation was that several respondents decided to answer the data collection questionnaire in its entirety, while others chose only to provide partial responses. This limitation may cause bias in the reported data (Morgado et al., 2018). Response options on the questionnaire could also lead to unclear data because of respondents’ misinterpretation. For example, answer options may have different connotations for some respondents, while others may offer relevant responses. There was also a possibility that closed-ended answer options may be challenging for some respondents who chose to provide inaccurate answers if the unique instances in the question did not apply to them. These issues were addressed through an in-depth review of responses to remove incomplete responses and only keep complete responses received from respondents.

**Delimitations**

The discussion of delineations in this paper was about identifying the appropriate contexts and those that were not pertinent. This research was not broad in scope and did not
cover all types of audits of financial institutions in the United States. The research specifically related to financial statement audits performed within the target industries. In particular, it did not study information technology (IT) audits. An IT audit is the inspection and assessment of an entity’s information technology infrastructure, policies, and operations (Hoy & Foley, 2015). Cao et al. (2015) explained that IT audits assessed whether IT infrastructures protected organizational assets, safeguarded information integrity, and aligned with corporate objectives. In addition, IT auditors evaluated physical security infrastructures and business and financial controls related to IT systems (Hoy & Foley, 2015). The conclusions of this study cannot apply to information technology audits because they were not the subject of this research.

This study did not apply to audits performed for entities located outside the United States. Similar to the current research, banks and securities firms operating outside the United States may have a substantial interest in encouraging high-quality accounting and financial standards for their sectors. The auditors may also need guidance on producing precise and reliable financial statements that reinforce public trust in business information and best practices that affect the audits of business organizations (Cao et al., 2015). Regulatory institutions located in countries other than the United States may have an interest in the study. However, this study was not a substitute for research that can correctly analyze and address these countries' regulatory standards and unique facts. Cao et al. promoted sound audit practices that contributed to the creation of high-quality organizational reporting and valuable and comprehensible audit reports (Cao et al., 2015). Developments in the area of establishing accounting and auditing standards received discussion to the extent that they apply to the United States banking and securities industries. Entities that create international accounting and auditing standards may use part of this study to inform the standard-setting process and address issues of interest to banks or
securities firms in foreign countries. However, the intentions of this study was not to establish international standards.

Through this study, I contributed to the existing body of knowledge by presenting views, mainly in the form of conclusions that consulted when drafting auditing standards for the sectors in the United States and associated countries or when conducting direct exchanges for scientific and professional research purposes. This study was also not a qualitative study of audit opinions in the banking and securities sectors in the United States. The research did not involve qualitative research on the influence of audit evidence on auditors' views in the banking and securities sectors of the United States. In the current study, I focused on the audit infrastructure as it related to obtaining sufficient and appropriate audit evidence to support the quality of audit opinions in the U. S. banking and securities industries. The study endeavored to conclude the application of quantitative research methods to strengthen the reliability and relevance of audit opinions in the target industries in the U.S. The study results also aimed at improving and adding to the existing body of knowledge relating to audit procedures and practices to ensure the provision of reasonable assurances to regulators and the public.

**Significance of the Study**

This subsection clarified why the current research was sufficiently significant to be conducted. I identified how the research addressed the lack of gaps, added to the body of knowledge, or moved the literature into a new and related direction. This subpart was mainly comprised of sub-section that discusses the reduction of gaps, the implication for biblical integration, the relationship to the field of study, and a summary of the significance of the study.
Reduction of Gaps in the Literature

This research was significant for several reasons. First, having an effective audit system was vital for an entity as it enabled it to pursue and achieve its various objectives (Omolaye & Jacob, 2017). Second, an audit was a means of assessing the effectiveness of an entity's internal controls and its compliance with applicable regulatory and industry standards (Aobdia, 2019). Third, maintaining an effective audit system and a consistent environment of compliant practices were essential to achieving an entity's business objectives, gaining dependable financial reports on its operations, averting fraud and misappropriation of assets, and curtailing losses (Jan & Sangmi, 2015). Sun et al. (2015) argued that without an effective audit system, an entity would not create reliable financial reports for internal or external purposes. As a result, effective audit systems cannot guide organizations to efficiently allocate their resources or decide which sections or product lines were lucrative and which ones were not. The ability for auditors to assess risks, prevent or detect fraud or assess compliance with applicable standards, as well as establish the effectiveness of internal controls, depending on the collection and evaluation of sufficient and appropriate audit evidence (Brown et al., 2020).

Omolaye and Jacob (2017) posited no universally accepted definition of adequate, sufficient, or high-quality audit evidence. There were also no unanimously established measures or benchmarks and agreements on elements that drive the quality of audit evidence. Wilson (2018) affirmed that limited knowledge of an entity's activities and finances could negatively impact the quality of the audit. Omolaye and Jacob (2017) argued that knowledge of the entity's operational procedures should not be a factor affecting audit opinions, as auditors who operated in specific industries needed to gain knowledge of the industry and exercise such knowledge to preserve their effectiveness during audit engagements. This research filled a gap in the literature.
by directly addressing questions about the relationship between sufficient and appropriate audit evidence on the quality of audit opinion in the banking and securities sectors in the United States (U.S.). The study also included the nature of the risks associated with auditing in the banking and securities sectors in the U.S.

According to Magnis and Iatridis (2017), entities operating in the banking and securities sectors were highly vulnerable to public perception and confidence in their services. Auditors in the banking and financial services sectors received criticism for failing to provide sufficient early warning in the event of financial services failure (Dalwai et al., 2015). Trading financial instruments and holding them to maturity played a crucial role in the banking and securities systems (Gonzalez, 2015). The nature of financial services made banking and securities entities inherently risky. The services involved the trading of highly volatile securities subject to market fluctuations, the holding of long-term assets in the forms of longstanding debts, short-term liabilities, and customer deposits (Nikolova et al., 2016). Gonzalez (2015 indicated that, the risk factors increased accountabilities on these institutions and required enhanced financial reporting and auditing environment to build and maintain trust in the systems.

Alzeban, and Sawan (2015), noted that the magnitude of annual reports has considerably augmented in recent years, both in the measure and intricacy of the information provided in the audited financial statements and the unaudited portions of periodic reports published for public consumption. Annual reports already provided substantial information on risks, exposures, and business models (Lennox et al., 2016). In addition, important information was provided outside annual reports (DeFond et al., 2016), for example, through analyst presentations, business updates, and periodic information, often obtainable separately on the entity’s websites or disclosed to regulators. However, Lennox et al. (2016), clarified that the size and complexity of
the information and how disclosure made annual reports less understandable to non-experts. Yearly reports indicated that the underlying apprehension was that it was challenging to understand the risk, the corporate models, or the current business assumptions (Louis et al., 2019).

Therefore, DeFond et al. (2016) theorized that an audit system and procedures based on the adequate collection and analysis of sufficient appropriate audit evidence were vital to avoid weak reporting and errors in an entity's records and reports and facilitated the understanding of those reports for the public at large or the non-expert. Gu et al. (2019) noted that recurring analysis of an entity's operations and the maintenance of rigorous internal controls through the collection and analysis of evidence can prevent and detect various forms of fraud and other accounting irregularities if the evidence was sufficient and appropriate during routine procedures. Thus, deterrence can be an essential element of prevention.

Suppose an entity was known to have a dynamic and thorough audit system. In that case, the entity's reputation can serve as a deterrent in preventing an employee or a third party from attempting to defraud it (Nisansala & Menike, 2018). Nikolova et al. (2016) postulated that the cost of an investment instrument or a bank deposit was primarily composed of the risk associated with said deposit or investment instrument. If a tool involves more risk, an investor will need a higher rate of return to invest. Therefore, there was always a need to have a satisfactory audit process to preserve the integrity of the systems that govern the investment instrument or the bank deposit. Malsch and Salterio (2015) suggested that stable control structures reflected through the existence of audit processes characterized by the collection and assessment of sufficient appropriate audit evidence can reduce various forms of risk in an enterprise environment, including the risk of material misstatement of financial reporting, the risk of fraud and
misappropriation of assets. The risk also existed related to the optimal production of management reports or assertions to insufficient information on the entity’s operations. Without the application of procedures to facilitate the gathering and evaluation of sufficient appropriate audit evidence, it was difficult for external stakeholders and regulatory entities to feel at ease about the quality of the audit opinion, as the elements of an audit were often complex and challenging to measure (Saha & Roy, 2017).

Gaynor et al. (2016) posited that most of the audit process can be almost invisible to external parties and even more so to users of financial statements. The only visible signs of potential low-quality audits were reiterations in the financial statements or re-issuance, or publicly released inquiries initiated by regulatory entities. However, these investigations, restatements, or re-issuances can take a significant amount of time to complete and, at that time, may have little relation to the initial quality issues of the audit (Gaynor et al., 2016). This study assisted auditors and audit firms focus on the most critical factors that can help obtain the sufficient and appropriate level of audit evidence while allowing them to bridge the gap between audit procedures and public understanding of the audit results.

Svanberg and Ohman (2019) hypothesized that a high-quality audit was fundamentally an audit that attained the common objective of a comprehensive and impartial assessment of an entity's financial, compliance, and operational condition. Louis et al. (2019) noted that the audit must be performed by a capable, competent, and independent body in accordance with the applicable auditing standards and regulatory requirements. The audit must also determine whether the entity's financial statements give an accurate and fair view of its activities and circumstances (Lakis, & Masiulevicius, 2017; Nisansala & Menike, 2018). Furiady and Kurnia (2015), emphasized that the concept of auditor competency, capability and independence were
critical factors that must support the auditor’s ability to gather sufficient appropriate audit
evidence; otherwise, the report was just a story-telling narrative instead and a product of
adequate and relevant professional work.

The United States International Trade Administration (USITA, 2019) indicated that the
financial markets in the United States are the largest and most liquid in the world. The U.S.’
leadership in this substantial, high growth segment converts into significant trade and industry
activities and the development of direct and indirect jobs in the United States. By the close of the
calendar year 2018, the U.S. financial sector’s assets were $17.9 billion, and its net income was
$236.8 billion. For Bernardini and Peersman (2018), the industry supported the world's leading
economy with an extensive multiplicity of banking institutions and a concentration of private
credit worldwide. The significance of financial services highlighted the growing importance of
the banking and securities sectors in the United States in the global business environment
(Schroeder et al., 2019) stressing the need for additional academic research to study the audit
process in these sectors.

Continued growth of the banking and securities industry in the United States, and
significant benefits for financial companies, financial services firms around the world have been
steadily migrating to the United States (USITA, 2019). Starting in 2018, at least 28 financial
services firms of all Fortune Global 500 firms have elected to localize their main operations
centers in the United States to benefit from these sectors’ resourceful, competitive, and
comprehensive advantages (Schroeder et al., 2019). Ravikumar et al. (2019) indicated that the
U.S. banking and securities industries offer the most extensive variety of financial instruments
and products that enable consumers to manage risk, generate wealth and meet their business
needs. This growth led to more users of financial information in the United States (Schroeder et al., 2019), and, as a result, the significance and the trust in the audit report grew in prominence.

Ong (2018) noted that the mutations in the U.S. economic environment led to the need to investigate the use of audit evidence-based practices by professional auditors in the U.S. banking and securities sectors, and the results of this study targeted the improvement of the professional activities of auditors, audit firms and regulators. Brown et al. (2020) argued that more research was needed to address the concept of sufficient and appropriate audit evidence in professional practice and education in the United States. By identifying current best practices, this study assisted auditors and examiners in the banking and securities sectors in the United States to enhance their practices and integrate enhanced audit policies and practices in their existing audit infrastructures. The results increased investor confidence in these sectors and, in general, in the U.S. economy.

Another area of gap reduction was that most studies investigating audit processes and practices tended to be exploratory, qualitative, or naturally mixed (Mah'd et al., 2019). As a result, a limited number of studies addressed the challenges faced by financial services entities in improving their professional accounting and auditing practices and the challenges experienced by policymakers and regulators (Lakis & Masiulevicius, 2017). Zarefar and Zarefar (2016) pointed to the specific need to focus on evidence, especially the quality and quantity of evidence used to support the professional opinion in the financial sector audits. Several researchers, including Magnis and Iatridis (2017), suggested that more research was needed to examine the impact of certain variables (for example, the quantity of evidence, the basis of evidence) on the audit report. These suggestions provided more information for studying the sufficiency and appropriateness of audit evidence supporting audit opinion.
Implications for Biblical Integration

Brown et al. (2020) indicated that one of the critical objectives of auditing was to exercise oversight of management performance in organizations. Auditing also aimed to ensure organizations and their agents followed the rules and obligations established by governing entities (Cassell et al., 2017). The Bible taught in 2 Kings 12:15 that they did not require an accounting from those to whom they gave the money to pay the workers, because they acted with complete honesty. This statement referred to the possibility that lack of maintenance of the accounts if the workers were not honest.

The passage showed that the Bible included auditing as an indispensable endeavor to reduce the lack of honesty. The Bible stresses in 1 John 4:1 that My loved ones, do not put your faith in every spirit, but put them to the test, to see if they are from God: because a great number of false prophets have gone out into the world. Among other interpretations, this passage taught caution about appearances. The Bible emphasized that oversight over financial reporting was necessary to avoid fraud and monitor agents (Gomola, 2016).

Gomola (2016) indicated that the Bible offered an in-depth discussion about the need for oversight over the management of financial resources. Gomola (2016) explained the requirement for limiting personal access to common property, segregation of duties, dual safekeeping of financial assets, and the reason for keeping oversight over the use of financial resources. The biblical logic of control systems was that if employees had the opportunity to engage in deceitful practices, they could succumb to temptation (Axtell et al., 2017). Therefore, a system that lessens this type of temptation is imperative.

The biblical implication of the notion of sufficiency and appropriateness of audit evidence went to trust and responsibility. Responsibility was essential for the functioning of any
society, and Christian duty was not different (Axtell et al., 2017). Mahohoma (2017) explained that all Christians are responsible in one way or another. The concept of Christian responsibility was to be accountable for their actions (Mouw, 2015). Auditors should be responsible for their actions when they complete their tasks and issued opinions that affect the public. One of the proper ways to demonstrate the responsibility of an auditor was to be able to support audit opinions with sufficient and appropriate audit evidence that can withstand scrutiny from any third party.

Establishing Christian responsibility requires trust (Mahohoma, 2017). Building trust was a time-consuming process that should maintain indefinitely. The Bible said that God made us responsible (Mouw, 2015). Romans 14:12 stated: Then each of us must give an account of ourselves to God. Therefore, Christians were equally accountable to each other. 1 Corinthians 12 taught the importance of a strong responsibility among believers. In biblical terms, accountability meant being responsible for how Christians handled the gifts and resources God gave them (Snodgrass, 2019), the ability to audit organizations being one of those gifts.

Being responsible in auditing also means maintaining integrity throughout the process, from planning the audit to fieldwork and issuing the audit report with an opinion factually supported by the collected audit evidence. Paul speaks of these responsibilities when in 2 Corinthians 8:21 he stated: For we are taking pains to do what is right, not only in the eyes of the Lord but also in the eyes of man. Christian auditors were responsible to each other and the public for the decisions they made.

In practical terms, without responsibility, human nature tended to step over the line of demarcation between good and evil (Windes et al., 2017), which went to the concepts of accountability and transparency. To make wise decisions, Christians must listen to the directions
of the Holy Spirit (Cincala, 2016). The biblical implication in this instance was that accountability and transparency existed where there were multiple experts or knowledgeable persons who discussed, reviewed, and approved an organization’s financial operations.

In addition, the theory of audit evidence relates equally to the biblical concept of integrity. The scriptures contained passages that urged integrity from Christians. Holy Scriptures ordered Christians to live with integrity and expressly declared in Galatians 5:25 *Since we live by the Spirit, let us keep in step with the Spirit* such a statement was an order to live a life of the highest integrity. This experience brought goodness and blessings to all (Windes et al., 2017). The completion of the audit work and the ability to issue appropriate opinions backed by sufficient and appropriate audit evidence required integrity.

The Christian commandment of integrity was a commandment to speak and act in the way taught by the Holy Scriptures. This commandment was a life of integrity and honoring God's call above all, which in auditing translated in gathering truthful and reliable evidence to support opinions that did not deceive the public. Peter spoke of in 1 Peter 3:10 when he stated that *whoever would love life and see good days must keep their tongue from evil and their lips from deceitful speech*. This biblical interpretation of integrity called the Christian to follow the path of God and avoid insincerity (Cincala, 2016), which could be the case in a completion of and without gathering sufficient appropriate audit evidence.

The creative mandate from God explained the burden placed on Christians to work with God in His continuous creative activity (Windes et al., 2017). The original order implied that Christian auditors must be committed to their work and support it with sufficient appropriate work products. God had commanded us to work with honesty and integrity and, being created in his image Christian auditors must work to promote the work of God while maintaining integrity.
Christian auditors must be able to incorporate the teachings of God into all of their commitments, such as the ability to prepare audit reports based on sufficient and appropriate evidence. The auditor’s work must comply with existing standards. In the image of how God brought to order through creation, the auditor can bring order to financial markets or financial institutions through the effective implementation of an appropriate audit system. By following the biblical teachings in their work, auditors can establish an orderly path to banking and stability in financial markets. Auditors can act responsible for bringing order to chaos through their assurance services and should conduct themselves with integrity in the same way that the Scriptures teach Christians to walk the righteous path.

Louis et al. (2019) explained that investors rely on audit reports to inform their investment choices when it comes to selecting alternatives, which implies that investors place a certain level of confidence in the work of auditors. Therefore, auditors’ efforts to gather sufficient and appropriate evidence should reflect the biblical teachings of work ethics to provide assurances to those who rely on their work. A Christian work ethic was one in which work was considered a moral duty imposed by God (Snodgrass, 2019). A Christian work ethic in auditing required a commitment to excellence in the task. 2 Timothy 2:15 taught constructive work ethics when the Christian was told to *Do your best to present yourself to God as one approved, a worker who does not need to be ashamed and who correctly handles the word of truth*.

Finally, the concept of audit evidence had biblical implications of faithfulness in work. Being faithful to auditors requires discipline and commitment for their plans and translating them into actions. Auditors must fulfill their good intentions and provide impartial opinions to their clients and perform work that ultimately protects the public interest and reflects their commitment to professional care. The biblical implication of this concept was that faithfulness in
work arises from recognizing that everything auditors were and knew to belong to God. Auditors’ professional skills and knowledge and audit techniques were all treasures that God gave them and that auditors must capitalize for His kingdom and glory.

**Benefit to Business Practice and Relationship to Cognate**

The study of auditing and audit evidence were concepts that directly related to the accounting cognate. An essential feature of a professional auditor was possessing a rigorous set of professional skills, which allowed them to understand and distinguish between the various types of audit evidence (Pappa & Filos, 2019). According to Nikolova et al. (2016), one of the distinctive features of the accounting and auditing professions was the responsibility to act in the public’s interest. The aptitude to understand audit evidence to prepare an audit report furnished to the public and on which the public based investment decision was a critical part of that responsibility. In addition, Arditiyan and Suryandari (2016) noted that auditors’ ability to understand the sufficiency and appropriateness of audit evidence improved the quality and consistency of the services provided to clients to improve the efficiency of global capital markets.

Asmara (2017) postulated that a culture of high professional skills was necessary to strengthen good governance practices. Developing and promoting a culture of best practices in auditing foster trust and transparency in the profession, lend credibility and value to decision-making, and help present stakeholders with an accurate image of the audited entity’s condition (Akins et al., 2016). Audit professionals appointed to executive and leadership roles both in industry and government have the responsibility to provide a highly skilled and reliable understanding of the audit material presented to them (Dalwai et al., 2015).
Additionally, Cassell et al. (2017) posited that audit professionals entrust with access to critical financial information concerning individuals and organizations. For example, responsibilities imply the capability to detect and address the abuse of business information or manipulation of the figures to improve business perceptions or convey particular views of revenue levels that may not be accurate from the outset (Jan & Sangmi, 2015). Akins et al. (2016) posited that auditing was a career focused on details that required knowledge and skills. Errors in the exercise of audit services can erode client morale, investors’ confidence, and the public perception at large and have legal implications with the involvement of government oversight authorities (Zarefar & Zarefar, 2016).

Persons exercising at any level in the audit profession needed to understand that it required a high level of professional competency (Sun et al., 2015). For Ravikumar et al. (2019), no business was immune to inadequate practices. However, those dealing with financial and sensitive personal and corporate information must adhere to strict professional standards. Essentially essential winning and maintaining the trust of consumers, industry experts, and business partners in any organizational environment, especially in the financial services industry (Zarefar & Zarefar, 2016).

**Summary of the Significance of the Study**

Brown et al. (2020) explained that audit evidence was progressively becoming part of a broader trend that emphasizes organizational accountability and auditor competency during audit engagements. The emphasis on responsibility required that auditors gather sufficient appropriate audit evidence to achieve high-quality commitments and support the creation of sustainable value in the reports they issue (Cassell et al., 2017). Abbott et al. (2016) emphasized that numerous organizations see auditors’ obligation of due care as a fundamental element of the
services they provide, which can afford a series of advantages to the audit firm, the clients, and the public and regulatory institutions who use audit reports. As professional standards-setting bodies, oversight entities, and investors become increasingly interested in the decisive role of audit reports, auditors must continue to make a quantifiable impact on businesses and industry by supporting their statements with sufficient relevant and appropriately reliable audit evidence (Lakis & Masiulevicius, 2017).

In summary, this study included quantitative methods to collect and analyze study data and contribute to an understanding of the importance of audit evidence in the development of audit opinion. I examined the relationship between sufficient appropriate audit evidence and the following variables (a) the quality of audit opinions, (b) the source of audit evidence, (c) management assertions, (d) the reliability of audit evidence, (e) internal control systems, and (f) audit report quality.

To address rising challenges in the auditing field, it was indispensable that researchers examine current auditing practices in the banking and securities sectors and determine the extent to which the audit evidence on which the audit opinions is sufficient and appropriate. Based on this contextual assessment, I had the objective to identify areas for further development and improvement of current professional practices in the banking and securities industries in the United States or other vital sectors facing similar challenges.

A Review of the Professional and Academic Literature

The review of professional and academic literature under the current thesis was a broad summary of prior studies on the concepts of audit evidence sufficiency and appropriateness. The literature review included an analysis of scholarly articles, books, and other professional journal articles pertinent to this specific area of research. This literature review listed, described,
evaluated, summarized, and clarified the concepts under study. Documentation of the traditional knowledge related to the concepts of the study, the context included a comprehensive understanding of advances and emerging approaches in the field. In addition to an introductory segment, this section of the thesis included sub-sections that discussed audit evidence and audit opinion and audit evidence sufficiency and appropriateness. Further sub-sections discussed the variables in the study as they relate to the theoretical framework and the established auditing and regulatory oversight practices in the United States banking and securities industries.

I intended to contribute to strengthening existing auditing and professional standards and develop technical proficiency in the practice of audit through research. Auditing is valued for its ability to provide an independent view of the credibility of accounting information, which improves public confidence in financial services, benefits the resource allocation process, and strengthens contractual effectiveness (Zhang, 2019). In addition, the increasing complexity of business transactions and accounting standards increase the potential of auditing to add value.

In recent years, changes of unprecedented magnitude have fundamentally reformed the market landscape both for auditors and their auditees. Increasing public pressure generated from the successive financial crisis and recurring inadequate practices in financial institutions, the public accounting profession in the United States is under more scrutiny (Patrick & Matthew, 2018). The increased scrutiny and demand for strengthened professional proficiency has generated a fundamental transformation in the dynamics of the source and quality of the audit environment and an increase in studies aimed at understanding the factors of audit evidence and opinion quality (Pennington, et al., 2017). Pennington et al. (2017) indicated that the most established understanding, on the one hand, is that auditing is a dualistic process whereby auditors succeed or fail to detect established standards violations. On the other hand, Pennington
et al. (2017) argued that auditors’ responsibilities go well beyond the mere detection of obvious or blatant violations of established financial and regulatory principles. In addition, auditors’ responsibilities extend to providing certifications that impact the quality of financial information.

The increased responsibility for auditors arises from professional standards that require auditors to exercise due professional care when examining an auditee's financial records and practices (AS 1015). The auditors’ opinion ensures that financial statements present accepted accounting principles. A fair presentation of financial statements requires an acceptable representation of underlying records used to reach the opinion establishing the appropriate description (Patrick & Matthew, 2018).

**Business Practices**

Harrast et al. (2021) noted that recent literature relevant to emerging business practices showed that standard-setting bodies, mainly the Securities and Exchange Commission (SEC) and the American Institute of Certified Public Accountants (AICPA) had established workgroups to examine the audit evidence implications of cryptocurrencies or cryptocurrency assets. As a result, the audit, and accounting of those assets pose renewed questions. Patrick and Matthew (2018) explained that numerous instances affecting decentralized ledgers of cryptocurrencies compel thoughtful assessments of fundamental issues within conventional audit and accounting contexts. Vincent and Davenport (2021) highlighted that a ledger, such as a blockchain, could prompt audit evidence affecting internal and external transactional data obtained from auditees. Bonyuet (2020), those issues prompt inquiries demanding the need for auditors to ascertain the sufficiency and appropriateness of audit evidence obtained from decentralized finance. Lombardi et al. (2021) explained that the entries could relate to the restrictions and controls about the blockchain and the level of assurance that are relevant and may affect data produced from
decentralized finance. The questions can similarly involve issues related to the types and reliability of transactions recorded on the decentralized ledgers (Cangemi & Brennan, 2019).

Based on the concealment that permeates cryptocurrencies, Ozeran and Gura (2020) stated that questions arise when auditors implement procedures to establish auditees’ rights and obligations stored in decentralized assets or cryptocurrencies. From a fraud perspective, Sokolenko et al. (2019) observed that bad actors within audited organizations would not face any constraints to record assets balances from decentralized ledgers on various statements and provide those statements to auditors examining separate statements. In those instances, as Abdennadher et al. (2021) remarked, auditors might encounter difficulties establishing the sufficiency and appropriateness of audit evidence when testing transactions reported on decentralized ledgers.

Based on the intricacies associated with blockchain knowledge and cryptocurrencies, Tarasova et al. (2020) observed that managing personnel within audited organizations might be deficient in the proficiency or capabilities required to preserve the organizational accounts and safeguard their resources. Consequently, the evaluation of whether an entity’s employees have the required expertise and competencies is possibly an essential factor associated with the auditor’s preference to complete an audit engagement (Dhobale & Mishra, 2020). Dupuis et al. (2021) posited that managing personnel had integrity and a practical business approach but did not possess the suitable expertise or experiences; an audit may not be feasible without management ability to address competency disparities may occur because non-preservation of suitable accounts, procedures and controls were not applied, or management relied on the auditor. Thus, presenting the risk that the auditor lacked the requisite level of expertise to
achieve their obligation of issuing an independent, unbiased opinion on the auditee’s financial statements.

Additionally, when evaluating the risks relevant to the audit period, Aksoy and Hacioglu (2021) noted the importance in appreciating an auditee that gains the required expertise and capabilities. If an auditee integrated cryptocurrencies in its businesses, it may be crucial for the auditor to consider the auditee’s ability to employ techniques, practices, and controls over electronic assets adequate to generate financial statements or audit evidence that is not affected by substantial misrepresentation (Wang et al., 2018). Comparably, Fan et al. (2020) clarified that particular forms of audit evidence could be challenging to achieve if specific activities are not undertaken when an operation or control action happens. Additionally, Spithoven (2019) explained that an auditee’s technological resources in creating cryptocurrency tools, though essential, may not be revealing sufficient and appropriate audit evidence and financial reporting abilities or practical accounting knowledge.

Simoyama et al. (2017) observed that assessing the auditee’s proficiency may be more complex than normally completed in a pre-cryptocurrency asset business practice environment based on the above-described questions. According to Vincent and Davenport (2021), the completion of relevant audit procedures to collect, assess and express an audit opinion in a cryptocurrency asset’s environment may include whether the auditee has the necessary knowledge of the risks, understanding of essential controls, and appreciation of the relevant financial reporting context. As Anders (2021) described, this involves evaluating the auditee’s capability to recognize and apply procedures addressing risks within the fundamental area of expertise that could present risks of substantial misstatement due to inaccuracies or fraudulent practices.
Parker et al. (2018) indicated that gaining an appreciation of the auditee’s business purpose in its initial involvement or significant changes in its involvement with cryptocurrency assets is a crucial aspect in evaluating the auditee management’s integrity. Furthermore, Rahman and Dawood (2019) stated that specific responsibilities within the cryptocurrency asset environment, for example organizations that hold the cryptocurrencies, suppliers that recognize cryptocurrencies, and those who validate the cryptocurrency transactions may pose new concerns affecting the sufficiency and appropriateness of audit evidence due the environment’s nature. Based on the above discussed intricacies, Smith and Castonguay (2020) specified that auditors considering engaging in the cryptocurrency economy environment may need to adapt their procedures to the new environment or risk failing to obtain sufficient appropriate audit evidence to complete their engagements.

Yaroshchuk and Belova (2021) indicated that the nature of cryptocurrency technology tends to support the exclusion of third parties, especially financial institutions' involvement in the completion of financial transactions. Consequently, Rahman and Dawood (2019) indicated that audit evidence customarily acquired from financial institutions relevant to confirming the validity and appropriateness of financial transactions may be absent. Though actions such as the review of authenticated blockchain smart contracts could apply to evidence control of cryptocurrencies, supplementary steps may frequently be essential in gaining sufficient appropriate audit evidence relevant to the auditee’s proprietorship of cryptocurrency assets (Parker et al., 2018). According to Simoyama et al. (2017), the quasi-secretive environment of a shared blockchain technology frequently raises risks associated with unidentified related party transactions or exchanges with restricted organizations subject to conflictual jurisdictional
responsibilities. There may be a lack of historical or existing data to determine or assess related party transactions (Spithoven, 2019).

Furthermore, Fan et al. (2020) explained that though the blockchain record of transactions may publicly identify the number of traded values. Transactions traces to a unique identification numbers or encrypted addresses. However, the technology fails to identify any material evidence regarding the exclusive physical identity of the transaction parties or the suitable identification or organization in the financial statements. As a consequence of these aspects, Wang et al. (2018) explained the necessity for the auditor to examine the efficacy of particular procedures and controls relevant to cryptocurrencies because ordinary audit procedures alone may not be satisfactory to acquire sufficient appropriate audit evidence.

Therefore, Aksoy and Hacioglu (2021) proposed that auditors apply additional, comprehensive examinations or assessments of pertinent documents relevant to the auditee’s internal control and information technology processes to examine transactional data provided by the auditee to serve as audit evidence. Dupuis et al. (2021) indicated that it is essential for auditors to appreciate the fundamental blockchain expertise associated with transactional assets involving cryptocurrencies or at least employ the assistance of experts to review those transactions before rendering an independent opinion on their sufficiency and appropriateness. In specific cases, Dhobale and Mishra (2020) indicated that audit evidence gained from blockchain technology may not represent sufficient appropriate audit evidence. Additional examination processes may be necessary to establish sufficiency and appropriateness.

Anders (2021) noted that the AICPA recently introduced Statement on Auditing Standards (SAS) No. 142 Audit Evidence, which will apply to audits of financial statements for periods ending on or after December 15, 2022, to addresses the ever-changing environment of
business practices concerning audit services and questions that have surfaced since AU-C section 500 was initially published. The standard guides on developing technologies utilized by both audited organizations and auditors (AICPA, 2019). In addition, the AICPA clarified the employment of professional skepticism during audit engagements. The statement also discusses guidance about the growing sources of data affecting audit evidence and the accuracy, completeness, significance, and consistency of audit evidence. This innovative guidance bases on the principle that auditors should assess data to be used as audit evidence regardless of the source from which auditors acquired it or the methods applied to collect the data. The AICPA emphasized that the new characteristics of evidence that auditors should consider involve whether the evidence is confirmatory or conflicting with the assertions issued by the auditee management. Those characteristics also include factors concerning the evidence’s legitimacy and its susceptibility to manipulation.

The AICPA officials explained that the designation of audit evidence and the auditor’s objective to design and complete the audit to gain relevant evidence that is satisfactory to back the opinion conveyed in the auditor’s report stays pertinent notwithstanding how the audit evidence obtained for assessment. Especially, the theories of sufficiency and appropriateness of audit evidence can be employed irrespective of the type or structure of evidence under consideration or assessed as audit evidence. The audit evidence guidance did not impede the auditor’s ability to use computer assisted audit tools to complete audit actions more proficiently to gain audit evidence. When reviewing data provided by the auditee as audit evidence, the auditors had the obligation to test the evidence’s correctness and comprehensiveness. They must also assess whether the data was appropriately accurate and thorough to meet the audit objectives. The methods applied to meet the audit objectives might differ in type and scope,
dependent upon whether the data was utilized to sustain the auditor’s risk assessment processes, or the inferences attained through the implementation of advanced audit procedures or the examinations of pertinent controls.

Research studies have provided a much more detailed perspective on how technology is changing auditing. Chen et al. (2018) examined whether there was an economic demand for continuous certification of compliance. These studies included the suggestion that new and emerging concepts in audits and examinations would result in an ongoing audit process framework. Chan and Vasarhelyi (2018) have suggested expansion of business practices to include continual auditing by dividing it into continuous compliance monitoring (CCM) and ongoing audit (CA). Bumgarner and Vasarhelyi (2018) indicated that many audit procedures could become automated to reduce costs, allowing more frequent audits and limiting critical internal audit tasks to assignments that require human judgment. With increases in the regulatory regime, increased technological complexity, and cost pressures, organizations are looking for productivity improvements in evaluating the performance of internal controls (Sun et al., 2015).

Yoon et al. (2015) implied one method of improving productivity, applied a technological approach that allowed near-continuous or, at least, high-frequency of oversight and monitoring over actual control operations. This process christens under the term continuous compliance monitoring (CCM). CCM is a subset of ongoing assurance practices, as well as ongoing assurance data management. Yoon et al. (2015) indicated that CCM ensured continual verification of data integrity, continuous risk monitoring, and evaluation in terms of measured risk dynamics (Chan & Vasarhelyi, 2018). According to Sun et al. (2015), improved management and monitoring of CCM controls and risk, management-related activities can reduce the need for time-consuming annual audit and assurance services. In addition, CCM
offered the possibility for detailed testing of controls, resulting in cost reduction (Bumgarner & Vasarhelyi, 2018). Other benefits included more coverage of elements to test, a more significant sampling, and the ability to do more with the same system or achieve more in a limited amount of time (Yoon et al., 2015).

Another concept that emerged from the audit and examination process was that continuous auditing could provide detailed, real-time analytical evidence demonstrating how an entity complies with established assurance policies and procedures (Chan & Vasarhelyi, 2018). As threats evolve, risk management activities should evolve (Bumgarner & Vasarhelyi, 2018). The use of continuous auditing can offer real-time evidence of the implementation of constant monitoring processes (Ly et al., 2018). The audit can have a better effect than the traditional auditing and examination approach, which only captured a snapshot of the compliance process during a point in time audit. In addition, continuous auditing can integrate into the compliance workflow to drive the implementation of policies and procedures across the organization (Van Hillo & Weigand, 2016).

Groomer and Murthy (2018) indicated that automated continuous auditing gathered documentation and indicators on systems, processes, transactions, and controls in real-time. With these tools, auditors collected information about processes, transactions, and accounts in a limited amount of time and at fewer costs, allowing the auditee to move away from the combined scrutiny of an audit and financial examination (Ly et al., 2018). Continuous audit activities demonstrated that the auditee knew its environment and immediately identified failures in practices and procedures and addressed them. In addition, continuous auditing allowed the auditee to respond to threats to assess business risks and processes (Clara et al., 2018). Chan and Vasarhelyi (2018) theorized that with continuous auditing, institutions could not only identify
potential abuses and attacks before they occur, but they can also ensure compliance with the Sarbanes Oxley Act of 2002 (SOX). In terms of early identification and resolution of potential weaknesses, institutions can avoid violations that often lead to a regulatory investigation (van Hillo & Weigand, 2016). Instead of sampling a percentage of transactions and processes, continuous auditing can allow the auditor to review all of them (Sun et al., 2015).

Goldbach (2015) explained that financial institutions' examinations by regulatory entities are assessments of their operations' financial health and soundness. Goldbach also include a review of regulatory compliance and internal controls (Jaremski, 2015). Barth et al. (2016), noted that in institution examiners in the United States, performed by the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Securities and Exchange Commission (SEC), the National Credit Union Administration (NCUA), the Federal Reserve, State regulatory entities and the Financial Industry Regulatory Authority (FINRA). Jaremski (2015) indicated that the financial institutions' examination process is based on the CAMELS classification system. This abbreviation describes the six main review areas of financial examinations. These areas consist of the adequacy of the institution's capital, asset quality, management, earnings, liquidity, and sensitivity to market risk (Wolfe, 2017).

**Supervisory Oversight Practices**

Examiners use a rating scale of one to five to rate each of six CAMELS areas (Masciandaro et al., 2020). Examiners also assign an overall rating based on each category's results (Jaremski, 2015). A score of one indicates a positive outcome, while a score of five indicates weak performance. For example, according to Eisenbach et al. (2016), examiners place financial institutions that obtain a score of four or five as their overall ratings on a program for corrective actions. The remedial action plan program allows regulators to closely monitor the
institution, review their activities, and assess how they address the deficiencies that resulted in the weak rating.

Masciandaro et al. (2020) indicated that the criteria for capital adequacy relate to tier one and tier two capital and whether these types of capital are sufficient to support the financial institution's operations under challenging conditions. Tier one capital is the financial institution's base capital and includes disclosed reserves, which appear in the institution's financial statements, and equity (Risal & Panta, 2019). The funds represent the use financial institution to function regularly and is the basis of the institution's financial strength (Masciandaro et al., 2020). According to Eisenbach et al. (2016), tier two capital is the additional capital of a financial institution. It may comprise undisclosed funds, subordinated debt, hybrid financial products, and associated elements (Risal & Panta, 2019). Similarly, the condition of asset quality is related to issues such as whether the financial institution's loan portfolio is sufficiently diversified and its provisions for losses are in line with industry standards (Eisenbach et al., 2016).

In terms of management criteria, Smith and Castonguay, (2020) explained that regulators aim to ensure that the financial institution's management team has a clear operational strategy and understands the unique risks of their organization and a reliable protocol to ensure legal and regulatory compliance. In terms of the outcome criteria, Handorf (2016) underscored that regulators focus on the quality of the financial institution's results and determine whether the institution appears stable enough to support itself when under pressure. The liquidity and sensitivity criteria are related to the financial institution's level of stability against possible shocks in the financial system (Hooda et al., 2018).
In terms of liquidity, regulators measure the financial institution's ability to meet its financial obligations, using liquidity tests such as acid tests, current, cash, or quick ratios (Handorf, 2016). In assessing the financial institution's sensitivity to pervasive risk, regulators often use complex financial models that simulate the institution's financial performance, subject to several potential adverse changes in financial markets (Smith & Castonguay, 2020). Examples of such differences include the increase in interest rates, loan default rates, or the decrease in the value of investments and the failures of derivative counterparties (Hooda et al., 2018). Bassett et al. (2015), detailed that the scope of a financial institution's examination includes a risk-based review of the rating areas of capital adequacy, asset quality, management, equity, liquidity, and sensitivity.

**Capital Adequacy.** Examiners assess the adequacy of capital by analyzing its trends (Risal & Panta, 2019). Under this area, examiners verify whether the institutions comply with the risk-based net worth requirement (Jaremski, 2015). To achieve a high capital adequacy rating, Wolfe (2017) clarified that institutions must comply with the rules and practices relating to interest and dividends. Other factors involved in the rating and evaluation of the adequacy of the capital are growth plans, economic environment, ability to control risks, and concentrations of loans and investments (O'Reilly et al., 2017).

**Asset Quality.** Berrospide et al. (2016) posited that the quality of assets covers the quality of loans issued by the institution to reflect its income. Masciandaro et al. (2020), explained that the evaluation of asset quality encompasses assessing investment risk factors that the institution may face and compared to its income. It shows the institution's stability against particular risks. In addition, examiners observe how the fair market value of investments
concerning their book values impacts the institutions. Finally, the quality of assets reflects in the
effectiveness of the institution's investment policies and practices (Eisenbach et al., 2016).

**Management.** Risal and Panta (2019) noted that management evaluation determines
whether an institution can respond adequately to financial stress. When rating this component,
examiners focus on management's ability to inform, measure, manage, and control the risks
associated with the institution's daily operations (Smith & Castonguay, 2020). In addition, it
covers the management's ability to guarantee the safety of the institution's services to the extent
that they comply with the necessary and applicable internal and external regulations (Handorf,
2016).

**Equity.** The ability of an institution to generate appropriate returns to grow, remain
competitive, and improve capital is a critical factor in assessing its viability (Hooda et al., 2018).
Bassett et al. (2015) indicated that examiners determine this by measuring growth, stability,
valuation margins, net interest margin, the level of net worth, and the quality of the institution's
existing assets.

**Liquidity.** When assessing an institution's liquidity, examiners test the sensitivity of
interest rate risk, the availability of assets that can easily convert into cash (Ghosh et al., 2017).
They also assess the institution's dependence on volatile financial resources in the short term and
asset and liability management techniques (Lee et al., 2016).

**Sensitivity.** Berrospide et al. (2016) clarified that sensitivity indicates the extent to which
a particular exposure to risk can affect the subject institution. Examiners assess an institution's
sensitivity to market risk by monitoring the management of credit concentrations (Silva et al.,
2016). In this way, reviewers can see how loans to specific borrowers affect the institution
(Wolfe, 2017). These loans may include agricultural, medical, credit cards, and loans to the
energy sector. In addition, the exposure to market fluctuations that impact currencies, commodities, equities, and derivatives is part of the sensitivity evaluation (Wolfe, 2017).

Wolfe (2017) noted that unlike regulatory examinations which may result in enforcement actions, audits are advisory services that involve the use of an independent public auditor or independent public accounting firms (IPA) to perform a full audit of financial statements, evaluate internal controls over financial information or exercise any other audit procedure. Internal audit activities outsourced or collaborating with other sources, are not considered part of an independent audit program (Patrick & Matthew, 2018). Chen et al. (2018), underscored that a useful external audit function often provides the board and management with the following:

- Reasonable assurance of the effectiveness of internal controls on financial information,
- The accuracy and timeliness of transactions, and the accuracy and completeness of financial and regulatory information.
- An independent and objective view of an institution's operations, including financial information processes
- Useful information for directors and managers to maintain risk management processes.

External Audits and Their Scopes

Depending on their type, external audits may have different scopes, which may include the financial statement audits, audits of internal controls, balance sheet audits, an agreed upon procedures.

Financial statement audits. Blay et al. (2016) posited that external auditing traditionally reflects the independent evaluation of financial statements. Independent audits are designed to
ensure or verify compliance with GAAP (Drake et al., 2019). The group performed by generally accepted auditing standards (GAAS). Its scope is sufficient to allow the auditor to express an opinion on the consolidated financial statements (Smith & Castonguay, 2020). 12 Code of Federal Regulation (CFR) part 363 requires that national financial institutions with total assets of $500 million or more have their financial statements audited by an independent auditor.

**Audits of internal controls.** According to Read and Yezegel (2016), this type of audit examines and reports on management's assertion relating to the effectiveness of the institution's internal controls on financial information. For example, the IPA's certification can cover all internal controls related to preparing annual financial statements or specific report schedules (Cordos et al., 2019). As part of this process, auditors document their evaluation of internal controls and prepare a written statement that establishes the criteria used and provides comments on the effectiveness of the controls (Christensen et al., 2016).

**Balance sheet audits.** Patrick and Matthew (2018) elucidated that an auditor reviews the institution's balance sheet in this type of audit and reports on it. As with financial statements audits, the balance sheet audit must conform to GAAS but not review or clarify whether the statement of income, changes in equity, or cash flows are presented fairly (Bunjaku, 2019).

**Agreed upon procedures.** Vecchione et al. (2021) posited that this type of audit, carried out by independent parties, relates to the performance of specific pre-arranged procedures, reviewing the suitability of internal controls or the accuracy of financial information. Such an audit is generally known as a director's review (Vecchione et al., 2021). The independent parties who perform this type of audit may be certified public accountants or certified financial institution auditors. The independent parties may have the appropriate certified information
systems, act in the capacity of a financial advisory firm, or other knowledgeable parties of the institution's sector (Vecchione et al., 2021).

Shahzad et al. (2018) argued that most studies define the quality of the audit as a variation of the joint probability assessed for a particular auditor to detect a violation in the auditee's accounting system and report it. This characterization interprets auditing as a binary process, with the role of auditors reduced to the simple detection and denunciation of apparent GAAP violations (Shahzad et al., 2018). While auditors are not doubt responsible for ensuring that financial statements are free of significant errors. Boolaky and Quick (2016) believed that this characterization underestimates the benefits of a high-quality audit. Boolaky and Quick (2016) argued that auditing extends beyond the simple detection and reporting of GAAP violations to ensure the quality of financial reports. In particular, Shahzad et al. (2018) expected high-quality auditors to consider not only whether the auditee's accounting options are designed and operating following GAAP, but how realistically the financial statements reflect the auditee's underlying financial health.

Glover et al. (2018) posited that the auditor's responsibility should extend beyond a limited review to ensure that the quality of financial information is consistent with generally accepted auditing standards, which require auditors to assess the quality of financial information. For example, AU-C section 500 requires auditors to judge the quality, not just the quantitative aspects of the audit evidence. Similarly, Silva et al. (2016) advised that auditors evaluate the qualitative aspects of the auditee's accounting practices, including possible biases in management judgments. These references indicate that auditors are responsible for ensuring a level of financial information quality that is superior to a cursory review of compliance with accounting standards.
Chen et al. (2018) noted that the risk of litigation also encourages auditors to care about the quality of financial information gathered during audit engagements. Honigsberg et al. (2017) indicated that courts consider that auditors should determine the reliability of audit evidence to support their opinions. The SEC has exhibited in most of its decisions relating to auditing that auditors are legally responsible for the opinions expressed in their reports, notwithstanding the auditee's responsibility to present fair and accurate financial information (Kedia et al., 2017). The decisions suggest that auditors are legally responsible for ensuring sufficient appropriate evidence to support their opinions on financial statements (Honigsberg et al., 2017).

The above arguments imply that the quality of the audit is a continuous process that, at first glance, seems inconsistent with the binary nature of the audit opinion. The quality of the audit is a function of the audit evidence that supports the auditor's judgment, which refers to the quality of the auditor's opinion (Silva et al., 2016). The quality of the auditor's opinion may vary with high-quality audit evidence, offering greater assurance that the financial statements accurately reflect the auditee's financial condition. The first element of audit evidence here is that the quality of the audit opinion stems from the audit procedures. Audit evidence of high quality increases the credibility of the audit opinion (Chen et al., 2018). Christensen et al. (2016) posited that post-audit financial records are not the only elements that influence the quality of audit evidence. The authors indicated that pre-audited financial statements affect audit evidence quality and contribute to the audit process. The quality of pre-audited financial statements also determines the auditee's financial information system, which integrates underlying data in financial reports and the auditee's unique characteristics (Gaynor et al., 2016).

Christiaanse et al. (2015) claimed that the quality of the auditee's financial information system also affects the relationship between audit evidence and opinion. Yoon et al. (2015)
emphasized that auditors may need to adjust previously audited financial statements before considering them as part of a current audit engagement to ensure their reliability. According to Christiaanse et al. (2015), auditors need fewer adjustments for auditees with high-quality financial information systems that produce better audit evidence because high-quality financial systems considers value-added pre-audited financial statements. Yoon et al. (2015) noted that improvements in the quality of audit evidence come only from the increased security provided by high-quality financial systems and personnel committed to producing the records subject to auditing. On the other hand, Glover et al. (2018) relativized by stating that the improvement in the quality of audit evidence comes from both a greater audit assurance and the judgment applied by a proficient auditor.

For Christiaanse et al. (2015), the quality of the audit evidence is not independent of other components of financial information quality. Some auditees are likely to prepare error-free audit evidence in anticipation of audits to influence the quality of the audit opinion they expect from the auditor (Glover et al., 2018). Therefore, Glover et al. (2018) argued that the quality of pre-audited financial statements is endogenous to the independent audit quality. Yoon et al. (2015) advised that auditors should consider the quality of the auditee's financial information system and its distinctive characteristics when scoping the audit and during the risk assessment process. The consideration of risks should be reflected in the audit risk assessment model, in which the auditor's choice expresses in terms of the inherent risk (Gaynor et al., 2016). Although auditees and auditors base their decisions on the expected quality of audit evidence, Lee et al. (2018) noted that unexpected random errors might affect the quality of the audit evidence. Therefore, ex-post events can occur and lead to errors or undiscovered fraud. Francis et al. (2017) argued that financial statements and their analysis should reflect quantified information
on auditees' financial positions. Francis et al posited that the audit opinion is necessary for stakeholders to understand the financial health and performance of the auditee in terms of liquidity, profitability, and operational efficiency. Shahzad et al. (2018) posited that the reliability and accuracy of audit opinions have essential effects that drive the behavior of financial markets. Honigsberg et al. (2017) elucidated that several factors affect the reliability and accuracy of the financial information used to form the audit opinion. Honigsberg et al. (2017) concluded that the most critical factors are the mechanisms of corporate governance, corporate culture, internal control systems, and the business sector in which an auditee operates.

Chen et al. (2018) emphasized that auditees expect to use appropriate corporate governance mechanisms and internal control systems to improve the quality of financial statements. Chen et al. (2017) posited that audit activity is one of the most debated topics in the current business environment. Audit opinions play a crucial role in the success of long-term economic efficiency (Chen et al., 2018). Chen et al. (2017) and Chen et al. (2018) concluded that the information presented in audit reports had a decisive influence on stakeholders' decisions. Kausar and Lennox (2017) specified that audited financial statements were critical to creditors when assessing the solvency of a potential borrower. As a result, stakeholders or potential stakeholders require an audit opinion on financial statements from prospective beneficiaries of their investments to ensure the financial information's accuracy (Espinosa-Pike & Barrainkua, 2016). Kausar and Lennox (2017) indicated that audited financial statements significantly reduce the uncertainty of an auditee's financial position. Espinosa-Pike and Barrainkua (2016) supported the claim that audit activities increase the value of the reporting entity.

Blay et al. (2016) pointed out that non-financial variables, such as the existence and effectiveness of a board of directors, are considered essential factors that affect the auditee's
financial information management process. Blay et al. (2016) indicated that the financial variables used to support audit opinions measure the auditee's profitability, liquidity, and operational efficiency from different angles. Blay et al. (2016) stated that auditors should evaluate an auditee's ability to continue as a successful business entity. From this perspective, Smith and Castonguay (2020) highlighted that one of the auditor's primary responsibilities is identifying and reporting possible financial and operational inadequacies. Read and Yezegel (2016) posited that financial and operational analysis performed by auditors are some of the most significant factors that influence the reliability and relevance of audit opinion.

Ernstberger et al. (2015) discussed key accounting variables to identify the factors that affect the auditor's opinion. They hypothesized that a lower growth rate and lower profitability reduce the likelihood of receiving an unqualified audit opinion. Ernesberger et al. (2015) concluded that an auditee's size and quality of its internal operations may predict the potential of the audit opinion. Ernstberger et al. (2015) also pointed out that an in-depth analysis of financial information could alert auditors to issues that are difficult to detect using traditional audit methods. Empirical findings from a study performed by Read and Yezegel (2016) revealed that audit opinion is strongly associated with the auditee financial information systems and internal control structure quality.

Tiron-Tudor et al. (2015) recognized that auditees with financial difficulties are likely to receive an adverse audit opinion. Smaller audit firms may not report a higher rate of unfavorable opinion in contrast to large audit firms. Chen et al. (2017) analyzed the relationship between audit opinion and publicly available information. They used a discriminant analysis based on accounting indices to forecast the audit opinion and concluded that accounting indices appeared helpful in predicting the audit opinion. Chen et al. (2018) reviewed financial and market
variables to expect auditor's opinion and declared that factors such as losses in the current year, industry performance, and changes in liabilities and assets levels play an essential role in the prediction of the audit opinion.

Tahinakis and Samarinas (2016) also studied factors that influence the auditor's opinion using organizational and financial effectiveness variables. Tahinakis and Samarinas concluded that audits performed by large audit firms tend to become extensive, while those conducted by small independent public accounting firms are likely to be limited in nature. Chen et al. (2018) examined whether financial and non-financial factors affected the audit opinions. Chen et al. reviewed a regression model based on a sample of auditees. Chen et al. indicated that financial factors, such as operating margin over total assets and the current ratio, were significantly related to the audit opinion. Finally, Tahinakis and Samarinas (2016) examined the usefulness of cash flow statements in predicting audit opinion. Tahinakis and Samarinas reviewed cash flow indices as the independent variable and the auditor's opinion, a dependent variable. Tahinakis and Samarinas concluded that cash flow coefficients were one of the main factors that influenced the audit opinion. A positive correlation exist between the amount of cash flow and the likelihood of receiving unqualified audit opinions.

Auditor's independence is one of the most contentious issues in the global business environment due to the SEC's significant accounting scandals and enforcement actions (Kedia et al., 2017). Non-audit services, such as accounting, internal auditing, design, and implementation of accounting systems provided by audit firms, can undermine auditor independence. The Sarbanes-Oxley Act, enacted in 2002, limited the scope of non-audit services to improve auditors' independence. Parker et al. (2018) argued that an unhealthy business association between the audit firm and auditees might indicate that auditors lack independence in
appearance. Chen et al. (2017) stated that auditors are more likely to issue an unqualified opinion when their audit firm provides a significantly higher non-audit services to the auditee.

For Kedia et al. (2017), the existence of professional skepticism in audit services enhances stakeholders' confidence in audit opinions. Kausar and Lennox (2017) stated that independent auditors should use a high level of professional skepticism in the audit process and that professional skepticism significantly improves the quality of audit evidence. Non-audit services provided by the audit firm to the auditee may affect professional skepticism. Bowlin et al. (2015) examined whether a strong business association between auditors and auditees affected professional skepticism. Bowlin et al. (2015) concluded that business associations strictly limited to audit services between auditors and auditees did not affect professional skepticism. Brazel et al. (2019) noted that audit standards suggest that auditors carefully analyze a company's ability to pay its debts. The volume and type of debt securities are among the main concerns of auditors when evaluating business continuity (Bowlin et al., 2015).

Brazel et al. (2019) concluded that auditees' status, whether in financial default or not, is helpful in explaining the type of audit opinion. Rodgers et al. (2017) concluded that previous studies have yielded mixed results limited in identifying the factors affecting audit opinion. Rodgers et al. argued that more studies are needed to expand on the factors that affect audit opinion. According to Brown et al. (2020), financial and non-financial variables are critical elements of forming an audit opinion. The correct use of non-financial and financial variables improves the reliability of the practical and relevant audit opinion. Therefore, non-financial and financial variables become integral parts of an auditor's analytical process (Cohen, et al., 2017).

According to Brown et al. (2020), operational efficiency measures, asset turnover ratios, and associated vital financial indicators may also help auditors express their opinion accurately.
Brown et al. (2020) posited that auditees with low asset turnover are likely to receive an adverse audit opinion. Tahinakis and Samarinas (2016) examined the average value of auditees' solvency index. Tahinakis and Samarinas noted that those with low solvency could receive an adverse audit opinion while those with higher stability were likely to obtain an unqualified audit opinion. Tahinakis and Samarinas concluded that auditees that rely more on their funds are more likely to receive unqualified audit opinions than those who engage in excessive borrowing. The results also revealed that higher growth rates and external oversight entities increase the probability of receiving unqualified audit opinions.

Chen et al. (2017) argued that auditees are more likely to receive an unqualified audit opinion if they have numerous years of presence on the stock market given the increased level of scrutiny associated with the need to remain competitive and attractive to investors. Ianniello and Galloppo (2015) indicated that auditees with a high growth rate exceed expectations in meeting financial reporting standards. In contrast, Kedia et al. (2017) advised that auditees that receive negative audit opinions suffer from low liquidity and struggle to find a footing in the investment market environment.

Martinez-Blasco et al. (2017) suggested that factors such as profitability indices, assets, equity performance, and profit margin play a key role in predicting the type of audit opinion. They noted that negative performance coefficients, assets, weak return on equity, and low-profit margins might predict that auditors would issue an adverse audit opinion. The findings are in line with the results of Hapsoro and Santoso (2018), who found that an inefficient auditee may be expected to receive an adverse audit opinion. In other words, auditees that effectively use their equity and total assets to generate more revenue are likely to obtain unqualified audit opinions. Kedia et al. (2017) indicated that audit opinion is one of the critical issues in the economic
context that has become a globalized concept. Stakeholders obtain significant benefits from the audit opinion when evaluating the financial health and performance of a business entity.

Martinez-Blasco et al. (2017) emphasized that audit opinions are useful guidelines for the reorganization of corporate resources. Chen et al. (2017) posited that a reliable model that identifies the factors affecting the type of audit opinion would be an essential analytical tool for auditors when they identify and discuss findings with their auditees and suggest effective changes in policies and procedures. Ianniello and Galloppo (2015) opined that future research should focus on forward-thinking classification methods and perform an advanced study of factors that affect the sufficiency and appropriateness of the evidence used to support opinions. They also submitted that the scope of empirical studies could be expanded to examine the factors that influence the type of audit opinion in other industries.

The Problem

An examination does not specifically mean that examiners or auditors reviewed all transactions (Jaremski, 2015). Audit and examination reports indicate whether the auditee's financials are presented fairly, in all material respects. In practice, this means that if a review was intended to detect significant fraud, it might not have detected all fraud (Zhang, 2019). Audit reports mention whether the auditee presented its financials under generally accepted accounting principles and other applicable standards. Knechel (2016) argued that the examination's goal is to provide a reasonably accurate and independent assessment of the reviewed financial records. Therefore, the auditor or examiner only may establish a judgment based on whether accurate or inaccurate information exists by following procedures that provide reasonable assurance based on sufficient and appropriate audit evidence (Jaremski, 2015).

Inherent limitations
Bentley-Goode et al. (2017) indicated that the auditing process had an intrinsic limitation reflected by issuing an opinion. Bentley-Goode et al. argued that auditors could only offer reasonable assurance about the accuracy and fairness of the financial statements rather than absolute assurance. The following paragraphs below discuss other inherent audit limitations.

**Use of professional judgment.** Clara et al. (2018) posited that auditing involves using judgment to identify audit risks, select appropriate audit procedures, and interpret audit evidence. While auditing standards provide guidelines to help auditors make informed decisions, auditors sometimes misjudge a situation that can cause them to fail to identify an inaccuracy in the financial statements (Jaremski, 2015).

**Use of sampling.** Bentley-Goode et al. (2017) indicated that auditors apply sampling techniques to limit the number of transactions and balances selected for audit tests to perform the audit efficiently and economically. However, Draeger et al. (2021) indicated that the results derived from selected transactions and balances might not represent the entire population. Therefore, an inherent risk exist that the audit procedures do not detect a misrepresentation of relative importance in the financial statements because to the inability of the auditors to perform detailed testing of all transactions and balances (Alareeni, 2019).

**Representations made by management.** Draeger et al. (2021) postulated that, in general, external evidence is considered a more reliable form of audit evidence than internal evidence produced by management. Although auditors collect audit evidence from a variety of sources, all too often, they rely on management statements to assess the reasonableness of the financial statement under review (Jaremski, 2015). Overreliance on management assertions is
particularly the case in instances involving management estimates as corroborating audit
evidence (Knechel, 2016).

**Risk of fraud.** Jaremski (2015) specified that perpetrators are supposed to hide fraud by
their very nature. Therefore, fraud presents a very high risk of not being detected by auditors
(Alareeni, 2019). Despite applying reliable audit methods and procedures, fraud may still exist in
audited statements but not be detected (Eutsler et al., 2016).

**Time restrictions.** Eutsler et al. (2016) indicated that in practice, auditors face stringent
time constraints to give their opinion on the financial statements. As a result, auditors tend to
prioritize the essential tasks for the proper performance of the audit. In some cases, especially
when auditees have a legal requirement to publish their financial reports within a specified
period. In these instances, auditors may disregard a critical element in the reporting period to
ensure that they meet deadlines (Knechel & Salterio, 2016)

**Threats related to independence.** Andiola et al. (2018) theorized that while the ethical
guidelines issued by professional and regulatory bodies try to minimize cases of loss of
objectivity by auditors, a certain level of conflict of interest is inevitable in practice. For
example, the perceived independence of an auditor comprises when a client represents a
significant portion of the audit firm's revenue (Ernstberger et al., 2015).

**Scope.** Hrncir (2016) clarified that audit procedures design to detect essential errors in
financial statements and focus on the financial aspects of transactions and events. Audit scope
does not generally consider non-financial events or issues (Cipriano et al., 2017).

**Failure prevention.** Johnson et al. (2019) indicated that financial institutions' regulatory
framework includes an administrative apparatus through which regulators control compliance.
Financial regulations are generally base more on deterrence by imposing penalties for violation
than on detecting and correcting possible infractions before they can cause damage to the financial institution (Crucean, 2019). Barth et al. (2016) found that the traditional financial regulation approach has simplified the monitoring process and allowed regulators to channel their efforts and experience more effectively. Crucean, (2019) noted that diversified business processes pose centralized monitoring and control difficulties. They pointed out that it is almost impossible for a single manager to understand the details of the many different products a single institution offers to consumers.

Carretta et al. (2015) specified that this complexity issue is high for the financial institution examiner who, as an outsider, has to master the unknown organizational structure and understand the daily operations of each of the entity's activities. Restrictive regulation may have helped regulators contain financial institutions' difficulties once they have developed (Barth et al., 2016). Restrictions on product diversification and geographic diversification limit a financial institution's ability to join many other similar institutions or financial entities, thus avoiding the risk of cascading bankruptcies if one entity encounters financial difficulties (Carretta et al., 2015). In a financial system made up of many small institutions, the bankruptcy of a single institution would have more negligible effect on the entire system than the bankruptcy of a large group of multiple connected financial institutions (Crucean, 2019). According to Carretta et al. (2015), some critics have questioned the ultimate effectiveness of preventive regulation because it encourages the regulated industry to find ways to circumvent established restrictions. When this situation occurs, applying remedial processes become complicated and expensive and often requires a legislative redesign to address the gaps (Johnson, et al., 2019).

Pennington et al. (2017) indicated that the quality of audits improves the quality of financial reports by increasing the credibility of financial statements. Therefore, the quality of
the audit is a factor in the quality of financial information. According to Chan and Vasarhelyi (2018) although difficult to define, the quality of financial information is also determined by the auditee's financial information system. The quality of financial information systems considers as an innate characteristic of the auditee, which determines its underlying effectiveness (Pennington, et al. 2017). Therefore, the auditee's financial information system and other essential features influence the quality of the pre-audited financial statements, which may limit the possible level of financial quality (Chan & Vasarhelyi, 2018). Therefore, audit quality provides an excellent guarantee that the financial statements accurately reflect the original state of the entity, conditioned by its business information system and associated inherent characteristics (Zhang, 2019).

Chan and Vasarhelyi (2018) indicated that the audit evidence and audit opinion belonged with two groups that were intrinsically associated with the audit process results. Several dimensions may characterize the unique strengths and weaknesses of each category. One aspect is how the auditor directly influences the factors in each group (Bratten et al., 2019). Zhang (2019) explained that material misrepresentations in the audit evidence, for example, were directly under the auditee's responsibility, while the basis of judgments and measures that form the audit opinion solely the auditor's responsibility. Another dimension that Bratten et al. (2019) noted was whether auditors took into accounts relatively serious failures, such as significant abnormalities or relatively less blatant management misrepresentations.

Francis et al. (2017) emphasized that there is still a debate about how auditors capture audit evidence of real or perceived quality, where representativeness and relevance are vital fundamentals affecting auditor judgment. The current study related to the review of audit evidence sufficiency and appropriateness and their relationship with the quality of the audit
opinion. Based on the above and the understanding that audit evidence and judgment were vital factors that affected the quality of the audit opinion, the study explored these notions and limited the context to auditing in the target industries. According to Francis et al. (2017), although the literature used many publications to measure the quality of the audit evidence and opinion, there was no consensus on the most appropriate measures. In addition, there was limited systematic guidance on whether or not it was possible to compare audit evidence from one representative context to another (Bratten et al., 2019). Therefore, this review began with a discussion about the conceptual nature and definition of quality evidence, followed by a discussion about the relationship between audit evidence quality and quality financial information. The debate presented a framework to understand and evaluate the audit quality indicators used in the literature. The goal of was to understand better the nature of the quality of the audit evidence and its relationship with the associated financial information.

**Theories**

Critics went as far as citing court cases in which auditors were held accountable for ensuring that information provided to them in their work was consistent with applicable standards. Together, these arguments suggested that the quality of the audit was a continuous concept that guaranteed the quality of financial information. A high-quality audit was a a work product that provided greater assurance of the quality of financial information provided to stakeholders (Pennington, et al., 2017). The theoretical framework in the current study hinged on four theories, which I expanded on in the paragraphs below.

**The policeman theory.** Hayes et al. (2014) posited that the supply and demand for audit services produce a strong need for an independent individual to play a crucial role in researching, identifying, and preventing of fraud. Ramamoorti et al., (2017) contended that there was a
paradigm shift from research, detection, and prevention of fraud to the establishment of a reasonable assurance about whether existing financial records were a fair representation of an entity’s financial condition. According to Clark and Erickson (2017), auditors should not operate as overseers, but as independent parties send signals to owners and regulatory entities whenever they detect irregularities or anomalies in audited entities’ financial records and practices.

Loikith and Bauchwitz (2016) argued that after several fraud cases in financial statements and the collapse of large companies like Enron in the past, the policeman theory would continue to impact audit considerations. According to Kempf and Cabrera (2019), the assertion that auditors should continue to focus on computational accuracy, deterrence, and fraud detection remains a central part of auditing. Oltean (2016) indicated that auditors must enforce accounting and financial standards and serve as a deterrent in preventing and resolving harmful practices that may result in fraud, waste, and abuse of financial resources.

This concept widely in the public sector, where entire departments have inspector general offices specifically dedicated to fighting fraud, waste, and abuse (Morin & Hazgui, 2016). According to Hodge (2019), recent financial scandals prompted a careful review of this theory. However, there is an ongoing public debate about the auditor's responsibility in detecting and disclosing fraud that draws interested parties to the basic public perceptions from which the theory is derived (Morin & Hazgui, 2016).

Opponents of this theory argued that the responsibilities for preventing and detecting fraud and irregularities rest with those charged with governance within an entity. The personnel charged with governance within audited organizations were required to put adequate internal control systems (Kempf & Cabrera, 2019). Loikith and Bauchwitz (2016) opined that auditors’ duties should not solely focus on detecting fraud unless required for a specific period when
stated explicitly as the purpose of an audit engagement (i.e., forensic audit). However, given the need for an unbiased review of those charged with governance, Clark and Erickson (2017) contended that auditors should ensure that owners’ assets are protected from fraud, waste, and abuse.

**The lending credibility theory.** Palazuelos et al. (2019) proposed that the primary function of independent audits was to add credibility to financial statements. In attesting to the authenticity and truthfulness of an entity’s financial statements, auditors lent credibility to the organization in question and its financial health. Their certified opinions carried an unprejudiced assessment to a third party and transmitted an assumption of trustworthiness and reliability (Francis, et al., 2017).

Drake et al. (2019) described the need for audit services as the necessity to impart confidence in financial statements. Schlueter and Ratzinger-Sakel’s (2019) noted that auditing served to institute and preserve investor confidence in financial statements with the equitable assurance that the economic facts required from audited entities are trustworthy and sincere. The auditor was consequently accountable for conveying this credibility. Finally, Cordos et al. (2019) argued that due to recent accounting abuses, the emphasis on audited financial statements grew as a channel of strengthened protection for investors.

Palazuelos et al. (2019) postulated that the lending credibility theory conditions that audit’s fundamental objective should include promoting investor confidence and enhancing assurance in financial reporting. According to Drake et al. (2019), the soundness of this theory resides in predicting that audited financial statements improve the trust of external parties in the reports issued by those charged with governance. Hodge (2019) indicated that audits develop and improve the economy through expressing opinions that directly impact investors’ decisions.
Auditing allowed users of financial statements to gain reasonable assurance in the information presented to them, with the implied presumption that the underlying financial information is correct and presented faithfully. The assumption of accuracy and sincerity consequently increased investors’ confidence in the information and facilitated investment decisions (Karkacıer, & Ertas, 2017). In support of this theory, Tiron-Tudor et al. (2015) stated that investors place more value and confidence in audited financial statements than those not audited.

**The inspired confidence theory.** According to Gepp et al. (2018), third parties interested in a business demanded and required managerial responsibilities that have driven the growth of audit services. Caritte et al. (2015) added that the application of audit of services came from the need to facilitate contractual relationships between audited entities and other parties. Kocken and Hulstijn (2017) opined that independent parties should view the preparation and presentation of financial statements controlled by those charged with governance to ensure that stakeholders had confidence in the reporting entity. According to Ridley (2017), the auditing profession grew in strength over the years with the development of various types of audits, including internal, regulatory, forensic, and performance audits, among others, to increase the requirement for reinforced accountability.

Elewa and El-Haddad (2019) saw accountability as a tool for demonstrating and supporting the actions of those in governance, first-line personnel, and managers of public resources to justify the transaction they performed. Caritte et al. (2015) stated that auditors’ primary objective should strictly preserve shareholders’ interest in the audited entity. Kocken and Hulstijn (2017) added that those charged with governance must account for their actions with openness and integrity. Caritte et al. (2015) pointed out that the basis of an argument in
favor of auditing was the need for administrators to justify their fiduciary duties to shareholders, which found its foundation in independent auditing that inspired confidence in administrators’ performance. According to Morin and Hazgui (2016), the idea of inspired confidence was inherent to the assumption that administrators have a fiduciary duty to their entities, which they were required to preserve when managing the resources entrusted to them. Drake et al. (2019) emphasized that the theory of inspired confidence maintained that there should be no inherent problem with executive control because organizational managers should pursue their institutions’ best interest in all their actions.

Ridley (2017) posited that organizational executives, over time, tend to see society as an extension of those who identified themselves as being a part of their organization and wished to ensure that the organizations’ assets use their best potential. For Elewa and El-Haddad (2019), the best way management can account for its compensation and performance to stakeholders was to provide periodic financial statements that inspired confidence in organizational practices and performance. Kocken and Hulstijn (2017) stated that external stakeholders had no direct means to verify the information published by management unless an independent audit confirmed its validity and reliability. Gepp et al. (2018) indicated that audits supported trust and inspired assurance between those entrusted with leading an organization and its owners.

The assurance theory. Proponents of the assurance theory affirmed that the need for assurance stems from the necessity to obtain independent assurance from an impartial third party on a subject prepared by an audited entity (Leung et al., 2015). Said assurance only provides when the impartial third party provided an independent perspective on the audited entity’s practices and condition. According to William Jr et al. (2016), this independent viewpoint was only useful if those involved in the assurance process understood; therefore, the significance of a
contractual agreement on the subject and the adequacy of the criteria required to evaluate the entity under audit (Schmidt et al., 2016).

According to Baylis et al. (2017), assurance services allowed interested parties to identify whether audited entities were true to their words or whether they met established requirements that significantly impacted their businesses. Proponents of this theory, the sufficiency and appropriateness of audit evidence were critical to support assurance services, the lack of which may result in the provision of inadequate assertion to vested parties. Zhang (2019) argued that assurance was necessary to guarantee a good quality managerial environment and a productive organizational environment. According to Bobek et al. (2015), professional audit engagements should always increase the confidence of those who refer to the auditor’s work. However, William Jr et al. (2016) posited that assurance services often refer to the primary and subsequent lines of defense in an internal control environment, which did not always translate into the provision of independent assurances.

The distinction between first and subsequent lines of defense in an asset protection environment may seem subtle. However, Leung et al. (2015) contended that the important implications regarding the savings vital to achieving intended results and the level of comfort can result from assurance services. For example, internal auditors may lead the process of designing internal control systems within an entity. In contrast, external auditors focus on preparing and advising on how to prepare independent financial statements. Bobek et al. (2015) postulated that the lack of distinction in these instances could significantly impact the reliability of assurance services. In all cases, Zhang (2019) posited that the audited entity might benefit from the experience and skills of professionals. However, the need for strengthened assurance required that professional auditors determine whether their involvement before the preparation or
design of processes constituted threats to their independence as providers or assurance services. If so, they should take measures to remove the risks to adequate levels.

According to Schmidt et al. (2016), the primary purpose of assurance services was to ensure the accuracy of the financial reports. Also, guarantee to all interested parties that false assertions did not affect audited financial records, no misuse of funds had occurred, or no fraud impacted the audited entity’s resources. In addition, financial assurance services must ensure that the assessment or evaluation of financial records complies with the most stringent accounting standards and regulatory requirements (Zhang, 2019). Williams Jr et al. (2016) emphasized that assurances must assess processes, procedures, and operations and determine whether these processes, procedures, and systems strictly receive observation to ensure that they were correct and resulted in optimal results. Baylis et al. (2017) further argued that assurance services are specialized in the appraisal and strengthening of an entity’s organizational performance. Bobek et al. (2015) further explained that assurance services enhanced the decision-making process because they drove change based on consumers’ feedback, critical financial evidence, employee involvement, and instances in which essential information affected organizational achievement.

**Variables**

Veridiana (2019) posited that the source of the evidence impacted its sufficiency and appropriateness. Saha and Roy (2017) argued that audit evidence obtained directly by the auditor is preferable to that obtained indirectly. Similarly, audit evidence obtained from controlled systems was more valuable for the audit process than information generated internally by the audited entity without existing controls (Lessambo, 2018). Furthermore, evidence supported by original documents was preferable to photocopied or verbal statements. However, some types of evidence respond better to specific statements (Veridiana, 2019). Therefore, it was important to
note that a review of multiple types of evidence should improve the quality and effectiveness of
the audit.

Lessambo (2018) explained that the strength of audit evidence depends on the reliability
of their sources. According to Veridiana (2019), the auditor must gather sufficient evidence to
minimize the risk of material misstatement. Several studies in the field of auditing have shown
that the competence and objectivity of the source were determining factors in the power of
persuasion. However, it was not always possible to determine the validity of specific audit
information or its source (Zager et al., 2016). If auditors believed that internal controls within an
organization were likely to be weak, they needed to identify other methods to collect and
evaluate evidence about the organization.

Blix et al. (2019) indicated that the amount of audit evidence required depends on the
auditor's assessment of the risks of material misstatement and the quality of that evidence.
Veridiana (2019) suggested that the higher the number of corroborating audit evidence, the more
convincing the evidence. However, in some instances, a large amount of evidence can only
provide limited persuasion. Zager et al. (2016) examined the effect of significant risk on the
amount of evidence. Zager et al. concluded that auditors tend to collect more evidence when they
see high risks in the information under audit. Blix et al. (2019) indicated that sufficient and
appropriate audit evidence may be affected by the following factors:

- Determination of the size of the audit sample and the elements of the population to be
  analyzed,
- The materiality of amounts under review,
- Evaluation of the nature and level of risk inherent the organization as well as the
  financial statements and related records,
• Evaluation of the nature and effectiveness of internal control systems
• Personal experience and skills of the auditor,
• The pertinence of the audit procedures, including procedures to detect fraud or possible errors, and;
• The source and credibility of the available information.

Lessambo (2018) indicated that the importance and risk of material misstatement are the main factors that influence the sufficiency of the evidence. Blix et al. (2019) posited that the higher the risk of material misstatement, the higher the quality of the evidence. If the quality of the evidence was high, the amount of audit evidence required was lower. Lessambo (2018) stressed that obtaining sufficient and appropriate evidence should consider several risk factors. These included:

• Risk of inappropriate records, for example, incomplete files, excessive journal entries, and account adjustments, unregistered transactions under standard procedures and unbalanced control accounts,

• Risk of insufficient transaction documentation, such as lack of trustworthiness of the data. Absence of valid authorizations, unavailable vouchers, and amendments to the documents (these documentation issues are of greater importance when it comes to substantial or uncommon transactions),

• Risk of an excessive number of differences between accounting entries and third-party confirmations, contradictory and inexplicable evidence of changes in operations proportions and;

• Risk of evasive or irrational responses to audit inquiries.
According to Gospel et al. (2019), statistical sampling was one of the means used by auditors to ensure that they have a representative sample of the population of evidence. Jones (2017) recommended that low confidence limits for sample size be established under regulatory guidance so that all audit professionals use the same sampling standards. Marazzi and Tille (2017) noted that through statistical standards, the auditor could improve the confidence of peer reviewers and stakeholders in professional practice and the procedures applied during the evidence-gathering process. Jones (2017) noted that the use of probabilistic sampling backed by statistics allowed auditors to reduce the risk of misjudgments they may encounter when using non-statistical sampling, which can reinforce the sufficiency and appropriateness of audit evidence obtained during their engagements.

Zuca (2015) pointed out that theoretical approaches, ethical concepts, including validity and reliability, influence the concept of audit evidence appropriateness and sufficiency. Therefore, the auditor conducting an audit must have a detailed understanding and an adequate appreciation of ethical concepts (Patrick & Matthew, 2018). For this study, the sufficiency (independent variable) criterion was defined as the amount of material evidence. In contrast, the appropriateness (independent variable) criterion was the satisfactory quality of the gathered audit evidence. In the context of this study, the dependent variable was the quality of audit opinions issued in the United States banking and securities industries. Sufficiency, in this context, relates to the quantity of the audit evidence, while appropriateness refers to the relevance and reliability of the evidence (Zuca, 2015).

Gospel et al. (2019) noted that there was an interdependent relationship between the concepts of "sufficiency" and "appropriateness" described in the literature and audit standards as a correlation originating from the interaction of these two concepts. The sufficiency and
appropriateness of the audit evidence were interrelated concepts and referred to the quantity and quality of the evidence (Saha & Roy, 2017). The decision to determine whether a sufficient amount of evidence depended on its amount and relevance. Patrick and Matthew (2018) suggested that there was generally a strong association between the concepts of sufficiency and appropriateness of audit evidence. However, there are cases where the amount of evidence may not meet the required quality or relevance, and vice versa.

Gospel et al. (2019) argued that the critical point for audit evidence is not the amount of evidence, but the quality of the evidence used in an audit. Saha and Roy (2017) noted that audit evidence was credible if it was sufficient in size and value to allow the auditor to draw an objective conclusion. Persuasion must endure further evaluation from other auditors. It signified those other auditors must also come to the same understanding that the amount of evidence was compelling enough to support the same conclusion (Veridiana, 2019). The reliability of the audit evidence stemmed from its ability to convince an objective reviewer (Zuca, 2015).

Cipriano et al. (2017) asserted that the relationship between audit evidence and auditors' opinions is critical in establishing the reliability of audit reports. This relationship came from a general theory of proof that used the rules of formal logic. Formal logic referred to the evidentiary requirements for issuing an auditor's opinion on a set of financial statements under review. Gallizo Larraz and Saladrigues (2016) emphasized that the logical relationships came from the integrity of the evidence collected, and its strength and materiality. Alkilani et al. (2019) indicated that these factors were vital in linking the framework with generally accepted auditing standards. Concerning the integrity of the evidence, Cipriano et al. (2017) argued that the professional judgments required by auditors regarding the evidence include:

- The amount and quality of evidence, and;
• The integration of the evidence for disclosure.

**Related Studies**

Shahzad et al. (2018) found that recent financial crises had revealed weaknesses in financial institutions' processes of risk management, control, and governance and highlighted the need to improve the quality of external audits. Colliard and Gromb (2018) posited that the financial sector is unique, given its economic utility. Quality audits play a central role in financial stability and provide the resources needed for economic growth. Ghosh et al. (2017) noted that this sector included global financial institutions whose failure could trigger a global crisis. In principle, Nasution and Ostermark (2019) found that regulatory authorities required that financial institutions maintain adequate and reliable records, prepare financial statements under established regulatory requirements, and comply with generally accepted practices. The audited accounts were expected to accurately reflect the institutions' financial condition and performance and convey an independent analysis supported by an objective opinion (Lee et al., 2016).

According to Cao et al. (2015), financial institutions' auditors must have sufficient knowledge and skills in the sector to adequately respond to the risks of material misstatement and the additional regulatory requirements that may arise. Given the complexity and diversity of financial institutions' activities and the legal and regulatory framework in which they operate, auditors should have specialized knowledge and experience in auditing financial services and should call on experts for assistance during audit engagements as appropriate (Lee et al., 2016). Macartney and Howarth (2020), underscored that gaining more insights from accountants, ethical and assurance standards, industry practices, and relevant regulatory requirements could strengthen industry knowledge. Cao et al. (2015) posited that knowledge of capital and liquidity requirements and having a general understanding of the legal and regulatory framework
applicable to financial institutions was an excellent place to start when attempting to gain an understanding of the industry.

A second characteristic was knowledge and understanding of computerized systems, which was helpful in navigating and obtaining relevant data on the financial system controls and processes (Lee et al., 2016). Shehzad and De Haan (2015) highlighted that auditors must have the ability to assess whether the audit engagement teams should include specialists with a high level of technical knowledge in complex areas, particularly given the intricacies of transactions unique to financial institutions. Hu et al. (2021) indicated that audit firms must have documented policies and procedures that establish minimum competency requirements for members of a financial institution audit team. The competency requirement was crucial because financial regulators may have the ability to step in and influence the proficiency requirements for auditors (Shehzad & De Haan, 2015).

Anginer et al. (2018) stressed that when regulations and standards do not specify auditors' qualifications requirements, financial regulators may encourage professional and regulatory bodies. Introducing training and experience requirements ensures that audit teams have a sufficiently competent staff. According to Hu et al. (2021), competence was particularly important to improve the auditor's capacity to exercise professional judgment and carry out certain critical aspects of the audit, such as identifying and evaluating risks of material misstatement and designs. In some cases, such as auditing specific complex accounting estimates, more specialized knowledge may be required to support the audit team (Macartney & Howarth, 2020). In addition, the financial institution auditor, must be objective and independent as it relates to the facts and in appearance, under the most stringent requirements applicable to public interest entities (Anginer et al., 2018).
Anginer et al. (2018) posited that objectivity was another characteristic, a fundamental ethical principle, and a vital element of audit quality. Anginer et al. implied that objectivity in the performance of audit work was an indication that the auditor's judgment was not affected by conflicts of interest. Macartney and Howarth (2020) underlined that since objectivity was a mental state that, in most cases, cannot be directly observed by users of financial statements, it was essential that auditors maintained their independence in their analysis of facts and appearance. According to Nasution and Ostermark (2019), independence was the absence of circumstances and relationships in which a reasonably informed third party would conclude that an auditor's objectivity was compromised. Ball et al. (2018) found that jurisdictional auditing standards and generally accepted ethical standards provided frameworks for auditors to identify and respond to threats to independence.

Ball et al. (2018) posited that regulators most often emphasized that to the extent that guidelines set forth by regulatory requirements relating to ethical standards are more restrictive than the corresponding professional principles, the auditor must comply with the most restrictive rule. Independence must observe the context of the audited institution, and related entities (Honigsberg, et al., 2017). Church et al. (2018) indicated that auditor independence was the mental state that allowed the expression of a conclusion without being affected by influences that compromised professional judgment. Ettredge et al. (2017), underscored that independence allowed the auditor to act with integrity and show professional objectivity and skepticism. Church et al. (2018) cautioned that when auditors avoid facts and related elements, a reasonable and informed third party could conclude that the auditor's judgment was compromised, weighing all the specific facts and circumstances.
Audit team rotation is another critical characteristic that impacts audit evidence in the financial services sector (Ettredge et al., 2017). Cao et al. (2019) stressed that auditors must comply with the requirements of applicable jurisdictional standards regarding audit team members' rotation. In assessing whether a relationship or circumstance represented a threat to independence, Tepalagul and Lin (2015) underscored that the auditor must evaluate the specific rules related to independence and the content of the threat to independence. Hu et al. (2017) indicated that the independence assessment should also include a review of an objective perspective and how a reasonably informed third party would perceive the threat and its effect on the auditor's objectivity.

Ettredge et al. (2017) noted that non-audit services provided to an auditee might affect, among other things, the perception by a third party of the auditor's independence. Auditors should be carefully evaluated to identify threats to the auditor's objectivity and perceived independence (Church et al., 2018). Lee et al. (2018) noted that financial regulators expected auditors to actively consider the possible threats to their independence, particularly threats that may affect the auditor's professional skepticism related to management assertions and unaudited financial records. For example, complex transactions can receive structuring to achieve a particular accounting treatment or a specific regulatory result when, in fact, they are inadequate. Cao et al. (2019) indicated that auditors discuss and gather management assertions, they must be careful to not take the claims at face value until after they have substantiated those assertions through an independent review. The auditor must exercise professional skepticism when planning and conducting financial services audits while considering the complexities of the sectors and the high probability of data manipulation (Nasution & Ostermark, 2019).
Bowlin et al. (2015) posited that professional skepticism was one of the key elements that affected the auditor's ability to gather and analyze adequate audit evidence. Rodgers et al. (2017) defined professional skepticism as an attitude that included an inquisitive mind, an awareness of the conditions that may indicate possible errors due to intentional omission or fraud, and a critical evaluation of the evidence. Professional skepticism must manifest itself throughout the audit, not only when collecting management assertions but also when testing the statements (Brown, et al., 2020). Professional skepticism could also manifest through actively seeking whether alternative accounting treatments are preferable to those selected by management and documenting the approach, the evidence obtained, and the reasons applied as well as the conclusions drawn (Cohen et al., 2017).

Brown et al. (2020) underlined that the auditor should adopt an interrogative approach. Ghosh et al. (2017) indicated that the application of appropriate professional skepticism was of paramount importance in financial services audits because of the amount and size of accounting estimates and the potential for inclusion of subjective data to support these estimates. Professional skepticism was particularly essential when audit evidence included:

- Significant estimates and judgments which were more susceptible to management bias.
- Significant non-recurring or unusual transactions; and,
- When financial information was vulnerable to fraud and perpetuation of errors due to weak internal controls.

According to Macartney and Howarth (2020), auditors must be skeptical about the auditee's preliminary assertions and representations, especially information relating to sensitive items such as asset valuations, fair value measurements, and solvency as well as liquidity.
valuations. Other examples may include complex structured transactions to achieve a particular accounting treatment or an appearance of compliance with regulatory requirements. In these instances, the auditors may have a reasonable doubt that the accounting treatment or proposed results were not consistent with the relevant accounting principle, internal control framework, or regulatory requirements (Silva, et al., 2016). In this context, the auditor must actively challenge the auditee's assumptions and judgments and form an independent opinion based on adequate audit evidence in their possession.

When a financial institution systematically used valuations at the upper or lower end of a range of acceptable assessments or when there were other indications of potential management bias, Wolfe (2017) highlighted that the auditor should take them into account in the general risk assessment where appropriate. Goman and Koch, (2019) reasoned that the proof of the degree of professional skepticism exercised must be demonstrable and understandable through the audit documentation that describes how, why, and what conclusions the auditors drew based on their analysis of the audit evidence.

Another element that affected audit evidence was the quality control framework (Goman & Koch, 2019). Auditors who performed financial services audits must comply with the strictest quality control requirements applicable to their audit entities (Goman & Koch, 2019). Cohen et al. (2017) indicated that to the extent that auditors' quality control standards were less restrictive than a similar regulatory principle, the auditors must comply with the most restrictive standard. Wolfe (2017) noted that the quality control reviewers must have the appropriate knowledge and experience to review auditors' work papers. The reviewer must show professional skepticism when assessing the quality of the audit evidence and determining the appropriateness of the auditor's judgment (Cohen et al., 2017). Goman and Koch (2019) noted that audit work papers
should highlight the quality assurance reviewers' participation throughout the audit and the results of their review. Any significant discussion between the quality assurance reviewers and the auditor, particularly where opinions may have diverged and how the auditors reached their findings, should be fully documented in the audit work papers (Cohen et al., 2017).

Various risks could affect financial conditions and financial institutions’ results. The risks include, among others, regulatory, credit, market, operational, and liquidity risks (Jonkman, 2016). In addition, new risks may arise, or the importance of each risk may change over time due to a variety of factors that may be related to changes in the state of developments inside and outside the financial institution (Prodanova, et al., 2019). When designing and conducting a financial institution's audit, the auditor must assess the inherent risk and existing controls to determine the likelihood of material misstatement in the financial statements. In doing so, the auditor better understands the internal controls relevant to the audit, particularly the control environment designed by the auditee (Thorps, et al., 2019).

To address the assessed risk of material misstatement, an auditor applies an audit strategy that includes substantive and control procedures (Prodanova, et al., 2019). Given the nature of financial services, including those involving a high volume of transactions, financial institutions may implement controls designed to address the risks to which they are exposed (Carbo-Valverde et al., 2016). As a result, auditors must conduct thorough tests of financial information controls to determine the extent to which the auditor can rely on them. Understanding the concept of materiality and the determination of materiality thresholds was necessary to establish the audit strategy. Auditors must also understand how to determine and assess whether there was a risk of material misstatement in financial statements (Jonkman, 2016).
Hu et al. (2016) theorized that auditor judgment was another critical element that impacts audit evidence. Simnett et al. (2016) noted that the determination of what was essential in the financial statements as a whole influenced the auditor's professional judgment. The analysis of audit evidence may uncover anomalies that may reasonably affect business decisions (Hu et al., 2021). Auditors should exercise caution when assessing isolated inaccuracies reflected in audit evidence (Griffiths, 2016). These inaccuracies could indicate broader issues within the financial institution that could lead to material errors in the financial statements as a whole (Fajembola et al., 2018). Therefore, individual inaccuracies should not rule simply because they fall below the materiality threshold established for planning purposes (Griffiths, 2016).

For balances of individual accounts, specific categories of transactions, or disclosures, auditing standards required auditors to establish a certain level of materiality (Fajembola et al., 2018). Venkat and Baird (2016) contended that if auditors believed that amounts in specific account categories exceeded the financial statements' materiality as a whole, they should assess their effect on stakeholders' business decisions. Materiality assessment was particularly critical in financial services audits since some elements in the financial statements impact the computation of key indicators used by a wide range of stakeholders (Aydemir & Guloglu, 2017). For example, Venkat and Baird (2016) hypothesized that financial indices such as liquidity, asset quality, capital adequacy, and equity were calculated based on account balances in financial statements or derived from the financial statements. Griffiths et al. (2016) noted that auditors' judgment also affected factors such as assessment of material misstatement, internal controls, and their components and the overall risk monitoring framework.

Omolaye and Jacob (2017) posited no universally accepted definition of adequate, sufficient, or high-quality audit evidence. Omolaye and Jacob noted a limited consensus on
established measures or benchmarks on elements that drove the quality of audit evidence. Wilson (2018) affirmed that limited knowledge of an entity's activities and finances could negatively impact the quality of the audit evidence. Omolaye and Jacob (2017) argued that knowledge of the entity's operational procedures should not be a factor affecting audit opinions, as auditors who operate in specific industries need to gain knowledge of the industry and exercise such knowledge to preserve their effectiveness during audit engagements.

According to Magnis and Iatridis (2017), entities operating in the banking and securities sectors were highly vulnerable to public perception and confidence in their services. Stakeholders have criticized auditors for failing to provide sufficient early warning in the event of financial service failure (Dalwai et al., 2015). Trading financial instruments and holding them to maturity plays a crucial role in the banking and securities systems (Gonzalez, 2015). The business environment and services provided by banking and securities entities make financial instrument risky. Since their services involve the trading of highly volatile securities subject to market fluctuations, the holding of long-term assets, in the forms of longstanding debts, short-term liabilities, and customer deposits (Nikolova et al., 2016). Gonzalez (2015) indicated that the risk factors places an increased level of accountabilities on these institutions and require enhanced financial reporting and auditing environment to build and maintain trust in the systems.

Alzeban and Sawan (2015) noted that the magnitude of annual reports has considerably augmented in recent years, both in the measure and intricacy of the information provided in the audited financial statements and the unaudited portions of periodic reports published for public consumption. Annual reports already provide substantial information on risks, exposures, and business models (Lennox et al., 2016). Additionally, these entities provide relevant information to the public outside annual reports (DeFond et al., 2016). For example, financial institutions
provided deliberate insight into their financial condition through analyst presentations, business updates, and periodic information, often obtainable separately on the entity's websites or disclosed to regulators. Lennox et al. (2016) clarified that the size and complexity of the information and its manner of disclosure to the public have made annual reports less understandable to non-experts. When reading yearly reports, the underlying apprehension is that it is challenging to understand the risk, the corporate models, or the current business assumptions (Louis et al., 2019).

Omid (2015) posited that the framework of audit opinion combined evidence and audit opinions and required the integrity of the evidence. In this instance, the preponderance of evidence requirements was generally higher than those needed for an arbitrarily chosen low level of evidence that may be required. In terms of materiality, Patra and Bustami (2016) emphasized the focus on the normative standards of audit evidence and its sufficiency as it affected audit opinion in three areas:

- Compliance with regulatory requirements or Generally Accepted Accounting Principles (GAAP),
- The integrity of internal practices, and;
- The effectiveness of internal control.

Garcia-Blandon and Argiles (2015) suggested that explanatory factors provide enough understanding to develop a theory of evidence. It follows that all studies require an illustrative association between the test and the statement to be confirmed by the evidence (Omid, 2015). Lee et al. (2018) indicated that the auditor's opinion was a formal statement relating to the examined entity's financial statements or representations. This official statement did not judge
the fiscal status of the reporting entity. Nor did it otherwise construe the financial data. Instead, the issued opinion addresses two main issues:

- The audited entity's compliance with GAAP or the explicitly applicable regulatory standards, and;
- The fair reflection of the entity's financial accounts in all material respects.

Crucean (2019) indicated that the ability to address these two issues depends on the sufficiency and appropriateness of the audit evidence gathered during the audit engagement. Hapsoro and Santoso (2018) explained that depending on the auditor's examination of the sufficiency and appropriateness of the audit evidence gathered, the auditor may issue several types of opinions such as unqualified, qualified, adverse, and disclaimer.

**An unqualified opinion.** This opinion is also known as an unmodified opinion. The auditor communicates an unqualified opinion if the financial statements are presumed to be free of material error. An unqualified opinion is given on an entity's internal controls if management has asserted responsibility for its establishment and maintenance, and the auditor has performed fieldwork to test the effectiveness of the entity's controls (Bronson et al., 2017).

**Qualified opinion.** A qualified statement is issued when an entity's financial records have not followed the applicable standards or regulations in all business transactions or practices. Although the wording of a qualified opinion is very similar to that of an unqualified opinion, the auditor provides an additional paragraph including the applicable variances in the financial statements and indicates why the auditor's report is not without reservation. A limitation in scope or a non-financial related issue may result in a qualified opinion. However, the deviation from applicable standards is not pervasive and does not distort the entity's financial position as a whole (Setyaningrum, 2017).
Adverse opinion. The most inferior opinion an entity can receive is an unfavorable or adverse opinion. An adverse opinion indicates that the financial documents are not under applicable standards and are grossly erroneous. An adverse opinion may indicate fraud, and entities that receive an adverse opinion are required to correct their financial statements and have their financial statements re-audited. Investors, lenders, and other financial institutions generally view financial statements that contain adverse opinions as a poor reflection of the auditee's managerial practices (Osman et al., 2016).

Disclaimer of opinion. If the auditor cannot complete the audit report due to the absence of financial records or lack of cooperation from management, the auditor issues a disclaimer. A disclaimer indicates that the auditors cannot give an opinion on the determined financial statements (Omid, 2015).

The most recent pronouncements and notions on audit evidence included the AICPA's exposure draft published on June 20, 2019. The draft included a discussion on proposed statements related to auditing standards on audit evidence (AICPA, 2019). The PCAOB Release No. 2018-005 about auditing accounting estimates, including fair value measurements and amendments to PCAOB auditing standards and PCAOB Release No. 2018-006, which relates to changes to auditing standards for auditor's use of the work of specialists (PCAOB, 2018). Under the exposure draft, the Audit Standards Board (ASB) proposed changes to Statement Audit Standards (SAS) No. 122 issued in October 2011 to address emerging issues that affect the audit evidence concept (AICPA, 2019). In August 2017, the ASB initiated a project to determine whether or not it was necessary to revise AU-C Section 500 to reflect the changing nature of operational and audit services during the year. Brown et al., 2020 explained that these issues relate to the use of emerging technologies by auditors, the concept of audit data analytics (ADA),
the application of professional skepticism, the increasing use of external information sources, and the necessity to preserve dependability and integrity and consistency of audit evidence.

According to Brown et al. (2020), the AICPA found it vital to strengthen AU-C Section 500, which currently focuses on applying audit strategies and processes in the audit evidence gathering process. The increasing use of computerized tools and techniques by both auditors and auditees caused the ASB to find that it was necessary to re-examine whether auditors' conclusion relating to the sufficiency and appropriateness of audit evidence was still appropriate (Brown et al., 2020). Instead of continuing with the current model, the ASB proposes expanding the proposed project's scope. This change required auditors to consider the sources, relevance, and reliability of the information used in the audit and confirm the information in the financial statements (Brown, et al., 2020).

Under release 2018-005, the PCAOB found that the use of sophisticated accounting estimates and fair value measurement continued to progress in financial reporting. As a result, the use of specialized work continued to grow in frequency and importance. Estimates often have a significant impact on an organization's informed financial position and results of operations. Accounting estimates are often among the areas most exposed to the risks of an audit, which require more attention from auditors (PCAOB, 2018). The new standard established a consistent approach based on risk. The new standard stressed that auditors must show professional skepticism when auditing accounting estimates, particularly concerning potential management bias (Barlas, 2019). The new standard also provided additional guidance on addressing certain unique aspects of the fair value audit of financial instruments, including the use of third-party price information, such as pricing services or brokers.
Fully understanding an enterprise's information system requires auditors to explicitly indicate whether the corresponding accounts involve accounting estimates and, where applicable, the processes used to develop accounting estimates (PCAOB, 2018). The auditors' work in this area must include reviewing the methods, which may consist of models, the data, and assumptions used by the auditee. The PCAOB (2018) also emphasized that this review should encompass the source from which the auditee derives its premises and the extent to which the auditee used third parties (other than specialists), including the nature of the service provided and the extent to which third parties used the auditee's data and assumptions.

Barlas (2019) explained the strengthened standard encourages auditors to review the methods, data, and assumptions used by the auditee to develop accounting estimates, including how they are selected and applied and determine the risk associated with the estimate. The PCAOB (2018) put a particular emphasis on a brainstorming session between members of the audit team to specifically focus on how the auditee's financial statements may be subject to material misstatement due to fraud. The discussion should now focus on the potential for manipulating financial data through management bias in accounting estimates or the omission of material information (Barlas, 2019).

In addition to the existing risk factors set out in the risk assessment standards, the PCAOB encouraged auditors to identify significant accounts and disclosures that involve accounting estimates. This identification related to factors such as:

- The degree of uncertainty associated with the occurrence of the future evolution of events and conditions underlying significant assumptions;
- The complexity of the developing accounting estimates;
- The number and complexity of substantial assumptions associated with the process;
• The degree of subjectivity related to the significant assumptions; and,
• If forecasts are essential for the estimate, the length of the forecast period, and the degree of uncertainty about trends affecting forecasts.

According to the PCAOB (2018), these risk factors describe the characteristics and conditions that may affect the auditor's determination of potential sources of inaccuracies in accounting estimates.

Barlas (2019) theorized that the emerging guidelines require auditors to assess a specialist's relationship with the auditee, including situations that may affect their objectivity. However, these guidelines did not provide specific requirements. Under PCAOB release 2018-006, which amends auditing standards for the use of dedicated specialists, auditors were offered additional guidance for conducting the assessment of services provided by specialists (PCAOB, 2018). The updated standard expanded the auditor's responsibility to evaluate specialists beyond the mere understanding of the specialist's work. Auditors were required to apply additional procedures to assess the relevance of the auditee's data and the main assumptions and methods used. However, it would not be necessary for auditors to conduct a re-performance of the specialists' work (PCAOB, 2018).

Barlas (2019) noted that the amended standards relating to the use of the work of specialists reinforce the requirements for the auditor's assessment of the work of specialists. For specialists hired or employed by the auditee, the expanded requirements explicitly include the obligation to:

• Assess the reasonableness of any significant assumptions used by the specialist (whether developed by the auditee's management or the specialist);
• Evaluate whether the methods used by the specialist are appropriate in the circumstances; and,

• Test the accuracy and integrity of the data produced by the auditee and utilized by the specialist. The auditor should also evaluate the relevance and reliability of data collected from external sources used by the specialist.

Svanberg and Ohman (2019) hypothesized that a high-quality audit is fundamentally an audit that attains the standard objective of a comprehensive and impartial assessment of an entity's financial, compliance, and operational condition. Louis et al. (2019) indicated that the auditors must perform by a capable, competent, and independent body under the applicable auditing standards and regulatory requirements. The audit must also determine whether the entity's financial statements give an accurate and fair view of its activities and circumstances (Lakis, & Masiulevicius, 2017; Nisansala & Menike, 2018). Abbott et al. (2016) and Furiady and Kurnia (2015) emphasized that the concept of auditor competence, capability, and independence are critical factors that must support the auditor's ability to gather sufficient appropriate audit evidence. Otherwise, the report is a story-telling narrative instead and a product of adequate and relevant professional work.

The United States International Trade Administration (USITA, 2019) indicated that the financial markets in the United States were the largest and most liquid in the world. In 2018, finance and insurance accounted for 7.4 % or $1.5 trillion of the US gross internal product. The U.S. leadership in this substantial, high-growth segment converted into significant trade and industry activities and the development of direct and indirect jobs in the United States. By the close of the calendar year 2018, the U.S. financial sector's assets were $17.9 trillion, and its net income was $236.8 billion. Bernardini and Peersman (2018) indicated that the industry supported
the world's leading economy with a multiplicity of financial institutions and a concentration of private credit worldwide. The high density of financial assets has highlighted the growing importance of the banking and securities sectors in the United States in the global business environment (Schroeder et al., 2019) and stressed the need for additional academic research to study the audit process these sectors.

The continued growth of the banking and securities industry in the United States, and significant benefits for financial companies, causes financial services firms around the world to steadily migrate to the United States (USITA, 2019). Starting in 2018, at least 28 financial services firms of all Fortune Global 500 firms have elected to localize their main operations centers in the United States to benefit from these sectors' resourceful, competitive, and comprehensive advantages (Schroeder et al., 2019). Ravikumar et al. (2019) indicated that the U.S. banking and securities industries offered the most extensive variety of financial instruments and products that enabled consumers to manage risk, generate wealth and meet their financial needs. This growth led to more users of financial information in the United States (Schroeder et al., 2019), and, as a result, the significance and trust in audit reports grew in importance.

**Summary of the Literature Review**

In summary, audit evidence sufficiency and appropriateness must sustain the auditors' opinion, and the procedures applied must support and indicate how the auditor arrived at the audit opinion (Cipriano et al., 2017). Auditors should ensure that they consider that these procedures are satisfactorily suitable to obtain sufficient and appropriate audit evidence (Osman et al., 2016). Bronson et al. (2017) asserted that auditors must also consider the relevance and reliability of the information used as evidence. Setyaningrum (2017) indicated that during an audit, the auditor is always responsible for obtaining and evaluating evidence using a variety of
procedures (inspection, observation, confirmation, recalculation, or analytical procedures) to form an audit opinion. Obtaining audit evidence (sufficient and appropriate) is one of the most critical steps that auditors must take and is essential in defining the overall standard for evidence (Cruecan, 2019).

Auditor evidence must receive documentation of the evidence appropriately to ensure that the audit supports the achievement of audit objectives. If the auditor did not achieve the audit objectives, the working papers must contain documentation explaining the departure (Patra & Bustami, 2016). Garcia-Blandon and Argiles (2015) indicated that auditors must document and gather audit evidence of critical matters in the preparation of the report and the opinion expressed. The audit report resulted from a significant fiduciary mission, which should allow any user to understand the level of risk posed by the audited entity (Malau et al., 2019). Therefore, the auditor must apply effective procedures to gather appropriate evidence to reach a valid and relevant audit opinion.

**Summary of Section 1 and Transition**

This research was significant for several reasons. First, having an effective audit system is vital for an entity as it enables it to pursue and achieve its various objectives. An audit is a means of assessing the effectiveness of an entity's internal controls and its compliance with applicable regulatory and industry standards (Aobdia, 2019). Maintaining an effective audit system and a consistent environment of compliant practices are essential to achieving an entity's business objectives, obtaining dependable financial reports on its operations, averting fraud and misappropriation of assets, and curtailing losses (Jan & Sangmi, 2015).

Sun, et al. (2015) argued that without an effective audit system, an entity would not create reliable financial reports for internal or external purposes. The lack of effectiveness in
audit systems affected entities' ability to efficiently allocate their resources or determine which sections or product lines were lucrative and which ones were not. The ability of auditors to assess risks, prevent or detect fraud or assess compliance with applicable standards, as well as establish the effectiveness of internal controls, depending on the collection and evaluation of sufficient and appropriate audit evidence (Brown et al., 2020).

Gaynor et al. (2016) noted that most of the audit process can be almost invisible to external parties and even more so to users of financial statements. The only visible signs of a potential low-quality audit were reiterations in the financial statements or re-issuance and publicly released inquiries initiated by regulatory entities. However, these investigations, restatements, or re-issuances significant time to complete and, at that time, may have little relation to the initial quality issues of the audit (Gaynor et al., 2016). This study helped auditors and audit firms focus on the most critical factors that can help obtain the sufficient and appropriate level of audit evidence while allowing them to bridge the gap between audit procedures and public understanding of the audit results. The results also offered insights on how practitioners and regulators can leverage financial examinations performed by regulators and financial statement audits performed by independent auditors to close the gap between regulatory financial examinations and audits.

Ong (2018) indicated that the mutations in the U.S. economic environment have led to the need to investigate the use of audit evidence-based practices by professional auditors, and the results of this study targeted the improvement of the auditors' professional activities as well as those of audit firms and regulators. Brown et al. (2020) argued that there is a need for more research to address the concept of sufficient and appropriate audit evidence in professional practice and education in the United States. By identifying current best practices, this study
assisted auditors and examiners in the banking and securities sectors in the United States to enhance their practices and integrate enhanced audit policies and practices in their existing audit infrastructures. The results strengthened the existing audit infrastructure, increased investor confidence in these sectors, and, in general, in the U.S. economy.

Another area of gap reduction is that most studies that investigate audit processes and practices tend to be exploratory, qualitative, or mixed (Mah'd et al., 2019). As a result, only a minimal number of studies addressed the challenges faced by financial services entities in improving their professional accounting and auditing practices and the challenges faced by policymakers and regulators (Lakis & Masiulevicius, 2017). Zarefar and Zarefar (2016) pointed to the specific need to focus on evidence, especially the quality and quantity of evidence used to support the professional opinion in the financial sector audits. Several researchers, including Magnis and Iatridis (2017), suggested that more research was needed to examine the impact of certain variables (i.e., the quantity of evidence, the basis of evidence) on the report. These suggestions provide more support for studying the sufficiency and appropriateness of audit evidence.

Section 2: The Project

Organizations that operate in the banking and securities industries in the United States are progressively affected by instances of deceptive practices and abuse of financial information (Ariail & Crumbley, 2019). However, auditors assigned to independently examine these organizations’ financial records every year (Tiron-Tudor et al., 2015). Liu (2019) opined that auditors’ failure to detect deceptive and manipulated financial data does a disservice to the audited organizations, their consumers, and the industry. Crucean (2019) proposed a necessity for research to develop mechanisms that can strengthen auditing practices and reinforce auditors’
ability to understand the risks that affect the banking and securities industries in the United States.

This research contributed to the existing body of research concerning auditors’ ability to collect and examine risk-focused audit evidence in the United States banking and securities industries. Further specifics of the study includes a discussion in the ensuing section. This section comprises a review of the following subjects: (1) purpose statement, (2) role of the researcher, (3) participants, (4) research methods and design, (5) population sampling, (6) data collection, (7) data analysis process, and (8) reliability and validity.

**Purpose Statement**

The purpose of this quantitative correlation study was to examine the relationship between the sufficiency and appropriateness of audit evidence obtained by auditors in the United States banking and securities and the quality of audit opinion. The research also served as reference material to reinforce audit procedures related to the sufficiency and appropriateness of audit evidence and deliver empirical data gathered from auditors and examiners. The results assisted in strengthening best practices in financial institutions’ audits and reinforcing the public’s trust in audited financial statements for corporations operating in the United States securities and banking industries.

**Role of the Researcher**

I performed principal investigation as well as collected and analyzed the data in the current quantitative study. Data relating to enforcement actions came directly from the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Securities and Exchange Commission (SEC), the National Credit Union Administration (NCUA), the Financial Industry Regulatory Authority, Inc. (FINRA), and the Federal Reserve.
The researcher operated from the standpoint that the principal investigator’s role is to design and implement a research technique (Yates & Leggett, 2016). Therefore, I utilized the simplifications provided by electronic correspondences to design a questionnaire that could be entirely completed through the internet and distributed to respondents for ease of use.

Researchers identified that the internet offers unique time management opportunities because of its ability to facilitate instantaneous data gathering and sharing (Markham & Stavrova, 2016). Therefore, I primarily relied on the internet, particularly a website named Survey Monkey, to accelerate the data collection process in the current study. After designing and testing the internet-based questionnaire, the participants received the questionnaires through public access. I obtained the study data automatically after completing each questionnaire from Survey Monkey and maintained the data in Microsoft Excel spreadsheets. The analysis of the data occurred through the Statistical Package for the Social Sciences (SPSS) software for statistical analysis.

**Research Methodology**

A correlational quantitative research method was best suited to study the relationship between two or more variables (Creswell, & Creswell, 2017). In this case, I focused on studying the relationship between sufficient, appropriate audit evidence and the quality of audit opinions. To meet the objectives of the study, the researcher must select the most appropriate design (McCusker & Gunaydin, 2015). I used a quantitative approach that focused on a main research question and a detailed data collection and analysis. This current sub-section includes a comprehensive review of the research method and design used for this study. I supported the research method and design based on a review of scholarly literature relating to comparable studies and established standards for academic research.
**Fixed Design**

The research project was a correlational study by gathering data through an internet-based questionnaire. According to Groeneveld et al. (2015), the principal investigator’s goal in leading a quantitative research study is to establish or invalidate the association between an independent variable and a dependent or outcome variable within a population. Curtis et al. (2016) asserted that correlational research design commands how the researcher s and examines study data and interprets the results. Creswell and Creswell (2017) theorized that the following rules govern a correlational study: subjects are usually measured one time; the purpose is only to confirm or invalidate associations between variables; and the study may comprise a sample population of hundreds or thousands of subjects to guarantee that a valid evaluation of an indiscriminate association between variables has been attained. In the current correlational study, I performed a one-time study of the variables to establish or invalidate the relationship between the dependent and independent variables.

I focused on elements such as the relationship between sufficient appropriate audit evidence and the following variables (a) the quality of audit opinions, (b) the source of audit evidence, (c) management assertions, (d) the reliability of audit evidence, (e) internal control systems, and (e) audit report quality. I followed several steps using the correlational research design. As discussed under the problem statement section of the current research, I first identified a problem, then proceeded with identifying variables, participants, or respondents gathered quantifiable data, and then examined the data necessary for the interpretation, extrapolation, and conclusion steps.

I gathered quantifiable data from experts in the regulatory organizations identified under the participants' section of this paper through a survey instrument and then examined the survey
data. Curtis et al. (2016) stated that an association or direction of a correlation between variables would be recognized in a correlated design. I selected this design to establish whether a correlation exists between the sufficiency and appropriateness of audit evidence and the quality of audit opinion. Boughorbel et al. (2017) posited that a correlation coefficient of 1.0 generally establishes a relationship while 0.00 indicates a lack of relationship. Based on that assumption, the research found that correlational design is the most suitable design to facilitate examining the relationship between the independent and dependent variables under study.

According to Nakagawa et al. (2017), the correlation between two or more variables adequately indicates how strong an association exists between those variables. Ly et al. (2018) stated that correlational design is an appropriate design when the researcher attempts to establish or demonstrate a strong association between independent and dependent variables. Ly et al. (2018) that a correlational design allows the researcher to use techniques that describe an accurate assessment of the relations between the variables under study.

**Quantitative Method**

As discussed in the nature of study section of this paper, I chose the quantitative method to research the sufficiency and appropriateness of audit evidence in the target industries. Groeneveld et al. (2015) postulated that the defining characteristic of quantitative methods is that they emphasize the objective measurements of numerical, scientific, or statistical data collected through surveys, questionnaires, and interviews, or by modeling pre-existing numerical data through computational techniques. Curtis et al. (2016) posited that quantitative research focuses on mathematical data and extrapolating it transversely among groups of people or to clarify a specific observation.
According to Curtis et al. (2016), quantitative research offers the possibility of studying relationships and establishing associations between several dependent and independent variables. Hochbein and Smeaton (2018) posit that quantitative research can be pursued through a multimethod focus to interpret a subject matter in its natural setting. Quantitative researchers study their subjects without influencing them while endeavoring to make sense of or understand phenomena in terms of the implications people convey to them.

Antwi and Hamza (2015) proceeded in the same line of thought. They posited that quantitative research aids in streamlining intricacies and attempts to establish a different or new perspective of understanding a phenomenon that may already exist. According to Hochbein and Smeaton (2018), the quantitative method is regularly in studies of large populations and uses an indiscriminate selection of studied samples to reach a generalizable deduction. Creswell and Creswell (2017) discussed that a significant characteristic of the quantitative method is establishing a problem and studying said the problem to draw conclusions, which was the goal in this study. The quantitative method facilitated an examination of the subject matter and offered the opportunity to use a correlational design to establish a relationship between the sufficiency and appropriateness of audit evidence in the target industries (Creswell & Creswell, 2017).

**Summary of Research Methodology**

I selected a method and design that facilitate examining the relationship between the sufficiency and appropriateness of audit evidence and the quality of audit opinion. O'Reilly et al. (2017) posited that factors such as quantity, reliability, source, professional proficiency, nature, and relevance help establish whether an audit opinion meets adequacy requirements. Yin (2020) postulated that auditors must acquire sufficient and appropriate evidence, which allows them to form pertinent conclusions and support their audit opinions. O'Reilly et al. (2017) emphasized
that audit evidence constitutes the foundation for developing an opinion about whether the organization’s financial statements constitute an accurate and reasonable reflection of existing records and practices. Hamdan (2017) indicated that the evidence gathered by the auditor must substantiate the audit report and the quality of the opinion expressed in said report. Through the use of a quantitative method and a correlational design, I examined the relationship between the variables in the study to contribute to the body of knowledge and strengthen existing techniques as well as to contribute to the body of knowledge and strengthen existing knowledge techniques and professional practices.

Participants

I gained access to the participants by initially searching publicly available information. The information came from publications of enforcement actions made by federal regulatory organizations, specifically the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Securities and Exchange Commission (SEC), the National Credit Union Administration (NCUA), and the Federal Reserve. I then cross-referenced the enforcement actions with the names of federal regulatory organizations that represent at the local level, specifically in Georgia. I did not openly interact with the respondents during the completion of the internet-based questionnaires. Mays and Pope (2020) established that respondents must have knowledge of the specific factors under research to ensure that their responses directly relate to the research's objective.

Researchers have an ethical obligation to protect respondents’ confidentiality and anonymity (Wolfe, 2017). I ensured this ethical responsibility by excluding the option to collect personally identifiable information from the questionnaire. Through the informed consent form, I assured respondents that their participation is confidential, and no personally identifiable
information was released in the research to ensure privacy protection. Only the organizations’ names would appear in the research, not the respondents who completed the questionnaire.

I publicly posted internet links to the survey. The internet links took respondents directly to the questionnaires. Once each respondent completed their questionnaire, the data became immediately available for review from the Survey Monkey internet application. I then collected the data from Survey Monkey for grouping and statistical analysis. I removed any personally identifiable information from the raw data before performing any analysis. Finally, I offered to send a copy of the research’s findings to respondents once the study was complete.

**Population and Sampling**

Identifying the appropriate population and performance of an accurate sampling were critical to the collection and analysis of pertinent data. A researcher’s ability to understand the population under study and rightly select a sample from population is vital when there is a need to draw a statistically sound conclusion. This section discusses the target population in the current study as well as the sample selection.

**Population**

The population comprised of financial institutions examiners and auditors who served in the following organizations: Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Securities and Exchange Commission (SEC), the National Credit Union Administration (NCUA), the Financial Industry Regulatory Authority, Inc. (FINRA), and the Federal Reserve. The population came from the internet registries disclosed by the aforementioned organizations and cross reference against publicly available information published by the United States Office of Personnel Management (OPM). As a result, I identified approximately a conservative combined number of twenty-six thousand (26,000)
bank examiners, auditors, and securities examiners in the above referenced entities. The identified number of examiners and auditors constituted the population from the sample.

**Sampling**

Sim et al. (2018) hypothesized that a sample is an independent number of elements selected from a population representative of said population. A population is the total number of individuals, observations, data, or elements of a certain subject. Consequently, the sample is a part or fraction of the whole group and acts as a representative subset of the population. Boyle et al. (2017) postulated that researchers might find it difficult to gain immediate access to entire populations. And due to the nature of some studies, researchers may find it unrealistic to obtain the results they need promptly when there is no sample. Using fewer people representing the whole population can produce valuable results while reducing time and resources. According to Sim et al. (2018), samples used by researchers must closely resemble the population. All participants in the sample must share the same characteristics and qualities. For example, if a study is about female third-year students, the sample should be a small percentage of females who fit this specific description. Similarly, if a researcher is carrying out a study on the working habits of single men who are 25 years old, the sample should only include men from this demographic group.

Boyle et al. (2017) explained that reaching out to each test participant from a population can be extremely tedious and time-consuming. In fact, in an instance, where the population is in thousands or hundreds of thousands, by the time the researchers collect and analyze all the demographic data on each element in the population, years could have passed, making the analysis useless because a new population would have emerged. What researchers can do is take a sample from the population and get data from that sample. Puy et al. (2018) emphasized that
obtaining the sample requires an unbiased procedures. The selection must be random so that all members of the population have the same possibilities of being added to the group. This process is similar to a sweepstakes draw and forms the basis for simple random sampling used in the current study.

I used a simple random sampling approach because the intention to perform an unbiased selection of the elements under study. Sharma (2017) posited that a simple random sample is a subgroup of a statistical population in which each element of the group has an identical likelihood of being selected. According to Puy et al. (2018), because elements which constitute the subgroup of the larger population chosen at random, each individual in the population has the same selection odds. A well-adjusted or balanced subgroup that conveys the maximum probability for representing the population as a whole, free from pre-established bias or misapprehensions that appeared from the random sample. I used the random sampling tool published by the National Business Research Institute. The sample was a random sample size of 383 individuals with a 95 % confidence level from the population of twenty-six thousand (26,000) examiners and auditors and a 5 % acceptable margin of error. I obtained actual responses from 397 respondents during the field research, as discussed in section three and shown in Appendix B. The table below shows the sample size obtained from the National Business Research Institute internet-based random sampling tool.

<table>
<thead>
<tr>
<th>Acceptable Margin of Error (SE)</th>
<th>5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desired Confidence Level (CI)</td>
<td>95%</td>
</tr>
<tr>
<td>Population size (N)</td>
<td>26,000</td>
</tr>
<tr>
<td>Response Distribution (RD)</td>
<td>50%</td>
</tr>
<tr>
<td>Recommended Sample Size (S)</td>
<td>383</td>
</tr>
</tbody>
</table>
Table 1. Sample size determination (obtained from the National Business Research Institute, 2020).

Where:

- Margin of Error (SE): represents the degree to which the researcher considers the data may not illustrate the entire population (Puy, et al., 2018).
- Desired Confidence Level (CI): represents the researcher's confidence that the data accurately characterizes the entire population.
- Population size (N): refers to the combined number of elements from which the random sample is selected.
- Response Distribution (RD): refers to how the researcher expects participants to respond to the survey questions (Puy, et al., 2018).
- Recommended Sample Size (S): represents the suggested number of complete responses to every question on the researcher’s survey to attain valid data within the specified tolerances (Puy, et al., 2018).

Puy et al. (2018) stated that the sample size computation must establish statistical significance with an anticipated confidence interval. The sample size established under the current study is in line with the anticipated significance and confidence. I determined the random sample from willing participants in entities discussed under the population section. Manning and Stewart (2017) theorized that sample framing involves the selection of the appropriate statistical sources from which the decision of selecting the participants. The sample frame in the current study, in general, comprises the aforementioned oversight entities that are specifically represented in the state of Georgia and having jurisdictional supervision authority over banking and securities industries in the United States.
While discussing sample size determination, Sharma (2017) explained that researchers need to identify a satisfactory sample size to discover associations in the data accurately. The likelihood of avoiding a Type II error and deciding to reject the null hypothesis may result from an erroneous interpretation of the test statistics. Under the current study, I selected a 95% confidence level, which set an alpha level of .05. Manning and Stewart (2017) noted that the standard practice in most quantitative studies is to set confidence intervals at 95%, which is the same percentage used in the current study. I postulated that the selected confidence level of 95% and alpha level of .05 are appropriate for the current study. I based the study’s premises on notions from Boyle et al. (2017), who theorized that researchers require a frame of stability which comes from an accurate level of confidence intervals and the optimal deviation such as the selected 95% and formulated alpha of .05. The sampling approach discussed herein enabled me to collect and analyze the study data with an accurate sample size to statistically show the association between the sufficiency and appropriateness of audit evidence and the quality of audit opinions in the target industries.

**Summary of Population and Sampling**

The eligibility benchmark for the study participants was external auditors that have performed audit engagements in the target industries. Eligible participants also included financial institution examiners in organizations that have issued enforcement actions in the United States banking and securities industries, specifically examiners in the following regulatory oversight entities: Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Securities and Exchange Commission (SEC), the National Credit Union Administration (NCUA), the Financial Industry Regulatory Authority, Inc. (FINRA), and the Federal Reserve. I asked the respondents to complete an internet-based survey published through
Survey Monkey. I used an internet-based sampling tool published by the National Business Research Institute to obtain a random sample size of 383 individuals with a 95% confidence level from the population of one twenty-six thousand (26,000) examiners and auditors, and 5% acceptable margin of error. Actual responses came from 397 respondents during field research.

**Data Collection and Organization**

Data collection was vital for correctly examining the sufficiency and appropriateness of audit evidence and how these variables affected the quality of audit opinion in the target industries. This section summarized the research instruments, data collection techniques, and the organization of the data collected. The main sources for designing questions for the current study derived mainly from an extensive review and analysis of the existing literature and the research objectives. I obtained the final version of the data collection tool from modifying and adapting the *Survey of Stakeholder Perspectives of Audit Quality* (IFAC, 2013), which is part of the study titled “A Framework for Audit Quality” performed and published by the International Federation of Accountants (IFAC, 2013).

The data collection tool included two main sections: The first section included screening data, while the second section included the actual survey questions. The use and reproduction of the *Survey of Stakeholder Perspectives of Audit Quality* was with non-exclusive permission, documented as appendix A, received from the IFAC represented by Ms. Judy Challenger, Assistant Manager, Intellectual Property, International Federation of Accountants. A copy of the original *Survey of Stakeholder Perspectives of Audit Quality* is on available in appendix A.

The screening section confirmed that the participants are over the age of 18. The screening also included the determination of the participants' profession as either bank examiners, securities examiners, or external auditors with specific working knowledge of the
banking and securities industries. Another screening question ensured participation was limited to employees of the Federal Deposit Insurance Corporation (FDIC) including employees from the Federal Reserve, the Office of the Comptroller of the Currency (OCC), The Financial Industry Regulation Authority (FINRA), the Securities and Exchange Commission (SEC), the National Credit Union Administration (NCUA), and Independent Public Accounting firms (IPAs). The screening also involved a determination of participants’ level of education. Participants had a minimum of a bachelor’s degree.

The second section related to the main objective of the study, which included collecting the opinions of the external auditors and examiners. A 5-point Likert scale designed to measure the extent to which respondents identified each statement related to sufficient appropriate audit evidence. The assessment scale had the following nominal values: (5) for strongly improve; (4) for Improve; (3) for Neutral; (2) for Impair; and (1) for strongly impair. This study used Likert-type scales for the following reasons:

a. It is practical when the researcher aims at obtaining rated statements from respondents (Kuhlmann et al., 2017); and,

b. The respondents had a range of options to choose from and, therefore, increases the response rate (Joshi et al., 2015).

The purpose of this survey was to collect respondents' responses related to the sufficiency and appropriateness of Audit Evidence for interpretation and possible enhancements to the audit framework in the United States banking and securities industries. The current research dealt specifically with auditors’ responsibilities to design and implement audit procedures to obtain sufficient appropriate audit evidence to support audit opinions when performing audit engagements in the United States banking and securities industries.
**Data Collection Plan**

As explained in the above paragraphs, I relied on surveys to collect data under the current study. Bernerth et al. (2018) posited that the use of a survey refers to investigating the characteristics of a given population by collecting data from a sample of that population and estimating its characteristics through the systematic use of statistical methodologies. According to Nardi (2018), common types of surveys include interviews and questionnaires, consisting of multiple-choice questionnaires. The questionnaires were distributed through mail surveys, administered in focus groups, or delivered in person. Interviews can be done in person or by phone and are often a more personal form of research than web-based questionnaires (Walton et al., 2017).

Kelly and Tan (2017) explained that there are several issues to consider when creating a survey. The issues to consider may include content, writing, response format, and location, as well as the sequence of questions. All these options can affect the answers given by the respondents (Antwi & Hamza, 2015). In business research, the purpose of questionnaires is to collect respondent’s information to test research hypotheses or answer study questions (Taljaard et al., 2015). Therefore, a questionnaire or survey was the main method to collect the data to test the research hypotheses and answer the study questions. Four key reasons were supporting the rationale for choosing the survey method in this investigation:

a. To ensure consistency with traditional methods of data collection given its popularity and acceptance as one of the primary tools for data collection in business research.

b. To ensure consistency with the research model.
c. To achieve the research objectives in terms of generalization, identifying relationships between research variables and conducting the required analysis techniques such as Analysis of Variance (ANOVA) test and factor analysis.

d. To ensure consistency with existing methods of data collection given its extensive use in prior research relating to the study of audit methodologies.

According to Dalati and Gomez (2018), questionnaires can be classified into three main categories: web-based questionnaires, self-administered questionnaires, and face-to-face interviews. A web-based questionnaire is preferable for research in a large geographic area, but only if the necessary infrastructure allows access to the Internet. For Brace (2018) although historically, questionnaires delivered by mail are simple to administer, researchers have found that it has a low response rate, given that it is easy for the receiving party to ignore the mail. According to Taljaard et al. (2015), self-administered questionnaires have two main advantages.

The delivery of primarily, self-administered questionnaires distributed to a large number of people (Revilla, et al., 2017). Secondly, the researcher can present the research topic and motivate respondents to answer honestly (Krosnick, 2018). However, Walton et al. (2017) cautioned that using a self-administered questionnaire has some drawbacks. For example, organizations often cannot or do not wish to give or use their time for data collection. Due to the rapid mutations in the auditing field and the need to maximize response rates from respondents, I used web-based questionnaires instead of mailing them to streamline the data collection process, increase respondents’ participation and improve the integrity of returned questionnaires.

**Instruments**

The data were included using an electronic survey tool published through Survey Monkey. The survey instrument publicly published on the internet for any participant to access.
The instrument contained five (5) screening questions and thirteen (13) questions relating to the core factors under investigation. The document of the survey is included in Appendix B.

**Selection of the measurement instrument.** In May 2019, the International Forum of Independent Audit Regulators (IFIAR) released the results of a large-scale annual survey of inspection findings. The survey of inspection findings tracks examination outcomes connected to organization-wide structures of quality control and individual audit actions. The quality control systems were an area of emphasis for numerous audit regulators and audit corporations, as these systems function as the basis for performing quality audits. The survey of quality audits studied elements such as (1) audit engagement performance which included the collection and examination of sufficient appropriate audit evidence, (2) independence and ethical requirements, (3) human resources, (4) monitoring, (5) client risk assessment, acceptance, and continuance of audit engagement, and (6) leadership responsibilities as they relate to internal control quality.

The IFIAR survey intended to inspire and promote progress towards dependable, high-quality audits through knowledge sharing between its adherents, in turn the expectation was to strengthen audit oversight. Other organizations, such as the American Association of Certified Public Accountants (AICPA) conducted audit quality surveys. The (AICPA) discovered that identifying, assessing, and responding to audit evidence that affects the risks of material misstatement were fundamental to every audit. However, peer reviewers discovered that a significant number of audits reviewed under the AICPA’s Enhancing Audit Quality Initiative did not meet the applicable risk assessment standards. As a result, standard setting and regulatory entities have emphasized research on the need to strengthen audit practices and procedures relating to the sufficiency and appropriateness of audit evidence which ultimately affected the quality of audits and audit opinions. I studied the surveys conducted under the AICPA
Enhancing Audit Quality initiative (AICPA, 2019) and the IFIAR annual survey of inspection findings to inform the data collection process under the current research.

I obtained permission from the International Federation of Accountants (IFAC) to modify and use survey questions from the instrument developed during the IFAC Audit Evidence Information Gathering Activities, specifically the study relating to the Survey of Stakeholder Perspectives of Audit Quality. I modified the questions from the survey used in activities mentioned above and adapted them to reflect the particularities of the target industries in the current study. The IFAC Audit Evidence Information Gathering Activities are performed under the Audit Evidence Work Stream Plan, which entailed information-gathering and research activities that mainly focused on developing strategies to enhance professional standards that impact the collection and interpretation of audit evidence. The activities mainly focused on research in three critical areas of audit evidence:

- Emerging Technologies
- Professional skepticism
- Sources of information

The IFAC’s work stream plan on the study of audit evidence had validity and reliability. The reliability of the IFAC research instrument came through internal consistency. During the Survey of Stakeholder Perspectives of Audit Quality, IFAC researchers obtained responses from stakeholders in nine countries, including the United States, the United Kingdom, Canada, New Zealand, South Africa, Australia, Germany, Japan, and the Netherlands as well as some adherents of the IFAC’s Consultative Advisory Group. The responses obtained from the participants in each of these countries appeared to reflect the same underlying paradigm. The respondent’s scores on the surveyed items correlated with each other. According to Viladrich et
al. (2017), researchers achieved internal consistency when they demonstrated general agreement among numerous elements that make up a combined score of a survey measurement in a given context. The underlying agreement in the IFAC survey was reflected concerning audit quality and stakeholders’ perspectives when respondents agreed that factors such as technologies, professional proficiency, and source of information were critical to audit evidence and quality.

The achievement of the validity of the IFAC research instrument came through content validity which is the degree to which a quantitative measure encompassed the concept of interest (Ding, 2019). Almanasreh et al. (2019) argued that content validity is sometimes referred to rational validity. Almanasreh et al. (2019) posited that content validity assesses how much a measure embodied each distinct component of a construct. In the IFAC’s context, the concepts of interest were audit evidence and audit quality and how stakeholders envisioned them. The IFAC survey included questions that specifically reflected the subject under study and made every effort to clarify to respondents through an introductory paragraph and self-explanatory questions. The survey was specific to gathering participants' responses in relation to audit evidence and audit quality. The purpose of all the questions asked in the study was to discuss the intended elements.

**Demographic data.** The data collection instrument’s first section was designed to collect information on the respondents' educational level, years of experience, and gender. For example, one of the survey questions to the respondents was to identify their highest level of educational achievements with the options of choosing between bachelor's, master's or professional degree, doctorate, and Juris Doctor. The demographic section also asked respondents to identify their occupation and at their employment institution. Upon completion of the demographic data section, I asked the respondents to answer the subsequent questions on the survey.
**Audit evidence sufficiency and appropriateness.** The second section focused on the study's main objective, which was to collect the opinions of financial institution examiners and auditors in the United States who specifically supervised, audited, or regulated the banking and financial services industries. The questions specifically related to variables such as: (a) the sufficiency and appropriateness of audit evidence, (b) the quality of audit opinions, (c) the source of audit evidence, (d) management assertions, (e) the reliability of audit evidence, (f) internal control systems, as well as (g) the quality of audit reports.

**Participants’ selection of audit evidence statements.** A 5-point Likert scale designed to measure how respondents perceive each statement related to audit evidence. In addition, the study included statistical techniques such as the SPSS package to examine the data. The assessment scale or classification gave respondents the option to agree with a specific statement by selecting between five answer choices ranging from “Strongly improve,” “improve,” “does not improve or impair,” “impair” and “strongly impair.” The purpose of the neutral option was to avoid or reduce the inclusion of biased responses from respondents. Krosnick (2018) indicated that using a neutral option on a Likert-type data collection tool affords the researcher the opportunity to reduce any bias that the tool may create for instances in which the participant may not have any cognitive response the statement. Willis et al. (2016) reported that customized responses come from a list of declarative statements and asking respondents to rate them in terms of agreement or disagreement.

Furthermore, Willis et al. (2016) added that appropriate scales should be used based on the type of data that the researcher anticipates obtaining from participants. Rahi (2017) emphasized that Likert-type data collection tools are often 5-point scales. This study used Likert-type scales for the following reasons:
a. It is useful to obtain the opinions of respondents (Kuhlmann et al., 2017), and;

b. It offers respondents a range of options, as shown below, to choose and, therefore, increase the response rate (Joshi, et al., 2015).

<table>
<thead>
<tr>
<th>Rating Scale</th>
<th>Strongly improve</th>
<th>Improve</th>
<th>Does not improve nor impair (Neutral)</th>
<th>Impair</th>
<th>Strongly impair</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td></td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Table 2. Five-points rating data collection tool*

**Data Organization Plan**

I gathered the survey data from Survey Monkey’s internet site and exported it to a spreadsheet readable as a Microsoft Excel file and convertible to a Statistical Package for the Social Sciences (SPSS) file for ease of analysis and additional security. The organization of the data in occurred in numerical order to facilitate the data analysis process. I used the numerical outline to afford optimal organization and precision for the data analysis process. The security of the data was through electronic management standards and password protection for data encryption to limit access to all research files. I also encrypted all original files and correspondences exchanged and obtained throughout the data collection process and saved them on the hard drive on a personal computer. A second password protected copy of the research data was put on a universal serial bus (USB) drive and locked in a filing cabinet at my home office. A password protected folder was a means to encrypt any data obtained electronically and storage occurred on a cloud system. Two additional encrypted copies to protect the data loss if the original files become inoperable or unusable or to remediate any other type of electronic malfunction.
In this study, the sequence, the writing, and the language level were key elements of the data organization. The questionnaire commenced with questions that respondents found easy to answer, such as gender, employing entity, or educational level. The objective was to facilitate the respondents’ understanding when completing the questionnaire by providing an initial set of simple questions that they could answer directly, thus increasing the response rate. At the beginning of each section, the respondents received clarifications about the purpose of the section to ensure a standardized response. According to Lubiano et al. (2016), the standardized sequencing of responses on Likert-type surveys is vital because, if not provided, respondents are more likely to cite their desired response erroneously. In addition, the study questionnaire avoided asking the names of respondents to give them a sense of freedom and anonymity to participate without self-censorship. The main sources of ideas for organizing questions for the current study derived primarily from an extensive review. Including an analysis of the existing literature regarding the research objectives. The final version of the questionnaire included two sections; the first section included demographic data, while the second section was to collect respondent data on the study variables.

**Summary of Data Collection & Organization**

The principal investigator performed extensive research to find studies that specifically related to the subject matter research. This research involved the review of survey instruments used by prominent standards setting or audit firms that have significantly contributed to the enhancement of existing practices that impact the elements under study. I found several survey instruments used by the AICPA and IFIAR which offered a valuable starting point for developing a tailored questionnaire to study the target industries. I settled for an adapting a data
collection developed by the IFAC. The instrument was accessible on the internet through Survey Monkey to collect essential data in implementing the current study.

Data Analysis

The data collected from each respondent during field research comprised of two main parts. The first part included data on each respondent’s gender, age group, the highest level of education, and professional occupation. The second part included each respondent responses on the following statements:

a. Whether the significance or robustness of the audit and the source of audit evidence improved or impaired sufficient appropriate audit evidence.

b. Whether the efficiency of the audit engagement and the quality of the audit opinion improved or impaired sufficient appropriate audit evidence.

c. Whether management assertions in relation to audit evidence and the auditor’s efficient use of management’s time and resources improved or impaired sufficient appropriate audit evidence.

d. Whether the audit engagement team’s competence and continuity of the audit concerning the auditor’s reliance on previous audits improved or impaired sufficient appropriate audit evidence.

e. Whether the auditor’s independence from management and ability to collect audit evidence in relation to the quality of audit opinion improved or impaired sufficient appropriate audit evidence.

f. Whether communication: quality, usefulness, and timeliness of audit procedures in relation to the evidence collection process improved or impaired sufficient appropriate audit evidence.
g. Whether the perception of auditor’s independence, the reliability of audit evidence collected by the auditor in relation to the quality of the audit report improved or impaired sufficient appropriate audit evidence.

h. Whether the audited entity’s professional relationship with the audit firm in relation to the auditor’s ability to apply adequate audit procedures improved or impaired sufficient appropriate audit evidence.

i. Whether the audit team’s knowledge and experience of the entity and its industry in relation to the audit team’s ability to perform pertinent audit techniques improved or impaired sufficient appropriate audit evidence.

j. Whether strength of regulatory and governance framework, and the effectiveness of internal control systems in relation to the auditee’s ability to produce reliable audit evidence improved or impaired sufficient appropriate audit evidence.

k. Whether the existence and effectiveness of regulatory inspection, supervision, or examination in relation to the audited entity’s ability to produce unaltered financial records improved or impaired sufficient appropriate audit evidence.

l. Whether the transparency of financial reports and reliability of underlying records in relation to the audited entity’s ability to support its assertions improved or impaired sufficient appropriate audit evidence.

m. Whether the quality of the audited entity’s financial reports and systems, and their ability to generate audit evidence, in relation to the quality of audit opinions improved or impaired sufficient appropriate audit evidence.

Descriptive statistical analysis occurred on the data collected. The test of the hypothesis to determine whether statistically significant relationships existed between the variables in the
study. Specifically, the relationships between the following variables: (a) the sufficiency and appropriateness of audit evidence, (b) the quality of audit opinions, (c) the source of audit evidence, (d) management assertions, (e) the reliability of audit evidence, (f) internal control systems, as well as (g) the quality of audit reports issued in the target industries. The test of hypothesis confirmed that statistically significant relationships existed between the variables. I documented a detailed discussion of the test of hypothesis under the section relating to the presentation of the findings section.

**The Variables**

**Sufficiency and appropriateness of audit evidence.** Mentz et al. (2018) argued that before attaining a decision and conveying an audit opinion on financial statements, auditors must establish whether the audit evidence collected from auditees is sufficient and appropriate as the basis to form an audit opinion. The variable of sufficient appropriate audit evidence was at the core of the current study because the main questions focus on sufficient appropriate audit evidence. Nugraha et al. (2020) added that auditors must support their work with sufficient evidence, which primarily indicates the amount of audit evidence collected during the audit engagement.

Nugraha et al. (2020) theorized that the quantity requirement must follow the appropriateness constraint, which implies that sufficient audit evidence must reflect the relevant quality. Mentz et al. (2018) further posited that the sufficiency requirement encompassed the quantity of sampling auditors selected and the processes applied, including the documents collected throughout the engagement. According to Nugraha et al. (2020), auditors must execute evaluations and detailed testing to establish that the evidence in hand is sufficient and
appropriate to the point that they can rely on to form their conclusions and develop their opinions.

Quality of audit opinions. The variable of audit opinion quality was another key variable under review in the current study. According to Sutopo et al. (2017), audit opinion quality goes directly to the quality of the audit engagement. Chen et al. (2017) reported that audit opinion was key element stakeholder rely on to make an investment or strategic decisions. The significance of an audit opinion quality lies in its reflection of the audited entity’s viability. The generation of a quality audit opinion assures the users of the financial statements or those with a vested interest in the audited entity that its financial health, reflected in the audit report, was adequate and reliable (Sutopo et al., 2017). The quality of the audit opinion is also reflected on the auditor as it helped establish and increase public confidence in the auditor or audit firm (Chen et al., 2017). According to Sutopo et al. (2017) audit, opinion quality was an indication that the independent auditor upheld the obligations of accountability and professionalism.

Source of audit evidence. The variable source of evidence was an integral part of the current study. Lessambo (2018) reported that auditors can collect audit evidence from numerous distinct sources, including their testing or external independent sources. The source of audit evidence may also include system generated records from the audited entity’s internal systems. According to Brown et al. (2020), auditors may carry out audit procedures such as observation, inspection, recalculation, confirmation, and analytical reviews to obtain audit evidence. In addition, auditors may obtain audit evidence by performing audit procedures to test accounting records. For example, auditors can obtain computed financial data from audited entities and apply accounting tests to assess the accuracy or adequacy of those financial records and the systems that generated the records (Ozturk, 2019). Auditors assessed the reliability of
financial reporting processes and related applications to ensure that they could rely on the audit evidence to form their audit opinions (Lessambo, 2018).

By performing such audit procedures, auditors can determine that the accounting records are internally consistent and following applicable financial and accounting standards in addition to compliance with established laws or regulations (Brown et al., 2020). In general, auditors can establish greater assurance on the audit evidence obtained from a consistent source than from sources that are not consistent or from sources that alter the nature of the audit evidence (Lessambo, 2018). For example, in some instances, validating evidence acquired from a source separate from the audited entity may augment assurance instead of evidence gained from the audited entity (Dowd, 2016). Generated audit evidence, such as audit evidence brought from internal accounting records, minutes from meetings, or management discussion notes, has a greater likelihood of being subject to alteration when compared to audit evidence from an independent source (Ozturk, 2019). Information from sources independent of the audited entity that the auditor can use as audit evidence may incorporate third-party validations, reports from subject matter experts, and comparable data on competitors established as benchmarks for the specific industry in which the audited entity operates (Dowd, 2016).

Management assertions. Management assertions represented another key variable in the current study. Management assertions are part of the primary data point auditors rely to perform their assessments (Thorps et al., 2019). Those assertions related to financial statements, are significant for investors and stakeholders because almost all financial measures utilized to evaluate the financial viability of an audited entity stem from the figures and associated narrative provided to auditors (Pennington, et al., 2017). Inaccurate or misleading management assertions may constitute indicators of underperforming management practices or reflect fraudulent
practices (Rose et al., 2017). Therefore, when auditing an entity’s financial statements, some of the preliminary actions auditors consider are to assess the reliability of management assertions related to financial statements (Thorps et al., 2019).

Baudot et al. (2018) noted that the Financial Accounting Standards Board (FASB) established thorough accounting standards that businesses must follow when preparing their financial statements. The existence of these accounting standards suggests that a framework of financial reporting and best practices exist to support and guide managers when developing assertions for auditors (Rose et al., 2017). Pennington et al. (2017) emphasized that management assertions are critical to the entire auditing process. The process reflect the audited entity’s accountability for financial reporting, compliance with established standards and regulation, and operations. An audited entity's statements are assumed to represent a set of management assertions (Thorps et al., 2019). As auditors examine management assertions, they have an obligation to establish whether underlying facts support those assertions. The development of appropriate audit procedures or tests to evaluate information obtained from management to verify its validity and reliability is essential to delivering the correct and pertinent audit work product (Rose et al., 2017).

**Reliability of audit evidence.** The reliability of audit evidence was another variable that is part of the study. According to Natalia and Svetlana (2018), the reliability of audit evidence is a function of its source and nature and hinges on the individual circumstances in which the auditor obtains it. Auditors obtain parts of the audit evidence by completing audit procedures to test records, for example, through analysis or substantive testing or reconciliations. By performing substantive audit testing, auditors can ascertain the consistency of information presented by the audited entity and establish the reliability of audit evidence (Zhaokai & Moffitt,
In addition, substantive testing allows the auditors to determine audit evidence appropriateness or usability as evidence they can rely on to develop their conclusions (Natalia & Svetlana, 2018).

Zhaokai and Moffitt (2019) postulated that the circumstances in which audited entities generate audit evidence, the controls over its preparation and implementation, and the controls over its preparation and implementation affect the evidence’s reliability. Therefore, forming an accurate audit conclusion is a function of the reliability of the various types of audit evidence that auditors obtain during their engagements. Sanchez-Medina et al. (2019) argued that auditors might postulate that information gained independently from the audited entity is reliable. However, the circumstance under which said independent source generates the audit evidence may affect the evidence’s reliability. For illustration, financial data obtained from an uninformed or misrepresented third-party may lack objectivity or authenticity and therefore turn out as unreliable.

Martins and Sa (2018) posited that although exceptions may occur, the reliability of audit evidence increases when the evidence comes from independent sources other than the audited entity. Effective controls, including those pertaining to the audit evidence formulation and preservation, enforced by the audited entity may strengthen the reliability of internally generated audit evidence. Saeed and Saeed (2018) stated that when auditors obtain audit evidence directly through examining how control functions, they may consider such evidence as having better reliability than evidence obtained by interpretation. Additionally, Martins and Sa (2018) explained that audit evidence communicated in oral form by the audited entity might appear less reliable when compared to documented audit evidence of written nature or electronic form. All the above factors are essential in establishing audit evidence reliability. When auditors form their
opinions based on unreliable audit evidence, their work products endure the same deficiency and become of no value to stakeholders (Sanchez-Medina et al., 2019).

**Internal control systems.** Internal control systems represented a key variable of the current study. Dickins and Fay (2017) reasoned that internal controls reflect practices, guidelines, and processes that an audited entity must execute to ensure its financial and accounting data are reliable. Dicking and Fay also indicate the audited entity’s ability to enforce internal accountability and counteract deceptive acts that can cause prejudice to its assets. In addition to observing established laws and regulations and ensuring the preservation of the entity’s assets, Chalmers et al. (2019) suggested that internal controls can strengthen operational effectiveness by advancing the truthfulness and suitability of financial reporting. When auditors express their opinions on financial statements, those opinions not only apply to the examined financial statements but also to the processes or practices as well as the underlying records applied to generate said financial statements (Dickins & Fay, 2017).

Darrough et al. (2018) affirmed that the assessment of an entity’s accounting or financial processes and the effectiveness of its internal controls are integral to the opinion stakeholders expect from auditors. Chalmers et al. (2019) recommended that organizations design internal controls to assess organizational governance. The accuracy that organizations design internal controls to assess organizational governance and the accuracy and timeliness of financial records. They are necessary to maintain operational effectiveness by detecting deficiencies and correcting them or preventing failures from occurring and having a negative effect on the audited entity. Darrough et al. (2018) found that the emphasis on internal controls and their importance has grown to the point that the Sarbanes-Oxley Act of 2002 made those charged with governance accountable for the accuracy of financial statements produced by publicly traded organizations.
Financial management systems. The last but equally important variable in the current study consisted of financial management systems. According to Knechel et al. (2020), financial management systems are at the core of the auditing process because they represent the infrastructure through which the audited entity generates and tracks its assets and liabilities. They reflect the entity’s expenditures, revenue, financial accounts, cash flow, and value. Al Nuaimi and Nobanee (2019) supported that financial management systems are the foundation that the audited entity utilizes to produce the financial statements presented to auditors and drive the entity’s financial resources to attain its overall objectives. Audited entities design their financial management systems to assist them in decision-making, creating accurate financial statements, and managing their resources as well as their financial obligations.

Al Nuaimi and Nobanee (2019) believed that audited entities build these systems to ensure all their operations are effective and maintained business continuity while generating quantifiable data for internal and external stakeholders. An effective financial management system is integral to the audit process as it ensures that the audited entity produces an enhanced structure aimed at streamlining functions that serve the generation of sufficient appropriate audit evidence Knechel et al., (2020). These systems constitute the structure in which the audited entity produces its accounting records, documents its transactions, and demonstrates compliance with established laws and accounting standards. The systems aid the audited entity in quantifying its budgetary planning process, scaling its operations, and adapting its growth. Al Nuaimi and Nobanee (2019) theorized that they are essential to business performance. They ensure and offer internal stakeholders the possibility to reflect on prospective outcomes of business decisions on earnings and the entity’s overall financial condition. Financial management systems help
demonstrate how an entity’s operations impact its financial performance and drive the information provided to stakeholders.

**Descriptive Statistics**

Using the data collection instrument obtained from the IFAC, I asked respondents to specify the extent to which the independent variables improve or impair the dependent variables. I ranked the extents of improvement or impairment using a Likert scale of 1 to 5 where:

1 represent the value for Strongly Improve,
2 represent the value for Improve,
3 represent the value for Neutral,
4 represent the value for Impair; and,
5 represent the value for Strongly Impair.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Type of Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Evidence sufficiency and appropriateness</td>
<td>Ordinal</td>
<td>Spearman Correlation Coefficient</td>
</tr>
<tr>
<td>Audit Opinion Quality</td>
<td>Ordinal</td>
<td>Spearman Correlation Coefficient</td>
</tr>
<tr>
<td>Source of Audit evidence</td>
<td>Ordinal</td>
<td>Spearman Correlation Coefficient</td>
</tr>
<tr>
<td>Management Assertions</td>
<td>Ordinal</td>
<td>Spearman Correlation Coefficient</td>
</tr>
<tr>
<td>Audit Evidence Reliability</td>
<td>Ordinal</td>
<td>Spearman Correlation Coefficient</td>
</tr>
<tr>
<td>Internal Control Systems</td>
<td>Ordinal</td>
<td>Spearman Correlation Coefficient</td>
</tr>
<tr>
<td>Financial Management Systems</td>
<td>Ordinal</td>
<td>Spearman Correlation Coefficient</td>
</tr>
</tbody>
</table>

Table 3 – Variable table and corresponding statistical test

Upon receipt of the survey responses, I summarized the demographic information to describe the population. Then, I evaluated the demographic information using descriptive analysis. McCarthy et al. (2019) posited that descriptive statistics allow researchers to study data
in a easy-to-understand and analyze manner. Before performing analysis on statistical data, researchers need to understand and prepare it for the analysis phase (Amrhein et al., 2019).

I reviewed the demographic data by focusing on specific statistical values such as the analysis of variance, which according to Neri (2018), includes comparable or diverse set of detected values for a specific item. Another value that the researcher review is the mean, represented by the standard average within the data set (Amrhein et al., 2019). I developed charts and graphs to show the statistical values of respondents grouped by gender, age group, educational level, and employing entities. The charts and graphs of respondents’ demographic data recorded is in Appendix B at the end of this paper.

I focused on the items outlined explicitly in the hypothesis section of this paper for correlations. I analyzed respondents’ answers using the corresponding Spearman Correlation function in SPSS statistical software. The Spearman’s correlation coefficient or Spearman’s Rho is based on the formula shown below.

\[
\rho = \frac{\sum_{i=1}^{n} (R(x_i) - \bar{R}(x))(R(y_i) - \bar{R}(y))}{\sqrt{\left(\sum_{i=1}^{n} (R(x_i) - \bar{R}(x))^2\right) \cdot \left(\sum_{i=1}^{n} (R(y_i) - \bar{R}(y))^2\right)}}
\]

*Figure 2: Full Spearman’s formula* (Cavallo, 2020).

I performed the data analysis using Spearman’s correlation coefficient due to the ordinal nature of the statistical data obtained by using a Likert type data collection tool. Schober et al. (2018) explained that the Spearman correlation coefficient has characteristics similar to the Pearson correlation coefficient. Schober et al. (2018) conveyed that the Pearson correlation coefficient measures the degree of linear association between two variables. A linear association exists when variation in one variable to a comparative adjustment in another variable. Cavallo (2020) noted that the Spearman correlation between two variables is equivalent to the Pearson
correlation between the rank values of those two variables. However, according to Wang et al. (2018), while Pearson's correlation measures linear associations, Spearman's correlation measures monotonic associations regardless of linearity.

For Schober et al. (2018), a Pearson correlation coefficient of zero shows that no linear association is present between two variables, while a Spearman correlation coefficient of −1 or +1 indicates a relationship deemed perfect. Wang et al. (2018) noted that the strength of a relationship measured by a Spearman correlation exist at any point between −1 and +1. A correlation coefficient close to ±1 is an indication of a correlation’s strength (Ly et al., 2018). When the coefficient is a positive figure, researchers can deduct that the variables are directly related. However, when the coefficient is a negative figure, the variables are not directly related in the opposite. As it relates to the null hypothesis in this paper, the statistical significance test focused on interpreting the results from the p-value obtained as part of the Spearman’s rho test in SPSS. According to Kennedy-Shaffer (2019) the p-value symbolizes the likelihood of attaining scores at the z level or higher when the null hypothesis is true. In other words, what percentage chance may exist of getting a specific sample mean score if it is in reality not dissimilar from the population mean.

I evaluated the variables for significance and reliability by testing for p-value and the Spearman coefficient. I postulated that if a p-value is p <0.05 while the Spearman rho is at or below +1, then a positive correlation and a statistically significant relationship between the variables exist; therefore, the results was the acceptance of the alternate hypothesis. When the Spearman coefficient is a negative number at or below -1 and the p-value is p>0.05, there is a negative correlation. Therefore, a statistically significant relationship between variables did not exist, resulting in the rejection the null hypothesis.
Hypotheses Testing

I used the independent variable of (a) sufficiency and appropriateness of audit evidence and six dependent variables represented by (b) quality of audit opinions, (c) source of audit evidence, (d) management assertions, additional variables were (a) reliability of audit evidence, (b) internal control systems, and (c) audit report quality. The purpose of the Fisher p-value was to show the effect between the independent and dependent variables when the significant relationship exists (Kim et al., 2018). Testing occurred on all six independent variables tested in correlation with the dependent variable with the p-value of p<0.05 to accept the null hypothesis. The calculated p-value represented statistical significance. Alternatively, resulting in the rejecting the null hypothesis if any p-values are p>0.05.

SPSS function for CORRELATE → BIVARIATE → SPEARMAN was used to show both the correlation coefficient ($r_s$) and p-value (significant f). If p<0.05 (alpha=.05), then I considered that a significant correlation between the independent variable and the dependent variable (Kim et al., 2018). After participants completed the survey instrument, I gathered the detailed and summarized data for analysis. First, I reviewed the data to identify and remove incomplete surveys. The data occurred in two separate sections for analysis: descriptive statistical analysis and quantitative analysis (i.e., hypothesis testing).

The primary questions included the following: ‘what is your highest level of education?’ And ‘what is your current profession?’ I categorized the responses by educational background and current professional specialties (i.e., bachelors, master’s degree, Juris Doctor, Bank Examiner Securities Examiner). The questions were to ensure that responses are received explicitly from current Bank Examiners, Securities Examiners, or External Auditors with at least a bachelor’s degree. I used this approach with all the survey questions and analyzed the
correlations between dependent and independent variables. As discussed in the above paragraphs, I used Spearman’s correlation coefficient to test for correlation between the variables. Then, I assessed statistical significance, using the standard p-value of 0.05 to determine if results were statistically significant at the 95% confidence level. The hypothesis test did not show any instance rejection of the null hypothesis. Therefore, I accepted the alternate hypothesis as discussed in the alternate hypothesis section below.

**Hypotheses Testing Alternatives**

The results of statistical correlation showed that I could not reject the null hypothesis because the Spearman rho coefficient showed a statistically significant relationship between the variables in the study. The detailed statistical coefficient is shown in the presentation of the finding section of the paper and Appendix C for each tested variable. Therefore, I accepted the alternate hypothesis based on each test’s results. The preliminary discussion of alternate hypothesis is in the next section.

**Alternate Hypothesis 1.** I used the variable of the source of audit evidence to show whether a statistically significant relationship existed between the source of audit evidence and sufficient appropriate audit evidence. I performed bivariate correlation analysis to determine if an association existed and the statistical significance of any relationship. The statistical significance was established using a p-value of 0.05. A Spearman's correlation was to determine the relationship between the source of audit evidence and sufficient appropriate audit evidence values. A strong, positive monotonic correlation between the source of audit evidence and sufficient appropriate audit evidence; therefore, resulting in the acceptance of the alternate hypothesis and sustained $H_a1$. 
Alternate Hypothesis 2. I used the variable of management assertions whether a statistically significant relationship existed between management assertions and sufficient appropriate audit evidence. I conducted bivariate correlation analysis to establish if a relationship exists and the statistical significance of any relationship. Significance was determined using a p-value of 0.05. A Spearman's correlation was necessary to determine the relationship between management assertions and sufficient appropriate audit evidence values. A strong, positive monotonic correlation between management assertions and sufficient appropriate audit evidence occurred. Therefore, resulting in the acceptance of the alternate hypothesis and sustained $H_a2$.

Alternate Hypothesis 3. I used the variable of quality of audit opinion to show whether a statistically significant relationship existed between the quality of audit opinion and sufficient appropriate audit evidence. The purpose of bivariate correlations analysis is to determine if an association exists and the statistical significance of any association. Significance was determined using a p-value of 0.05. The purpose of a Spearman's correlation is to determine the relationship between quality of audit opinion and sufficient appropriate audit evidence values. A strong, positive monotonic correlation between the quality of audit opinion and sufficient appropriate audit evidence occurred. Therefore, resulting in an acceptance of the alternate hypothesis and sustained $H_a3$.

Alternate Hypothesis 4. I used the variables of the effectiveness of internal control to show whether a statistically significant relationship existed between effective internal control systems and reliable audit evidence. The purpose of bivariate correlation is to determine if an association existed and the statistical significance of any association. Significance was determined using a p-value of 0.05. A Spearman's correlation determine the relationship between the effectiveness of internal control systems and reliable audit evidence values. A strong,
positive monotonic correlation between effective internal control systems and reliable audit evidence occurred leading to the acceptance of the alternate hypothesis and sustained $H_4$.

**Alternate Hypothesis 5.** I used the variable of quality of the audit report to show whether a statistically significant relationship existed between the reliability of audit evidence and the quality of the audit report. Conducting a Bivariate correlations analysis was to determine if an association existed and the statistical significance of any association. Significance was determined using a p-value of 0.05. A Spearman's correlation determined the relationship between the reliability of audit evidence and the quality of the audit report. A strong, positive monotonic correlation between the reliability of audit evidence and the quality of the audit report occurred. The results indicated the acceptance of the alternate hypothesis and sustained $H_5$.

**Alternate Hypothesis 6.** I used the variable quality of financial management systems to show whether a statistically significant relationship existed between the quality of financial systems and sufficient appropriate audit evidence. Bivariate correlation analysis was to determine if an association existed and the statistical significance of any association. Significance was determined using a p-value of 0.05. A Spearman's correlation determine the relationship between the quality of financial management systems and sufficient appropriate audit evidence. A strong, positive monotonic correlation existed between the quality of financial management systems and sufficient appropriate audit evidence. The results were an acceptance of the alternate hypothesis and sustained $H_6$.

**Summary of Data Analysis**

After the six hypotheses in the study, I briefed the data and presented the results in the hypothesis section under the presentation of findings section of the paper. Using the Spearman correlation coefficient and Fischer’s p-value of 0.05 acceptance of the alternate hypotheses
occurred determined by the results from the tests. To determine the statistical significance of the relationships between the dependent and independent variables, I conducted a bivariate correlation analysis using Spearman’s rho in SPSS. The analysis's conduction was conducted using the CORRELATE function of SPSS statistical software with statistical significance established using a p-value of 0.05.

**Reliability and Validity**

Quantitative research is a comprehensive investigative method, which mainly uses computational, statistical, or mathematical measures to test proposed theories (Mohajan, 2017). To determine whether research work products are an accurate representation of the element under study, researchers established processes for testing the precision of results (Queiros et al., 2017). These processes aid in validating the objectivity and efficacy of the research. Diligence and exactitude, in quantitative studies, refer to the degree to which researcher augment the value of the study; researchers accomplish this by meeting the requirements of reliability and validity (Maxwell, 2017).

Maxwell (2017) posited that reliability is an expression of an instrument's consistency or the extent to which an instrument gauges with dependability the same type of data with each use under identical circumstances. Researchers generally estimate reliability using internal consistency, the association or relationship between various results of an experiment, instrument, or test (Queiros et al., 2017). Mohajan (2017) suggested that validity shows how an investigator measures an element, model, or concept accurately or accurately in a study. In principle, it is how precise a test or part of research measures or achieves its intended purpose.

As briefly discussed above, reliability and validity are fundamental to any research type, especially the current correlational research. Queiros et al. (2017) submitted that the forms and
level of limitations that affect reliability and validity vary contingent upon the nature of the study, tools applied, and analysis performed. Maxwell (2017) reasoned that it is impossible to develop research free of threats to reliability and validity. To address these threats, researchers must apply adequate safeguards in their strategies when designing and carrying out the study to alleviate reliability and validity threats (Queiros et al., 2017). A discussion of concerns relating to reliability and validity and how to address them in will occur in this section.

**Reliability**

Pajo (2018) conveyed that a reliable research instrument regularly produces similar results in recurrent instances under the same conditions. Hackett (2019) recounted that reliability is when a tool produces transversely consistent results while remaining constant regardless of the time of test performance (test-retest correlations). O'Dwyer and Bernauer (2016) also specified that significance tests would reflect divergent orders from random occurrences.

In these instances, when it is improbable that the emerging pattern did not happen in a randomized manner, the null hypothesis of no-effect can be rejected (Pajo, 2018). Also, under the current study, I observed a 95% confidence interval. According to Hespanhol et al. (2019), this level of observation means that the researcher is confident that 95% of the time, the test results reflects the results obtained from the entire population should the researcher repeat the current test or investigation many times as possible.

Hespanhol et al. (2019) postulated that confidence intervals ensure the reliability or accuracy of test results. Therefore, I performed several tests on the data from this study to ensure reliability. For instances where the analysis indicates p-values is less than 0.05 (p<0.05), I considered strong statistical significance, critical consistency, and reliability (Matthews, 2019). However, if the p-value is greater than 0.05 (p>0.05), the statistical significance of any
relationship was not significant, and there would not be any consistency or reliability in those instances (Schreiber, 2020).

Reliability in a quantitative study relates to the consistency of measurement and the degree to which it is without prejudice (Coolican, 2017). Taking appropriate steps to do away with bias and extricating threats to reliability establishes assurances that other researchers have the ability to replicate the data collection and analysis processes in similar studies (Boyle & Schmierbach, 2020). I discussed two main attributes of reliability in quantitative studies: internal consistency and stability.

**Internal consistency.** Internal consistency of quantitative measurement gauges whether the data collection tool accurately reflects the studied concepts. Respondents or participants associate the same general meaning to the items under examination (Barzykowski et al., 2019). According to Van Dam and Meulders (2020), internal consistency is an approach to determine how well a test or survey measures what the researcher intends to measure. I addressed internal consistency by sending out the surveys simultaneously to all respondents. I did not send inquiries out over different periods while performing the testing.

I reviewed responses from respondents to ensure that they associate the same level of understanding through the determination of patterns of similarity in the answers. However, I could have obtained a wide variety of responses, which would have made it challenging to determine the achievement of the internal consistency. To address this concern, I used Cronbach's Alpha. According to Thigpen et al. (2017), Cronbach's alpha, represented by the Greek symbol “α”, or alpha coefficient is a measure of reliability for internal consistency.

Thigpen et al. (2017) posited that high reliability means a test measures the element the researcher designed test measure for assessment. In contrast, low reliability indicates that a test
measures something else or possibly nothing. Barzykowski et al. (2019) theorized that researchers conduct Cronbach's alpha tests to determine whether responses obtained from multiple-choice Likert type scale surveys are reliable. Thigpen et al. (2017) conveyed that multiple-choice questions might measure underlying unobservable variables such as a person's perception or understanding of a concept or the extent to which an individual agrees or disagrees with the element under study. Upon applying the Cronbach's alpha test, I determined whether the test accurately assessed the variables of concern.

**Stability**

Cornell and Ebersole (2018) explained that stability is when a research instrument remains constant independently of changes and produces the same results. Mellinger and Hanson (2017) hypothesized that studies with dependable stability show that any other researcher can use the same research tool under similar circumstances and obtain the same results. Research with adequate measurement stability is likely to produce the same results for researchers who use it. Test-retest reliability and parallel form reliability are the fundamental attributes of stability (Cornell & Ebersole, 2018).

**Parallel form reliability.** Also known as equivalent forms reliability, utilizes a single set of questions distributed into two comparable sets of forms (Hu et al., 2020). Both sets include items that gauge the same perception, model, or proficiency. In these instances, researchers administer the two types of questions to the same sample of respondents within a limited interval of time and then compute an assessment of reliability from the two forms.

Researchers apply this approach to determine whether the two types of tests assess or evaluate the same concepts or models (Hu et al., 2020). Parallel form reliability allows the researcher to assess whether test scores or measures remain stable using different survey tools.
Parallel form reliability is most common in an educational assessment environment (Bertens et al., 2016). In an educational environment, it is frequently essential to produce different tests to ensure that students are not gaining access to the questions beforehand (Hu et al., 2016). In those instances, parallel form reliability is pertinent, as test administrators expect students to obtain similar results when taking different variations of the same test. The current study's environment is different from a context in which parallel form reliability is appropriate; therefore, I do not expect to split the questions from the research instrument into two sets to measure the same concept.

**Test-retest reliability.** According to Cornell and Ebersole (2018), test-retest reliability assesses the consistency of outcomes when I reprised the same assessments on identical samples at different intervals. Researchers employ this approach when measuring elements or concepts that they expect to remain constant in the sample. However, several dynamics, such as respondents' experiences, locations, perceptions, or conditions unrelated to the research, may impact how well they respond to the research questions (Bertens et al., 2016). These factors can affect research results when administered at different intervals. Test-retest reliability can give researchers the ability to measure how well a technique counteracts these elements over time.

Test-retest reliability is greater when there is a minor variance between the dual sets of outcomes (Cornell & Ebersole, 2018). The data under the current research is directly collected through an automated system as respondents answer the survey questions. This approach abridges the risk of data entry errors. The use of Survey Monkey and a data collection tool developed and used by the International Auditing and Assurance Standards Board (IFAC) helps address the reliability issue. Safeguards implemented also include assurances that other
researchers can use the same tool to gather similar data and perform an identical analysis to reach comparable results.

**Validity**

Researchers define validity as the degree to which investigators correctly assess a notion in a quantitative study (Mohajan, 2017). For example, a research instrument developed to study students' learning skills, but which measures intellectual quotient would fail to meet validity requirements. The expectation of the survey selected for this study provided validity based on statistical results by presenting the relationships between the hypothesis and the research questions. Discussions of research instrument validity generally distribute it into various distinctive categories or types. However, under the current study, I considered two categories: content validity and criterion validity.

**Content validity**

Content validity is the degree to which a measurement instrument fully accounts for the research's construct of interest (Maxwell, 2017). In other words, content validity reflects how well the test instrument represents the entire concept. For example, I expect the current research to have strong content validity. Questions on the data collection tool represented the subjects that respondents encounter or deal with in their daily professional engagements. Van Dam and Meulders (2020) advanced that researchers often perceive content validity as a precondition to criterion validity because it is an adequate gauge of whether the data collection tool reflects the concepts or elements under study.

The lack of content validity implies that the components of a research instrument are irrelevant to the central premise under investigation. In that case, they assess ideas other than the ideas anticipated to study, which may potentially instill bias in the study (Barzykowski et al.,
Therefore, maintaining adequate content validity ensures that the data collection tool encloses questions relating to respondents' professional knowledge of the concepts under study, their opinions, and the actual reflection of professional practices about the elements under study. Maxwell (2017) noted that content validity is not ordinarily measured quantitatively. Instead, the evaluation is by prudently examining the measurement technique against the theoretical definition of the construct in the study, which was the goal during the questionnaire design process.

**Criterion Validity**

Criterion validity is the degree to which correlation exists between variables based on respondents' scores obtained from a data collection tool (Ruch & Heintz, 2017). For example, I expected to establish a positive correlation between the variables during the test of significance and relationship under the current study. The eventual intent of criterion validity is to confirm that test scores are foretelling of real-life results (Arnold et al., 2018). The fundamental standard for this approach is to administer the data collection tool to a set of respondents and gather measures of some criterion of interest such as professional opinion, learning skills, or any other concept under study (Caronni et al., 2018). Researchers associated two options to this standard: concurrent validity and predictive validity (Arnold et al., 2018). Under concurrent validity, researchers collect the criterion's measurement and test scores at the same time. Under predictive validity, researchers allow an interval to elapse between the point in time when they collect test scores and the criterion's assessments (Caronni et al., 2018).

I applied concurrent validity because the first approach is apt at producing higher validity coefficients than the predictive standards (Ruch & Heintz, 2017). For example, the goals of the test of hypothesis 1, is the expectation to show whether a statistically significant association
exists between the source of audit evidence and sufficient appropriate audit evidence. I performed bivariate correlation analysis to determine if an association exists and the statistical significance of any relationship. I established statistical significance using a p-value of 0.05 due to its wide use as a standard when testing statistical significance in scientific research (Matthews, 2019). Then, I ran a Spearman's correlation test to determine the relationship between the variables (a) source of audit evidence and (b) sufficient appropriate audit evidence. An expectation of a p-value of p<0.05 show a strong, positive monotonic correlation between the source of audit evidence and sufficient relevant audit evidence. In this case, the results were the acceptance or fail to reject the null hypothesis and sustain H_a_1. Researchers can posit that numerous research validity may exist in quantitative research. However, under the current study four categories: construct, internal, external, and statistical conclusion validity received consideration.

**Construct validity.** According to Kenny, D. A. (2019), construct validity must establish that scores on a specific test reflect the theoretical attributes under study. I mitigated construct validity concerns by developing variables that directly reflect the overarching and subsequent research questions. I also discusses each variable and the type of statistical strategy best suited to test the variables. The selection occurred of the relevant data collection instrument that specifically addressed the research questions and incorporated the variables that I expected to analyze during hypothesis testing.

**Internal validity.** Internal validity establishes a causal relationship between variables when researchers expect an independent variable to affect a dependent variable in an experimental study (Petursdottir, & Carr, 2018). This type of validity is pertinent to experimental studies when researchers attempt to make generalized inferences of cause-effect relationships
between variables (Kenny, 2019). The current study is non-experimental, and I am not attempting to establish a cause-effect relationship between variables. Since establishing causality is not a fundamental goal of the current research, is the expectation is to expose the effects of internal validity threats (Arnold et al., 2018).

**External validity.** External validity pertains to a researcher's ability to generalize from a specific set of conditions and outcomes in an experimental study to further populations, conditions, measurements, or experiments (Petursdottir, & Carr, 2018). External validity borrows the cause-effect relationship from internal validity and attempts to generalize the observed condition or effect to a larger population or other circumstances (Tengstedt et al., 2018). Although I did not expect to generalize the results from the current study to different events or populations, I addressed threats that may affect external validity.

These precautions include limiting the population to banking and securities oversight regulatory entities in the United States. The safeguards also include restricting participation to respondents actively employed as bank examiners, securities examiners, and auditors with specific industry experience in audits of banking and securities firms and limiting participation to respondents who have a minimum of bachelor's degree (Lachmann et al., 2017). Although this study included a research instrument developed in a previous survey on the audit framework, the current study is not a duplication of an earlier study.

**Statistical conclusion validity.** According to Garavan et al. (2019), statistical conclusion validity relates to the use of appropriate statistical tests and the dependability or accuracy of the deductive reasoning obtained from statistical analysis. It is the reflection of the results from my statistical inferences. These results may relate to the concepts using various tests such as an analysis of variance (ANOVA), a correlation test, or a regression analysis (Rutkowski &
Delandshere, 2016). The results also pertains to my ability to use the relevant statistical test to evaluate the data.

Instances could exist in which researchers conclude that a relationship exists between variables, which may lead to rejecting the null hypothesis when, in fact, no association exists (Rutkowski & Delandshere, 2016). These instances designates as type one (I) errors. In other cases, the researcher may decide against rejecting an incorrect null hypothesis when, in fact, said null hypothesis is correct type two (II) error may occur (Garavan et al., 2019). I addressed the concerns relating to statistical conclusion validity by considering and selecting the proper type of test and the scale of analysis as discussed in the data analysis section. Suitable statistical tests and pertinent tools aid the ability to address threats to statistical conclusion validity.

Summary of Reliability and Validity

The notion of establishing credibility and conveying scientific authority is central to any research process. Quantitative research transacts predominantly with the conclusion of pragmatic formations (Tengstedt et al., 2018). Under such processes, validity and reliability governs whether researchers accurately assessed what they envisioned to determine and whether results represent a true reflection of adequate scientific conclusions (Philipp et al., 2018). Under the current study, I correctly addresses reliability concerns by choosing and utilizing comparable research data obtained through a recognized third party, the IFAC. I approached questions of validity through the performance of statistical tests and measurements of significance established and widely acknowledged in quantitative research (Lachmann et al., 2017). Finally, I ensured that the statistical analyses are suitable and relevant for the type of data and hypotheses under review (Rutkowski & Delandshere, 2016).
Summary of Section 2 and Transition

I used the quantitative method to study audit evidence in the United States banking and securities industries. Thorough analysis of each variable occurred through a systematic approach using the appropriate methodology and relevant statistical test (Garavan et al., 2019). I applied a correlational design to study the relationships between audit evidence and the quality of audit opinion in the target industries. I reproduced a previously developed data collection tool by the IFAC and specifically adapted it to the context of the study. The customized instrument facilitated data collection from 397 respondents, an adequate sample size for the desired confidence level and statistical significance level. The instrument allowed me to establish both reliability and validity.

I used a correlation research method to test each hypothesis and develop inferences based on statistical results. I described each method of analysis to review the data from the study upon completion of the field test. Section three (3) of this paper identified the study's findings based on the results, which addressed the research questions and tests of hypotheses. The quantitative data analysis section included details of the statistical tests completed in the study and connected each hypothesis to the relevant research question, the associated theoretical framework, and related literature. I performed quantitative data analysis on the collected data collected to draw findings for the study. Practical actions in the design and completion of the study addressed risks to reliability and validity. I presented and discussed the findings of each of the hypotheses in section three of the thesis. A comprehensive analysis determines how the results helped in responding to the research questions of the thesis as well as how they participated in reinforcing the existing body to the field of examination, accounting, and audit. Section three (3) includes a clarification of the study's conclusions and their applicability to professional practice, established
recommendations for actions, and designates those the study may affect. The section also contained recommendations for additional research and reflections.

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

The study results can effectively apply to the practice of audit in any organizational setting and the accounting field. Additionally, the results are relevant to Bank Examiners, corporate administrators, audit committees, Boards of Directors, and other stakeholders in the public accounting and reporting environment. This segment of the paper includes a discussion on the the impact of these findings on auditing in the United States banking and securities sectors and their stakeholders and business and accounting practices. Finally, I will discuss inferences based on the study results related to professional accounting and bank examination practices.

Through this thesis, I examined the degree of sufficient appropriate audit evidence gained by auditors in the United States banking and securities industries by examining the understandings and observations of external auditors, bank examiners, and securities examiners. To this end, I used the following variables: (a) quality of audit opinions, (b) source of audit evidence, (c) management assertions, (d) reliability of audit evidence, (e) internal control systems, as well as (f) audit report quality to test and assess the extent and strength of the relationships between these variables and sufficient appropriate audit evidence in the target industries. This section of the thesis reflects recommendations for external auditors and examiners (bank and securities) and proposals for future studies.

**Overview of the Study**

The purpose of the thesis was to investigate the main research question supported by five secondary questions. The main question focused on studying the influence or impact of sufficient appropriate audit evidence on the quality of audit opinion in the United States banking and
securities industries. I designed six hypotheses from preliminary analysis to investigate the primary and secondary research questions. The survey instrument was a customized instrument previously developed by the IFAC to collect respondent data for analysis and interpretation. I hypothesized that audit work products were not always reflective of the actual conditions of audited organizations in the target industries. Then, I formulated a quantitative research design to study the variable and address the research questions.

The lack of adequate quality of audit opinions and the evidence collected by auditors occurred from financial governance issues that have beleaguered the target industries. In addition, auditors have issued clean opinions on the financial statements produced by major corporations in the United States. In contrast, the whistleblowers have revealed that the same organizations that received clean audit opinions affected by fraudulent practices (Cordis & Lambert, 2017; Tayan, 2019). Cordis and Lambert (2017) noted that the auditors continued to maintain a relationship of confidence with the public, the revelations of limitations in the audit process have, to some extent, generated trust issues between audit firms, oversight entities, and the public. The limitations in the audit process also led to problems of concerns about financial documentation and reliability of the reports and opinions issued by auditors.

The trust and concern issues regarding the validity and reliability of audit opinions and reports in the target industries motivated this study. The recurrence of audit inadequacies implied that auditors might, sometimes, face confines, which they can address, to some extent, by bridging the gap between the audit and supervisory oversight process (Tayan, 2019). The apportionment of a prominent role to the policeman theory in the audit process, especially about the target industries, was one of the driving factors that prompted the current study.
I used a quantitative method to collect various understandings from key professional groups of external or public auditors and examiners with direct advisory knowledge and oversight responsibilities within the target industries. Respondents provided their answers about the impact of the designated study factors or variables on audit evidence. Statistical analyses on the collected data received examination to determine whether the hypotheses in the study were supported and validated by respondent data. The hypothesis analysis showed that the sufficiency and appropriateness of audit evidence had a significant impact on the other variables and factors in the study. No difference in auditors and examiners' understanding of audit evidence in the target industries occurred. In addition, respondents’ education level and gender had no impact on how they understood and interpreted the study factors.

I used the study’s results to establish inferences or implications for professional practice and recommendations for stakeholders. A key recommendation is bridging the gap between the advisory nature of the audit processes and the enforcement aspects of supervisory oversight. A part of the recommendations involves establishing a connection between audits and supervisory oversight where the audit process receives essential reinforcements from supervisory entities and, in return, serves as an early warning system for oversight organizations to help address the limitations auditors encounter during their engagements. Another important recommendation is easing auditors’ access to information that may otherwise receive constriction under the guise of protected proprietary auditee data. The restricted information may be valuable to the audit process but concealed from auditors by auditees throughout the engagement. The paragraphs and subsections below discuss the study’s application to professional practice, recommendations for further research, and reflections.
Presentation of the Findings

This study investigates concerns associated with the sufficiency and appropriateness of audit evidence. Palermo et al. (2017) stated that auditors must recognize the importance of transparency and promote confidence in their services and operations. The study went from the postulate of due professional care, which, in part, hinges on the obligation for auditors to inform stakeholders on the intricacies of auditing the administration of financial resources and the necessity to retain public confidence in fiduciary accountabilities. I noted that a literature review on several cases reflected failures of fiduciary oversight responsibilities. Widespread issue in most instances links to auditors’ inability to collect and act on sufficient and appropriate evidence (Bratten et al., 2019). I used a Likert type questionnaire to collect data from industry experts in an attempt to pinpoint the significance of the relationships between factors such as (a) the sufficiency and appropriateness of audit evidence, (b) the quality of audit opinions, (c) the source of audit evidence, (d) management assertions, (e) the reliability of audit evidence, (f) internal control systems, as well as (g) the quality of audit reports issued in the target industries.

The use of the Statistical Package for the Social Sciences [SPSS] software assisted to examine the information gathered through the questionnaires. According to Cohen et al. (2017), two main data analysis methods exist: parametric and non-parametric. Parametric statistics is a subset of statistical analysis that presumes data come from a form of probability dispersal and produces interpretations about the constraints of the distribution (Cohen et al., 2017). In contrast, non-parametric statistics is another subset of statistics that researchers use when populations are not typical, or the dataset under analysis is recognized to have severely skewed data (Jackson, et al., 2009). The sample size for this study was over 300, selected randomly from a normally distributed population. Three techniques existed during the pre-test stage of the data analysis
process. The three techniques were all part of the descriptive analysis phase. These pre-tests included a reliability test using Cronbach’s Alpha, an analysis of Variance (ANOVA), specifically one-way ANOVA, and a T-test.

**Descriptive Statistics**

I used descriptive statistics to review and explain the quantitative data collected during the field study. The analysis of the variance was on respondents’ level of education level and occupation participants to ascertain whether they had any effect on key variables in the study variables. The main research question for this study, states as follows: “How does sufficient and appropriate audit evidence influence the quality of audit opinion in United States securities and banking industries?” The overarching conclusion that sufficient and appropriate audit evidence significantly influenced the quality of audit opinion. Furthermore, a significant relationship between the source of audit evidence and its quality related to the sufficiency and appropriateness of said evidence. Additionally, substantial relationships existed between management assertions and sufficient appropriate audit evidence. Also between the sufficient and appropriate audit evidence and the quality of audit opinion; the reliability of audit evidence and the effectiveness of internal control systems; and audit evidence and the quality of the audit report existed.

The problem that prompted this study is the need to study the sufficiency and appropriateness of audit evidence to form independent and objective audit opinions. Specifically, when the issue hinges on deficiencies that affect the collection of sufficient appropriate audit evidence to support the quality of audit opinions in the United States banking and securities industries. I demonstrated how the study's conclusion would apply to professional practice related to the supervision and oversight of financial institutions and provided suggestions for
actions. Finally, I completed the paper with proposals for additional study and consideration with a synopsis. Section 3 includes all data supported by the evidence collected through field research.

I associated the analysis to the literature on the sufficiency and appropriateness of audit evidence in the practice of supervising banking and securities entities in the United States through the postulate that the collection of sufficient and appropriate audit evidence by the auditor may supplement or serve as early warning factor for targeted or risk-focused supervisory examinations. No significant outliers existed in the research data to impact the direction of the relationship between the variables in the study. The combined supervisory and oversight framework principles driving the research include analyzing critical factors that may affect the sufficiency and appropriateness of audit evidence. These factors may consist of corporate governance related to the existence and effectiveness of internal control systems and management’s predisposition to produce accurate, current, and complete assertions when making representations to auditors. Other supervisory principles such as capital adequacy and liquidity requirements and risk management related to the source of audit evidence and the reliability of audit evidence also drove the research.

I designed the project to address the five research questions discussed in section 1 of the paper. The findings presented in this section address each research question. Furthermore I related the results to the current body of literature as appropriate. I selected a sample of 400 respondents who, at the time of the study, were employed as External Auditors, Securities Examiners, and Bank Examiners in the United States (U.S.) banking and securities industries. The study included financial institutions chartered as National Banks by the Office of the Comptroller of the Currency (OCC) and organizations registered with the Securities and Exchange Commission (SEC). The period covered by this study was the calendar year 2020.
I used a simple random sampling approach to perform an unbiased selection of the elements under study. Sharma (2017) posited that a simple random sample is a subgroup of a statistical population in which each component of the group has an identical likelihood of being selected. According to Puy et al. (2018) elements that constitute the subgroup of the larger population chosen at random; each individual in the population has the same selection odds. The random selection creates, in most cases, a well-adjusted or balanced subgroup that conveys the maximum probability for representing the population, free from pre-established bias or misapprehensions.

Using the simple random sampling technique, I found a sample size of 379 adjusted to 400 individuals with a 95% confidence level from the population of twenty-six thousand six hundred and fifty-four examiners and a 5% acceptable margin of error. I obtained the sample size through the sample size calculator developed by the National Business Research Institute in December 2020. Other relevant research questions established to investigate the main questions are as follows:

Research Question 1: To what extent, if any, is there a relationship between the source of audit evidence and the quality of sufficient appropriate audit evidence?

Research question 2: To what extent, if any, is there a relationship between management assertions and sufficient appropriate audit evidence?

Research Question 3: To what extent, if any, is there a relationship between sufficient and appropriate audit evidence and the quality of audit opinion?

Research Question 4: To what extent, if any, is there a relationship between the reliability of audit evidence and the effectiveness of internal control systems?
Research Question 5: To what extent, if any, is there a relationship between audit evidence and the quality of audit reports?

Respondents’ Profile

The participants received the following questions: ‘what is your highest level of education? And what is your current profession? Categorization of the responses were by educational background and current professional specialties (i.e., bachelors, master's degree, Juris Doctor, Bank Examiner, and Securities Examiner). Finally, I used the results of this categorization to ensure that responses are received explicitly from professionals that are currently either Bank Examiners, Securities Examiners, or External Auditors with at least a bachelor’s degree.

Although I sent requests to collect data from 400 respondents, 397 participants responded. Forty seven percent of respondents identified as female while 53 % identified as male. The age groups showed that the most significant number or 31 % of respondents were in the 30-39 age bracket while the second largest number or 27 % of respondents was in the 40-49 age bracket, the third-largest group of respondents were in the 50-59 age bracket and represented 23 % of total respondents.

The largest group of respondents with a master’s degree or Master of Business Administration (MBA) was 30 %, while the second largest (23 %) were those with a Juris Doctor, the third largest (20 %) degree representation was respondents with a bachelor’s degree. Forty four percent of respondents were Bank Examiners, the largest respondents by profession. The second-largest profession was securities examiners, who accounted for 32 % of respondents, while external auditors were 24 % of respondents by profession. Interestingly, most respondents
had an MBA or Juris Doctor (see table 4 below and appendix B for further details on raw respondent data).

*Table 4 Respondent's distribution by Gender, Age Group, Occupation, and Education Level*

In table 4, 68.01% of respondents had, at a minimum, an MBA, Juris Doctor, or a professional degree beyond the bachelor's degree, while 19.65% held a bachelor's degree. In contrast, only 12.34% had a Ph.D. or another doctoral degree. Furthermore, the table shows that 76.07% of respondents were Bank and Securities Examiners while the remaining 23.93% were External Auditors. The importance to note that all Bank and Securities Examiners worked in the
public sector while the External Auditors were employees of Independent Public Accounting (IPAs) firms.

As discussed in the above paragraphs, a Spearman’s correlation coefficient assisted in the test for correlation between the variables. I assessed statistical significance, using the standard p-value of .05 to determine if results were statistically significant at the 95% confidence level. In this sub-section on quantitative findings, I presented the survey respondents’ demographic profile, as shown above, and then presented the results of reliability tests performed as discussed in the following paragraphs. Three hundred ninety-seven randomly selected respondents were entered into the Statistical Package for the Social Sciences [SPSS] software program. The sample participants came from three groups of Auditors and Examiners: Bank Examiners, Securities Examiners, and External Auditors. In addition to the descriptive biographical analysis, I undertook additional statistical analysis using Cronbach's Alpha (\( \alpha \)) to test the reliability of the findings.

**Reliability Test (Cronbach's Alpha)**

I used Cronbach’s Alpha to measure internal consistency for the study survey and variables based on the sample estimation. Taber (2018) proposed that an alpha (\( \alpha \)) value of 0.7 widely assumed as an acceptable Cronbach's alpha coefficient. However, other studies such as those published by Arifin (2018) and Gallais et al. (2017) indicated that a Cronbach’s Alpha value of 0.6 and more is considered adequate to establish reliability. Table 5 provides the final Cronbach's Alpha Based on standardized items for the study’s seven variables.
### Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.974</td>
<td>.975</td>
<td>7</td>
</tr>
</tbody>
</table>

**Table 5 – Cronbach’s Alpha – Reliability Statistics**

Table 5 reflects the conclusive finding obtained from Cronbach’s test. Seven variables had an overall Cronbach's alpha of 0.974. According to Gallais et al. (2017), Cronbach’s Alpha higher than 0.7 is a satisfactory Alpha coefficient to establish reliability in social science research. Based on the test results shown in table 6, discussed below, the Inter-item Consistency Reliability (ICR) of the instruments in the research were satisfactory because they were in line with standardized ICR values widely accepted in social research (Taber, 2018).

### Inter-Item Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Sufficient Appropriate Evidence</th>
<th>Evidence Source</th>
<th>Opinion Quality</th>
<th>Management Assertions</th>
<th>Evidence Reliability</th>
<th>Internal Controls</th>
<th>Audit Report Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient Appropriate Evidence</td>
<td>1.000</td>
<td>.925</td>
<td>.924</td>
<td>.798</td>
<td>.806</td>
<td>.840</td>
<td>.921</td>
</tr>
<tr>
<td>Evidence Source</td>
<td>.925</td>
<td>1.000</td>
<td>.957</td>
<td>.827</td>
<td>.782</td>
<td>.921</td>
<td>.906</td>
</tr>
<tr>
<td>Opinion Quality</td>
<td>.924</td>
<td>.957</td>
<td>1.000</td>
<td>.814</td>
<td>.809</td>
<td>.900</td>
<td>.943</td>
</tr>
<tr>
<td>Management Assertions</td>
<td>.798</td>
<td>.827</td>
<td>.814</td>
<td>1.000</td>
<td>.693</td>
<td>.842</td>
<td>.780</td>
</tr>
<tr>
<td>Evidence Reliability</td>
<td>.806</td>
<td>.782</td>
<td>.809</td>
<td>.693</td>
<td>1.000</td>
<td>.763</td>
<td>.840</td>
</tr>
<tr>
<td>Internal Controls</td>
<td>.840</td>
<td>.921</td>
<td>.900</td>
<td>.842</td>
<td>.763</td>
<td>1.000</td>
<td>.865</td>
</tr>
<tr>
<td>Audit Report Quality</td>
<td>.921</td>
<td>.906</td>
<td>.943</td>
<td>.780</td>
<td>.840</td>
<td>.865</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Table 6 Cronbach’s Alpha – Inter-Item Correlation Matrix.**
Table 7 includes the Cronbach's alpha obtained from analyzing respondents' data in the survey was higher than 0.60. The reported alpha coefficients suggested that the study instruments' reliability was stable. The entirety of the scales in the study reflected significant alpha scores, fluctuating from a lowest Alpha value of $\alpha = 0.693$ to the highest Alpha value of $\alpha = 0.957$. The coefficients were all higher than the widely accepted Alpha coefficient of 0.60 (Arifin, 2018).

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient Appropriate Evidence</td>
<td>10.68</td>
<td>14.526</td>
<td>.935</td>
<td>.904</td>
<td>.968</td>
</tr>
<tr>
<td>Evidence Source</td>
<td>10.79</td>
<td>14.805</td>
<td>.957</td>
<td>.947</td>
<td>.966</td>
</tr>
<tr>
<td>Opinion Quality</td>
<td>10.78</td>
<td>14.692</td>
<td>.963</td>
<td>.949</td>
<td>.965</td>
</tr>
<tr>
<td>Management Assertions</td>
<td>11.02</td>
<td>16.086</td>
<td>.838</td>
<td>.739</td>
<td>.974</td>
</tr>
<tr>
<td>Evidence Reliability</td>
<td>10.72</td>
<td>17.088</td>
<td>.827</td>
<td>.718</td>
<td>.976</td>
</tr>
<tr>
<td>Internal Controls</td>
<td>10.89</td>
<td>16.013</td>
<td>.916</td>
<td>.882</td>
<td>.970</td>
</tr>
<tr>
<td>Audit Report Quality</td>
<td>10.76</td>
<td>15.011</td>
<td>.942</td>
<td>.920</td>
<td>.967</td>
</tr>
</tbody>
</table>

Table 7 – Item-Total Statistics

Based on the Cronbach’s Alpha results, I determined that the reliability coefficients indicated significant internal consistency and concluded that the coefficients were sufficient to establish the high reliability of the instrument. The reliability factors were in line with a satisfactory level of internal consistency, as noted by Gallais et al. (2017). Table 7 included the examination of the uniformity with which participants addressed the questions asked in the survey.

Gallais et al. (2017) posited that if participants respond to survey questions consistently in various instances, such data tools can reflect stability and validity. I relied on both the ICR, and the Item-Total Statistics as shown in tables 6 and 7 to examine the alpha test results of the
seven critical variables in the study, which are: (a) sufficiency and appropriateness of audit evidence and the independent variables of (b) quality of audit opinions, (c) source of audit evidence, (d) management assertions, (e) reliability of audit evidence, (f) internal control systems, as well as (g) audit report quality. The Cronbach’s alpha coefficient, as reflected in table 7, conveyed the following:

- For Audit Evidence Sufficiency and Appropriateness, the test showed a corrected item-total correlation value of $\alpha=0.935$ while the Cronbach’s Alpha, if item deleted, reflected alpha $\alpha=0.968$. The new value of alpha for sufficiency and appropriateness of audit evidence improved to $\alpha=0.968$.

- For Source of Audit Evidence, the test showed a corrected item-total correlation value of $\alpha=0.957$ while the Cronbach's Alpha, if item deleted, reflected alpha $\alpha=0.966$. The new value of alpha for source of audit evidence improved to $\alpha=0.966$.

- For Audit Opinion Quality, the test showed a corrected item-total correlation value of $\alpha=0.963$ while the Cronbach's Alpha, if item deleted, reflected alpha $\alpha=0.965$. The new value of alpha for audit opinion quality improved to $\alpha=0.965$.

- For Management Assertions, the test showed a corrected item-total correlation value of $\alpha=0.838$ while the Cronbach's Alpha, if item deleted, reflected alpha $\alpha=0.974$. The new value of alpha for management assertions improved to $\alpha=0.974$.

- For Audit Evidence Reliability, the test showed a corrected item-total correlation value of $\alpha=0.827$ while the Cronbach's Alpha, if item deleted, reflected alpha $\alpha=0.976$. The new value of alpha for reliability of audit evidence improved to $\alpha=0.976$. 
• For Internal Controls, the test showed a corrected item-total correlation value of $\alpha=0.916$ while the Cronbach's Alpha, if item deleted, reflected alpha $\alpha=0.970$. The new value of alpha for internal controls improved to $\alpha=0.970$.

• For Audit Report Quality, the test showed a corrected item-total correlation value of $\alpha=0.942$ while the Cronbach's Alpha, if item deleted, reflected alpha $\alpha=0.967$. The new value of alpha for internal controls was improved to $\alpha=0.967$.

Respondent’s Representativity in sample

I also utilized T-tests to assess the respondents’ understanding of audit evidence sufficiency and appropriateness. Furthermore, I conducted a one-way analysis of variance (ANOVA) tests to analyze whether the participants’ occupations impacted their understanding of audit evidence. Gallais et al. (2017) discussed that researchers perform these tests to safeguard the distinction between the sufficiency and appropriateness of audit evidence in participants’ responses. The paragraphs below reflect the specifics of the conclusions from the tests.

Respondents’ Occupation. In this study, Bank and Securities Examiners (Examiners) represented 76.07% of respondents. In contrast, External Auditors represented 23.93% of the remaining respondents. I noted a high percentage of Examiners compared to External Auditors in the groups of respondents. The Examiners represented more than 75% of the respondents, and I decided that the results were vital to assess the impact on the study results. Therefore, I used a T-test to examine whether the significant ratio of 1:3 of External Auditors to Examiners impacted the understanding of sufficient appropriate audit evidence, affecting the study results. Table 8, shown below, reflects the findings.
The data statistics showed a mean score of $\mu=50.92$ for Examiners. The same test result reflected a mean score of $\mu=27.82$ for External Auditors. An assessment of the mean for each group of respondents showed that no evident disparity existed between the two groups (Examiners and External Auditors). The t-test validated no statistically substantial divergence in the understanding of audit evidence sufficiency and appropriateness related to both sets of respondents (examiners and external auditors). Therefore, the difference in ratio among the respondents in both groups did not impact the study's outcome.

**Respondents’ Education Level.** Respondents’ demographic data showed that at least 80.35% of participants held a master’s, professional degree, or higher. In contrast, only 19.65% of respondents achieved a bachelor’s degree. Based on these results, I decided to examine if education influenced the understanding of audit evidence sufficiency and appropriateness. The results of the ANOVA test (Table 9, shown below) did not disclose any statistical disparity in the understanding of audit evidence sufficiency, and appropriateness between the sets as it relates to respondents’ level of education as the value of $p$ was 0.924 and consequently not substantial since $p<0.05$.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>.642</td>
<td>5</td>
<td>.910</td>
<td>.546</td>
<td>.924</td>
</tr>
<tr>
<td>Within</td>
<td>31.300</td>
<td>392</td>
<td>.080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>31.942</td>
<td>397</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 9 ANOVA test results - education level and audit evidence sufficiency and appropriateness*
I used T-test and ANOVA to analyze whether there was any bias in representativity based on respondents’ educational level and occupation data. The test results indicated that statistically significant differences between the variables and respondents' understanding of sufficient appropriate audit evidence did not exist. These results suggest that educational level and occupation had no impact on the research results related to respondents’ interpretation of the survey's questions. Upon completing the above pre-tests, I initiated and completed the hypothesis testing, as documented below.

**Hypotheses Testing**

I addressed the research questions by analyzing the individual indicators or independent variables using a non-parametric test. Specifically, Spearman's Rho measured the strength of association between the independent and dependent variables. I postulated that if Spearman's coefficient equals 1, a seamless, positive correlation exists between the variables. Alternatively, if the Spearman coefficient equals -1, then a seamless negative correlation exists between the variables. Hypothesis testing using Spearman's correlation coefficient occurred because of the ordinal nature of the statistical data obtained using a Likert-type data collection tool. Van Doorn et al. (2018) explained that the Spearman correlation coefficient has characteristics similar to the Pearson correlation coefficient. However, both methods are different in how researchers use them to interpret test results (Schober et al., 2018). On the one hand, the Pearson correlation coefficient is most suitable for assessing linear associations, while the Spearman coefficient is most appropriate for testing monotonic relationships (Van Doorn et al., 2018).

Schober et al. (2018) suggested that the Pearson correlation coefficient measures the degree of linear association between two variables. According to Van Doorn et al. (2018), the Pearson coefficient aims to establish whether a linear association exists when a shift in one
variable links to a comparative adjustment in another variable. Cavallo (2020) noted that the value of the Spearman correlation coefficient between two variables is equivalent to the Pearson correlation coefficient between the rank values of those two variables. According to Wang et al. (2018), while Pearson's correlation measures linear associations, Spearman's correlation measures monotonic associations regardless of linearity. I used the Spearman correlation method to test for correlation and statistical significance between the independent variable of (a) sufficiency and appropriateness of audit evidence and the dependent variables of (b) quality of audit opinions, (c) source of audit evidence, (d) management assertions, (e) reliability of audit evidence, (f) internal control systems, as well as (g) audit report quality.

I evaluated the variables for significance and reliability by testing for p-value and the Spearman coefficient then postulated that if a p-value was less than .05, p<.05, while the Spearman rho is at or below +1, then a positive correlation and a statistically significant relationship between the variables exists. The result were acceptance of the alternate hypothesis. In the alternate case, if the Spearman coefficient is a negative number at or below -1 and the p-value is >.05, then there will be a negative correlation, and a statistically significant relationship will not exist between the variables, the results indicated the rejection of the null hypothesis. I used the Fisher p-value to show the effect of the relationship between the independent and dependent variables (Kim et al., 2018). Test occurred on all six dependent variables in correlation with the independent variable. The calculated p-value represented statistical significance. Alternatively, the results indicated rejection of the null hypothesis if any p-value is greater than 0.05, p>0.05.

I used the SPSS function of CORRELATE → BIVARIATE → SPEARMAN to perform the test and show both the correlation coefficient (rs) and p-value (significant f). If p<0.05
(where alpha=.05), I considered a significant correlation existed between the independent variable and the dependent variables (Kim et al., 2018). After participants completed the survey instrument, I gathered the details and summarized the data for analysis and reviewed the data to identify and remove incomplete surveys. Finally, I placed the data in two separate sections for analysis: one for descriptive statistical analysis and another one for hypothesis testing.

Based upon the pre-test conducted, I noted that the collected data was ordinal. Researchers have posited that if there is a need to examine ordinal data with a large order level, such as five or more, then the appropriate test to use is a Spearman’s rank correlation coefficient (Cavallo, 2020). During pre-test analysis, I ranked participants’ responses on a scale of 1 to 5 using a Likert-type survey tool, which resulted in a data set with a large order level (Kim et al., 2018). Therefore, I selected Spearman’s rank correlation coefficient as the most appropriate test to examine the hypotheses under study.

Kim et al. (2018) suggested that the performance of the Spearman rank correlation coefficient is comparable to that of the Kendall rank correlation coefficient, with the former being slightly better for large sample sizes. Furthermore, in the current study, I was interested in examining the strength and direction of an association between variables. I selected the Spearman rank correlation because it describes the monotonic relationship between two variables. According to Cavallo (2020), Spearman’s rank correlation coefficient is suitable for non-normally distributed continuous-ordinal data, which is the nature of the data. Using the Spearman correlation coefficient, I examined the correlation rather than causation which is inappropriate for analyses of agreement between variables.
**Probability of Type I error**

When the researcher rejects the null hypothesis, the likelihood of issuing a type I error is alpha (α), which is the degree of significance the researcher sets for assessing the hypotheses (Brooks et al., 2017). In the current study, I set an α of 0.05 to indicate that I prepared to recognize a 5% probability that the conclusion is incorrect when the null hypothesis receives rejection. Maurer et al. (2018) hypothesized that it is essential to use a reduced α coefficient to lower the risk of type I error. However, applying a reduced alpha value implies that the researcher may have a limited likelihood to identify an actual disparity in the data if one occurs (Brooks et al., 2017). Therefore, although the likelihood of reaching a type I error marginally exists, I considered an α of 0.05 as a satisfactory degree of type I error. Furthermore, an α of 0.05 is not significant enough to impair the test results because the researcher is confident that there is a 95 % chance that the conclusion is correct (Maurer et al., 2018).

**Probability of Type II error**

Freiman et al. (2019) posited that, when the null hypothesis is incorrect, and the researcher fails to reject the null hypothesis making a type II error. The likelihood of making a type II error is β and hinges on the strength of the test (Feng et al., 2018). Researchers can reduce the probability of making a type II error by ensuring that the tests have enough strength, which they attain by establishing a high sample size (Freiman et al., 2019). I ensured that the sample size was significant enough (397 respondents) to identify a functional discrepancy if a type II error actually occurred. Therefore, I expect that type II error is marginally present and not significant enough to impact the study results given the large, selected sample (Feng et al., 2018).
Hypothesis 1

To test this hypothesis, I performed Spearman’s Rho test. I used the dependent variable of a source of audit evidence to test the correlation between the independent and dependent variables. The data analysis showed a statistically significant association between the source of audit evidence and sufficient appropriate audit evidence. A bivariate correlation analysis determined if an association existed between the variables. I also determined the statistical significance of any relationship between the source of audit evidence and sufficient appropriate audit evidence. The statistical significance established using a p-value of .05.

The purpose of a Spearman's rank-order correlation was to determine the relationship between the source of audit evidence and sufficient appropriate audit evidence. There was a strong, positive correlation between the source of audit evidence and sufficient appropriate audit evidence, which was statistically significant and showed $r_s (395) = .907, p < .001$. The test showed a positive monotonic correlation between the source of audit evidence and sufficient appropriate audit evidence. The results were the rejection of the null hypothesis and sustainability of the alternate hypothesis $H_a1$. There was a strong, positive monotonic correlation between the source of audit evidence and sufficient appropriate audit evidence. The table below shows the test output.
I used a Spearman rank correlation coefficient to examine the strength and direction of an association between the source of audit evidence and sufficient appropriate audit evidence. A statistically significant and positive relationship existed between these variables. Although, as a result, rejection of the null hypothesis occurred, the acceptance of the alternate hypothesis occurred. \( H_a \): There is a statistically significant relationship between the source of audit evidence and the quality of sufficient appropriate audit evidence.

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Evidence</th>
<th>Sufficient Appropriate Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spearman's rho</strong></td>
<td><strong>Evidence Source</strong></td>
<td><strong>Correlation Coefficient</strong></td>
</tr>
<tr>
<td>Evidence Source</td>
<td>Evidence Source</td>
<td>Correlation Coefficient</td>
</tr>
<tr>
<td>Spearman's rho</td>
<td>Evidence Source</td>
<td>1.000</td>
</tr>
<tr>
<td>Sufficient Evidence</td>
<td>Correlation Coefficient</td>
<td>.907**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

*Table 10 Hypothesis Testing 1*

**Hypothesis 2**

I performed a Spearman’s Rho test to assess hypothesis 2. I used the dependent variable of management assertions to test the correlation between the independent and dependent variables. The data analysis showed that a statistically significant association exists between management assertions and sufficient appropriate audit evidence. Next, I performed a bivariate correlation analysis to determine if an association exist between the variables. I also determined that the statistical significance of any relationship between management assertions and sufficient appropriate audit evidence. The statistical significance established using a p-value of .05.
A Spearman’s rank-order correlation determine the relationship between management assertions and sufficient appropriate audit evidence. There was a strong, positive correlation between management assertions and sufficient appropriate audit evidence, which was statistically significant and showed \( r_s (395) = .734, p<.001 \). The test showed a positive monotonic correlation between management assertions and sufficient appropriate audit evidence. The results were the rejection of the null hypothesis and sustained the alternated hypothesis \( H_a2 \). There was a strong, positive monotonic correlation between management assertions and sufficient appropriate audit evidence. The table below shows the test output.

I used a Spearman rank correlation coefficient to examine the strength and direction of an association between management assertions and sufficient appropriate audit evidence. A statistically significant and positive relationship existed between these variables. As a result, the rejection of the null hypothesis did not occur. I did not accept the alternate hypothesis: \( H_a2 \):

*There is a statistically significant relationship between management assertions and sufficient appropriate audit evidence.*

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Sufficient Appropriate Evidence</th>
<th>Management Assertions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td>Sufficient Appropriate Evidence</td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>397</td>
<td>397</td>
</tr>
<tr>
<td>Management Assertions</td>
<td>Correlation Coefficient</td>
<td>.734**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>397</td>
<td>397</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 11 Hypothesis Testing 2
Hypothesis 3

I performed Spearman’s Rho test to assess hypothesis 2. I used the independent variable of quality of audit opinion to test the correlation between the independent and dependent variables. The data analysis showed that a statistically significant association exists between sufficient appropriate audit evidence and the quality of audit opinion. I performed a bivariate correlation analysis to determine if an association existed between the variables. An assessment of the statistical significance occurred between sufficient appropriate audit evidence and the quality of audit opinion. The establishment of a statistical significance was using a p-value of .05.

A Spearman's rank-order correlation determined the relationship between sufficient appropriate audit evidence and the quality of audit opinion. There was a strong, positive correlation between sufficient appropriate audit evidence and the quality of audit opinion, which was statistically significant and showed $r_s (395) = .908$, $p<.001$. The test showed a positive monotonic correlation between sufficient appropriate audit evidence and the quality of audit opinion. I rejected the null hypothesis and sustained the alternate hypothesis $H_0$: There was a strong, positive monotonic correlation between sufficient appropriate audit evidence and the quality of audit opinion. The table below shows the test output. I used a Spearman rank correlation coefficient to examine the strength and direction of an association between sufficient appropriate audit evidence and the quality of audit opinion. I discovered that there was a statistically significant and positive relationship between these variables. As a result of the I did not reject the null hypothesis, instead accepted the alternative hypothesis, $H_a$: There is a
statistically significant relationship between sufficient and appropriate audit evidence and the quality of audit opinion.

**Correlations**

<table>
<thead>
<tr>
<th></th>
<th>Sufficient Appropriate Evidence</th>
<th>Opinion Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spearman's rho</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sufficient Appropriate Evidence</td>
<td>Correlation Coefficient</td>
<td>.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>397</td>
<td>397</td>
</tr>
<tr>
<td>Opinion Quality</td>
<td>Correlation Coefficient</td>
<td>.908**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>397</td>
<td>397</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

*Table 12 Hypothesis Testing 3*

**Hypothesis 4.** I performed Spearman’s Rho test to assess hypothesis 4. I used the independent variable of the effectiveness of internal control systems to examine the correlation between the independent and dependent variables. The data analysis showed a statistically significant association between effective internal control systems and reliable audit evidence. I performed a bivariate correlation analysis to determine if an association existed between the variables. I also determined the statistical significance of any relationship between effective internal control systems and reliable audit evidence. The statistical significance established using a p-value of .05.

A Spearman's rank-order correlation determines the relationship between effective internal control systems and reliable audit evidence. There was a strong, positive correlation between effective internal control systems and reliable audit evidence, which was statistically significant and showed rs (395) = .688, p<.001. The test showed a positive monotonic correlation between effective internal control systems and reliable audit evidence. I rejected the null
hypothesis and sustained the alternate $H_4$. There was a strong, positive monotonic correlation between effective internal control systems and reliable audit evidence. The table below shows the test output.

I used a Spearman rank correlation coefficient to examine the strength and direction of an association between effective internal control systems and reliable audit evidence. A statistically significant and positive relationship existed between these variables. As a result of I did not reject the null hypothesis, instead accepted the alternative hypothesis, $H_4$: There is a statistically significant relationship between the reliability of audit evidence and the effectiveness of internal control systems.

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Effective Internal Control Systems</th>
<th>Reliable Audit Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>397</td>
<td>397</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 13 Hypothesis Testing 4

Hypothesis 5

I performed Spearman’s Rho test to assess hypothesis 5. I used the independent variables of the quality of the audit report to test the correlation between the independent and dependent variables. The data analysis showed that a statistically significant association exists between the reliability of audit evidence and the quality of the audit report. A bivariate correlation analysis to determine if an association exists between the variables. I also determined the statistical
The significance of any relationship between the reliability of audit evidence and the quality of the audit report. The statistical significance established using a p-value of .05.

A Spearman's rank-order correlation determine the relationship between the reliability of audit evidence and the quality of the audit report. There was a strong, positive correlation between the reliability of audit evidence and the quality of the audit report, which was statistically significant and showed $rs(395) = .806$, $p<.001$. The test showed a positive monotonic correlation between effective internal control systems and reliable audit evidence. I rejected the null hypothesis and sustained $H_05$. There was a strong, positive monotonic correlation between the reliability of audit evidence and the quality of the audit report. The table below shows the test output.

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Audit Evidence Reliability</th>
<th>Quality of Audit Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td>Audit Evidence Reliability</td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>397</td>
</tr>
<tr>
<td>Audit Report</td>
<td>Correlation Coefficient</td>
<td>.806**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>397</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).  
Table 14 Hypothesis Testing 5

I used a Spearman rank correlation coefficient to examine the strength and direction of an association between the reliability of audit evidence and the quality of the audit report. A statistically significant and positive relationship existed between these variables. Although, as a result, I did not reject the null hypothesis, instead accepted the alternate hypothesis, $H_a5$: There
is a statistically significant relationship between the reliability of audit evidence and the quality of the audit report.

Hypothesis 6

I performed Spearman’s Rho test to assess hypothesis 6. I used the independent variables of the quality of financial management systems to test the correlation between the independent and dependent variables. The data analysis showed a statistically significant association between the quality of financial systems and sufficient appropriate audit evidence. I performed a bivariate correlation analysis to determine if an association exists and the statistical significance of any relationship between the quality of financial systems and sufficient appropriate audit evidence. The statistical significance established using a p-value of .05.

A Spearman's rank-order correlation determined the relationship between the quality of financial systems and sufficient appropriate audit evidence. There was a strong, positive correlation between the quality of financial systems and sufficient appropriate audit evidence, which was statistically significant and showed $rs (395) = .684, \ p<.001$. The test showed a positive monotonic correlation between the quality of financial systems and sufficient appropriate audit evidence. I rejected the null hypothesis and sustained the alternate hypothesis $H_a6$. There was a strong, positive monotonic correlation between the quality of financial systems and sufficient appropriate audit evidence. The table below shows the test output. I used a Spearman rank correlation coefficient to examine the strength and direction of an association between the quality of financial systems and sufficient appropriate audit evidence. A statistically significant and positive relationship existed between these variables. Although, as a result I did not reject the null hypothesis, instead I accepted the alternate hypothesis, $H_a6$: There is a
statistically significant relationship between the sufficiency and appropriateness of audit evidence and the quality of audit opinions.

Table 15 Hypothesis Testing 6

Summary of Hypothesis Test Findings

The hypothesis testing identified that the study variables quality of audit opinions, source of audit evidence, management assertions, reliability of audit evidence, internal control systems, as well as audit report quality have a significant effect on the sufficiency and appropriateness of evidence obtained in the United States banking and securities industries. The hypothesis findings for the six factors having an effect were confirmed and clarified by the test results. The test results showed that when looking at the sufficiency and appropriateness of audit evidence, the source is as important as the reliability of the evidence.

While an overall tendency existed to consider internal controls and their effectiveness, the findings also showed that management assertions had a statistically significant relationship with establishing the sufficiency and appropriateness of audit evidence. The reliability of audit evidence and audit report quality were also elements of significant impact given their role in
establishing a holistic view of the audit process. When performing sampling, the selection is
generally made from the auditors’ prior experiences and their understanding of the auditee's
internal controls, the assessment of risk, and fraud-related factors. I did not find evidence to
suggest that auditors always employed statistical approaches when performing risk-focused
assessments of organizations under audit. The inexistence of consistent evidence to support
statistical sampling may have repercussions on the strength of audit tests and the internal
consistency of how auditors establish and select their samples during audit engagement and
could be an area of further research.

When reviewing respondents’ data related to Auditors and Examiners, the understanding
of the different groups did not differ relative to the impacts that the study factors have on the
sufficiency and appropriateness of evidence. Respondents’ approaches towards the sufficiency
and appropriateness of audit evidence were homogeneous across occupational groups. I
anticipated that the level of education would influence the viewpoints that respondents have
towards the study factors. However, I discovered that the two variables had no effect on the
respondents’ understanding of audit evidence sufficiency and appropriateness.

**Relationship of Findings**

After completing hypothesis testing, I briefed the data and found a common thread
among the independent variables when tested against each dependent variable. Each of the six
hypotheses tested was specifically related to a research question. I developed hypothesis one to
address question one, while question two was explored through hypothesis two. The same
sequential matching principle applied to research questions three through five, addressed through
hypotheses three through five.
Research question one included the extent to which, if any, a relationship existed between the source of audit evidence and the quality of sufficient appropriate audit evidence. To address this question, hypothesis one tested whether a relationship existed between audit evidence and the quality of sufficient appropriate audit evidence. The non-parametric Spearman’s rho test showed a strong and statistically significant relationship between audit evidence and the quality of sufficient appropriate audit evidence. Thus, providing a definitive answer, based on the sample size and test performed, that a relationship did indeed exist between the source of audit evidence and the quality of sufficient appropriate audit evidence. Additionally, the test results showed that the relationship was significant in extent. I applied the same statistical test to research questions two through five using the corresponding hypothesis to address the relevant research question. The tests showed that each research question led to a hypothesis test confirming a strong and positive monotonic relationship or correlation between the independent and dependent variables.

Each test of hypothesis addressed the corresponding research question as outlined. Research question two, to what extent, if any, is there a relationship between management assertions and sufficient appropriate audit evidence? Based on the hypothesis test, there is a strong and positive relationship between management assertions and sufficient appropriate audit evidence. Research question three to what extent, if any, is there a relationship between sufficient and appropriate audit evidence and the quality of audit opinion? Based on the hypothesis test, there is a strong and positive relationship between sufficient and appropriate audit evidence and the quality of audit opinion. Research question four to what extent, if any, is there a relationship between the reliability of audit evidence and the effectiveness of internal control systems? Based on the hypothesis test, a strong and positive relationship existed between
the reliability of audit evidence and the effectiveness of internal control systems. Research question five to what extent, if any, is there a relationship between the audit evidence and the quality of the audit report? Based on the hypothesis test, a strong and positive relationship existed between the audit evidence and the quality of the audit report.

**Relationship of the Findings to the Theoretical Framework**

The existence of strong relationships between the variables in the study supports the theoretical framework reflected through the lending credibility, inspired confidence, policeman, and assurance theories. Based on the significant relationship between audit evidence and the quality of audit opinion, the reliability of audit evidence, and the quality of the audit report, I found that the assurance provided by auditors directly influences the quality of the audit evidence and the subsequent opinion issued by auditors. This conclusion relates to the literature on the factors affecting the reliability and relevance of audit opinion. Francis et al. (2017) stated that financial statements and their assessments should reflect measured data on the true financial positions and accomplishments of auditees. The audit opinion is essential for stakeholders to recognize and appreciate the financial strength or condition of the auditee in terms of cash flow, viability, and operational efficiency.

The existence of a significant relationship between the source of audit evidence, the quality of the audited entity's financial systems, and the reliability of audit evidence go to the theoretical principle of lending credibility to the auditee's financial systems and the financial information provided to the public. Shahzad et al. (2018) posited that the dependability and correctness of audit opinions have essential effects that drive the behavior of financial markets. Therefore, the production of accurate and dependable data from reliable financial management
systems lends the necessary credibility to the audited entity and the auditors who expressed an opinion on those systems.

I noted a similar conclusion when it came to the inspired confidence and policeman theories. The byproduct of the significant relationship between the source of audit evidence, the quality of sufficient appropriate audit evidence, and management assertions is that the auditor must not solely rely on the information provided by management. The literature reveals that the latest financial crises exposed vulnerabilities in financial institutions' practices of risk management, internal control, and governance and underscored the necessity to expand the value of external audits (Shahzad et al., 2018). The necessity to ensure the maintenance of public confidence in the financial markets requires an expansion of routine and existing audit procedures, which have shown their limitations. The policeman theory becomes a pertinent principle in this environment when there is a need to establish a constructive rapport between external auditors and oversight or supervisory entities to complement their functions and obligations. The rapport can lead to frequent exchange of reciprocally valuable information to hold auditees accountable (Ghosh et al., 2017).

Another nexus between the policeman-inspired confidence theories and the existence of significant relationships between the source of audit evidence, the quality of sufficient appropriate audit evidence, and management assertions also reflects the need for auditors to validate or test information provided by auditees. The connection also relates to the auditor’s obligation to substantiate the auditee’s assertions through an independent review before reaching a conclusion, which puts the auditors’ reputation at risk and shapes the auditee’s financial condition in the public eye (Anginer et al., 2018). The nexus also through the sectors' intricacies and the elevated likelihood of unethical behavior. Finally, the relationship also encompasses the
auditor’s obligation to exercise professional skepticism and adopt an investigative mindset when designing and conducting their engagements (Nasution & Ostermark, 2019).

**Relationship of the Findings to the Literature**

Several studies have shown that the source of audit evidence is a critical factor in determining and establishing the persuasiveness and reliability of audit evidence (Shbeilat et al., 2018). The quantitative review of respondents’ data showed that 89.85% of the participants agreed that the source of audit evidence improved or strongly improved the significance of the audit. The agreement rate showed that participants viewed the source of audit evidence as a key element when auditors attempt to establish and confirm facts during their engagements. The critical nature of the source of audit evidence goes to the auditors’ ability to collect evidence from reliable, independent, or multiple sources that can corroborate the same piece of data or collection of data (Smith & Castonguay, 2020).

Participants’ responses align with the literature, which particularly showed in the case of Johnson et al. (2019) that the source of audit evidence improves the adequacy and applicability of the audit. The results are also consistent with the assessment of Choudhary et al. (2019) in their study of the properties and implications for financial reporting and reliability which found that the persuasive character of the audit evidence collected by auditors during their engagements increased when the evidence is received from an independent party as opposed to assertions communicated by the auditee. Shbeilat et al. (2018) pointed out that the persuasive character or the quality of the audit evidence depends on the reliability of their source. In this context, Choudhary et al. (2019) posited that the auditors consider the evidence from parties external to the auditee as more credible than the evidence coming internally from the audited entity.
The literature reveals that although auditors need external evidence, the collection of such evidence often poses challenges that auditors must navigate to ensure the evidence itself is not affected by the third party providing it (Johnson et al., 2019). Carstens (2018) noted that in large financial organizations and securities conglomerates, reliability and infrastructural constraints might hinder the collection of audit evidence from parties other than the audited entities themselves. In total, 97.21% of respondents indicated that the reliability of audit evidence collected by the auditor concerning the quality of the audit report improves or strongly improves the sufficiency and appropriateness of the audit evidence collected during the engagement. This response to the survey reflected the guidance issued by the Public Company Accounting Oversight Board (PCAOB) through Auditing Standard (AS) 1105. AS 1105 underscores the need for auditors to test the correctness and comprehensiveness of data produced by the audited entity. The standard also emphasizes that auditors complete their due diligence related to the audit evidence’s relevance and reliability.

The survey responses confirmed respondents’ views of sufficient appropriate audit evidence relating to auditor independence during audit data collection and completing the engagement. The responses from 96.70% of respondents showed that the auditor's independence from management and ability to collect audit evidence concerning the quality of audit opinion improve or strongly improve sufficient appropriate audit evidence. The finding is consistent with AS 1105.08, which highlights that audit evidence collected from an informed and independent source carries strengthened reliability compared to evidence gained solely from sources internal to the auditee. Several studies, such as those conducted by Mardijuwono and Subianto (2018), and Amalia et al. (2019), have also explained that, in some instances, the audit evidence obtained
from impartial outside sources carries more objectivity when compared to supporting information issued by the audited entity.

Internal sources may manipulate critical audit information or be unwilling to share information that may adversely affect the audited entity, which can impede the consistency or reliability of the audit evidence (Subianto, 2018). The survey results showed a mixed set of responses from participants when it came to examining the extent to which the audited entity's professional relationship with the audit firm concerning the auditor's ability to apply adequate audit procedures during the audit engagement. A significant portion of respondents, specifically 41.62 %, remained neutral in their responses by indicating that the professional relationship between the auditor and audited entity did not have an impact on sufficient appropriate audit evidence. In contrast, the second largest percentage of respondents on this question indicated that the relationship might impair sufficient appropriate audit evidence. This question remains an area that researchers can conduct further studies on to ascertain the impact of the auditor-auditee relationship on sufficient appropriate audit evidence.

A strong majority of respondents in the survey agreed that the audit team’s knowledge and experience of the audited entity and its industry concerning the auditor’s ability to perform pertinent audit techniques have a significant impact on the sufficiency and appropriateness of the evidence collected during the engagements. The response to the survey showed that 94.93 % of respondents agreed or strongly agreed that industry knowledge and the application of pertinent audit techniques have a significant impact on the auditor’s ability to collect sufficient appropriate audit evidence. The responses to this survey question are consistent with the literature. Guliyev et al. (2019) posited that the auditors with an adequate understanding of the auditee’s business
tend to design more appropriate audit procedures or programs and apply pertinent audit
techniques to collect relevant audit evidence when performing their engagements.

Sun (2019) indicated that gaining an insight into the audited entity's industry is key to a
successful and effective audit. The audit enables the auditors to customize their work to address
the specific realities and conditions of each auditee and conduct an informed assessment of their
findings. Auditors’ knowledge of the auditee’s business also helps them acquire and preserve a
constructive professional rapport (Guliyev et al., 2019). Auditing standards (AS) AS 2110.09 are
the guidance that the auditor should understand the audited entity and its environment, including
its industry and applicable regulatory requirements and other external factors. This understanding
goes to the core of assessing the risks or existence of material misstatements that affect or may
eventually affect the financial statements produced by the audited entity.

Raweh et al. (2021) argued that the auditor's ability to understand the auditee and its
industry would eventually guide the design and implementation of sufficient and relevant audit
procedures throughout the engagement. For Guliyev et al. (2019) understanding the auditee is a
reiterative process that unfolds during the whole duration of the engagement. Raweh et al. (2021)
indicated that before accepting an audit engagement, auditors should initially understand the
auditee’s industry, its governance, and how it operates concerning peers in its environment.

Duh et al. (2020) indicated that auditors must obtain detailed information on the auditee
during the planning process to allow them to effectively plan their engagements. Auditors must
understand the type and nature of the auditee’s operations, organizational structure, and business
strategy. This knowledge enables auditors to recognize the value of actions and operations that
are expected to substantially impact the auditee’s financial statements and fiscal integrity (Sun,
2019). The findings from the survey are in line with Auditing Standards AS 1015.07, which
recommends that auditors retain a critical attitude and incorporate it in their handling of information during their engagements.

Studies such as those of Kelly and Tan (2017) and Bailey et al. (2018) have shown that auditors tend to impart a higher level of reliability to evidence obtained from systems with strong and effective internal controls instead of those with limited or weak internal controls. The survey data showed that 95.18% of respondents agreed that the strength of regulatory and governance framework and the effectiveness of internal control systems improve or strongly improve the auditee's ability to produce reliable audit evidence. As shown in the cases of Bailey et al. (2018) and Kelly and Tan (2017), the literature corroborates the results from this question in that the elements of audit evidence generated in-house are more reliable when the audited entity has effective internal controls. This high confidence in the reliability of audit evidence based on the strength of internal controls is in line with the postulate supported by Jeppesen (2019) related to the design of effective internal controls to detect and prevent fraudulent practices.

Studies posited that one of the primary functions of internal controls is to establish a risk-oriented methodology in ensuring that the audited entity directs its focus on high-risk areas by helping those charged with governance recognize and mitigate risk (Duh et al., 2020). For Mardijuwono and Subianto (2018) indicated that the risk assessment is an essential step to establish a foundational basis for internal controls. Appelbaum and Nehmer (2017) argued that one of the key functions of internal controls is to protect the corporation's assets and thus tackle questions relating to the reliability of financial statements and communicate to the auditor whether those statements are current accurate complete.

The literature supports the finding relating to the significance of internal controls when examining questions relating to the detection and prevention of fraud by establishing segregated
responsibilities in the completion or performance of key functions within the audited entity. Jeppesen (2019) posited that the existence of strong internal controls through the sharing of responsibilities in a key process could prevent or contribute to detecting fraud. Internal controls designed in a manner such that no one person would operate two of three tasks. The task pertain to authorizing, recording, and keeping custody of corporate assets could be assessed as strong in contrast to an environment in which one individual exercise all three or the majority of these functions (Lemaire-Harvey & Harvey, 2020).

**Relationship of the Findings to the Problem**

The general problem investigated under the study was to examine auditors’ failure to collect sufficient and appropriate evidence to form an independent and objective opinion. The general problem translated into a specific problem disconnected between audit engagements and auditors’ ability to obtain sufficient appropriate audit evidence to support the quality of their audit opinions in the United States banking and securities industries. I conducted the current quantitative correlation study to address the problem to examine the independent variables of (a) sufficiency and appropriateness of audit evidence and the dependent variable of (b) quality of audit opinions. In addition to the quality of audit opinion, I also examined (c) the source of audit evidence, (d) management assertions, (e) the reliability of audit evidence, (f) internal control systems, as well as (g) audit report quality. I collected data from Auditors and bank examiners operating in the target industries to study the above variables, which resulted in the findings discussed herein.

The findings showed that one factor influencing the quality of the audit opinion is the reliability of audit evidence collected and examined prior to forming the audit opinion. The study confirmed that the audit opinion closely relates to the source of audit evidence. Hung and Cheng
(2018) postulated that, in cases of audit failures, auditors were less apprehensive of the integrity of the source of audit evidence when the evidence provided by a primary source was consistent with evidence gained from a separate source. According to Zerban (2017), assessing the strength or the credible character of the audit evidence sets a vital basis for detecting misstatements during auditing.

Contradictory evidence may suggest an unacceptable set of preliminary expectations. Those evaluations of intrinsic risk, level of evidentiary support, and other considerations need modification or adaptation to the new set of circumstances. In those instances, detection risk can reach intolerable degrees when the auditor neglects to carry out the appropriate audit procedures, applies the correct procedures improperly, or fails to accurately assess the testing results (Raweh et al., 2021). The study findings support the postulate that auditors need to evaluate existing controls and the inherent risk before designating detection risk to ensure that they bring the overall audit risk to an appropriate level (Amalia et al., 2019). However, it is doubtful that auditors can completely remove detection risk because they do not always have to scrutinize every individual transaction that makes up financial statements. As an alternative, auditors should intend to reduce detection risk satisfactorily (Amalia et al., 2019).

The study findings answered the research problem because they corroborated a significant relationship between the source of audit evidence and sufficient appropriate audit evidence. Shbeilat et al. (2018) postulated that the process of collecting and mixing a variety of audit evidence data adds to uncertainty in the audit process. The uncertainty is due to uniform processes for merging distinct elements of evidence that correlate to a particular objective or a specific account. Bakri et al. (2017) indicated that when examining the elements of audit
evidence, the auditor should take measures to safeguard the relevant elements and distinguish them from those not relevant.

According to Parker et al. (2018), the auditor should collect an appropriate number of reliable and sufficient evidence to establish the truthfulness of the financial statements under review and their conformity with recognized professional accounting standards. The findings also address the research problem regarding the relationship between management assertions and sufficient appropriate audit evidence. The study found a significant relationship between management assertions and sufficient appropriate audit evidence, which corroborated with the literature. William Jr et al. (2016) indicated that the obligation to lead operations, ensuring conformity with established regulations, and communicating financial data to stakeholders remained with the auditee’s management. Thus, the auditee’s numerous statements are presumed to characterize a set of management assertions (Choudhary et al., 2019).

Lemaire-Harvey and Harvey (2020) postulated that auditors expect management assertions to reflect the auditee’s condition related to its business processes, financial results, and its conformity with established standards and legal requirements. However, that is not the case at all times. The existence of the potential disconnect between management assertions and the facts requires auditors to examine the underlying elements to corroborate the assertions and determine whether management presented them truly and fairly (Bakri et al., 2017). Colquhoun et al. (2017) posited that auditors design their examinations procedures to evaluate information and verify whether management provided legitimate and relevant assertions. Auditors create audit tests to implement these procedures and address general audit objectives (Hung & Cheng, 2018). Colquhoun et al. (2017) indicated that each audit objective should relate to the corresponding or relevant management's assertion and attempt to confirm or challenge.
Parker et al. (2018) noted that auditors must design detailed tests in a risk-focused manner to resolve their audit objective in each audit area without relying on management assertions solely. For example, Hung and Cheng (2018) asserted that auditors must develop tests to ascertain whether an auditee has appropriately reported transactions relating to its debts or revenue transactions during a specific period. These tests must be specific to the accounts and information systems in place at the auditee and must go beyond sole reliance on management assertions (Zerban, 2017). Auditing Standards AS 2201.28 emphasizes that auditors should identify substantial accounts and their disclosures and the assertions pertinent to them. The standards state that pertinent assertions are financial information provided by the auditee that has a realistic likelihood of including a misstatement that is likely to affect the financial statements through a material misstatement. Parker et al. (2018) posited that the greater the number of audit evidence, the more likely the evidence is convincing. However, in some instances, the increased quantity of evidence may not necessarily convey more persuasiveness (Colquhoun et al., 2017). As discussed in the preceding paragraphs, the findings fully addressed the research problem related to the relationship between sufficient and appropriate audit evidence and the quality of audit opinion.

**Summary of the findings**

The primary research question investigated how sufficient and appropriate audit evidence influences audit opinion quality in United States securities and banking industries. I found that sufficient and appropriate audit evidence significantly influences the quality of audit opinion in the target industries. Through survey data analysis, I answered each research question as discussed in the above paragraphs and outlined below:
• Answer to RQ 1: There is a statistically significant relationship between the source of audit evidence and the quality of sufficient appropriate audit evidence.

• Answer to RQ 2: There is a statistically significant relationship between management assertions and sufficient appropriate audit evidence.

• Answer to RQ 3: There is a statistically significant relationship between sufficient and appropriate audit evidence and the quality of audit opinion.

• Answer to RQ 4: There is a statistically significant relationship between the reliability of audit evidence and the effectiveness of internal control systems.

• Answer to RQ 5: There is a statistically significant relationship between the audit evidence and the quality of the audit report.

As discussed in the above hypothesis testing section, I discovered a strong, positive monotonic correlation between each of the studied independent and dependent variables, which resulted in the positive answer to the research questions. I conducted a bivariate correlation analysis using Spearman’s rho in SPSS. The analysis used the CORRELATE function of SPSS statistical software with statistical significance established using a p-value of .05. Using Spearman's correlation coefficient and Fischer's p-value, I established and rejected all null hypotheses as determined by test results.

I found that six of the six individual variables: (a) the source of audit evidence, (b) management assertions, (c) the quality of audit opinion, (d) the reliability of audit evidence, (e) the effectiveness of internal control systems, and (g) the quality of the audited entity’s financial systems and sufficient appropriate audit evidence were statistically significant for the determination of sufficient appropriate audit evidence from the sample analyzed. I tested each hypothesis as reviewed in the above paragraphs and addressed them as outlined below:
Hₐ1: There is a statistically significant relationship between the source of audit evidence and the quality of sufficient appropriate audit evidence.

Hₐ2: There is a statistically significant relationship between management assertions and sufficient appropriate audit evidence.

Hₐ3: There is a statistically significant relationship between sufficient and appropriate audit evidence and the quality of audit opinion.

Hₐ4: There is a statistically significant relationship between the reliability of audit evidence and the effectiveness of internal control systems.

Hₐ5: There is a statistically significant relationship between the reliability of audit evidence and the quality of the audit report.

Hₐ6: There is a statistically significant relationship between the sufficiency and appropriateness of audit evidence and the quality of audit opinions.

The hypothesis testing and prediction model did not remove an outlier variable from the six independent variables. I found that the model analyzed was a statistically significant prediction model for reported audit evidence. If not sufficient or reliable, it became subject to manipulation leading to fraud, waste, or abuse. The findings address the research problem and purpose through the analysis of the results. I evaluated the existing literature to identify and assess, where possible, auditors’ environment and their professional practices within the United States banking securities industries. From this discussion, I developed recommendations and identified future research opportunities, discussed in the following sections of the paper.

**Application to Professional Practice**

I utilized the results from the current study to make significant contributions to the theory of audit evidence, especially within the boundaries of the audit process within the target
industries. From the outset, establishing the nature of the collected evidence, analyses, and contributions based on quantitative research is noteworthy. Therefore, this study conferred a quantitative evidence aspect and enhanced the breadth of the existing literature on audit evidence. Numerous examinations of audit evidence fixated on the qualitative characteristics or the impact of a particular factor on audit evidence.

The current study departed from the qualitative approach of audit evidence and focused on performing a quantitative examination by assessing different variables. The study involved an in-depth review of seven variables relating to audit evidence and their implication in the professional practice of audits. I used a theoretical framework specifically designed to account for all seven variables and their correlation with the existing body of knowledge. As a result, the research expands the current body of knowledge by establishing significant relationships between a critical, independent variable and six dependent variables to provide a comprehensive and quantitative understanding of the role of audit evidence in the audit process.

**Improving General Business Practice**

An essential recommendation for improvement to business practice is bridging the gap between audits and examinations. Auditors generally pursue the objective of expressing an independent opinion on whether the auditee's financial statements were organized and presented, in all material respects, in agreement with a set of established financial reporting standards and relevant frameworks. In contrast, the main objective of examiners, through the performance of prudential and compliance examinations, is to preserve stability and trust in the financial system and address harm or the risk of harm to consumers or users of financial services and products. Examiners' role consequently falls within the scope of preserving the public interest and reducing the risk of loss to stakeholders or the public at large. Furthermore, supervision regularly focuses
on establishing compliance with laws and regulations governing audited entities and their operations.

Stakeholders should understand the gaps between audits and examinations and apply strategies that allow auditors to understand the sensitivity of the examination process and how audit work products impact the work of bank and securities examiners. The test of hypotheses showed a statistically significant relationship between the reliability of audit evidence and the effectiveness of internal control systems. The existence of a substantial connection between the reliability of audit evidence and the usefulness of internal control implies that internal control systems directly impact the audit evidence produced by auditees’ internal systems of records. The effect of internal control versus audit evidence further reinforces the need for additional skepticism and a strong capacity for discernment from auditors.

Balakrishnan et al. (2020) suggested that auditors’ responsibilities increase when the public and examiners’ reliance on their work products is the perspective. In addition to ensuring the public’s trust in financial markets, part of examiners’ oversight responsibilities requires them to review auditors’ work products (Sy & Tinker, 2019). Ghosh et al. (2017), examining auditors' work products allow examiners to understand the effectiveness of the examined institutions’ internal processes and assess whether those processes pose a risk of harm to the public. Therefore, auditors play a crucial role as intermediaries between auditees, the public, and examiners. Their work products must pass the highest level of scrutiny concerning reliability when examiners place confidence in the audit products to exercise supervisory obligations (Balakrishnan et al., 2020).

I am not inferring that examiners instinctively rely on auditors’ work to form their conclusions but notes that auditors’ work products play a substantial role in examiners’
assessments of examined entities’ internal processes. Therefore, auditors should not view their work just under the prism of advisory services provided to auditees but as an integral part of the supervisory infrastructure designed by legislators to reinforce the public trust in financial markets and institutions (Ghosh et al., 2017). The ability to bridge the gap between audits and examinations also falls within the scope of early detection and resolution of inadequate practices and fraud.

According to Ferramosca et al. (2017), examiners and auditors hold differing complementary responsibilities rather than contradictory. Nicoletti (2018) indicated that examiners are mainly concerned with ensuring compliance with laws and regulations, preserving the financial system's stability, and promoting the safety and soundness of specific organizations to protect the public interest. Therefore, examiners monitor auditees' current and forthcoming sustainability and utilize the financial statements produced by auditees to evaluate their status and accomplishments (Osma et al., 2019). Auditors, conversely, are principally oriented toward providing advisory services and reporting on auditees’ financial statements, usually to investors or the auditees’ governing bodies (Ferramosca et al., 2017). Osma et al. (2019) explained that examiners are obligated to preserve a consistent or suitable internal control system as a foundation for reliable and cautious administration of the auditee’s operations. Auditors, in most instances, have the responsibility to evaluate internal control to establish the level of confidence to be placed on the system in preparing and executing the audit (Nicoletti, 2018).

Gopalan et al. (2019) clarified that examiners must be satisfied that each auditee maintains satisfactory records. The organized records in agreement with the relevant accounting standards and practices enable the examiners to assess the auditee’s financial condition, effectiveness, and effectiveness. The auditee distributes or provides access consistently to
financial statements that are a fair reflection of its status. Hu et al. (2021) indicated that auditors focus on whether the auditee maintains satisfactory and appropriately dependable accounting records. Dependable accounting records allows the auditee to organize and present financial statements that are free from material misstatements. The auditor is able to render an opinion on those statements. Thus, in essence, there is a form of complementarity between the auditor and examiner’s responsibilities. Both groups of professionals have responsibilities that relate to internal control to some extent (Lestari, 2018). However, examiners cannot assume auditors’ assessment of internal control for audit purposes was sufficient for the objectives for which the examiners need an evaluation, given the separate objectives for which internal control is assessed and examined by the auditor and examiner (Anginer et al., 2019).

According to Lestari (2018), auditors may gain valuable insights from information deriving from examiners’ work products and vice versa. Hu et al. (2021) remarked that auditors may independently assess the audited organization through examiners’ conclusions given the independent nature of supervisory examinations. Anginer et al. (2019) asserted that examiners also develop approaches to analytical procedures that can be shared with auditors to review and evaluate sensitive accounts and processes. As a byproduct of this recommendation, I discovered the necessity to expand auditing standard AS 1301 “communications with audit committees.” As currently written, AS 1301 only establishes the requirement for auditors to communicate certain matters to audit committees. The standard is silent on the communication of issues to supervisory entities.

The suggested innovation in this area is for the PCAOB to either expand AS 1301 or establish a new standard that requires communicating certain matters to supervisory entities. Masciandaro et al. (2020) observed that examiners have post-audit access to audit work products,
and most of the time, the work products transmit through the examined entity. A risk exists that
the examined institution intercepts and alters the audit findings or restricts the examiner's access
to some audit data. Establishing an audit standard for direct information sharing between auditors
and examiners bypasses the need for auditors or examiners to go through auditees when auditors
or examiners need to obtain or share information about an entity.

Protecting the interest of the parties involved the confidential and sensitive nature of the
information acquired or shared. I suggest that auditees inform the auditors and examiners to
share information. The new or improved standard establishes the requirement for the timeliness,
general guidelines, and the context in which auditors can share matters requiring attention with
examiners. The standard should include clear legal protection afforded to auditors when making
bona fide or good faith disclosures to supervisory entities.

The continuation of bridging the gap between examiners and auditors can take the form
of a joint task force between both groups of professionals in a permanent forum used to facilitate
the flow of information. The collaboration between both groups can be shaped through
regulatory or legislative measures at the federal and state level to ensure a clear and reasonable
prerogative for each group. The creation of this type of venue for direct collaboration between
auditors and examiners is especially crucial when the involvement of the auditees would imperil
the flow of information. A forum of direct communication between auditors and examiners can
be pertinent. For example, the highest level of those charged with governance within the
auditee’s organizational structure perpetrated or facilitated fraudulent actions or concealed
deficiencies that caused or can cause consumer harm.
**Potential Application Strategies**

The study results confirmed six key hypotheses focused on the central role played by the audit evidence in the auditing process and the attributes of consistency and dependability to the auditor's work product. Practitioners can apply the study results under the broad prism of ensuring that audit evidence meets the established standards codified by standards-setting bodies. However, as noted under the above section, there may be areas in which the standards need updating or revision to implement the recommendation fully. The potential application of the study’s results to the auditing and supervisory process is to establish a well-defined context and framework through which auditors can fully inform the supervisory process based on the opinion they issue on financial statements produced by auditees. Examiners can gain assistance from the work of auditors on an ongoing basis. Auditors should incorporate in their audit risk assessment information pertinent to the current areas of supervisory interest and plan and execute their audit engagements while considering those factors. Auditors and examiners can achieve this through regular consultations at the federal and state levels amongst professional audit or accounting organizations and supervisory agencies. The exchanges between the groups should include areas of shared interest.

The hypotheses confirmed a significant relationship between the source of audit evidence, management assertions, quality of audit opinion, and sufficient appropriate audit evidence. The hypotheses confirmed that practitioners, particularly, examiners place a high level of reliance on how auditors gather audit evidence and form their opinions. Therefore, auditors must have a clear understanding of examiners’ knowledge and perception of critical factors that include the conclusions made by auditors. Auditors should inform their processes by collecting information from examiners or, at least, obtain such information during pre-planning stages.
where examiners communicate their understandings of applicable or relevant audit processes to auditors. Collecting the examiners' viewpoints can enhance the overall methodologies and processes applied by auditors while auditing entities in the target industries. The results also suggest a comprehensive approach to the auditing process through the involvement of all key stakeholders in the processes, especially standards-setting bodies.

Potential application strategies can also involve the ability to leverage the existing regulatory framework to facilitate exchanges between examiners, auditors, and standard-setting entities. The discussions can affect the review and establish a baseline for treating significant auditing matters and emerging accounting issues. The issues can range from setting the suitable accounting methods for recently created financial instruments or products to the disposition of outdated valuation methodologies. The review of the characteristic of audit evidence can also involve additional attributes of economic improvements and emerging forms of valuation that may impact securities or cryptocurrencies.

Masciandaro et al. (2020) indicated that examiners and auditors have a shared interest in ensuring a uniform framework within their industries. Therefore, I expect that examiners and auditors seamlessly collaborate on adopting and implementation of adopting and relevant and fitting accounting practices. Examiners can exercise a clear mandate to drive the realization of standardized policies (Patel, 2018). The auditors’ familiarity with designing procedures allows assessing inherent risks within audited organizations, auditors are often well-positioned to observe or evaluate the effective implementation of those policies (Anginer et al., 2019). Continuous communication between examiners and auditors could substantially impact the design and dissemination of broadly applicable standards for practitioners.
Another application strategy of the study's results is to establish that auditors have the appropriate and relevant industry knowledge to help them navigate the evidence collection and assessment process. One of the hypotheses in the study (hypothesis 2) established a significant relationship between audit evidence and management assertions. The validation of hypothesis two implied that auditors should have the specialized industry knowledge to ensure they ask relevant and appropriate questions when collecting audit evidence from management. The suggested level of industry knowledge should be proportionate with the scope, complexity, and variety of the auditee’s activities. The auditor should also have a proper understanding of the legal and regulatory framework in which the auditee operates to help facilitate the collection and evaluation of audit evidence.

According to Barucci and Milani (2018), knowledge and expertise are especially crucial in an auditor’s capacity to implement professional judgment and execute vital parts of the audit, such as recognizing and measuring the risks of substantial misstatement and applying the correct rejoinders to address the detected threats. The study results suggest that examiners or supervisory entities should have the authority to recommend minimum auditor competency requirements if they identify significant deficiencies in the audit process or if they recognize discrepancies affecting the qualities of audit opinions. The significant correlation between sufficient appropriate audit evidence and the quality of audit opinion confirmed under hypothesis three suggests that guidelines and standards should incorporate detailed industry competency requirements for auditors operating in the target industries. The conditions may involve professional education and an understanding of key characteristics relevant to each sector.

Professional skepticism is another area of the potential application of the study's results. Hypothesis five confirmed a statistically significant relationship between the reliability of audit
evidence and the quality of the audit report. The hypothesis suggests that the quality of the auditor’s report influences the reliability of the audit evidence examined before forming the conclusions communicated through the audit report. Through this hypothesis, I observed the reflection of the need for auditors to adopt and apply a questioning mind throughout the audit process to establish the reliability of the audit evidence under assessment. Auditors should use skepticism during the collection and confirmation of audit evidence from management and remain inquisitive throughout the engagement.

The study results suggest that auditors consider whether different measurements or procedures are better than those chosen and applied by management. They should memorialize in written form the audit methodology, the evidence collected, the reasoning applied, and the deductions, inferences, or conclusions attained as results of those assessments. According to Zulfikar et al. (2020), auditors’ ability to use and practice appropriate professional skepticism is always significant. Di Fabio (2019) indicated that the level of scrutiny on the skepticism becomes considerable in extent when it comes to the audits of financial services and products due to the quantity and magnitude of accounting valuations and the likelihood for constrained and biased evidence that could impact management assumptions.

According to Cohen et al. (2017), professional skepticism is predominantly imperative when auditing substantial management estimations and assumptions, particularly the measurements concerning an extensive level of uncertainty. Brazel et al. (2019) noted that skepticism is also critical when detecting and assessing sizable unusual or odd operations and uncovering transactions subject to fraud and inaccuracies due to the circumvention of existing controls or the existence of ineffective controls. In the target industries, the need for professional skepticism emphasizes the vital role that auditors play in conveying trust in audited financial
statements and the assurance communicated to stakeholders through the audit opinion (Rodgers et al., 2017). The public responsibility is exceptionally pertinent to the financial strength of the overall economy, given financial institutions’ role as intermediaries between economic agents (Brazel et al., 2019). The quality of the audit services is vital to the efficacy of such public functions. Moreover, the auditor has a duty of due professional care, which according to Rodgers et al. (2017), entails avoiding the presumption of undisputed trustworthiness from management.

**Summary of Application to Professional Practice**

Cohen et al. (2017) suggested that auditors accomplish various roles, comprising advisory services, financial reporting, auditing, and non-audit services. Stakeholders expect proficiency from the auditors and professionalism in many financial matters (Brazel et al., 2019). Consequently, Bae et al. (2019) emphasized that auditors need to ensure they understand the detailed requirements of each auditee and industry in which they operate to better serve their auditees and preserve the public interest or, at least, send an early warning to regulatory authorities. The result of this study impacts audit or accounting practices in two key areas: a) recommending a strengthened framework for the assessment and reliance on audit evidence, and b) bridging the gap between auditors and examiners. Stein (2019) suggested that professional auditors should be cognizant of auditees' best business practices and reporting requirements in the target industries. Auditors must apply this knowledge to prepare reports and financial statements and perform audits truthfully.

Chen et al. (2018) underscored that all stakeholders, including board members, supervisory organizations, and potential investors, rely on audited financial statements to inform their decision-making process. Cao et al. (2019) posited that it is essential that auditors perform their services in the public interest. Auditors must have a strong comprehension of auditing in the
financial sector. They must adequately obtain, assess, question, audit evidence, and form an independent opinion based on reliable, sufficient, and appropriate audit evidence (Chen, et al., 2017).

The results of this study aids auditors in learning more about the audit evidence and the factors that may have an impact on or a relationship with the sufficiency and appropriateness of audit evidence. Professional organizations and standard-setting bodies have established extensive principles and guidelines to assist auditors in their engagements. The regulations and policies integrate the requirement for auditors to safeguard the public interest, which demonstrates that auditors and examiners ultimately have a shared responsibility in preserving public trust in auditees and the financial system at large. Stakeholders can use auditors' work products to detect and recognize risk factors, design audit plans, inform the rulemaking or legislative process, and develop substantial evidence during litigations or support a legal opinion in court proceedings. Therefore, auditors must ensure that the audit evidence that they collected during their engagement was sufficient and appropriate enough to withstand any scrutiny from an informed, independent party.

The results of this thesis apply to all financial organizations in the United States banking and securities industries. Overall, the results may also apply to the assessment and study of audit evidence in the professional practice of audit services, where appropriate. For example, incentives for auditors to encourage best practices and mitigate inadequacies in the collection and evaluation of audit evidence applies to other industries or sectors of the economy. However, widespread application of the study results was not the intended purpose of the study. Instead, practitioners, supervisory organizations, auditees, policymakers, and other stakeholders could
learn from the results of this study and use this knowledge to understand better the correlation between audit evidence and audit reports and the role it plays in the audit process.

Investors can also use the results to question or assess the reliability of audit reports published by publicly traded financial organizations before making investment choices. The Readers should extensively distribute the study results to stakeholders in the target industries. I also recommends wide distribution of the research findings in academic and industry journals to advance the capability to practice and implement best practices in the study and review of audit evidence. Readers can also share the findings through electronic media sources such as news articles, professional opinion blogs, and the internet site of professional organizations, supervisory organizations, standard-setting bodies, independent audit firms, and social media platforms.

**Recommendations for Further Study**

The study identified areas of potential gaps that require additional research to obtain further detailed data. The first area is the auditor-auditee relationship and its correlation with audit evidence. The analysis of respondents’ data showed that 41.62% of participants remained neutral in their responses by indicating that the professional relationship between the auditor and audited entity did not impact sufficient appropriate audit evidence. In contrast, the second-largest percentage of respondents, or 32.74% of participants, indicated that the relationship impairs sufficient appropriate audit evidence in response to this question.

This question remains one of the areas of further research. I can examine the auditor-auditee relationship to ascertain its effect on sufficient appropriate audit evidence. Based on respondents’ data, I could not conclusively establish whether the auditor-auditee relationship had any impact on or correlation with sufficient appropriate audit evidence. Therefore, there is a need
to conduct further quantitative research on the auditor-auditee relationship to establish a correlation between these variables.

The study results identified the need to conduct further research in statistical sampling techniques in the auditing process. Although widely used statistical sampling techniques exist, I did not find sufficient evidence to support the consistent use of statistical sampling techniques in the auditing process. I noted that there is constantly a risk that the auditor’s sample does not reflect the essential characteristics or elements of the entire population. Auditors limit their assessment and consent to taking on sampling risk. After accepting the risk, auditors perform additional or alternate procedures to compensate for the sample’s failure to represent the population. However, the auditor cannot eliminate the risk of failing to capture significant features or fundamentals of the population. Audit sampling depends, at times, on the practice of using judgments relative to exclusions, materiality, and developing conclusions.

I noted that sampling risk ascended from the likelihood that auditors’ judgment and inferences could diverge from the inferences. Primarily when an examination of controls or a significant test is constrained to a sample, the risks would formulate if the auditors applied the examination to all elements in the population or group of elements under audit. An actual sample could comprise proportionally additional or fewer financial misstatements or nonconformities from established controls that exist in the population or group of elements as a whole. Therefore, I noted that further research is needed on consistent statically sampling techniques during the selection, analysis, and documentation of audit evidence.

Reflections

I undertook this study a specific portion of the audit process in the United States banking and securities industries. I examined audit evidence to determine whether a correlation existed
between six dependent variables and the sufficiency and appropriateness of audit evidence. Through the hypothesis analysis, I discovered that a statistically significant relationship existed between sufficient appropriate audit evidence and the other six variables in the study, which was:

(a) the quality of audit opinions, (b) the source of audit evidence, (c) management assertions, (d) the reliability of audit evidence, (e) internal control systems, and (f) audit report quality. The results showed that there is a need to bridge the gap between the audit and examination processes. The results also identified the need to update existing professional standards and allow auditors’ to directly communicate matters requiring attention to supervisory entities without involving the auditees.

**Personal & Professional Growth**

The dissertation was an inspiring and thought-provoking process that ultimately led to significant personal and professional growth. On the personal growth front, the study inspired me to develop critical self-awareness. The study provided a language for my unique personality and drove me to conduct significant reading on academic studies in finance and accounting and sparked a strong interest in scientific research. From the outset, the study allowed me to develop a personal vision centered on designing and completing scientific research in the accounting field.

The personal vision had professional implications because completing higher education at the doctoral level equipped me with the necessary competitive edge and academic knowledge to pursue career development. After establishing a clear personal vision to achieve the doctoral research, I planned to reach this goal. The study drove me to develop a personal development plan including specific milestones to ensure I stay on track and perform a periodic assessment of
progress in the developmental agenda. The main byproduct of the development plan was time
management which proved to be crucial throughout the dissertation.

The dissertation also helped me write a comprehensive list of daily, weekly, and monthly
goals. I tracked the accomplishment of each goal in a personal diary, which allowed to improve
my writing style and gave an outlet for documenting daily, weekly, and monthly as well as
annual achievements. I reflected on behavioral aspects of the dissertation process, remarks, and
experiences through tracking accomplishments. Conducting the research also allowed me to
consider how to make changes and improvements to act differently or similarly in the future. In
essence, the research motivation is to document critical stages of the research process, maintain a
written record of the thoughts and actions driving the study, and therefore allow to track and
measure progress.

The dissertation provided me with advanced academic knowledge in the professional
field of choice on the professional front. Moreover, I applied all the techniques learned through
personal growth to professional development. The soft skills learned through personnel growth
seamlessly applied to professional development. I continued to have an inquisitive mind and an
improved writing style when documenting work products or leading teams in the work
environment. The dissertation motivated me to seek additional professional education and
improve my expertise. The dissertation shaped my understanding of complex financial,
management, and accounting concepts. Conducting the study increased my level of knowledge
and expertise. Peers and institutional stakeholders saw me as a resource to consult for gaining
insights on best practices in a specific area relating to auditing, policy implications of regulatory
requirements, or examinations.
**Biblical Perspective**

The study of the reliability and appropriateness of audit evidence can relate to the biblical teachings about honesty and trustworthiness. As taught by the Holy Scriptures, one of the critical constraints of trustworthiness is bringing our work and creating good quality products for those who have confidence in us. A key passage of the Scriptures teaches that *She is like the merchant ships; she brings her food from afar. Proverbs 31:14.* Proficient and dependable auditors should learn from these teachings and ensure that their work benefits their customers and the public. The Holy Scriptures further teach that *you shall not have in your bag differing weights, a large and a small. You shall not have in your house differing measures, a large and a small. You shall have a full and just weight; you shall have a full and just measure, that your days may be prolonged in the land which the Lord your God gives you. Deuteronomy 25:13-16.* Auditors must embody these principles and fulfill the fiduciary obligation of trust to all those who rely on their opinions and work products.

Trustworthiness in biblical teaching correlates to the observation of professional principles in the auditing and business environment. Auditors’ obligation to perform their engagements following established standards relates to the scriptural responsibility to remain honorably genuine and reasonable in all our actions. Reasonableness and prudence in our activities are consistent with the rules that society developed and established for all its components. In their greater spiritual significance, honesty and trustworthiness are the qualities of being dependable or virtuous in the eyes of the Holy Scriptures.

Trustworthiness in the context of examining audit evidence includes integrity, morality, behavior, and staying true to the promises we make. The biblical implications of honesty find their reflection in auditors’ ability to collect and examine audit evidence. The honesty and
trustworthiness in their biblical senses require auditors to convey the true nature of the auditee’s financial condition through their work products. The implications of trustworthiness are consequently founded upon the spiritual standards of being dependable and noble because the Scriptures teach that Finally, brothers and sisters, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable - if anything is excellent or praiseworthy - think about such things, Philippians 4:8.

The Scriptures instruct us to dissociate ourselves from unfair and deceptive practices. In Leviticus 19:11-13, the scriptures teach that Do not steal. Do not lie. Do not deceive one another. Do not swear falsely by my name and so profane the name of your God. I am the Lord. Do not defraud or rob your neighbor. This passage calls explicitly for the proscription of dishonesty or deception. When the auditor knowingly fails to exercise due professional care and issues an inherently misleading audit opinion or writes an audit report that is not the true reflection of the auditee’s condition, the auditor violates the above biblical precept. The biblical call to refrain from falsely swearing in God’s name can be interpreted as a warning to auditors to exercise professional skepticism in their engagements and abstain from issuing an audit opinion without first performing adequate and informed due diligence. The verses imply that auditors must be careful of all they do to ensure they are not transgressing biblical principles.

In Leviticus 19:35-36, the Scriptures teach that: Do not use dishonest standards when measuring length, weight, or quantity. Use honest scales and honest weights, an honest ephah and an honest hin. This passage conveys that all forms of deceits and distortions are unacceptable, which in many cases can be unlawful for observant auditors. Auditors have the ethical responsibility to avoid misleading actions and habits. The auditors must ensure that auditees preserve a high degree of moral conduct. Auditors must avoid showing auditees how to
act deceptively or contribute to the concealment of fraudulent practices by failing to perform a competent and independent review of audit evidence. Furthermore, auditors should avoid associating themselves with auditees with questionable standards and those who are not disinclined to defraud consumers and the public.

**Summary of Reflections**

I noted that similar studies had not been performed at the international level, specifically in the banking and securities industries. I interested to see what other researchers find when examining the sufficiency and appropriateness of audit evidence in the European or Asian financial sectors. Further studies on audit evidence at the global level would have more impact if other researchers could obtain additional data to compare results and see if correlation factors between the studies globally established variables. Further studies could prove that no particular technique of assessing audit elements has a statistically significant correlation with sufficient appropriate audit evidence or demonstrate the opposite. If other researcher can undertake similar studies globally in other regional areas or lines of business, they can establish significant cognizance on the matter and contribute to the existing body of knowledge about the analysis of audit evidence.

The results of this study contributed to the set of studies on the sufficiency and appropriateness of audit evidence that exist regarding financial examinations in the United States banking and securities industries. Incidentally, I recommends further study on auditing and supervisory examination in the target industries. Based on the restricted availability of extensive experiential research on audit evidence informed by U.S. securities and banking organizations, numerous prospects are open to further inquiries. The current study was limited to six
hypotheses, examined seven critical variables related to the audit evidence, and focused on studying data obtained from 397 respondents.

I recommend that further studies include more than six hypotheses, more than seven variables, and other audit elements such as audit content, audit scope, materiality, audit risks, procedures, or timing requirements. Further studies can also consider other industries or select a larger sample of respondents. The consideration of other audit elements or factors and the selection of a larger sample of respondents can assist in better recognizing other variables that can be correlated with audit evidence and expand the research findings. Considering other industries or larger sample sizes could improve the research model, assist in establishing cross-cutting conclusions, and expand the body of knowledge beyond the financial sector.

**Summary of Section 3**

I designed and executed this applied doctoral research thesis to study the sufficiency and appropriateness of audit evidence in the United States. I specifically examined the relationship between sufficient appropriate audit evidence and the following variables (a) the quality of audit opinions, (b) the source of audit evidence, (c) management assertions, (d) the reliability of audit evidence, (e) internal control systems, and (f) audit report quality. I gathered survey data from a sample of 397 respondents comprised of external auditors, securities examiners, and bank examiners. The tests performed included a non-parametric test using Spearman’s coefficient to determine the correlation between the above-cited variables. The results indicated a significant relationship between all dependent variables and the independent variable. I noted the following findings:

- A strong, positive, and statistically significant correlation exists between the source of audit evidence and sufficient appropriate audit evidence, which was statistically
significant and showed \( r_s (395) = .907, p < .001 \). Subsequent tests also showed similar strong, positive, and statistically significant correlations between:

- Management assertions and appropriate audit evidence showed \( r_s (395) = .734, p < .001 \).
- Sufficient appropriate audit evidence and the quality of audit opinion, which showed \( r_s (395) = .908, p < .001 \).
- Effective internal control systems and reliable audit evidence showed \( r_s (395) = .688, p < .001 \).
- The audit evidence's reliability and the audit report's quality, which showed \( r_s (395) = .806, p < .001 \).
- The quality of financial systems and sufficient appropriate audit evidence, \( r_s (395) = .684, p < .001 \).

Summary and Study Conclusions

I conducted the current to investigate the sufficiency and appropriateness of audit evidence in the united banking and securities industries. The results of this study aid in addressing gaps in the literature concerning the evaluation or assessment of sufficient appropriate audit evidence in the target industries. Much of the current literature on audit evidence relates to pronouncements issued by standard-setting bodies in the professional field of interest. The pronouncements are broad in nature and apply the overall auditing process as a whole. The research attempted to address six questions comprised of a leading research question supplemented by five secondary questions. The research findings allowed me to conclusively address those questions outlined in the above sub-section on study results and research questions. The study findings showed that a statistically significant relationship exists between the sufficient appropriate audit evidence and the critical variables in the study.
Auditors, examiners, and associated stakeholders would benefit from implementing the study’s recommendations. The benefits can arise from the development of clarified guidance, the establishment of joint taskforces, the creation of specialized professional education requirements, and the application of best practices to drive greater public confidence in the target industries. Implementing the recommendations will also lead to creating an emergent forum of exchanges between auditors and examiners. The recommendations will help foster the enhancement of specialized skills and expertise to promote an environment of strengthened fiduciary responsibilities.

The improvement and synergy of professional expertise between auditors and examiners will better equip both professionals in meeting and addressing the challenges arising from the financial sector. The synergy of action will subsequently assist in constructing sounder and informed practices to safeguard the public interest and reinforce public confidence in the United States financial system. Other industries in the United States or similar lines of business on the global stage can learn from the study’s results and apply the research findings research to strengthen their awareness of the factors closely associated with audit evidence.
References

https://doi.org/10.1111/1475-679X.12099

Abrams, L. (2016). The Bancorp: A Test for Post-Enron GAAP.  

https://doi.org/10.1108/jfra-05-2020-0151

https://www.aicpa.org/content/dam/aicpa/research/standards/auditattest/downloadeddocuments/au-c-00500.pdf

https://doi.org/10.1177/1052562916631109


Alzeban, A., & Sawan, N. (2015). The impact of audit committee characteristics on the implementation of internal audit recommendations. *Journal of International Accounting, Auditing and Taxation, 24*, 61-71. [https://doi.org/10.1016/j.intaccaudtax.2015.02.005](https://doi.org/10.1016/j.intaccaudtax.2015.02.005)


https://doi.org/10.1111/1911-3846.12427


https://eprints.ugd.edu.mk/id/eprint/24435


https://doi.org/10.1145/2746090.2746098


https://doi.org/10.2469/faj.v73.n2.4


https://doi.org/10.1016/j.sbspro.2015.11.042

https://doi.org/10.1016/j.jns.2017.01.032

https://doi.org/10.3926/ic.683

https://doi.org/10.1002/hrdq.21345

https://doi.org/10.1016/j.intaccaudtax.2015.02.001

https://doi.org/10.1017/cbo9781139013734.008

https://doi.org/10.2308/ajpt-51453


https://doi.org/10.1080/08839514.2018.1451032

https://doi.org/10.1080/14783363.2013.876181


https://doi.org/10.1080/10705511.2016.1148605


https://doi.org/10.1108/MAJ-06-2014-1045


Kennedy-Shaffer, L. (2019). Before p< 0.05 to beyond p< 0.05: Using history to contextualize p-values and significance testing. *The American Statistician, 73*(sup1), 82-90. https://doi.org/10.1080/00031305.2018.1537891


[https://doi.org/10.9770/jesi.2018.6.1(9)](https://doi.org/10.9770/jesi.2018.6.1(9))


[https://doi.org/10.1111/faam.12034](https://doi.org/10.1111/faam.12034)

[https://doi.org/10.1016/j.jacceco.2015.08.003](https://doi.org/10.1016/j.jacceco.2015.08.003)

[https://doi.org/10.1007/978-3-319-90521-1_9](https://doi.org/10.1007/978-3-319-90521-1_9)


Maarouf, H. (2019). Pragmatism as a supportive paradigm for the mixed research approach: Conceptualizing the ontological, epistemological, and axiological stances of pragmatism. *International Business Research, 12*(9), 1-12. [https://doi.org/10.5539/ibr.v12n9p1](https://doi.org/10.5539/ibr.v12n9p1)


Markham, A., & Stavrova, S. (2016). Internet/cryptocurrency research. *Qualitative research*, 229-244. [https://doi.org/10.4135/9781848608191.d28](https://doi.org/10.4135/9781848608191.d28)


[https://doi.org/10.1002/sim.7614](https://doi.org/10.1002/sim.7614)


[https://doi.org/10.1002/9781119410867.ch15](https://doi.org/10.1002/9781119410867.ch15)

[https://doi.org/10.1007/978-3-030-14038-0_3](https://doi.org/10.1007/978-3-030-14038-0_3)


[https://doi.org/10.1016/j.jbtep.2018.08.009](https://doi.org/10.1016/j.jbtep.2018.08.009)

[https://doi.org/10.1177/1558689815607096](https://doi.org/10.1177/1558689815607096)


[https://hdl.handle.net/10520/EJC-f99b3cbbe](https://hdl.handle.net/10520/EJC-f99b3cbbe)


https://doi.org/10.1108/02580540210793527


47. https://doi.org/10.22610/jsds.v7i1.1228


http://www.managementjournal.info/index.php/IJAME


https://doi.org/10.35808/ijeab/325


https://doi.org/10.3389/fpsyg.2017.00616


[https://doi.org/10.2308/isys-51494](https://doi.org/10.2308/isys-51494)

[https://doi.org/10.1213/ane.000000000000286](https://doi.org/10.1213/ane.000000000000286)

[https://doi.org/10.1016/j.sapharm.2019.05.023](https://doi.org/10.1016/j.sapharm.2019.05.023)


Auditing. *International Journal of Engineering & Technology*, 7(2.34), 5-11.

https://www.researchgate.net/profile/Abdul-Salam-Shah/publication


https://d1wqtxts1xzle7.cloudfront.net/58765080/Pros_and_cons_of_sampling-with-cover-page-


https://doi.org/10.5430/afr.v7n4p184


https://doi.org/10.1111/joes.12208


https://doi.org/10.1016/j.intfin.2015.05.004


https://doi.org/10.1016/j.jfs.2016.04.004


van Hillo, R., & Weigand, H. (2016, June). Continuous auditing & continuous monitoring: Continuous value?. In *2016 IEEE tenth international conference on research challenges in information science (RCIS)* (pp. 1-11). IEEE. [https://doi.org/10.1109/RCIS.2016.7549279](https://doi.org/10.1109/RCIS.2016.7549279)


https://doi.org/10.2991/apbec-18.2019.2


*Longitudinal and Life Course Studies, 8*(4), 401-416.  
http://dx.doi.org/10.14301/llcs.v8i4.434

[https://doi.org/10.1016/j.cobeha.2017.09.012](https://doi.org/10.1016/j.cobeha.2017.09.012)


Wilson, J. (2018). Rethinking the use of audit to drive improvement, 3-4.  
[https://doi.org/10.1177/1757177417746732](https://doi.org/10.1177/1757177417746732)


https://search.yahoo.com/search?p=google+scholar&fr=yfp-t&ei=UTF-8&fp=1


https://doi.org/10.3758/s13428-017-0858-x


https://doi.org/10.1080/00014788.2020.1824115


https://doi.org/10.4236/ojacct.2018.71001


https://doi.org/10.1108/jaee-10-2018-0113


Appendix A: Pre-Data Collection Authorization and Support

From: Guilavogui, Adama
Sent: Wednesday, May 27, 2020 9:50 PM
To: 
Cc: Guilavogui, Adama

Subject: Request for Permission to Use Survey Tool

Dear Sir or Madam,

My name is Adama Guilavogui. I am a doctoral student of Accounting from Liberty University in Lynchburg, Virginia in the United States. I am writing my dissertation titled “Examining the sufficiency and appropriateness of audit evidence in the United States banking and securities industries”. Under the direction of my dissertation committee chaired by Dr. Gene Sullivan at the Liberty University Graduate School of Business.

I would like your permission to use the data collection instrument from the study published by IAASB under the title “A Framework for Audit Quality”. It appeared from my initial reading that the survey of Stakeholder Perspectives of Audit Quality contained in the referenced study is relevant to my research. I would like to obtain your permission to use the survey instrument and your confirmation that I can reproduce part of the study in my research.

Specifically, I would like to use, print, and modify the data collection tool (survey) from the study to adapt it to the specific context of my research under the following conditions:

- I will use the tool only for my research study and will not sell or use it with any compensated or curriculum development activities.
- I will include the copyright statement, if any, on all copies of the instrument.
- I will send a copy of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please send me a copy of the questions used in the survey and indicate your acceptance by replying to me through e-mail at [redacted] my contact number is [redacted]

Adama Guilavogui
Doctoral Student
Graduate School of Business
Liberty University
Lynchburg, VA, United States
Hello

Thank you for your interest in reproducing the above IFAC content solely as reference(s) in your doctoral dissertation to be submitted to the Liberty University. I am pleased to inform you that as per your request below of May 27, non-exclusive permission is granted.

As a condition of granting this one-time permission, please ensure that the copyright statement below is reflected in your doctoral dissertation:

This following [doctoral dissertation name] includes text from A Framework for Audit Quality, published by the International Federation of Accountants (IFAC) in January 2013 and is used with permission of IFAC. Such use of IFAC’s copyrighted material and trademarks in no way represents an endorsement or promotion by IFAC. Any views or opinions that may be included in [Thesis name] are solely those of the writer and do not express the views and opinions of IFAC or any independent standard setting board associated with IFAC.

This grant of permission applies solely to the request noted in this email and in the request submitted on May 27. For additional requests to reproduce, or translate and reproduce IFAC publications, please refer to the appropriate Policy Statement on our website: http://www.ifac.org/about-ifac/translations-permissions and submit a new written request to https://www.ifac.org/permission-request.

If we may be of further assistance, please do not hesitate to contact me your convenience.

Kind regards,

Judy Challenger
Assistant Manager, Intellectual Property
International Federation of Accountants
520 Fifth Avenue
New York, NY 10017 USA

Learn more at: ifac.org  facebook  linkedin  blog
Initial Survey Tool from IFAC

Stakeholder Survey

To assist with the development of the framework, in 2011 the IAASB undertook a survey of stakeholders in nine countries (Australia, Canada, Germany, Japan, Netherlands, New Zealand, South Africa, UK, and US) as well as some members of the IAASB’s Consultative Advisory Group.

Stakeholders were provided with a list of possible factors that they might take into account in forming a view on the likely quality of an audit and asked to indicate whether the factors were (a) important, (b) less important, or (c) not important. They were also requested to add other factors not on the list and provide comments.


199 responses were received from the following stakeholder groups:

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit committee members</td>
<td>32</td>
</tr>
<tr>
<td>Institutional investors</td>
<td>43</td>
</tr>
<tr>
<td>Senior management of larger entities</td>
<td>32</td>
</tr>
<tr>
<td>Senior management of smaller entities</td>
<td>33</td>
</tr>
<tr>
<td>Primary public sector stakeholders</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>169</strong></td>
</tr>
</tbody>
</table>

Based on the survey, the key factors that key stakeholder groups are likely to take into account in forming a view on the likely quality of an audit are described below. These factors have been used to help develop the Framework for Audit Quality and the links to relevant attributes are as follows:

<table>
<thead>
<tr>
<th>Key</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M:</td>
<td>Management</td>
<td>✓</td>
</tr>
<tr>
<td>AC:</td>
<td>Audit Committees</td>
<td>✓</td>
</tr>
<tr>
<td>Inv:</td>
<td>Institutional investors and primary public sector stakeholders</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor</th>
<th>M</th>
<th>AC</th>
<th>Inv</th>
<th>Attribute</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robustness of the audit</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement efficiency</td>
<td></td>
<td>✓</td>
<td></td>
<td>1.7.4</td>
<td></td>
</tr>
</tbody>
</table>

1 Refer to the table at paragraph 30, Summary of Attributes.
<table>
<thead>
<tr>
<th>Factor</th>
<th>M</th>
<th>AC</th>
<th>Inv</th>
<th>Attribute&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficient use of management’s time and resources</td>
<td></td>
<td>✔</td>
<td></td>
<td>1.7, 4</td>
<td></td>
</tr>
<tr>
<td>Engagement team competence and continuity</td>
<td></td>
<td>✔</td>
<td></td>
<td>1.4.1, 1.4.2, 1.4.3 and 1.4.5</td>
<td></td>
</tr>
<tr>
<td>Competence of senior team</td>
<td></td>
<td>✔</td>
<td></td>
<td>1.4.1, 1.4.2 and 1.4.3</td>
<td></td>
</tr>
<tr>
<td>Communications: quality usefulness, timeliness</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>2 and 3</td>
<td></td>
</tr>
<tr>
<td>Firm reputation</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>The firm’s reputation is not specifically addressed in the Framework as it is not an element of audit quality, but something that may emerge from sustained delivery of quality audits. There will, however, be other factors impacting a firm’s “brand image,” including its size, its marketing activities and the degree to which it may be adversely affected by litigation or regulatory action.</td>
</tr>
<tr>
<td>Professional relationship</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>1.1, 1.2 and 1.3</td>
<td></td>
</tr>
<tr>
<td>Partner accessibility</td>
<td></td>
<td>✔</td>
<td></td>
<td>1.4.7</td>
<td></td>
</tr>
<tr>
<td>Knowledge and experience of entity and industry</td>
<td></td>
<td>✔</td>
<td></td>
<td>1.4.2</td>
<td></td>
</tr>
<tr>
<td>Independence from management</td>
<td></td>
<td>✔</td>
<td></td>
<td>1.1.3</td>
<td></td>
</tr>
<tr>
<td>Perceptions of independence</td>
<td></td>
<td></td>
<td>✔</td>
<td>1.1.3</td>
<td></td>
</tr>
<tr>
<td>Strength of regulatory framework, including quality of audit committee</td>
<td></td>
<td>✔</td>
<td></td>
<td>4.1, 4.2 and 4.4</td>
<td></td>
</tr>
<tr>
<td>Regulatory inspection</td>
<td></td>
<td>✔</td>
<td></td>
<td>1.8.2</td>
<td></td>
</tr>
<tr>
<td>Transparency reports</td>
<td></td>
<td>✔</td>
<td></td>
<td>2.2.1</td>
<td></td>
</tr>
<tr>
<td>Quality of client’s financial reports</td>
<td></td>
<td>✔</td>
<td></td>
<td>2.1.5</td>
<td></td>
</tr>
</tbody>
</table>
Sample Informed Consent Letter

Dear Participant,

You are invited to take part in a research study about the sufficiency and appropriateness of audit evidence in the United States banking and securities industries. The researcher is professionals over the age of 18 who are current bank examiners, securities examiners and auditors with specific working knowledge of the United States banking and securities industries. You may have gained access to this study through an organization that agreed to participate to assist in recruiting potential participants. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part. This study is being conducted by a researcher named Adama Guilavogui, who is a doctoral student at Liberty University.

Background Information:
The purpose of this study is to assess the sufficiency and appropriateness of audit evidence in the United States banking and securities industries.

Procedures: If you agree to be in this study, you will be asked to:
- complete a brief demographic questionnaire that includes five questions that will take approximately one minute to complete.
- complete a survey pertaining to the sufficiency and appropriateness of audit evidence that includes 13 questions that will take approximately 10 minutes to complete.

Here are some sample questions:

1. What is the extent to which the existence and effectiveness of regulatory inspection, supervision or examination in relation to the audited entity’s ability to produce unaltered financial records improves or impairs sufficient appropriate audit evidence?
2. What is the extent to which the transparency of financial reports and the reliability of underlying records in relation to the audited entity’s ability to support its assertions improves or impairs sufficient appropriate audit evidence?

Voluntary Nature of the Study: This study is completely voluntary. Everyone will respect your decision of whether you choose to be in the study. No one associated with this survey will treat you differently if you decide not to be in the study. Additionally, this study is completely anonymous, no one will know if you did nor did not participate. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study: Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress, and concerns the type of relationships with the entities you audit or examine. Being in this study would not pose risk to your safety or wellbeing. The benefits of the study include voicing your thoughts and concerns regarding the sufficient appropriate audit evidence and its impact the audit opinions in your industry.

Payment: This study is completely voluntary; there will be no reimbursement or payment for time.

Privacy: Any information you provide will be kept anonymous. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by password
protection and data encryption. Data will be kept for a period of at least 5 years, as required by the university.

**Contacts and Questions:** If you have questions now or later, you may contact the researcher, Adama Guilavogui, via [Contact Information]. You can ask any questions you have before you begin the survey.

**Statement of Consent:** I have read the above information. I feel I understand the study well enough to decide about my involvement. By clicking the link below, I understand and agree to the terms described above. Please indicate your consent by clicking the link below. Link to Survey:
Sample Recruitment Letter for Social Media, Email or Phone Outreach.

Dear Participant

My name is Adama Guilavogui and I am a Doctoral Student from the School of Business at the Liberty University. I am writing to invite you to participate in my research study about “Examining sufficient appropriate audit evidence in the United States banking and securities industries”.

If you decide to participate in this study, you will complete a questionnaire on www.surveymonkey.com. I am not offering any sort of compensation for this study. I would not need audio or video records from you. The survey will automatically capture your anonymous responses in written electronic format and send them to me for analysis. The project is not funded.

Remember, this is completely voluntary. You can choose to be in the study or not. If you would like to participate or have any questions about the study, please email or contact me

Thank you very much.

Sincerely,

Adama Guilavogui
DATA COLLECTION TOOL

The Study Questionnaire

Section 1: Background Information

About the Respondent:

1. Respondent’s Gender
   a. Male ☐                       b. Female ☐

2. Respondent Age Group
   a. 20-29 years ☐                  b. 30-39 ☐
   c. 40-49 years ☐                  d. 50-59 years ☐
   e. 60 to more years ☐

3. Respondent’s highest level of completed education
   a. bachelor’s degree ☐            b. Master of Science Degree ☐
   c. MBA/Master of Accounting ☐    d. Juris Doctor ☐
   d. PhD or Other Doctorate Degree ☐
   e. Other Professional Degree (Please Specify).................................................................
   f. Professional Certification (Please Specify).................................................................

About the Respondent’s Professional Occupation

4. Which of the following occupations matches your current profession?
   a. Bank Examiner ☐                b. Securities Examiner ☐
   c. External Auditor ☐

5. Current Institution of Employment
   a. FDIC ☐                        b. Federal Reserve ☐
   c. OCC ☐                         d. FINRA ☐
   e. NCUA ☐                        f. SEC ☐
   e. Audit Firm ☐

Section 2: Factors Relating to Audit Evidence Sufficiency and appropriateness

Please select the appropriate answer based on the following rating scale

<table>
<thead>
<tr>
<th>Rating</th>
<th>1 - Strongly improve</th>
<th>2 - Improve</th>
<th>3 - Does not improve nor impair (neutral)</th>
<th>4 - Impair</th>
<th>5 - Strongly impair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating Scale</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
The following questions relate to the reliability of the audit evidence and quality of the audit framework:

<table>
<thead>
<tr>
<th>Statement or Factors</th>
<th>Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the extent to which the significance or robustness of the audit and the source of audit evidence improve or impair sufficient appropriate audit evidence?</td>
<td>Choose an item.</td>
</tr>
<tr>
<td>2. What is the extent to which the efficiency of the audit engagement and the quality of the audit opinion improves or impairs sufficient appropriate audit evidence?</td>
<td>Choose an item.</td>
</tr>
<tr>
<td>3. What is the extent to which management assertions in relation to audit evidence and the auditor's efficient use of management's time and resources improves or impairs sufficient appropriate audit evidence?</td>
<td>Choose an item.</td>
</tr>
<tr>
<td>4. What is the extent to which the audit engagement team's competence and continuity of the audit in relation to the auditor's reliance on previous audits improve or impair sufficient appropriate audit evidence?</td>
<td>Choose an item.</td>
</tr>
<tr>
<td>5. What is the extent to which the auditor's independence from management and ability to collect audit evidence in relation to the quality of audit opinion improve or impair sufficient appropriate audit evidence?</td>
<td>Choose an item.</td>
</tr>
<tr>
<td>6. What is the extent to which communication, quality, usefulness, and timeliness of audit procedures in relation to the evidence collection process improve or impair sufficient appropriate audit evidence?</td>
<td>Choose an item.</td>
</tr>
<tr>
<td>7. What is the extent to which the perception of auditor's independence, the reliability of audit evidence collected by the auditor in relation to the quality of the audit report improve or impair sufficient appropriate audit evidence?</td>
<td>Choose an item.</td>
</tr>
<tr>
<td>8. What is the extent to which the audited entity's professional relationship with the audit firm in relation to the auditor's ability to apply adequate audit procedures improve or impair sufficient appropriate audit evidence?</td>
<td>Choose an item.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>9.</td>
<td>What is the extent to which the audit team’s knowledge and experience of the entity and its industry in relation to the audit team’s ability to perform pertinent audit techniques improves or impairs sufficient appropriate audit evidence?</td>
</tr>
<tr>
<td>10.</td>
<td>What is the extent to which the strength of regulatory and governance framework, and the effectiveness of internal control systems in relation to the auditee’s ability to produce reliable audit evidence improves or impairs sufficient appropriate audit evidence?</td>
</tr>
<tr>
<td>11.</td>
<td>What is the extent to which the existence and effectiveness of regulatory inspection, supervision or examination in relation to the audited entity’s ability to produce unaltered financial records improve or impair sufficient appropriate audit evidence?</td>
</tr>
<tr>
<td>12.</td>
<td>What is the extent to which the transparency of financial reports and reliability of underlying records in relation to the audited entity’s ability to support its assertions improve or impair sufficient appropriate audit evidence?</td>
</tr>
<tr>
<td>13.</td>
<td>What is the extent to which the quality of the audited entity’s financial reports and systems, and their ability to generate audit evidence, in relation to the quality of audit opinions improve or impair sufficient appropriate audit evidence?</td>
</tr>
</tbody>
</table>

**Respondent’s Opportunity to Provide Narrative or Suggestions:**

Please provide any other comments or suggestions as needed. Please be as detailed as possible (the researcher welcomes suggestions for improvement and future research).

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

Would respondent like to receive a summary of the findings, upon completion of the research?

   a. Yes [ ]  b. No [ ]

Thank you for your availability and taking the time to complete this survey.

Survey Monkey Link: https://www.surveymonkey.com
Appendix B: Survey Summary Data

Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

**What is your gender?**

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>48.85%</td>
</tr>
<tr>
<td>Male</td>
<td>53.15%</td>
</tr>
</tbody>
</table>

Answered: 397
Skipped: 0

**What is your age group?**

<table>
<thead>
<tr>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60 to more years</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.34%</td>
<td>30.98%</td>
<td>29.22%</td>
<td>23.17%</td>
<td>4.28%</td>
</tr>
</tbody>
</table>

Answered: 397
Skipped: 0
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is your highest level of education (completed)?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's Degree</td>
<td>78</td>
</tr>
<tr>
<td>MBA/Master</td>
<td>121</td>
</tr>
<tr>
<td>Juris Doctor</td>
<td>93</td>
</tr>
<tr>
<td>Other Professional Degree - Master's Degree or Higher</td>
<td>56</td>
</tr>
<tr>
<td>PhD or Another Doctorate Degree</td>
<td>49</td>
</tr>
</tbody>
</table>

Answered 397  Skipped 0

Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

Which of the following occupations matches your current profession?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Examiner</td>
<td>43.83% 174</td>
</tr>
<tr>
<td>External Auditor</td>
<td>23.33% 95</td>
</tr>
<tr>
<td>Securities Examiner</td>
<td>32.24% 128</td>
</tr>
</tbody>
</table>

Answered 397  Skipped 0
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

Current institution of Employment?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDIC</td>
<td>17% 65</td>
</tr>
<tr>
<td>FINRA</td>
<td>14% 57</td>
</tr>
<tr>
<td>Federal Reserve</td>
<td>7% 28</td>
</tr>
<tr>
<td>Department of Treasury (OCC)</td>
<td>12% 47</td>
</tr>
<tr>
<td>Independent Audit Firm</td>
<td>24% 95</td>
</tr>
<tr>
<td>Securities and Exchange Commission</td>
<td>18% 71</td>
</tr>
<tr>
<td>National Credit Union Administration</td>
<td>8% 33</td>
</tr>
</tbody>
</table>

Answered 397, Skipped 0

What is your current institution of Employment?

![Bar chart showing responses for different institutions]
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the significance or robustness of the audit and the source of audit evidence improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>33.76%</td>
</tr>
<tr>
<td>Improve</td>
<td>56.09%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>7.61%</td>
</tr>
<tr>
<td>Impair</td>
<td>2.03%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.51%</td>
</tr>
</tbody>
</table>

Answered: 397
Skipped: 0

What is the extent to which the significance or robustness of the audit and the source of audit evidence improve or impair sufficient appropriate audit evidence?

![Bar chart showing responses]

- Strongly improve: 33.76%
- Improve: 56.09%
- Does not improve nor impair (neutral): 7.61%
- Impair: 2.03%
- Strongly impair: 0.51%
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the efficiency of the audit engagement and the quality of the audit opinion improves or impairs sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>32.23%</td>
</tr>
<tr>
<td>Improve</td>
<td>59.90%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>4.82%</td>
</tr>
<tr>
<td>Impair</td>
<td>1.78%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>1.27%</td>
</tr>
<tr>
<td>Answered</td>
<td>397</td>
</tr>
<tr>
<td>Skipped</td>
<td>0</td>
</tr>
</tbody>
</table>
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which management assertions in relation to audit evidence and the auditor's efficient use of management's time and resources improves or impairs sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>47.97%</td>
</tr>
<tr>
<td>Improve</td>
<td>48.22%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>3.55%</td>
</tr>
<tr>
<td>Impair</td>
<td>0.00%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.25%</td>
</tr>
</tbody>
</table>

Answered: 397
Skipped: 0
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the audit engagement team's competence and continuity of the audit in relation to the auditor's reliance on previous audits improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>41.88%</td>
</tr>
<tr>
<td>Improve</td>
<td>51.52%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>4.82%</td>
</tr>
<tr>
<td>Impair</td>
<td>1.52%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.25%</td>
</tr>
</tbody>
</table>

Answered: 397
Skipped: 0

What is the extent to which the audit engagement team’s competence and continuity of the audit in relation to the auditor’s reliance on previous audits improve or impair sufficient appropriate audit evidence?

![Bar chart showing responses]

Responses
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the auditor's independence from management and ability to collect audit evidence in relation to the quality of audit opinion improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>36.79%</td>
</tr>
<tr>
<td>Improve</td>
<td>60.31%</td>
</tr>
<tr>
<td>Does not improve nor impair</td>
<td>2.28%</td>
</tr>
<tr>
<td>Impair</td>
<td>1.02%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Answered 397, Skipped 0

What is the extent to which the auditor's independence from management and ability to collect audit evidence in relation to the quality of audit opinion improve or impair sufficient appropriate audit evidence?
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which Communication: quality, usefulness, and timeliness of audit procedures in relation to the evidence collection process improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>34.62%</td>
<td>135</td>
</tr>
<tr>
<td>Improve</td>
<td>62.69%</td>
<td>251</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>2.29%</td>
<td>9</td>
</tr>
<tr>
<td>Impair</td>
<td>0.25%</td>
<td>1</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.25%</td>
<td>1</td>
</tr>
</tbody>
</table>

Answered: 397
Skipped: 0
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the perception of auditor’s independence, the reliability of audit evidence collected by the auditor in relation to the quality of the audit report improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>29.50%</td>
</tr>
<tr>
<td>Improve</td>
<td>05.39%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>4.07%</td>
</tr>
<tr>
<td>Impair</td>
<td>0.51%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>1.53%</td>
</tr>
</tbody>
</table>

Answered 397
Skipped 0

The perception of auditor’s independence and the reliability of audit evidence collected by the auditor in relation to the quality of the audit report.
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the audited entity’s professional relationship with the audit firm in relation to the auditor’s ability to apply adequate audit procedures improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>4.57%</td>
</tr>
<tr>
<td>Improve</td>
<td>16.50%</td>
</tr>
<tr>
<td>Does not improve nor impair</td>
<td>41.62%</td>
</tr>
<tr>
<td>Impair</td>
<td>32.74%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>4.57%</td>
</tr>
</tbody>
</table>

Answered 384
Skipped 0

The audited entity’s professional relationship with the audit firm.
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the audit team’s knowledge and experience of the entity and its industry in relation to the audit team’s ability to perform pertinent audit techniques improves or impairs sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>18.53%</td>
</tr>
<tr>
<td>Improve</td>
<td>76.40%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>4.31%</td>
</tr>
<tr>
<td>Impair</td>
<td>0.76%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Answered 397, Skipped 0

The Audit Team’s knowledge and experience of the entity and its industry.
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the strength of regulatory and governance framework, and the effectiveness of internal control systems in relation to the auditee’s ability to produce reliable audit evidence improves or impairs sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>31.22%</td>
</tr>
<tr>
<td>Improve</td>
<td>63.96%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>3.05%</td>
</tr>
<tr>
<td>Impair</td>
<td>1.27%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.51%</td>
</tr>
</tbody>
</table>

Answered: 397
Skipped: 0

The Strength of regulatory and governance framework, and the effectiveness of internal control systems in relation to the auditee’s ability to produce reliable audit evidence.
What is the extent to which the existence and effectiveness of regulatory inspection, supervision or examination in relation to the audited entity’s ability to produce unaltered financial records improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>26.65%</td>
</tr>
<tr>
<td>Improve</td>
<td>65.74%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>6.35%</td>
</tr>
<tr>
<td>Impair</td>
<td>0.76%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.51%</td>
</tr>
</tbody>
</table>

Answered 397
Skipped 0

The existence and effectiveness of regulatory inspection, supervision, or examination.
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the transparency of financial reports and reliability of underlying records in relation to the audited entity’s ability to support its assertions improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>36.60%</td>
</tr>
<tr>
<td>Improve</td>
<td>57.11%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>4.57%</td>
</tr>
<tr>
<td>Impair</td>
<td>0.76%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.76%</td>
</tr>
<tr>
<td>Answered</td>
<td>397</td>
</tr>
<tr>
<td>Skipped</td>
<td>0</td>
</tr>
</tbody>
</table>

The transparency of financial reports and the reliability of underlying records

![Chart showing responses](chart.png)
Survey of Audit Evidence Sufficiency and Appropriateness in the United States Banking and Securities Industries

What is the extent to which the quality of the audited entity’s financial reports and systems, and their ability to generate audit evidence, in relation to the quality of audit opinions improve or impair sufficient appropriate audit evidence?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly improve</td>
<td>57.36%</td>
</tr>
<tr>
<td>Improve</td>
<td>38.60%</td>
</tr>
<tr>
<td>Does not improve nor impair (neutral)</td>
<td>2.28%</td>
</tr>
<tr>
<td>Impair</td>
<td>1.02%</td>
</tr>
<tr>
<td>Strongly impair</td>
<td>0.76%</td>
</tr>
</tbody>
</table>

Answered 397, Skipped 0

The quality of the audited entity’s financial reports and systems and their ability to generate sufficient appropriate audit evidence to supports the quality of audit opinions.
Appendix C: Data Analysis Tables

**Respondent’s Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>186</td>
<td>46.85</td>
</tr>
<tr>
<td>Male</td>
<td>211</td>
<td>53.15</td>
</tr>
<tr>
<td>Total</td>
<td>397</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Respondents’ Age Group**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29 Years</td>
<td>49</td>
<td>12.34</td>
</tr>
<tr>
<td>30-39 Years</td>
<td>123</td>
<td>30.98</td>
</tr>
<tr>
<td>40-49 Years</td>
<td>116</td>
<td>29.22</td>
</tr>
<tr>
<td>50-59 Years</td>
<td>92</td>
<td>23.17</td>
</tr>
<tr>
<td>60 Years or More</td>
<td>17</td>
<td>4.28</td>
</tr>
<tr>
<td>Total</td>
<td>397</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Respondent’s Highest Level of Education**

<table>
<thead>
<tr>
<th>Degree</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s Degree</td>
<td>78</td>
<td>19.65</td>
</tr>
<tr>
<td>MBA/Master</td>
<td>121</td>
<td>30.48</td>
</tr>
<tr>
<td>Juris Doctor</td>
<td>93</td>
<td>23.43</td>
</tr>
<tr>
<td>Professional Degrees</td>
<td>56</td>
<td>14.11</td>
</tr>
<tr>
<td>PhD or Other Doctoral Degrees</td>
<td>49</td>
<td>12.34</td>
</tr>
<tr>
<td>Total</td>
<td>397</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Respondent’s Professional Occupation**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Examiner</td>
<td>174</td>
<td>43.83</td>
</tr>
<tr>
<td>Securities Examiner</td>
<td>95</td>
<td>23.93</td>
</tr>
<tr>
<td>External Auditor</td>
<td>128</td>
<td>32.24</td>
</tr>
<tr>
<td>Total</td>
<td>397</td>
<td>100.00</td>
</tr>
</tbody>
</table>
### Cronbach’s Alpha – Reliability Statistics

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>.974</td>
<td>.975</td>
<td>7</td>
</tr>
</tbody>
</table>

### Cronbach’s Alpha – Inter-Item Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Sufficient Appropriate Evidence</th>
<th>Evidence Source</th>
<th>Opinion Quality</th>
<th>Management Assertions</th>
<th>Evidence Reliability</th>
<th>Internal Controls</th>
<th>Audit Report Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient Appropriate Evidence</td>
<td>1.000</td>
<td>.925</td>
<td>.924</td>
<td>.798</td>
<td>.006</td>
<td>.840</td>
<td>.921</td>
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<tr>
<td>Evidence Source</td>
<td>.925</td>
<td>1.000</td>
<td>.957</td>
<td>.827</td>
<td>.782</td>
<td>.921</td>
<td>.906</td>
</tr>
<tr>
<td>Opinion Quality</td>
<td>.924</td>
<td>.957</td>
<td>1.000</td>
<td>.814</td>
<td>.809</td>
<td>.900</td>
<td>.943</td>
</tr>
<tr>
<td>Management Assertions</td>
<td>.798</td>
<td>.827</td>
<td>.814</td>
<td>1.000</td>
<td>.693</td>
<td>.842</td>
<td>.780</td>
</tr>
<tr>
<td>Evidence Reliability</td>
<td>.806</td>
<td>.782</td>
<td>.809</td>
<td>.693</td>
<td>1.000</td>
<td>.763</td>
<td>.840</td>
</tr>
<tr>
<td>Internal Controls</td>
<td>.840</td>
<td>.921</td>
<td>.900</td>
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### Cronbach’s Alpha – Item-Total Statistics

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<tr>
<th></th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
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<tbody>
<tr>
<td>Sufficient Appropriate Evidence</td>
<td>10.68</td>
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<td>.904</td>
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<td>10.79</td>
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<td>.957</td>
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<td>Opinion Quality</td>
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<td>.963</td>
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<td>Management Assertions</td>
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<td>16.086</td>
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One-Sample Statistics

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<th>Std. Error Mean</th>
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<td>External Auditors</td>
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ANOVA test results of Education Level and Audit Evidence Sufficiency and Appropriateness

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<th>Mean Square</th>
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<td>Total</td>
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Hypothesis Testing 1

Correlations

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<th></th>
<th>Evidence Source</th>
<th>Evidence</th>
<th>Sufficient Appropriate Evidence</th>
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</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>.90**</td>
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<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.000</td>
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<tr>
<td>N</td>
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<td>397</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Correlation Coefficient</td>
<td>.907**</td>
<td>1.000</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.000</td>
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<td>N</td>
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</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Hypothesis Testing 2

Correlation:

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<th>Correlation Coefficient</th>
<th>Management Assertions</th>
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</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>.90**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.000</td>
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</tr>
<tr>
<td>N</td>
<td>397</td>
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<tr>
<td></td>
<td>Correlation Coefficient</td>
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<td>1.000</td>
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<tr>
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<tr>
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**. Correlation is significant at the 0.01 level (2-tailed).
### Hypothesis Testing 3

#### Correlations

<table>
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<tr>
<th>Spearman's rho</th>
<th>Sufficient Appropriate Evidence Correlation Coefficient</th>
<th>Sufficient Appropriate Evidence Sig. (2-tailed)</th>
<th>Opinion Quality Correlation Coefficient</th>
<th>Opinion Quality Sig. (2-tailed)</th>
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<tbody>
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<tr>
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<td>S.</td>
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<tr>
<td>Opinion Quality</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

### Hypothesis Testing 4

#### Correlations

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<th>Effective Internal Control Systems Sig. (2-tailed)</th>
<th>Reliable Audit Evidence Correlation Coefficient</th>
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**. Correlation is significant at the 0.01 level (2-tailed).

### Hypothesis Testing 5

#### Correlations

<table>
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<tr>
<th>Spearman's rho</th>
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<th>Quality of Audit Report Correlation Coefficient</th>
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**. Correlation is significant at the 0.01 level (2-tailed).
Hypothesis Testing 6

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**. Correlation is significant at the 0.01 level (2-tailed).