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## The Relationship Between Accountability, Transparency, and Company Performances: An Ex-Post Facto Study

Omari Bakari Mwayungu  
*Walden University*

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# Walden University

College of Management and Technology

This is to certify that the doctoral study by

Omari Mwayungu

has been found to be complete and satisfactory in all respects,  
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Walden University  
2021

Abstract

DBA Portfolio Capstone

The Relationship Between Accountability, Transparency, and Company Performances:

An Ex-Post Facto Study

by

Omari Mwayungu

MBA, Strayer University, 2014

BS, Thomas Edison State University, 2013

Doctoral Portfolio Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

October 2021

## Abstract

Companies that fully adopt accountability reporting practices are less likely to engage in financial fraud or unethical business behaviors, improving company performance (CP). The CP is predictable by accountability or corporate social responsibility (CSR) and transparency or corporate social responsibility disclosure (CSRSD). Financial managers of U.S. publicly traded companies who fail to adopt the CSR and CSRSD practices and inconsistently disclose annual financial reports could suffer from a lack of public trust and decreased profitability. Grounded in stakeholder theory, the purpose of this quantitative ex-post-facto study was to examine the relationship between CSR, CSRSD, and four CP outcome measures: income, return on equity, return on assets, and earnings per share. Secondary data were collected from the sample of 91 U.S. publicly traded companies listed on the NYSE for 2017, 2018, and 2019. The results of each of the four multiple linear regression analyses were not significant. A key recommendation for the Securities and Exchange Commission (SEC) is to implement accepted unique CSR reporting standards for all U.S. publicly traded companies. The implications for positive social change include the potential for financial managers and senior business leaders to promote sound ethical practices that could lead to social development and value creation for the communities and society.

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## Dedication

I would like to express my most sincere gratitude to God, who gave me the strength and wisdom to complete my doctoral study. My special thanks go to my parents, the late Mr. Bakari Mwayungu and Mrs. Mwajuma Mwayungu, for instilling in me the importance of education and to never give up on my dreams. I am immensely grateful to both of you for teaching me how to succeed in life. I dedicate this study to my wife, Rose Mwayungu; your love, compassion, support, and understanding have been immeasurable. My sincere appreciation goes to my father-in-law, Dr. Walter Odipo, for your prayer, support, and encouragement. Finally, I would like to thank the Mwayungu family for their support during this doctoral journey.

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I appreciate my family for their understanding and the sacrifices they made to help me achieve the title of Dr. Omari Mwayungu. Many thanks go to all my classmates for their constructive criticisms throughout my doctorate study. Finally, I would like to thank the previous researchers for their unwavering efforts in assuring that prospective researchers like myself can readily carry out related research.

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## Section 1: Background and Context

### **Historical Background**

Corporate governance (CG) was developed as an independent study field in the 1970s (Pargendler, 2016). The CG field has broadly improved since its initial introduction, and it incorporates multiple disciplines such as accounting, economics, ethics, finance, law, management, and organizational behavior (Pargendler, 2016). CG management primarily focuses on meeting the different interests of various stakeholders (Ntim, 2018). Girgenti et al. (2016) stated that CG's structure showed weaknesses during the financial reporting crisis in the early 2000s. Such deficiencies contributed to the decrease in emerging global markets and the economic collapse of 2008 (Bhagat & Bolton, 2019; Girgenti et al., 2016). Public policy reforms following changes in government and shifts in domestic priorities have played a significant role since 2000 in determining implementation strategies of CG.

The financial challenges in the 2000s created difficulties for various organizations in healthcare reformation and cyber-attacks (Girgenti et al., 2016). Such problems have intensely changed the government's regulatory requirements (Gold & Heikkurinen, 2018). Boubaker and Nguyen (2017) discussed the primary issues that affected some companies due to a lack of best CG practices, including higher-level management and organizational culture problems. CG best practices increase company profitability by attracting more investors willing to invest in other companies due to improved CP and reputation (Liang, 2012). Financial institutions inability to regulate themselves contributed to the financial crisis of 2008. The company's CSR and CSRD were essential

to the publicly traded companies for improving profitability. The purpose of this quantitative ex-post-facto study was to examine the relationship between CSR, CSRD, and CP in terms of profitability.

### **Organizational Context**

In this study, I used the quantitative ex-post-facto method to examine the relationship between CSR, CSRD, and CP in terms of profitability. The targeted population is the publicly traded companies listed on the New York Stock Exchange (NYSE). The data for this study are obtainable from the U.S. Securities and Exchange Commission Electronic Data Gathering, Analysis, and Retrieval system (SEC EDGAR) database for the sampled publicly traded companies. The companies' Form 10-K and 10-Q are the primary sources for the datasets (Securities and Exchange Commission, 2019). SEC laws require all publicly traded companies to provide audited annual financial reports on Form 10-K and disclose unaudited financial statements on Form 10-Q (Securities and Exchange Commission, 2017).

### **Internal and External Context**

Internal and external context involves studying variables that could impact publicly traded companies' performances, such as CSR and CSRD. Consistent annual filing practices with the SEC could improve company profitability (Bartov & Konchitchki, 2017). However, failure to comply with the regulations set forth by the SEC could cost the company public trust and profitability. The internal context includes the organizational structure (responsibilities and procedures), culture, and values necessary to achieve the company's objectives (Constantinescu & Kaptein, 2020). The internal context

could also help employees engage in ethical behavior and improve their overall ethical performance (Constantinescu & Kaptein, 2020). The company's ethics program is a component of this critical step as it presents instruments such as whistleblowing policies and monitoring practices, codes of ethics, and training (Rooij & Fine, 2019). For instance, by SEC laws, the Chief Executive Officers (CEOs) of public companies are responsible for overseeing their internal control, including the accuracy of quarterly and annual financial reports to make the publicly traded companies remain ethically sound.

The overall performance of an organization involves the use of contextual components within the workplace to reach ethical, social, and financial successes. The external context includes the contextual impacts from regulatory demands, customers, stockholders, and competition (Constantinescu & Kaptein, 2020). Transparency has a significant impact on CP, and failure to comply with good ethical practices could lead to poor FP (Akhigbe et al., 2013).

A company's best compliance practices, including CSR and CSRD, play a significant role in improving performances (Akhigbe et al., 2013; Kim & Oh, 2019). Companies listed under Standard & Poor's 500 (S&P 500) from 2009 – 2013 used CSR and FP measures to examine the relationship between CSR and FP. The study outcomes suggested that engaging in CSR programs could increase CP in terms of profitability (Giannarakis et al., 2016). CSR disclosure practices are essential for enhancing performance and allowing public participation in a company's long-term goals. The primary data for the CSR, CSRD, and CP are retrievable from the company 10-K annual reports. The purpose of this quantitative ex-post-facto study was to examine the



relationship between CSR, CSRD, and CP in terms of profitability. I used content analysis and S &P scoring methodology to measure the relationship between CSR, CSRD, and CP. Profitability ratios NI, ROE, ROA, and EPS were also manually calculated to determine the data analysis's required values. CP is measurable by using accounting-based financial performance (Koo, 2016) and market-based financial performance (Galant & Cadez, 2017). The commonly used indicators for CP include ROA, ROE, net operating income (NOI), and return on sales (ROS) (Rutkowska-Ziarko, 2015).

Corporate accountability incorporates the accountability to all stakeholders for all of the company's activities and outcomes. In this study, I used CSR, CSRD, and CP to evaluate the relationship between the variables. Lack of CSR disclosure practices in companies' business operations could promote an environment of unacceptable, unethical behavior, including fraudulent activities (Hall, 2016). An opportunity refers to access to assets and the information that manages assets (Hall, 2016). Hall's study revealed that individuals with higher education were allowed to have more access to the company's funds and investments than those with high school education. The employees with graduate degrees committed more fraud than those with high school education (Hall, 2016). Implementing the best practices in CSR and CSRD could help improve the organization's profitability (Kharel et al., 2019). Such achievement could also encourage policymakers to develop more effective policies essential for achieving long-term company goals (Kim & Oh, 2019).

### **Problem Statement**

In 2008 the estimated loss from fraud and abuse was roughly 7% of annual revenues, equivalent to \$994 billion in fraud and losses (Hall, 2016). Out of 959 fraud cases examined, 25% of the companies experienced losses of more than \$1 million (Hall, 2016). On average, companies that fully adopt accountability reporting practices are less likely to engage in financial frauds or other unethical business behaviors (Christensen, 2016). The specific business problem is that financial managers of some publicly traded companies do not understand the relationship between CSR, CSRD, and CP. The purpose of this quantitative ex-post-facto study was to examine the relationship between CSR, CSRD, and CP in terms of profitability. The EDGAR database was the primary data source for this study. Previous studies have not been used the data to examine the relationship between the specified independent and dependent variables.

### **Purpose Statement**

In 2008 the estimated loss from fraud and abuse was roughly 7% of annual revenues, equivalent to \$994 billion in fraud and losses (Hall, 2016). Out of 959 fraud cases examined, 25% of the companies experienced losses of more than \$1 million (Hall, 2016). On average, companies that fully adopt accountability reporting practices are less likely to engage in financial frauds or other unethical business behaviors (Christensen, 2016). The specific business problem is that financial managers of some publicly traded companies do not understand the relationship between CSR, CSRD, and CP. The purpose of this quantitative ex-post-facto study was to examine the relationship between CSR, CSRD, and CP in terms of profitability. The SEC EDGAR database was the primary data

source for this study. This study's data have not examined the relationship between the specified independent variables and the dependent variable.

This population is appropriate for this study because the estimated loss from fraud was seven percent of annual revenues totaling \$994 billion for the year 2008 (Hall, 2016). The independent variables identified in the datasets were CSR and CSRD. The findings of this study could lead to positive social change by encouraging all publicly traded companies to implement the best practices of CSR and CSRD in society and communities. The targeted group for this study was the U.S. publicly traded companies listed on the NYSE. The potential stakeholders interested in this study include publicly traded companies, financial professionals, investors, academic researchers, regulators, and finance professionals.

### **Target Audience**

A stakeholder is a group of individuals or organizations that could influence business decisions (Mashali et al., 2020). Stakeholder analysis attempts to identify individuals affected or who might be affected by the research results (Colvin et al., 2016). The key stakeholders interested in this study could include publicly traded companies, SEC, Public Company Accounting Oversight Board (PCAOB), independent auditors, investors, and finance professionals. The publicly traded company's financial disclosure and social responsibility practices are critical for any corporation's development. The CSR and financial disclosures are essential for stakeholders, investors, and the general public for making sound investment decisions. Investors perform a financial analysis before committing themselves to buy shares and seek evidence to help with their

investment decisions. The law requires all U.S. publicly traded companies to file their yearly incomes through the SEC (Cunningham & Warren, 2019; Ling & Liu, 2019). Therefore, investors can have the opportunity to review the audited financial reports to understand the financial status of the selected companies of their choice before making final investment decisions. The audited financial statements at the SEC guarantee investors the validity of financial reports. Audited financial statements are available to the public to provide potential investors with accurate financial information (Cunningham et al., 2019).

The Sarbanes-Oxley (SOX) Section 302 requires that CEOs and Chief Financial Officers (CFOs) must validate the audited financial statements of their company (Diser & Schhfer, 2017). I designed the research question to examine the relationship between CSR, CSRD, and CP.

### **Research Question**

Research Question (RQ): What is the relationship between accountability, transparency, and company performance?

### **Hypotheses**

Null Hypothesis ( $H_0$ ): There is no relationship between accountability, transparency, and company performance.

Alternative Hypothesis ( $H_1$ ): There is a relationship between accountability, transparency, and company performance.

## Data Collection and Analysis

I collected data for this quantitative, ex-post-facto research study using an archival data collection technique for the sampled publicly traded companies listed under the NYSE. The datasets are retrievable from a data file located in the EDGAR database of historical SEC 10-K filings (Securities and Exchange Commission, 2012). The MR analysis was appropriate for analyzing the data found in the SEC historical filings. Researchers use an MR model to examine the relationship between a set of predictor variables and a numerical dependent variable (Green & Salkind, 2017). Simple linear regression requires one independent variable to predict the dependent variable's result; MR requires two or more independent variables to describe the findings.

### Level of Measurements

Statisticians usually define four levels of measurement — it is critical to identify the measurement level related to quantitative data before analyzing data (Liddell & Kruschke, 2018). The measurement level determines the study's analytical approach, which comprises four significant levels (Aini et al., 2018; Dalati, 2018). Nominal data is a basic order of data, and it has no consistency (Liddell & Kruschke, 2018), for example, Male = 0; Female = 1. *Ordinal data* has no logical sequence, and the intervals between values are inconsistent (Williams, 2021). For example, sweater or shirt sizes include different sizes such as small, medium, and large. Interval data is consistent, has a consistent sequence, and has assigned intervals between values but no true zero (Williams, 2021). For example: Fahrenheit degrees or level of pain on scale of 1–5 could be described as: 1 = Very Dissatisfied; 2 = Dissatisfied; 3 = Neutral; 4 = Satisfied; and 5

= Very satisfied. Ratio (scale) data is persistent and has standardized variations between values and a natural zero: length, age, weight, and height (Williams, 2021).

The CSR and CSRD variables were measured using the content analysis approach of specific CSR disclosure in corporate reports (Aureli, 2017; Lock & Seele, 2016; Securities and Exchange Commission, 2017). For instance, the ratio data for this study use an approach of assigning values: one if a CSR disclosure item is reported and zero if there is no report. I presented each company's CSR reporting index as a ratio of the number of items disclosed to the total number of item disclosure.

The data for the sampled publicly traded companies are retrievable from the SEC EDGAR database on the reported 10-K annual reports for the specific financial year. The CP can be measured using the following approaches: accounting-based financial performance (Koo, 2016) and market-based financial performance (Galant & Cadez, 2017). I calculated the averages of historical profitability ratios NI, ROE, ROA, and EPS for the sampled publicly traded companies for 2017, 2018, and 2019. The regression analysis summary for predictor variables determines whether or not the CSR and CSRD variables are statistically significant. I performed the G\*Power analysis to determine the sample size needed between 88 and 107 companies to achieve a power of .90 and .95 (Figure 2).

### **Significance**

The SEC Act of 1934 authorizes the SEC to examine periodic financial reports from all U.S. publicly traded companies (Ege et al., 2020). Such statements include annual, quarterly, and other regular reports depending on the size of the company. Some publicly traded companies violate the mandated SEC laws and regulations. As a result, companies encounter harsh penalties for failing to comply with the SEC. In principle, such measures forced corporate executives to prevent unethical practices, such as implementing adequate compliance programs to improve ethical practices and performances (Girgenti et al., 2016). The relevant secondary data for this study are retrievable from financial databases such as Kinder, Lydenberg, and Domini (KLD), SEC EDGAR, and Compustat (Guo & Yang, 2017). The findings of this study could emphasize the importance of researches related to this field from different perspectives.

### **The Advantage of Study Findings**

This study's findings provide a broad understanding of the relationship between CSR, CSRD, CP. Such knowledge could improve the quality of an organization's specific data being disclosed to the markets so investors can make informed decisions and enhance CG in the United States. The SEC intends to protect investors by assuring that the securities markets stay accurate and impartial. Implementing effective compliance programs could significantly minimize the potential financial risk endured by some publicly traded companies (Rezaee, 2016; Susanto & Bosta, 2018). Moreover, such efforts could encourage more investors to pursue multiple business aspirations and become more profitable. Therefore, financial managers should consider implementing

more effective compliance programs to achieve profit-making goals and become more ethically transparent organizations.

### **Improvement of Business Practice**

The number of companies reporting sustainability information has dramatically increased in recent years due to the imposed directives from the SEC since the establishment of new stock guidelines (Rezaee, 2016). The supervision of managers by boards of directors has increased; as a result, problems such as bribery and fraud have declined significantly (Rezaee, 2016). The financial manager's lack of consistency in large corporations has also improved, particularly in the financial reporting aspect as required by the SEC (Chabrak, 2015; Rezaee, 2016). Rezaee's study indicated that employee's lack of compliance training contributed to unethical behaviors and significantly to many organizational failures.

Many companies consider ethical and compliance training a priority and became more transparent by adopting CSR programs (Rangan et al., 2012). Companies that have implemented the CSR initiative have seen improvement in profitability. For example, the Coca-Cola Company donates \$88.1 million every year to different environmental, educational, and humanitarian organizations (Rangan et al., 2012). Similarly, IBM and Microsoft contribute about \$300 million in software products to non-governmental organizations worldwide (Rangan et al., 2012). Hence, the humanitarianism efforts led to brand awareness and refined social capital, translating to business profits. Such charitable giving reflects a company's core competencies and business priorities, as demonstrated by IBM and Microsoft companies for being part of the CSR initiative.



### **Positive Social Change**

The study findings can help financial managers implement the company's appropriate CSR and CSRD practices in the decision-making process. Financial managers can design the proper risk preventive methods and CSR programs to enhance CG based on a stakeholder's perspective (Muslu et al., 2019). The new approaches could lead to value creation and an opportunity to develop corporate strategies (Kim & Oh, 2019). The implication for positive social change is that this study could increase trust in all publicly traded companies and communities by improving CSR programs, goals, and ethical awareness in decision-making, policies, and procedures. By sufficiently managing the CSR initiatives, each publicly traded company could maximize its benefit to society, create value and achieve the goals of its stakeholders.

### **Theoretical Framework**

I used stakeholder theory as a framework to examine the relationship between CSR, CSRD, and CP. Freeman established this theory in the mid-1980s (Civera & Freeman, 2019). Previous researchers used stakeholder theory to examine and understand the relationship between CSR, CSRD, and FP (Dias et al., 2016; Giannarakis, 2014; Lim & Greenwood, 2017).

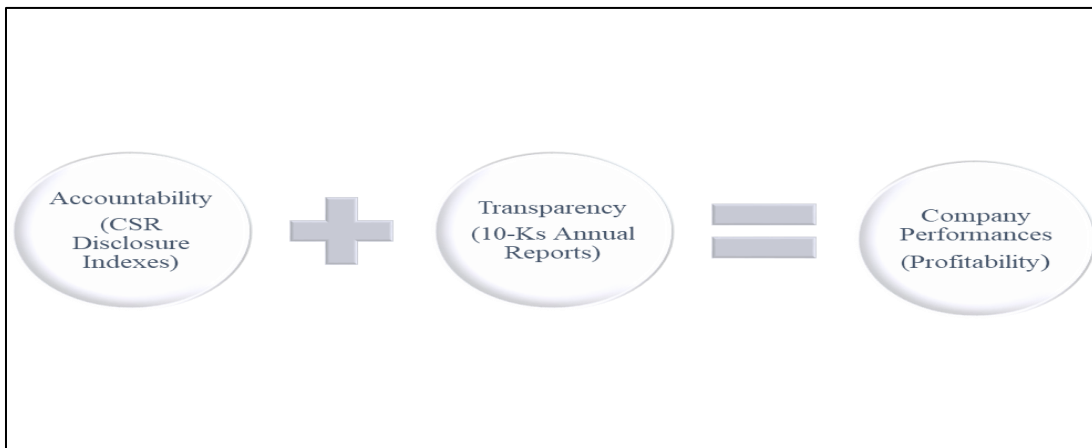
In stakeholder theory, Freeman posited that the importance of business lies in building relationships and value for all its stakeholders (Tantalo, 2016). The stakeholder theory stated that companies' primary goals are to create and maximize stakeholders' value by satisfying all stakeholders' needs (Lim & Greenwood, 2017; Mehrotra & Morck, 2017). The primary stakeholders typically include (a) customers, (b) employees, (c)

suppliers, (d) communities, (e) governments, and (f) shareholders (Civera & Freeman, 2019). Stakeholder theory specifies a company's responsibilities to all stakeholders as both stakeholder theory and CSR emphasize the significance of company responsibility toward the community and the general public (Freeman & Dmytriiev, 2017).

The independent variables for this study are CSR and CSRD, and the dependent variable is the CP in terms of profitability. Therefore, it is evident that the stakeholder theory propositions support the purpose of this quantitative, ex-post-facto study to examine the relationship between CSR, CSRD, and CP (Giannarakis, 2014). Figure 1 is the representation of the graphical model of stakeholder theory.

### Figure 1

*Graphical Model of Stakeholder Theory as it applies to examine the company performances.*



Source: Author's summary based on literature review

### **Representative Literature Review**

The U.S. corporate governance system has been criticized, primarily due to companies' continued fraudulent and financial mismanagement, such as Enron, WorldCom, Tyco, and Adelphia (El Mahdy, 2019). Financial crises endured by these companies and others led to the legislative reform of the SOX Act of 2002 and the NYSE governance guideline. The SOX Act mandated several CG changes for the U.S. publicly traded companies, including changes that affected executive compensation, shareholder, and board monitoring (Bertus et al., 2019). The NYSE and National Association of Securities Dealers Automated Quotations (NASDAQ) mandated CG changes for companies listed in their respective roles. SOX strengthens top management's and the board's accountability for reporting accurate financial information and misreporting consequences.

The purpose of this quantitative, ex-post-facto study was to determine the relationship between CSR, CSRD, and CP in terms of profitability (NI, ROE, ROA, and EPS). This study focused on historical 10-K filings for 2017, 2018, and 2019 (Securities and Exchange Commission, 2012). The critical business problem is that some publicly traded companies listed on the NYSE do not fully engage in the best CSR disclosure practices (Cohen et al., 2017; Jianu et al., 2017).

I conducted a literature review to develop an understanding of theoretical and methodological contributions to my specific topic. The literature review consists of academic journals, scholarly books, websites, and peer-reviewed articles related to stakeholder theory, CSR, CSRD, CP, and CG. The related databases I used to prepare the

literature review include ProQuest, Academic research complete, Government websites, ABI/FORMS, Walden library resources, and Google Scholar. I used the key search terms for carrying out the research: CSR, CSRD, CP, corporate social performance, FP, CSR, CG, stakeholder, and shareholder. Sixty-seven items, or 81% of the literature, were published within five years, and 61 or 81% were peer-reviewed (Table 1). The literature review includes a literature review conducted in stakeholder theory, CSR initiatives, CSRD, FP, and environmental, social, and governance (ESG). Table 1 describes the breakdown of literature review sources used in this quantitative ex-post-facto study.

**Table 1**

*Breakdown of Literature Review Sources*

Reference Type	Total Sources	Total Sources Within 5 Years	Expected Graduation Within 5 Years as of 2021
Peer-reviewed			
Journal	75	61	81%
Books	2	2	100%
Websites	6	4	67%
Total	83	67	81%

Source: Author's calculations

A research question constitutes a vital part of the research approach, review of literature, and study. The primary research question is as follows:

RQ: What is the relationship between accountability, transparency, and company performance?

I used this research question to assess the relationship between CSR, CSRD, and CP of the selected publicly traded companies listed on the NYSE. The null and alternative hypotheses are two commonly independent statements about a population. I

used a hypothesis analysis of the sampled publicly-traded companies' data to decide whether or not to reject the null hypothesis.

$H_0$ : There is no relationship between accountability, transparency, and company performance.

$H_1$ : There is a relationship between accountability, transparency, and company performance.

### **Accountability**

Corporate accountability is the role of a publicly-traded company in non-financial measures to include social responsibility, sustainability, and environmental performance (Lys et al., 2015). Numerous companies regularly provide corporate accountability reports to meet requirements from society and shareholders. Companies must submit the SEC's accountability reports and annual financial statements (Johnston & Petacchi, 2017).

### **Transparency**

Transparency addresses a company's comprehensive financial information to the SEC (Securities and Exchange Commission, 2017). Transparency ensures that yearly published financial data reflect the truth about the company's financial position (Securities and Exchange Commission, 2017). An organization's financial strength is measurable through the annual financial reports such as 10-Ks. A company is profitable if it manages its assets and liabilities appropriately (Myšková & Hájek, 2017). Some of the financial ratios critical for measuring the company's financial performance include liquidity ratios, leverages ratios, and valuation (Myšková & Hájek, 2017). Company

profitability is measurable using different profitability ratios. Such performance ratios include return on sales (ROS), return on assets (ROA), return on equity (ROE), earnings before interest and tax (EBIT), and gross profit margin (GPM) (Najjar, 2013; Pazarskis et al., 2018).

Financial scandals involved accounting frauds of giant companies such as Enron, Worldcom, and Tyco occurred in the 21st century (Ozili, 2020). Most of such dishonest companies were deemed untrustworthy for failing to meet financial obligations towards their employees and engagement in CSR activities (Ozili, 2020). The public outcry forced those companies to engage in CSR activities to increase stakeholder confidence (Grewal et al., 2019; Cho et al., 2019). For example, the Korean government initiated a range of rigorous financial regulations that compelled Korean corporations to use more engaged business practices, including investment in CSR-related programs. As a result, stockholders who were affected by these crises continually demanded that the companies defend their rights and meet social responsibility obligations (Cho et al., 2019). CSR initiatives' implementation gained a reputation among stakeholders in companies by creating an ethical environment among companies.

Many countries develop CSR indices to evaluate different CSR reporting criteria such as human rights, protection environment, including the financial reports such as the Dow Jones Sustainability Index (DJSI), Standard and Poor's 500 (S&P 500) index, and NYSE (Papouti & Sodhi, 2020). CSR disclosures could impact corporate financial performance in different aspects, including employee growth, productivity, and social and environmental standards. Fulfilling CSR responsibilities created by

stakeholder expectations promotes confidence and increases stakeholder relationships, which leads to an increase in capital market benefits such as reducing the cost of equity capital (Dhaliwal et al., 2014). Stakeholder theory was the theoretical framework used to determine the relationship between CSR, CSRD, and CP.

### **Theoretical Framework**

The stakeholder theory was the appropriate theoretical framework for the study. The stakeholder theory suggests that an organization's financial improvement depends on all stakeholders' interests (Freeman & Dmytriiev, 2017). The different approaches designed to understand the stakeholder theory include: instrumental, descriptive, and normative (Civera & Freeman, 2019; Estaswara, 2020; Freeman et al., 2018). The instrumental approach focuses on increasing competitive advantage and archiving corporate governance (Civera & Freeman, 2019; Bosse & Coughlan, 2016). The instrumental method's effectiveness is critical for legitimizing stakeholder engagement and protecting inappropriate actions that might interfere with creating a competitive advantage (Brenner, 2001; Estaswara, 2020). Descriptive approaches to stakeholder theory converge on portraying and prioritizing who qualifies as stakeholders.

Descriptive approaches to stakeholder theory concentrate on selecting who qualify as stakeholders under the assumption that a company may have all the necessary resources to accommodate every participant who could identify as a stakeholder to stake a claim (Civera & Freeman, 2019; Valentinov & Hajdu, 2019). Therefore, the environmental question itself can be deemed a primary stakeholder to a company and usually prompts discussion in these circumstances. The environment is viewed as a

primary stakeholder in the business and explains company problems such as the lack of resources required to meet all shareholder's claims (Loughran & McDonald, 2016).

Normative pressure could impact the relationship between CSR and company profitability.

Normative strategies to stakeholder theory focus on managing stakeholders for ethical or moral grounds. Such an approach aligns with the policies that support the ideas for sustainability efforts to justify its importance (Freeman et al., 2018; Valentinov & Hajdu, 2019). Internal and external stakeholders are critical groups of interest to corporations. Internal stakeholders involve groups such as owners, employees, and managers.

Both internal and external stakeholders are critical groups of interest to corporations (McDonnell, 2018). The internal stakeholders have voting power and consist of owners, management, and directors (Brenner, 2001; McDonnell, 2018). Internal affairs of a corporation are the responsibility of internal stakeholders, including the company's overall management. Hatherly et al. (2020) identified some external stakeholders, including consumers, competitors, governance, physical environment, and social groups.

Primary stakeholders do not have the right to voting power but have economic dominance, including shareholders and investors, employees, creditors, customers, and suppliers (Brenner, 2001; Hatherly et al., 2020). Secondary stakeholders have the political power to influence the general public (Francisco de Oliveira & Rabechini, 2019). Stakeholders invest in companies to generate a profit and are allowed by law to vote for the board of directors, mergers, and acquisitions (Galai & Wiener, 2008).



Stakeholders have the right to acquire the company's financial reports to observe how the company performs financially (Galai & Wiener, 2008). CG provides the structure for managing an organization's objectives through various elements of management.

### **Corporate Governance**

CG consists of shareholders, employees, a board of directors, government, and management (Lund & Pollman, 2021). Managers play a significant role in an organization's survival and success, which depends on the manager's ability to increase profit and strengthen the relationship between accountability and transparency. A company's CG is determined by social responsibility principles, stakeholder view, and commitment (Klein et al., 2019). During the 2001 Enron financial crisis, Enron created a gap between CP and corporate values (Salvioni & Gennari, 2020). Such culture problems have contributed to a new organizational model in which responsible corporate culture emphasizes integrity and assurance.

### ***Board of Directors (BODs)***

BODs are a significant component of CG (Becchetti et al., 2020). CG regulations imposed a statutory trust on a company's roles on the BOD, for instance, protection of the rights of shareholders, including voting rights. The BOD is responsible for establishing company objectives, strategies and analyzing management performance (Becchetti et al., 2020). Shareholders are accountable for creating an efficient BOD to oversee and advise executives (Crisóstomo et al., 2020). Becchetti et al. (2020) stated that the audit and internal control team were accountable for creating practical risk management measures to guarantee organizations' reliability of internal reporting.

Internal management reporting is an essential element of the company's accountability.

### ***Stakeholder Management***

Stakeholder management is the process that focuses on managing stakeholders to engage in different responsibilities by creating a plan that suits each stakeholders' levels of interest and power (Francisco de Oliveira & Rabechini, 2019). The idea that the company is an environmentally dependent group of different interests depends on the manager's relationship with other stakeholders to bring improvements between stakeholders. Thus, the manager's opinion of a stakeholder's qualities is significant to the manager's stakeholder salience view. Francisco de Oliveira and Rabechini (2019) stated that stakeholder attributes incorporate stakeholders' power to improve the company, legitimacy of the stakeholder associated with the company, and the urgency of stakeholder interests in the company. A company's stakeholders can be identified based on traits, but managers may or may not precisely concede the stakeholder latitude (Sunder, 2016). Such interpretation underscores the best views of the stockholders as merely one of the numerous stakeholder groups.

### ***Classes of Stakeholders***

Different stakeholders are identifiable based on attributed possession of one, two, three, or a combination of all the attributes (Francisco de Oliveira & Rabechini, 2019). Sunder (2016) categorized stakeholders into different groups: (a) Latent stakeholders possess one attribute, including dormant, discretionary, and demanding stakeholders. (b) Expectant stakeholders have two characteristics: dependent and dangerous stakeholders, and Definitive stakeholders are stakeholders that possess all three traits.

## **Corporate Social Responsibility**

The CSR concept demonstrates that CSR is a strategic approach for generating maximum profit through social responsibilities to attain the stakeholder's maximum value (Kirk, 2020). Companies that adopt CSR practices create a significant relationship between CSR and FP (Cho et al., 2019). The lack of acceptable corporate governance practices leads to a negative correlation between CSRs and financial performance. Galant and Cadez (2017) stated that corporations are not looking to make profits but rather meet their stakeholders' needs. Thus, companies must attempt to receive social support as corporate citizens.

Engaging in CSR activities could minimize conflicts of interest among corporations and stakeholders and eventually improving financial performance and company value. Galant and Cadez (2017) argued that CSR requires considering problems beyond the company's economic, technical, and legal needs. Friedman (1970) suggested that a company is responsible entirely for its shareholders. Contrary, Galant, and Cadez argued that besides the shareholders, it is necessary to consider other stakeholders' importance. The sustainability of corporate financial performance consists of value-creating and value-destroying theories (Alshehhi et al., 2018). The value-creation method theorizes that company risks are minimizable through the implementation of environmental and social responsibility practices.

The value-destruction theory assumes that companies involved in social and ecological responsibility concentrate more on satisfying stakeholders at the expense of shareholders and tend to forget to focus on profitability. Therefore, the value-destruction theory suggests a negative correlation when directing resources towards less profitable and sustainable activities (Alshehhi et al., 2018). In stakeholder theory, engaging in CSR activities such as environmental or social contributes to improving a corporation's financial performance. Cho et al.'s (2019) study provide practical evidence of the positive association between CSR and CP using accounting and market-based measures.

Cho's study investigated whether a corporate investment in CSR programs promotes organizational performance and market appraisals. Conclusively Cho's research demonstrated that Korean companies presented practical recommendations to policymakers, market participants, and scholars in the emerging market. Shin defined social accountability as a standardizing framework of corporate practice essential for achieving the need of company stakeholders and the public by solving different social and financial challenges through corporate measures.

The Organization for Economic Cooperation and Development (OECD) institute defines CSR as the social engagement of an organization to develop and strengthen the relationship between the OECD and society (Fronseca & Domingues, 2017). The International Financial Reporting Standards (IFRS) implementation approaches are critical in reducing data disparity in the capital market and can also help investors make the right investment choices (Gao & Sidhu, 2018; Shin & Oh, 2017). The Enron financial collapse was the most significant business failure of the generation, which prompted

Congress to enact the SOX Act in 2002. SOX comprises two provisions requiring CEOs and CFOs to certify that their companies' filings with the SEC are accurate to the best of their knowledge. The provisions include (a) substantial criminal penalties, (b) Officers must certify that they have internal financial controls such as financial statements. The external auditors perform an audit of the financial statements to improve the accuracy of a company's financial statements.

The SOX signed into law during high-profile corporate scandals that revealed the corrupt accounting practices of the largest firms in the United States (Connell, 2017). The scandals and related regulatory impediments led to a loss of public trust in the accounting profession and the agencies accountable for the regulations. Palmon et al. (2011) examined the SOX Act's influence on the Financial Accounting Standards Board (FASB) and the accounting standards-setting regulatory process. Acceptable corporate governance practices within an institution can help prevent financial risks. Haswell and Evans (2018) investigated how sound regulators may have learned the effectiveness and importance of fair value accounting (FVA) during the Enron scandal.

### **Independent Variables**

Many studies have been quantified based on five distinct methods: content analysis, surveys carried out using questionnaires, reputational measures, unidimensional indicators, and ethical rating (Aureli, 2017; Soana, 2011). Researchers used such techniques to quantify social performance in empirical studies that have documented the possible correlation between corporate social performance (CSP) and corporate financial performance (CFP). Soana (2011) study used the content analysis procedure to collect

data from the sample banks' annual reports of previous studies related to CSRD's. In this study, I used secondary data analysis to examine the research question using data from the historical annual reports (10-Ks) of the sampled U.S. publicly traded companies listed on the NYSE.

Previous studies indicated that a dichotomous procedure used an unweighted scoring method to record the CSR index data. The technique requires that disclosure is assigned a score of one if an item is disclosed (Siano, 2011). The dimensions used in Siano's study for CSRD include ethical, legal, environmental, economic, and philanthropic. Each reported individual item scored 1 and 0 when there is no disclosure (Siano, 2011). In the end, all the reported scores combined to get the overall disclosure scores (CSRD). The CSRD is divided by 98, giving you the overall scores essential for scoring procedures (Table 5). The CSRD is calculable using the equation:

$$\sum d_i / N$$
, where  $d = 1$  if the CSRD exists and 0 if not, while  $N=98$  (maximum possible disclosures).

Taskin (2015) investigated the bidirectional relationship between CSR practices of Turkish banks and their financial performance measured by ROE, ROA, and NIM (Net Interest Margin) for the year 2013. The content analysis applied to analyze CSR levels based on CSR index calculations to examine the relationship between CP and CSRD (Taskin, 2015). Taskin revealed that ROA and ROE could not adequately explain the CSR levels. Taskin's study findings also demonstrated a bidirectional relationship between CSR and NIMs.

Another study conducted by Nor et al. (2016) constructed a CSRD index based on 20 disclosure items for large-sized companies in Malaysia. The results showed mixed results between environmental disclosure index and financial performance. However, companies disclosing environmental information gain market benefits and the ability to gain profit from investments. Buallay's (2019) study examined the relationship between ESG (environmental, social, and governance) and the bank's operational, financial, and market performance. The results indicated a significant positive impact of ESG on performance. However, the relationship between ESG disclosures varied when measured individually.

A study conducted by Kim et al. (2019) used a sample of 5040 prominent U.S. companies to examine the assurance service of CSR reports on the relationship between CSR performance and the company's FP. The study findings established that CSR performance was positively related to the company's FP. The study findings also revealed a significant role of assurance service for CSR information in the relationship between CSR performance and the company's FP. This study seeks to find the relationship between CSR, CSRD, and CP.

Federal securities law authorizes the SEC to examine all publicly traded company's annual and financial reports (Securities and Exchange Commission, 2019). The CSR reports are accessible from the SEC website using the SEC EDGAR tool (Securities and Exchange Commission, 2017). When making investment decisions, investors consider CSR to benefit the company's capital market (Muslu et al., 2019). Implementing CSR practices could reduce the cost of equity capital to companies and

increases financial analyst budget accuracy (Hasan et al., 2018; Muslu et al., 2019). I calculated the CSR and CSRD scores using the S&P scoring procedures (Appendix B).

The transparency and disclosure (T&D) scores measure a company's public disclosures — scores are obtainable from the annual reports to include best practice information items. The 98 items contain three sub-groups: financial transparency disclosure, board, management structure, ownership structure, and investment (Aksu & Kosedag, 2006; Khanna et al., 2004). The inclusion of every attribute is scored based on a yes or no answer, yes-included, no-not included, and N/A- not applicable. For every yes-answer, the company receives one point when it reports on an item (Aksu & Kosedag, 2006). The T&D model for calculating scores is as follows:

$$TDS = \sum \sum S_{jk} / TOTS_{jk}$$

Where:

$j$  = the attribute category subscript,  $j = 1, 2, 3$ ,

$k$  = the attribute subscript,  $k = 1, \dots, 98$ ,

$S_{jk}$  = the number of information items the company disclosed (answered – yes) in every category, and TOTS = the total maximum possible (yes) answers for each company.

In this model, the related disclosure score acquired from 35 questions in the sub-category financial provided in Appendix B. Companies need to present reliable annual financial reports to the SEC to earn stakeholders and the public's trust to meet their profit-making goals. Credible financial statements could help investors make informed decisions regarding their investments.



Financial transparency is critical to both investors and financial markets (Baraibar-Diez & Sotorrío, 2018). The study outcomes did not indicate whether the independent variables CSR and CSRD could impact the dependent variable CP.

Table 2 depicts the independent variables' data, source, and scale for this quantitative ex-post-facto study.

**Table 2**

*Independent Variables*

Variable	Data	Data Source	Scale
<u>Independent Variables</u>	CSRD Reports:		
<b>Accountability</b> (CSR Index)	1% Disclosure = Item Disclosure/Total Item Disclosure	SEC Financial Statements	Expressed as ratio.
<b>Transparency</b> (CSRD) – Overall disclosure score using all the 98 questions given in Appendix B.	10Ks Annual Reports.	SEC Financial Statements	Expressed as ratio.

*Company Performance*

Financial statements represent how well a company is performing financially. The income statement reports profit or loss a company generated monthly, quarterly, semi-annually, or yearly. The balance sheet presents a company's assets, liabilities, and equity in a specific period. The cash flow statement evaluates how well a company generates cash to pay its debt obligations and finance its operating expenses. Susanto and Bosta's

(2018) study indicated that free cash flow, profitability, and board independence impacted earnings management. Lee and Kim (2019) study viewed that financial statements' earnings and cash flow components improved future cash flow. Some of the profitability ratios for examining financial performance (Table 3) include:

1. NI measures the company's profit over a specific period or total revenues minus total expenses.
2. ROA measures how efficiently the company uses its assets to generate profit or NI divided by total assets.
3. ROE measures how much profit the company makes as a percentage of the owner's investment or net income divided by the owner's equity.
4. EPS is determined using net income divided by the outstanding number of shares.

Researchers used two approaches to measure financial performance: accounting-based and market-based financial performance (Nuber et al., 2020). From the accounting perspective, this research study used the averages of profitability ratios to measure CP, which includes: NI, ROE, ROA, and EPS. I obtained the CSR, CSRD, and CP datasets from the SEC EDGAR database (Securities and Exchange Commission, 2012). Tobin's q applied the market-based approach to measuring FP. Table 3 illustrates the data, data source, and scale for this study's dependent variables.

**Table 3***Dependent Variable (Company Performance)*

Variable	Data	Data Source	Scale
Net Income (NI)	Total assets – Total expenses	SEC, Financial Statement	Expressed as ratio
Return on Assets (ROA)	Net income/Total assets	SEC, Financial Statement	Expressed as ratio
Return on Equity (ROE)	Net income/Owner's equity	SEC, Financial Statement	Expressed as ratio
Earnings Per Share (EPS)	Net income/Outstanding number of shares	SEC, Financial Statement	Expressed as ratio

**Measuring CSR Disclosure**

Measuring CSR and CSRD have not been easy due to various motives, such as adhering to appropriate laws and ethical business practices. Standardization and disclosure are essential for validating the CSR-CP relationship and many financiers when making their investment choices. There is still a lack of generally accepted CSR reporting standards. A publicly traded company's primary goals are to generate profits and adopt ethical and CSR responsibility practices (Barnett et al., 2020). There are different approaches to measuring independent variables. For instance, the researchers collect the disclosure information using various methods such as questionnaires surveys, content analysis of disclosed CSR information in CSR reports, use of KLD rating indicators, and textual analysis (Guo & Yang, 2017). The specific CSR disclosures for this quantitative ex-post-facto study included annual reports, particularly 10-K annual reports and CSR

disclosure reports of U.S publicly traded companies listed on the NYSE.

Previous studies on CSR used the annual financial reports to collect data concerning social responsibility disclosure and determinants (Loughran & McDonald, 2016). The use of annual reports provides credibility and is a vital communication tool for building trust between a corporation and the public regarding social responsibility. The corporate disclosure reports are essentially obtainable from corporate reports such as management commentary, annual reports, CSR reports, sustainability, environmental reports, and environmental reports (Loughran & McDonald, 2016; Li, 2010). Previous researchers have used financial and non-financial data to develop standards for measuring financial risks and financial performance. Predictive models and business reports can use the textual analysis of financial and non-financial data to evaluate business risks and overall financial performance (Siano & Wysocki, 2020).

In 2009 SEC-mandated companies that use Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS) to file their annual and quarterly reports in the eXtensible Business Reporting Language (XBRL) format along with text/Html filings. Such requirements have enabled many companies to immediately provide financial and non-financial information to stakeholders, investors, and the general public (Hoitash et al., 2020). CSR disclosures are becoming an essential part of the overall financial view of a company's performance due to regulatory and management requirements. For example, the SEC requires quarterly and annual disclosures of all publicly traded companies' financial and non-financial information. Such information includes periodic financial statements and the level of involvement in

corporate social responsibility activities (Li, 2010; Securities and Exchange Commission, 2012). The best approach to understand a company's financial position is to review its latest 10-K filing.

A company's 10-K annual reports are the primary source of company-specific financial information necessary for investors, stakeholders, and the general public. The SEC EDGAR database was the source for the data collection, particularly for the sampled publicly traded companies listed on NYSE for 2017, 2018, and 2019 (Securities and Exchange Commission, 2012). The financial statements are retrievable through EDGAR's file system using the Central Index Key (CIK) number and Standard Industrial Classification (SIC) code to obtain the historical filings of a company with the specific related fiscal year (Securities and Exchange Commission, 2017). The SEC regulations prevent corporations from making fabricated statements in the filed 10-Ks annual reports – accurate information is critical for investors, regulators, and the public in general. In addition, reliable information is crucial for investors and analysts to make informed investment decisions and help regulators create appropriate policies based on the findings.

### ***Financial Statements Section***

Typically found in Part ii, Item 8 of the 10-K annual reports (Table 14) contains accounting information that reflects a company's performance (Qian, 2020). Historical filings consist of data such as sales, earnings, and outstanding debt critical for determining financial performance (Table 14). Investors focus on historical accounting data on 10-K annual reports to assess a company's financial performance using crucial

financial ratios such as Debt to Equity, Book to Market, and Price to Earnings ratio (Myšková & Hájek, 2017). Measuring the financial strength of a company requires constant analysis of such critical ratios for a considerable period. Most often, stockholders tend to invest in wealthy companies to become more profitable. The most significant text sections of the 10-K annual reports for analyzing the company performance include the Management discussion and analysis section.

### ***Management Discussion and Analysis (MDA) Section***

The most crucial text sections of the 10-K annual reports are in Section 7, called the Management discussion and analysis section (Table 14). The MDA section contains top corporate executives responsible for analyzing the financial performance (Gaulin, 2017). The senior officials review their company's financial statements and ensure that it meets the SEC laws and regulations (Li, 2019). The executives address critical issues concerning the company's business opportunities and challenges as part of the strategic plans to achieve company goals successfully.

### ***Risk Factor Section (RF)***

Item 1A of the 10-K is an essential section of the 10-K annual report comprising an analysis of risks confronting the company and the related industry in which it operates (Hope et al., 2016). Risk is a crucial factor in assessing company performance (Gaulin, 2017). SEC filings require an attorney's involvement to avoid shareholder lawsuits due to a disclosure failure. As per SEC laws and regulations requirements, the RF section is primarily critical for all publicly traded companies to address their most potential risks (Gaulin, 2017; Hope et al., 2016). Besides the annual financial reports, all the companies

must also produce corporate accountability reports to fulfill the stockholder's and the general public's needs. Rangan et al. (2012) defined corporate accountability as a traded company role in non-financial measures comprising social responsibility, sustainability, and environmental performance. Similarly, Rangan et al. study described a sustainability report as measuring and disclosing company performance accountability goals in attaining sustainable improvement goals for internal and external stakeholders.

The U.S. publicly traded companies annually provide accountability reports to inform the general public and shareholders about their current financial status, mostly needed by stakeholders for investment decisions (Securities and Exchange Commission, 2019). Companies must submit their 10-K annual and CSR reports to the SEC (Christensen, 2016). Transparency focuses on disclosing an organization's accurate financial information to the SEC using the 10-K and 10-Q.

### **Transparency**

Transparency ensures that annual published financial data reflect reality. Boubaker and Nguyen (2017) confirmed that some publicly traded companies violated SEC financial laws and regulations. The companies' primary issues were failing to meet the 10-K annual filings standards mandated by the SEC's rules and regulations. For instance, in 2008 alone, the computed losses from financial fraud amounted to \$994 billion from several companies in the United States (Hall, 2016). In many cases, corporate executives did not always live up to their internal corporate responsibility and were involved in diverse unethical activities such as financial fraud such as financial (Hall, 2016).

The 2008 financial scandals involved some of the U.S. corporate executives of large organizations (Hall, 2016). The public complaint surrounding the fraudulent activities of the executive of corporations such as Enron, WorldCom, and Adelphia forced Congress into enacting the Sarbanes-Oxley Act of 2002 (Hall, 2016; Schoen, 2017). SOX provides diverse provisions created precisely for resolving issues related to corporate governance and stock markets. Liang (2012) stated that previous studies indicated that accountability and transparency practices positively impacted companies' performance. For instance, before selling stocks, bonds, and other securities, corporations must have a reputable 10-K and 10-Q filings record with the SEC so that investors can examine the company's financial position before making the final investment decisions. Such a mandate created collectively high confidence in investors and shareholders, stakeholders, and the general public.

The SOX Act is the most significant securities law since the SEC Acts of 1933 and 1934. The SEC laws require that the U.S. publicly traded companies furnish yearly income statements to the SEC (Securities and Exchange Commission, 2019). Some corporate financial managers do not comply with the SEC's laws and regulations that promote CSR and CSRD practices. In the United States, most corporate executives attempt to prevent such unethical practices by proposing effective compliance programs (Girgenti et al., 2016). The recent literature studies address that good corporate governance creates social benefits and improves the relationship of CG attributes of CSR and CSRD.



### *Q-Theory Model*

The history of Tobin's  $q$  is the most significant concept in the literature on corporate governance (Bartlett & Partnoy, 2020). Peters and Taylor (2017) stated that despite the  $q$  theory's reputation, its preliminary performance has been inadequate. For instance, regression of finance rates for Tobin's  $q$  leaves large residuals. More variables such as free cash flow are needed to help determine the problem and explain the investment in detail (Andrei et al., 2019; Peters & Taylor, 2017). James Tobin defined the Tobin  $q$  theory as the market value of company assets divided by its replacement value (Bartlett & Partnoy, 2020). The study results indicated errors when using market-to-book value as the dependent variable to measure company value.

Tobin's study showed that cash flows have a significant impact on capital investment (Abel, 2018). The focus on investment indicates that investment opportunities are a primary way companies create value for their investors and stakeholders. Accounting reforms inspire investment decisions when various financing determinants, such as investment opportunities and cash flows, are regulated (Roychowdhury et al., 2019). Changes in GAAP can have a direct impact on investment decisions due to contract covenants. For example, debt contracts usually incorporate penalties based on numbers reported in the financial statement. Previous studies examined companies' financial performance by employing unique indicators such as ROA, Tobin's  $q$ , and its relevance to CSR performance. Cho et al. (2019) used the revenue growth rate and Tobin's  $Q$  as descriptive variables for corporate financial performance to examine the

relationship with CSR performance. As a result, Cho's study indicated a positive correlation between CSR performance, profitability, and corporate value using Tobin's q.

### **Problem**

Financial failures involve economic, financial, and business factors (Wiggins & Metrick, 2019). A financial loss occurs when a company's capital structure is inconsistent based on bad corporate business decisions. Also, financial failure involve numerous circumstances such as high financial leverage, mismanagement of working capital, causing illiquidity (Wiggins & Metrick, 2019). More debt to the company would mean that there is small equity to overcome losses caused by adverse changes in the company's activities. Business challenges occur when the company's performance declines below expectations because of competitiveness, management, and operations problems.

A positive influence on corporate governance indicates the best accounting practices (Dewi et al., 2018; Vintilă & Păunescu, 2016). Previous study results revealed the connection between governance and financial performance for companies in the banking sector demonstrated that consistent use of acceptable corporate governance practices could improve higher market value (Dewi et al., 2018; Vintilă & Păunescu, 2016)

The CSR literature has proved the stakeholder theory's value for bringing improvements and creating opportunities in the companies and society (Harrison et al., 2015). The presence of disputes between the value that stakeholders and companies seek and the benefits required by the community calls for the need to investigate and document the differences in concerns such as regulation, incentives, and public policy

(Harrison & Wicks, 2013). Future research might also examine whether a company's resources create value for its stakeholders by the profit generated from its performance.

Numerous management studies have often focused on financial performance as the sole measure of interest. Therefore, it implies that the companies focus on increasing financial performance instead of creating total value. For example, research focusing on shareholder returns controlled the merger and acquisition literature. (Harris & Wicks, 2013). The recommendations for stakeholders who use this literature are that a company could be biased to maximize the financial benefit of acquisition versus generating value in stakeholder terms (Freeman et al., 2018). The concept of corporate social engagement requires that companies be responsible for society's needs by engaging ethically in activities intended to promote benefits for the community (Civera & Freeman, 2019). The company's efforts to generate profits for shareholders increase opportunities, which is significant in bringing together the company and society.

### **Transition**

The introduction of this study discussed in Section 1 includes various required components, such as a problem statement, purpose statement, and research question. The discussion of the critical components consists of the target audience, significance, theoretical framework, target audience, and literature review. The problem statement of this quantitative ex-post-facto study addresses the CSRD and CSR issues facing some of the U.S. publicly traded companies. Section 1 also discussed the study's significance, ethical issues that prompted the research, and the related theory. Section 1 clarified the

purpose of the research and listed the articles related to the literature review concerning this research study.

## Section 2: Project Design and Process

In Section 2, I describe the method and design of the study. I restate the study purpose statement and identify the targeted population as publicly traded companies listed on NYSE. Next, I describe the reliability, validity, and sampling procedures that I used for the study. This section also includes: (a) research question and hypotheses, (b) measurement of variables, (c) and ethical considerations. I conclude this section by addressing the study view of past literature differences in the relationship between accountability, transparency, and company performance.

### **Method and Design**

Previous studies classified three methods used in research as follows: (a) quantitative, (b) qualitative, and (c) mixed methods (Creswell & Creswell, 2017). I used the quantitative ex-post-facto research design to determine the relationship between accountability, transparency, and company performance in terms of profitability. Researchers used the quantitative method to test theories by examining the relationship between variables using statistical approaches such as regression analysis (Creswell & Creswell, 2017).

### **Method**

I used the quantitative research method to examine the relationship between the independent and dependent variables. The quantitative method was relevant because researchers used it when studying the relationship between variables and theories. Researchers who adopted the quantitative method also used numerical data and quantifiable variables (Park & Park, 2016). This quantitative study used the stakeholder

theory as the theoretical framework to examine the relationship between CSR, CSRD, and CP. I used the sampled companies' annual financial reports (10-Ks) to measure the relationship between CSR, CSRD, and CP. I retrieved and analyzed the historical financial data for 2017, 2018, and 2019 from the SEC EDGAR database (Securities and Exchange Commission, 2012).

The purpose of this quantitative ex-post-facto study was to examine the relationship between CSR, CSRD, and CP in terms of profitability. The targeted population was the U.S publicly traded companies listed on the NYSE using historical data for 2017, 2018, and 2019. The geographical location is the United States. The dependent and independent variables included CSR, CSRD, CP, respectively. The implication for social change is that the study can help financial managers in the decision-making process in implementing the company's appropriate CSR disclosure practices to follow. Financial managers can also design robust risk preventive mechanisms related to CSR programs and ethics training (Chabrak, 2015). Such approaches could lead to value creation and an opportunity to achieve corporate goals (Tantalo & Priem, 2016). The financial managers could also use this study's findings to benefit from various capital market participants, such as the SEC guidance on companies to justify the importance of disclosure and evaluate the impact of 10-K reporting.

### **Research Question**

RQ: What is the relationship between accountability, transparency, and company performance?

## Hypotheses

$H_0$ : There is no relationship between accountability, transparency, and company performance.

$H_1$ : There is a relationship between accountability, transparency, and company performance.

## Design

The selected research design for this study is a quantitative ex-post-facto design. The goal for conducting quantitative research was to determine the relationship between the independent variables CSR and CSRD and the dependent variable (CP). The quantitative method uses numerical data and quantifiable variables (Park & Park, 2016). Quantitative studies investigate causal relationships between variables, and it requires large sample sizes to reach statistical significance than qualitative studies (Maxwell, 2019). Although quantitative data were more effective in determining the relationship between the variables than qualitative data, it can test the hypothesis and avoids contextual detail.

The quantitative methods provide summaries of data to authenticate generalizations of the phenomenon under study. Such an approach also uses appropriate techniques to assure validity and reliability (Creswell & Creswell, 2017). Such an approach allows the research to be replicated, analyzed, and equaled with similar studies (Park & Park, 2016). Therefore, the quantitative method was suitable for this study since previous researchers examined the relationship between the independent and dependent variables and the related theories. Qualitative methods answer questions on experience

from the standpoint of the participant.

Qualitative research is the study of social science that collects and works with non-numerical data to explain such data's meaning to understand the investigation under review by examining the targeted population (Park & Park, 2016). In a qualitative method, generalization is unreliable, making broad policy recommendations based on the study results – it is challenging to measure causality between different research phenomena (Maxwell, 2019). In quantitative research, statistical data identify and report significant trends, while the analytical methods could determine the causal relationships between the variables. Testing theory in the quantitative method is relatively more straightforward than in the qualitative approach. Data collection technique using secondary data implies examining data collected by an individual researcher for another primary purpose.

The secondary data reduces the data collection challenges such as expenses and time (Securities and Exchange Commission, 2017). Some disadvantages of secondary data might be that the original researcher may not have the same interests as the researcher interested in using the data. The foremost researcher might have omitted critical information from the data (McKnight & McKnight, 2011). The researcher also could have used inadequate measures or failed to secure the integrity of all records (McKnight & McKnight, 2011). I examined companies with complete financial data retrieved from the SEC EDGAR database — and incorporated in this study only publicly traded companies listed on NYSE that filed complete financial reports on their 10-Ks.



This study did not include companies that did not file comprehensive annual reports for 2017, 2018, and 2019. The quantitative ex-post-facto research design was suitable for conducting social research when it is challenging or impossible to access human participants (Cristóbal et al., 2019). I used the archival data collection method to compile the primary data for the sampled companies listed on the NYSE. This research study used an ex-post-facto research design to determine the existing relationship between CSR, CSRD, and CP. An MR approach was appropriate for analyzing data. An MR is applied when the researcher examines the relationship between a set of predictor variables and a numerical dependent variable (Green & Salkind, 2017). Constantin (2017) stated that both dependent and independent variables used in the regression must be quantifiable. Hence the ratio scale was appropriate for performing calculations such as means and variation indicators.

I used SEC EDGAR's database as the primary source for CSR, CSRD, and CP variables measured by NI, ROE, ROA, and EPS. (Securities and Exchange Commission, 2012). In the data collection step, selecting the proper methods and instruments to answer the research questions is significant for any study (Rahi, 2017). Data collection instruments include observation, questionnaires, interviews, and case studies for intense research (Karbawang et al., 2018). Such data collection methods do not apply to this quantitative ex-post-facto study — secondary data is the appropriate approach for this study. The secondary data are available from the SEC EDGAR database and accessible from primary sources for public use and future research studies (Securities and Exchange Commission, 2017). The data are readily available through electronic sources,

government records, public sector records, and journals.

### **Measurement of Variables**

The examined variables for this study include CSR, CSRD, and CP from each of the sampled company's 10-K annual reports for 2017, 2018, and 2019. I used CSR and CSRD reports as a way to measure the CSR and CSRD scores. The dependent variable CP was measured using the profitability ratios NI, ROE, ROA, and EPS. I tested for a correlation matrix to determine the linear relationship between the variables.

Multicollinearity is a concern because it threatens the statistical significance of independent variables CSR and CSRD. I performed an MR test to detect highly correlated CSR and CSRD. The CSR and CSRD scores derived from the annual reports (10-Ks) — the reported items from each attribute receive a score of 1 and 0 when there is no disclosure.

The S&P 500 introduced the T&D scoring methodology to assess the disclosure levels (Patel et al., 2002). The S&P collects the company's CSR and CSRD information from the annual financial reports 10-Ks — and uses the T&D guideline to determine the number of reported items for scoring purposes (Appendix B). This study contains the computation of 98 disclosure attributes classified into three subsections:

1. Ownership structure and investor rights consist of 28 attributes.
2. Financial transparency and information disclosure consist of 35 attributes.
3. Board and management structure and process consist of 35 attributes.

The S&P scoring technique requires that CSR disclosures are measured separately for each disclosure attribute, such as ownership structure, financial transparency, and

board and management structure. S&P approach achieves the CSRD by dividing the combined overall score of each attribute to 98 (standardized overall score). Say total ownership disclosures = 20; financial transparency = 30; board and management = 28. The total scores = 78 — when divided to 98, equals .7959 — approximately equal to 80%. Such results merit a score of 8 (Table 5).

The overall scores are measurable using the following equation:

$\sum d_i / N$ , where  $d = 1$  if the CSRD exists and 0 if not, while  $N$  is the total number of maximum possible disclosures.

Note:

1. It is not a possibility for  $N$  to be 0.
2. The dependent variable is the company's performance (NI, ROE, ROA, and EPS).

The financial performance presents a view of a company's income expressed as a ratio. In this study, I used the profitability and financial ratios to measure the financial performance of the publicly traded companies listed on the NYSE for years 2017, 2018, and 2019 (Securities and Exchange Commission, 2017). A company's financial performance is examinable through accounting or market measures (Gallardo-Vázquez et al., 2019). Previous researchers used the accounting and market approach to evaluate the relationship between CSR-related reporting and financial performance (Gallardo-Vázquez et al., 2019). Market-based measures rely on the concept that shareholders comprise a primary stakeholder group whose actions could affect the organization's goals (Gallardo-Vázquez et al., 2019). Accounting-based indicators, such as ROA and ROE,

determines companies' profitability. Some of the ratios from Table 3 include the following:

*Net Income (NI)*. NI measures the company's profit over a specific period or total revenues minus total expenses.

*Return on Assets (ROA)*. ROA measures how efficiently the company uses its assets to generate profit or net income divided by total assets.

*Return on Equity (ROE)*. ROE measures how much profit the company makes as a percentage of the owner's investment or net income divided by the owner's equity.

*Earnings Per Share (EPS)*. EPS is determined using net income divided by the outstanding number shares.

### **Reliability and Validity**

#### **Reliability**

In quantitative research, reliability implies the consistency, stability, and repeatability of results (Mohajan, 2017). The study outcomes are reliable when consistent results occur in similar but varied conditions (Mohajan, 2017). The reliability coefficient is between 0 and 1, the perfect reliability nearing 1, and no reliability approaching 0 (Mohajan, 2017). The reliability of the study could increase by making sure that the data collected were accurate and relevant to the research study. This quantitative ex-post-facto study used existing data of historical filings and tests.

The data source is considered reliable since it has been reported to the SEC by the U.S. publicly traded companies (U.S. Securities and Exchange Commission, 2017). The codebook is a mechanism of research and the principle of the codebook applies to all

studies that require collecting and analyzing data (Boslaugh, 2013). The codebook related information for this study incorporate data collection methods applied, data entry techniques, decision made concerning the data, and coding procedures. The historical filings are accessible through the SEC EDGAR database (Ling & Liu, 2019; Securities and Exchange Commission, 2017). Validity determines the extent to which a theory is precisely measured in a quantitative study. For instance, a study designed to explore profitability but which actually measures liquidity would not be deemed valid.

### **Validity**

Validity is a technique used to determine whether or not the test measure meets the required standards. Threats to statistical conclusion validity occur when Type I error (false-positive), also called ( $\alpha$ ), emerges if a researcher rejects a null hypothesis that is true in the population (Banerjee et al., 2009; Louangrath, 2013). A Type II error (false-negative), also called ( $\beta$ ), emerges when the researcher fails to reject a null hypothesis that is false in the population (Banerjee et al., 2009). Even though Type I and Type II errors are inevitable, the researcher could minimize the threat by increasing the sample size (Banerjee et al., 2009). Internal and external factors can influence the validity of a study. Therefore, I increased the sample size to reduce Type 1 and Type II errors.

Internal validity refers to how the observed outcomes represent the population under study and not due to methodological failures. I assessed this study's internal validity based on the level of the relationship between CSR, CSRD, and CP of historical filings. The datasets obtained from the SEC EDGAR database deemed reliable evidence of a company's financial performance. For example, forms 10-Ks and 10-Qs filed with

the SEC must be viewed and certified by the CEO and CFO of a company to ensure that the presented financial information does not contain misleading data (Blythe, 2020). Data qualities are impacted by false corporate disclosure, corporate misstatements, and computation mistakes (Fox et al., 2016). The SEC-mandated considerable measure of data quality of annual report filed by companies using the Commission's EDGAR data repository in the XBRL format (Securities and Exchange Commission, 2020). The effects of missing data on quantitative research could lead to unpredictable outcomes.

### **Missing Data**

During the data collection process using surveys or interviews, missing data incidents can happen due to various reasons such as nonresponse from some participants (De Leeuw, 2001; Langkamp et al., 2010). Langkamp et al. (2010) identified the practical methodologies for handling missing data surveys, including re-weight, drop, hot-deck, and multiple imputation methods. In an ex-post-facto quantitative study, missing data occurs when a company does not file complete financial reports for various reasons, such as transaction errors that might have occurred during the filing processes (Hoitash et al., 2020; Ling & Liu, 2019).

In a quantitative secondary data study, a researcher either treats the collected data set as if it has only observed values or neglects the imputations and analyzes only observed values (Wang et al., 1992). This ex-post-facto quantitative study used existing secondary data from the SEC EDGAR database – essentially the audited historical 10-K annual reports for publicly traded companies (Securities and Exchange Commission, 2017). I examined historical records of companies that have complete historical financial

records to avoid missing data misleading conclusions. Investors can search for companies' specific information, such as audit reports, by using tools such as central index keys (CIKs), standard industrial classification (SIC), or companies' names (Security and Exchange Commission, 2012). The initial step in the sampling process is to define the target population.

Violated analytical tests' assumptions need to examine descriptive statistics and test distributions of variables for normality assumption (Whelan & DuVernet, 2015). Jeon (2015) argued that the MR model was suitable for examining the relationships between two or more independent variables and one dependent variable. Jeon suggested testing the assumptions for normality, multicollinearity, and homoscedasticity to prevent drawing false conclusions from the analysis before employing the MR model. Researchers used Bartlett's test of sphericity to test the homoscedasticity assumption (Shukor, 2016). A Bartlett's p-value greater than .05 indicates no violation of homogeneity variance (Shukor, 2016).

Data normality test intends to test for normal distribution of the dependent variable regression model and the independent variables (Heryanto, 2019). I performed data normality tests using the Kolmogorov-Smirnov (K.S) statistical test (Sainani, 2012). The result of the K-S test greater than 0.05 indicates that the data used for the study suffice normality test conditions (Heryanto, 2019). Graph analysis is another normality test, commonly known as the normal probability-probability (P-P) plot test. The data scattered around the diagonal line indicate normally distributed data (Heryanto, 2019). In this study, I used the K-S test and the quantile-quantile (Q-Q) plot test to test normality.

Multicollinearity suggests the presence of high correlations between two or more predictor variables in an MR model. A multicollinearity test is appropriate for testing the correlation between independent variables (Heryanto, 2019). Multicollinearity occurs when a tolerance value is less than .10, or the variance inflation factor (VIF) is greater than 10 (Heryanto, 2019). Alternatively, multicollinearity does not occur when the tolerance value is less than .10 or VIF is less than 10 (Heryanto, 2019; Lavery et al., 2017). I performed the statistical analyses of all the violated assumptions using SPSS Version 27.

### **Sampling Procedure**

To examine the relationship between CSR, CSRD, and CP required a minimum sample size of between 88 and 107 companies. The targeted sampled companies for this study included publicly traded companies listed on the NYSE. I collected data from the publicly traded companies listed on the NYSE for these industries: financial and bank services, technology, healthcare, energy, oil and gas, and real estate. The companies met these criteria:

1. The companies were publicly traded companies listed on the NYSE.
2. SEC EDGAR published the company's annual financial reports (10-Ks).
3. There were no missing data for the selected years 2017, 2018, and 2019.

I calculated the three-year averages of historical profitability ratios for dependable variables NI, ROA, ROE, and EPS for each sampled company. The company's data are retrievable from the SEC EDGAR database from the 10-Ks annual reports for 2017, 2018, and 2019. The year 2017 was a starting point for data collection because 2021 is

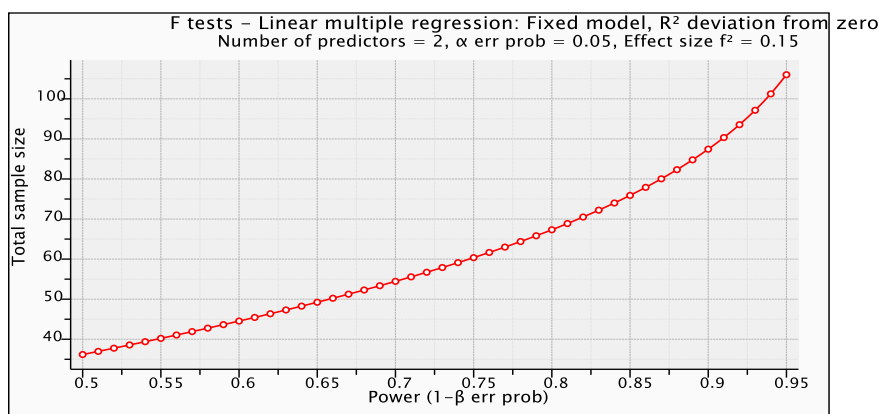


within five years of the expected completion of my doctoral program – making the most currently available data. The SEC EDGAR data are freely available to investors, financial professionals, and the general public.

I collected the data from the sampled company's financial reports for 2017, 2018, and 2019. I then performed a G\*Power analysis to determine the appropriate sample size for the study – assuming a medium effect size ( $f^2 = .15$ ),  $\alpha = .05$ , and two predictor variables. The G\*Power analysis results confirmed that the study required a minimum sample size of between 88 and 107 companies to attain a power of .90 and .95 (Figure 2). The SEC EDGAR database was the primary data collection source for this study. The data for this quantitative ex-post-facto study are also retrievable from Compustat and KLD Statistics financial databases.

## Figure 2

### *Power as a Function of Sample Size*



## **Ethical Consideration**

The researcher's responsibility is to protect the participants and their data (Karbwang et al., 2018). Obeying the essential ethical practices is crucial to avoid misrepresentation of data, safeguarding participant confidentiality, and protecting sensitive topics (Turcotte-Tremblay & Sween-Cadieux, 2018). Consent forms provide additional protection to the participant's rights. All participants must sign consent forms as part of the agreement to participate and protect their rights (Noain-Sánchez, 2016). The consent form's details contain the purpose of the study, data collection methods, and the type of data and reporting methods (Karbwang et al., 2018).

The Office for Human Research Protections (OHRP) provides a consent form that describes the rights of the participants in detail. OHRP informs all participants of the right to voluntarily decide not to participate in a research study without being penalized (Office for Human Research Protections, 2018). The OHRP recommends that whoever wishes to disenroll from participating in a research study should communicate such an intention with the research management team (Noain-Sánchez, 2016; Office for Human Research Protections, 2018). The OHRP rules require researchers to retain all the participants' collected information for five years regardless of whether a third party kept the report (Noain-Sanchez, 2016). Ethical standards related to scholarly research and writing were a significant component of this study.

## ***Ethical Principles***

The SEC EDGAR database used for this study was a profound ethically accepted data accessible to the public. The accessibility of the secondary data enhances the

significance of all public investment in data gathering (Securities and Exchange Commission, 2017). The basic ethical principles define legal aspects that serve as a primary justification for the appropriate ethical management of human actions. The three basic principles relevant to the ethics of research involving human subjects include the principle of Respect for persons, Beneficence, and Justice (Coravos et al., 2020; Office for Human Research Protections, 2018). Respect for persons principle protects the rights of individuals with diminished autonomy.

Respect for persons includes two ethical beliefs:

1. Treat individuals as autonomous representatives.
2. Individuals with reduced autonomy deserve protection.

The principle of Respect for persons falls into two ethical requirements (Coravos et al., 2020; White, 2020):

1. To accept the responsibility to acknowledge autonomy.
2. Protect those with diminished autonomy. A person of reduced autonomy is deprived or incompetent to make decisions and plans, such as prisoners and mentally disabled individuals (Office for Human Research Protections, 2018).

A lack of respect for an autonomous individual includes denying the person's freedom to give opinions on problems affecting specific group(s) within their community.

The beneficence principle calls for ethically treating people, respecting their choices, and protecting them from potential harm (White, 2020). The principle of justice calls for equal treatment – a discrimination act occurs when some benefit to which a person is entitled is invalidated without justification (Office for Human Research

Protections, 2018). The OHRP stated that the obligations of serving as research subjects involved mainly poor patients in the periods between the 19<sup>th</sup> and 20<sup>th</sup> centuries (Office for Human Research Protections, 2018). Previous research demonstrated that improved medical care derived from successful research benefited a selective group of patients deemed more important than their counterparts (Office for Human Research Protections, 2018). The Institutional Review Board (IRB) is accountable for assuring that all Walden University research meets ethical standards and U.S federal regulations. I obtained my IRB approval to comply with the required ethical standards before the data collection process. The IRB approval number is 08-28-20-0724487. I collected the appropriate data for this study from the SEC EDGAR database and performed the MR analysis to answer the research question. Table 4 depicts the breakdown of sources used for the entire document in this quantitative ex-post-facto study.

**Table 4**

*Breakdown of Sources for the Entire Document*

Reference Type	Total Sources	Total Sources Within 5 Years	Expected Graduation Within 5 Years as of 2021
Peer-reviewed			
Journal	144	107	74%
Books	11	10	91%
Websites	12	8	67%
<b>Total</b>	<b>167</b>	<b>125</b>	<b>75%</b>

Source: Author's calculations

## **Transition and Summary**

A review of past literature reported differences in the relationship between accountability, transparency, and company performance. The purpose of this quantitative ex-post-facto study was to determine the relationship between the independent variables CSR, CSRD, and dependent variable CP in terms of profitability (NI, ROA, ROE, and EPS). I used an MR model to examine the relationship between CSR, CSRD, and CP. The stakeholder theory is the theoretical framework used for this study.

In Section 2, I discussed the purpose statement and the research question of this research study — also, I selected the appropriate research method and design, the quantitative ex-post-facto study. I also addressed the study's ethical considerations, data collection, data instrument, and analysis. I discussed the SEC EDGAR datasets of the sampled U.S publicly traded companies for 2017, 2018, 2019 are appropriate for this quantitative ex-post-facto study. Finally, all related ethical concerns are discussed, including the specific guidelines of the Institutional Review Board (IRB). Based on Walden University and its IRB rules — I began the data collection process after receiving my IRB approval number 08-28-20-0724487.

### Section 3: The Deliverable

#### **Executive Summary**

The purpose of the quantitative, ex-post-facto study was to examine the relationship between CSR, CSRD, and CP in terms of profitability. I employed the Statistical Package for the Social Sciences (SPSS) software, Version 27, to test for the relationship between CSR, CSRD, and the CP in terms of profitability. I incorporated the MR analysis to examine the relationship between CSR, CSRD, and CP (NI, ROE, ROA, and EPS). After examining the key assumptions in performing an MR analysis, there was absolute collinearity between the independent variables. I rejected the alternative hypothesis and retained the null hypothesis because the analysis indicated no significant relationship between CSR, CSRD, and CP. I present the summary of findings, recommendations for action, communication plan, the implication for social change, skills and competencies, and application to professional practice, which furnished the basis for the recommendations for action and future research.

The purpose of the quantitative, ex-post-facto study was to examine the relationship between CSR, CSRD, and CP in terms of profitability. The targeted population is the publicly traded companies listed on the NYSE. The geographical location is east of the United States. The theoretical framework supporting this study is the stakeholder theory. The data for this study were attainable using an archival data collection method for the sampled publicly traded companies for 2017, 2018, and 2019.

I used SPSS, Version 27, and applied MR to test the relationship between the independent and dependent variables CSR, CSRD, and, CP respectively. I analyzed 91

companies from five industries: financial, bank services, technology, healthcare, energy, oil and gas, and real estate. A company stock must be a publicly-traded company and file its 10-K annual reports with the SEC. Previous research indicated that some U.S publicly traded companies adopted the standard disclosure best practices approach to quantify each company's CSR policy engagement. I collected the CSR, CSRD, and CP data from 10-Ks annual reports for all the sampled companies for this study.

The U.S. disclosure best practices standards rank a company's accountability and transparency by providing a score for every reported item. For example, the company receives one point when it discloses information on an item (attribute) such as financial, governance, or ownership. The overall results from the 98 questions are converted into a percentage and arranged in scores from 1 – 10. For instance, the percentage range between 11 – 20 receives a score of 2; 21 – 30 receives a score of 3, and; 71 – 80 receives a score of 8. The S&P 500 arranged the overall scores (98) into three subcategories: financial, governance, and ownership (Appendix B).

To test the relationship between CSR, CSRD, and CP—I calculated the average of each sampled company's historical financial reports (10Ks) to include NI, ROE, ROA, and EPS (Table 3). I used the S&P best practices model as an implicit benchmark to determine each organization's CSR and CSRD Scores. I then combined the 91 datasets representing NI, ROE, ROA, and EPS for all of the sampled companies from each industry. I finally regressed each profitability ratio against its related CSR and CSRD scores using the MR analysis to determine the existing relationship between the variables.

The sampled publicly traded companies for this study comprised of five different industries listed on the NYSE for 2017, 2018, and 2019:

1. Financial and bank services.
2. Technology.
3. Healthcare.
4. Energy, oil, and gas.
5. Real estate



**Figure 3***Companies in Sample and Their Related Industries*

Financial & Bank Services	<sup>b</sup> Technology	<sup>c</sup> Healthcare	<sup>d</sup> Energy, Oil, and Gas	<sup>e</sup> Real Estate
1. J.P. Morgan Chase & Co.	1. MasterCard Inc.	1. United Health Group Inc.	1. Exxon Mobil Corp.	1. Simon Prop. Group
2. Wells Fargo & Co.	2. Twitter Inc.	2. CVS Health Corp.	2. Chevron Corp.	2. Prologis Inc.
3. Bank of America	3. Oracle Corp.	3. Stryker Corp.	3. Marathon Petroleum	3. Equity Residential
4. American Express Co.	4. HP Inc.	4. Pfizer Inc.	4. Occidental Petro Corp.	4. Boston Prop. Inc
5. Morgan Stanley	5. Vmware Inc.	5. Anthem Inc.	5. OneOk Inc.	5. Annaly Capital Inc.
6. M&T Bank Corp.	6. Servicenow Inc.	6. Centene Corp.	6. Nextera Energy Inc.	6. Welltower Inc.
7. Goldman Sachs Group	7. Motorola Solutions Inc.	7. Mckesson Corp.	7. Williams Co.	7. Federal Real. Trust
8. Citigroup Inc.	8. Fleetcor Techno. Inc.	8. Universal Health Servic	8. Edison International	8. Vereit Inc.
9. Ally Financial Inc.	9. Palo Alto Networks Inc.	9. AbbVie Inc.	9. DTE Energy Company	9. Public Storage
10. American Intern. Group	10. Verizon Comm. Inc	10. Medtronics PLC	10. Entergy Corp.	10. Brixmor Prop Inc.
11. Capitalone Financial Co.	11. Salesforce.com Inc.	11. Eli Lilly & Co.	11. Halliburton Co.	11. Equity Residential
12. Comerica Inc.	12. IBM	12. 3M Company	12. Hess Corporation	12. Alexandria Real Est. Inc.
13. Bank of New York Mellon	13. Amphenol Corp.	13. Merck & Co., Inc.	13. General Electric Co.	13. Camden Prop. Trust
14. Metlife Inc.	14. IQVIA Holdings Inc.	14. Becton Dickinson Co	14. Centerpoint Energy Inc.	14. Crowne Castle Intern.
15. BlackRock Inc.	15. Square Inc.	15. Zoetis Inc	15. Bristol Myers Squibb Co.	15. American Tower REIT
16. KeyCorp	16. Fortive Corp.	16. HCA Healthcare	16. Conocophillip Co.	16. Ventas Inc.
17. Citizen Financial Group Inc.	17. Paycom Software Inc.	17. Waters Corp.	17. Dominion Energy Inc.	17. Avalonbay Inc.
18. U.S. Bancorp	18. Arista Networks Inc.	18. Varian Medical System	18. Southern Co.	18. Digital Realty Trust Inc.
				19. CBRE Grp.

<sup>a</sup>Financial Industry <sup>b</sup>Technology Industry <sup>c</sup>Healthcare Industry <sup>d</sup>Energy, Oil, and Gas Industry <sup>e</sup>Real Estate Industry

To identify the CSR practices of the U.S. publicly traded companies, I examined the 10-K annual reports and annual reports (proxy statements) for three years from 2017 – 2019. This study’s content analysis focused on the U.S. best practices of T&D guidelines (Appendix B). I used the guideline as a benchmark for measuring the degree of CSR, namely, (a) financial transparency and information disclosure, (b) board and management structure and process (c) ownership structure and investor relations. If a company discloses each dimension requirement, the overall number of the reported items must reach 91% or more to receive a total score of 10. Table 5 compiles the measurements of CSR practices examined in the content analysis.

**Table 5**

*CSR Methods Applied in Content Analysis*

Dimensions	Source	Scores
Financial Transparency and Information Disclosure	Transparency and Disclosure Survey (Appendix B)	11 – 20 = 2
		21 – 30 = 3
		31 – 40 = 4
Board and Management Structure and Process	Transparency and Disclosure Survey (Appendix B)	41 – 50 = 5
		51 – 60 = 6
		61 – 70 = 7
Ownership Structure and Investor Relations	Transparency and Disclosure Survey (Appendix B)	71 – 80 = 8
		81 – 90 = 9
		91 – 100 = 10

I selected the 18 companies under the financial industry based on two criteria: (a) the company is registered and listed on the NYSE and (b) has filed complete annual reports for 2017, 2018, and 2019. Each company's ticker symbol is retrievable from the market watch website (Market Watch, 2021). The dependent variables data, NI, ROE,

ROA, and EPS, were obtained from each sampled company's 10-K annual reports for 2017, 2018, and 2019. I calculated each company's data manually using the appropriate methods indicated in Table 8 under the dependent variables.

In this study, there are 18 publicly traded companies in the technology industry. The ticker symbol was critical in identifying each company listed on the NYSE or other stock exchanges such as NASDAQ and S&P 500 (Market Watch, 2021; Securities and Exchange Commission, 2012). I retrieved the datasets for each company from the 10-K annual reports for 2017, 2018, and 2019 as indicated in the SEC EDGAR database. The company's performance in terms of profitability for each company was determined using NI, ROE, ROA, and EPS ratios (Table 21).

The healthcare industry was among the five sectors selected for this study. This industry's data includes 18 companies listed on the NYSE and retrievable from the SEC EDGAR database, particularly from the 10-K annual reports for 2017, 2018, and 2019. The collected data consist of CSR and CSRD scores for measuring CSR and CSRD, respectively. Data for measuring CP in profitability include NI, ROE, ROA, and EPS.

I retrieved the energy, gas, and oil industries data from the SEC EDGAR database. Eighteen companies from the energy, gas, and oil industries were part of the 91 sampled companies for this study and listed on the NYSE. The SEC and market watch websites provided the tools to look up each company's ticker symbols, related industry, and whether or not listed on NYSE (Market Watch, 2021; Securities and Exchange Commission, 2012). The CSR, CSRD, and CP data are retrievable from 10-K's annual reports using the EDGAR's tool for years 2017, 2018, and 2019.

The real estate industry includes 19 companies listed on NYSE. This industry's data are accessible from the SEC Website (Securities and Exchange Commission, 2012). I used the 10-Ks annual reports for each company as the primary data source for this study, including CSR, CSRD, and CP (NI, ROE, ROA, and EPS) reports for 2017, 2018, and 2019. The use of ticker symbols was crucial for selecting the specific company for market research or data analysis (Market Watch, 2021).

### **Measuring Company Performance**

There are different approaches to measuring a CP in profitability (NI, ROE, ROA, EPS). The information on a company's financial performance was obtained from 10-Ks annual reports of the sampled U.S. publicly traded companies. In this study, I analyzed the relationship between CSR, CSRD, and CP using the variables: NI, ROE, ROA, and EPS. I computed a three-year average of each company's variables from their previous 10-Ks annual reports for 2017, 2018, and 2019 retrieved from the SEC EDGAR database.

### **Determining the CSR and CSRD Scores**

I used the U.S disclosure best practices standards adopted by S&P to determine CSR scores for 91 U.S. publicly traded companies for 2017, 2018, and 2019. To determine the CSR score, I examined each company's 10-Ks annual reports against the 98 items as the T&D items listed in Appendix B. S&P used the T&D approach to measure the CSR and CSRD scores in this study. The S&P overall disclosure items (98) including financial (35 items), governance (35 items), and ownership (28 items). The S&P scoring method uses the ratio of the reported items to the overall score (98 questions), converts the ratio into a percentage, and arranges it in scores from 1–10

(Khanna et al., 2004; Patel & Dallas, 2002). A company receives one point when it reports information on an item (Khanna et al., 2004). The percentage range between 11 – 20 receives a score of 2; 21 – 30 receives a score of 3, and; 71 – 80 receives a score of 8. CSR scores for each reported sub-dimension score are determined individually for each company for a specific year. CSRD scores are determined using the ratio of the reported sub-dimension for the particular year to the overall 98 attributes.

The overall disclosure scores were calculated using the 98 questions in Appendix B, referred to as the transparency score (Khanna et al., 2004; Patel & Dallas, 2002). The case of financial disclosure scores includes 35 questions from the sub-dimension financial transparency disclosure. Governance disclosure scores derived from 35 questions of the subdimension board, management structure, and process. Ownership disclosure scores include 28 questions listed under the sub-dimension called ownership structure and investor relations. The approach employed to measure and calculate all the test variables include the following:

**Figure 4***Dimensions of CSR Practices used in Content Analysis*

CSR Dimensions	Content	Source
Financial Transparency and Information Disclosure.	(1) Business (2) Risk-factors (3) Legal proceedings, (4) Financial data (5) Management's discussion and analysis (Appendix A)	<ul style="list-style-type: none"> <li>• SEC EDGAR (10-Ks Annual Reports)</li> <li>• Proxy Statement (Form DEF 14A)</li> </ul>
Board and Management Structure and Process.	(1) Directors, Executive Officers, and Corporate Governance (2) Executive compensation (3) Security ownership of specific beneficial owners; and (4) Management and related stockholder issues; and (5) Director independence (6) Principal accounting fees and services (Appendix A)	<ul style="list-style-type: none"> <li>• SEC EDGAR (10-Ks Annual Reports).</li> <li>• Proxy Statement (Form DEF 14A)</li> </ul>
Ownership Structure and Investor Relations.	(1) Number of outstanding shares to include preferred shares, ordinary shares. (2) Shareholder structure - voting rights distribution (Appendix A)	<ul style="list-style-type: none"> <li>• SEC EDGAR (10-Ks Annual Reports).</li> <li>• Proxy Statement (Form DEF 14A)</li> </ul>

A company is assigned a value of one when it discloses the CSR information from any dimensions to include financial, governance, and ownership. Alternatively, a company is assigned a value of zero value if there is no report. The CSRD overall scores for each company were calculated using all the specified 98 dimensions (Appendix B).

I used the S&P's scoring method as a benchmark to determine the number of CSR-reported items and CSRD scores. In this study, data normalization for predictor

variables CSR and CSRD was deemed unnecessary. The ratio values between the overall number of CSR-reported items divided by 98 (possible maximum CSR-reported items) were recorded as the overall CSRD scores. For example, JP Morgan's overall number of CSR-reported items (Accountability) was 94. Therefore, I divided the overall number of its CSR-reported items (94) by the possible maximum CSR-reported items (98), equal to .96. In this case, I recorded the overall CSRD score (Transparency) for JP Morgan as .96. I applied the same procedures to all the sampled companies in this study to determine the CSR and CSRD values. The overall CSR and CSRD values were calculated to measure the relationship between accountability and transparency. Moreover, NI, ROE, ROA, and EPS were used to measure company performance.

**Figure 5***Analyzed Variables*

Variable	Definition
<u>Independent Variables</u>	
Accountability (CSR Index)	It is computed as <i>Item Disclosure</i> divided by <i>Total Item Disclosure</i> . Every dimension of the disclosure is calculable using the equation: $\sum di / N$ , where $d = 1$ if the CSR disclosure exists and 0 otherwise, while N is the total number of maximum possible disclosures for the selected dimension.
Transparency (CSR D)	<i>Transparency</i> refers to the overall disclosure score using all the 98 questions given in Appendix B.
<u>Dependent Variables</u>	
Company Performances (CP): NI	Net average income is computed by dividing (i) $(3 \times \text{net income for 2019}) + (2 \times \text{net income for 2018}) + (\text{net income for 2017})$ by (ii) 6.
ROE	Return on average equity is calculated by dividing (i) one-year period net income for 2019, 2018, and 2017 by (ii) one-year average total shareholders' equity for 2019, 2018, and 2017, respectively.
ROA	The average return on assets is computed by dividing (i) one-year period net income for 2019, 2018, and 2017 by (ii) total assets for 2019, 2018, and 2017, respectively).
EPS	Earnings per share are computed by dividing (i) one-year period net income for 2019, 2018, and 2017, respectively) by (ii) one-year period basic weighted average common shares outstanding for 2019, 2018, and 2017.

Source: Author's summary based on Annual reports (10-Ks)



### **Purpose of the Study**

The purpose of this quantitative ex-post-facto study was to examine the relationship between CSR, CSRD, and CP in terms of profitability. I used MR analysis to examine the relationship between CSR, CSRD, and CP in profitability. The models did not significantly predict CP as measured by NI,  $F(2, 88) = .670$ ,  $p = .514$ ,  $R^2 = .112$ ; ROE,  $F(2, 88) = 4.274$ ,  $p = .017$ ;  $R^2 = .089$ ; ROA,  $F(2, 88) = 1.931$ ,  $p = 1.51$ ,  $R^2 = .042$ . EPS,  $F(2, 88) = .428$ ,  $p = .653$ ,  $R^2 = .010$ . This study's results indicated an inconsistent relationship between CSR, CSRD, and CP (NI, ROE, ROA, and EPS). The findings of this study could lead to positive social change and contribute to business practice by promoting — the best CSR disclosure practices of CSR and CSRD to all publicly traded companies.

### **Goals and Objectives**

In 2008 the estimated loss from fraud and abuse was roughly seven percent of annual revenues, equivalent to \$994 billion in fraud and losses (Hall, 2016). Out of 959 fraud cases examined, 25% of the companies experienced losses of more than \$1 million (Hall, 2016). To a great extent, the social outcomes of this crisis created a reputational problem for the involved companies, restricting their competitiveness and profitability. Companies are encouraged to adopt CSR practices due to the CSR's perceived advantages. In the long run, engaging in CSR activities could improve companies' competitiveness and reputation, positively impacting the relationship between CSR disclosure practices and its FP.

The objective of this study aims to determine if there is a relationship between CSR, CSRD, and CP in terms of profitability. The goal of this study is to understand the relationship between CSR, CSRD, and CP. The dataset for sampled U.S publicly traded companies listed on NYSE for 2017, 2018, and 2019 provided the opportunity to examine how the specified companies performed in CSR disclosure practices. In this study, I discussed the relationship between CSR, CSRD, and CP. The stakeholder theory could support the publicly traded companies in promoting the best practices of CSR and CSRD. As a result, such companies could report more reliable financial performance and avoid potential managerial risks such as not involving internal and external stakeholders in the process. The implication for positive social change could increase value to local communities and society by fully engaging in CSR disclosure practices.

### **Overview of Findings**

The purpose of this study was to examine the relationship between CSR, CSRD, and CP in terms of profitability (NI, ROE, ROA, and EPS). The CSRD's reporting was rising over the years in different sectors (Rangan et al., 2012), which was a positive trend in the U.S publicly traded companies, including banking, technology, healthcare; gas, oil, and energy; and real estate industries. Researchers have argued that CSR's mixed findings impacted CP due to a lack of transparency in the CSR dimension and CP measurements (Yoon & Chung, 2018).

Literature reviews presented in Section 1 revealed that previous studies reported conflicting findings on the nature and the strength of the impacts of the CSR disclosure practices on the company's FP. The study results of the prior studies included significant,

insignificant, and mixed results. The interpretations of the findings of this study were not consistent. I failed to reject the null hypothesis as the study findings did not indicate a significant relationship between CSR, CSRD, and CP in terms of profitability. Such findings were consistent with Soana's (2011) study, in which there was no significant effect observed between CSR and accounting returns.

On the other hand, the impact on the lack of significant relation between CSR and CSRD differed from Cho et al.'s (2019) and Kim et al. (2019) studies. In these studies, researchers found significant positive effects of CSR on financial performance. Inconsistent with the previous literature on the relationship between CSR and financial performance and the insights from the stakeholder theory, I rejected the null hypothesis as the study findings indicated the non-existence of the relationship between CSR, CSRD, and CP.

### **Recommendations**

The findings of this study can have significant theoretical and practical recommendations. The study results have contributed to the existing literature from different perspectives. The inconsistent results of CSR, CSRD, and CP did not support the stakeholder theory. Stakeholder theory believes that business activities intended at improving the stakeholders should promote the business, create a competitive advantage and increase financial performance (Harrison et al., 2007). Youn et al. (2015) and Inoue and Lee (2011) examined the impact of CSR on CP. Youn and Lee's study results were inconsistent with the Stakeholder theory perspective.

The inconsistent findings of this study fill the gap in the existing literature on CSR disclosure practices by adding the U.S. publicly-traded company's perspective on the phenomena through improving our knowledge of the impact of CSRD's practices on the CP's in diverse industries. The study results also suggested that CSR disclosure practices may not improve company profitability immediately. However, it could enhance FP in the long run and prevent the potential risk of poor managerial decisions. Therefore, my recommendations to the business communities and society are as follows: (1) managers should ensure transparency of managerial process (2) implementing, conducting, and communicating the concept of CSRD's practices within their organizations, and (3) full involve the internal and external stakeholders in the process.

### **Presentation of the Findings**

In this segment, I presented the assumptions tested, the descriptive and inferential statistics, and a theoretical interpretation of the results. I explained the study outcomes in tables and figures to exhibit a graphic representation of the summary report. Lastly, I provided a conclusion statement.

### **Assumption Tests**

I evaluated multicollinearity assumptions, outliers, normality, linearity, homoscedasticity, and the independence of residuals. The SPSS, version 27, was used to test the assumption's violation for the study. Statistical outcomes, tables, and figures are shown in this section to examine all linear regression assumptions violations.

### ***Multicollinearity***

Multicollinearity occurs when predictor variables indicate a high correlation with each other. I tested the severity of multicollinearity to determine if there was a linear relationship between the predictor variables. I applied tolerance and VIF to examine the multicollinearity assumption between CSR and CSRD. Table 6 indicates a perfect linear relationship between CSR and CSRD since the VIF and tolerance were equal to 5.89 and .170, respectively. A VIF higher than ten 10 is a sign of serious collinearity (O'Brien, 2007).

The VIF and tolerance are related statistics for determining collinearity in multiple regression. VIF has emerged in the literature with rules for assessing the VIF values, including rules 4 and 10 (Jou et al., 2014; O'Brien, 2007). A tolerance of less than 0.20 corresponds to rules 5 and 0.10 rule 10, respectively, indicating a collinearity problem (O'Brien, 2007). VIF values more significant than ten should not be a reason to dispute the regression analyses results. It is critical to look at other statistical results, such as Table 6, indicating appropriate standardized coefficient beta ( $\beta$ ). I performed the MR analysis using the independent variables CSR and CSRD and the dependent variable CP.

In this study, an MR analysis met the study's purposes because of a minimum number of predictive variables needed to conduct the MR analysis. MR predicts a normal dependent variable from two or more independent variables. Next, I address the assumption of normality, outliers, residuals independence, homoscedasticity, and linearity.

**Table 6***Multicollinearity of Independent Variables*

Dependent Variable (NI)

Mode	<u>Unstand Coeff.</u>		<u>Standardized Coeff.</u>			Zero-order	Correlation Partial	<u>Collinearity Stats</u>			
	<i>B</i>	Standard Error	<i>Beta</i>	<i>t</i>	Sig.			Part	Tolerance	VIF	
1Constant	16.454	18.248		.902	.370						
CSR Report	-.502	.464	.278	1.084	.281	-.086	-.115	.115	.170	5.899	
CSR Score	37.067	45.209	.211	.820	.414	-.043	.087	.087	.170	5.899	
<u>Dependent Variable (ROE)</u>											
1Constant				-							
	122.618	61.033		2.009	.048						
CSR Report	3.554	1.551	5.66	2.292	.024	.264	.237	.233	.170	5.899	
CSR Score	202.719	151.207	-.331	-	1.341	.183	.185	-.141	.136	.170	5.899
<u>Dependent Variable (ROA)</u>											
1Constant				-							
	29.233	20.571		1.421	.159						
CSR Report	.722	.523	.350	1.381	.171	.192	.146	.144	.170	5.899	
CSR Score	34.797	50.963	-.173	-.683	.497	.146	-.073	.071	.170	5.899	
<u>Dependent Variable (EPS)</u>											
1Constant	16.921	14.926		1.134	.260						
CSR Report	5.027E-5	.379	.000	.000	1.000	-.089	.000	.000	.170	5.899	
CSR Score	-14.078	36.979	.098	-.381	.704	-.098	-.041	.040	.170	5.899	

### *Normality*

A normal probability plot, known as a Q-Q plot, presents the data's distribution versus the expected normal distribution. For normally distributed data, observations should lie roughly on a straight line (Boslaugh, 2013). If the data is non-normal, the points form a curve that deviates from a straight line. The Q-Q plots indicated outliers in data distributions (Fig. 6, Fig. 7, Fig. 8, and Fig. 6). The substantial evidence suggests that the sample data do not meet the assumptions of normality.

Shapiro-Wilk and Kolmogorov-Smirnov tests are useful for testing and confirming normality using the Z-scores (Martin & Bridgmon, 2012). Z-scores and Kurtosis scores of the distribution are measurable by dividing the skewness and Kurtosis of the distribution by its related standard error (Table 9). For a normal distribution, the standard Z-scores is  $\pm 3.29$  for a medium sample ( $50 < n < 300$ ) (Kim, 2013; Martin & Bridgmon, 2012).

Table 12 exhibits the NI, ROE, ROA, and EPS. The Z-kurtosis scores for ROE and EPS are 3.226 and 1.868, respectively, indicating normal distribution. The Z-kurtosis scores for the variables NI and ROA are 9.018 and 5.776, respectively, deviated from normal. The Z-skewness scores of 7.019, 5.770, 6.249, and 4.648 for variables NI, ROE, ROA, and EPS, respectively, deviated from normal.

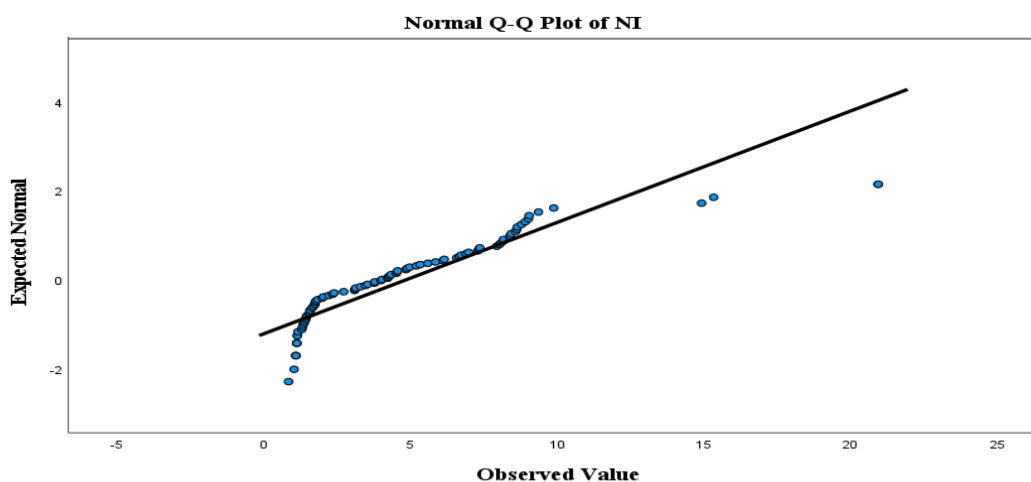
The S-W and the K-S tests are statistical tests that evaluate the hypothesis to determine if the data are normally distributed (Martin & Bridgmon, 2012). The *p* values of both tests of .00 shown in Table 8 are significantly less than .05, suggesting that the dependent variables NI, ROE, ROA, and EPS do not indicate a normal distribution. Not

all statistical analyses necessitate the normality of the dependent variable — in regression analysis, it is acceptable to show that the residuals are relatively normal (Habeck & Brickman, 2018). The minimum and maximum standard residuals values for dependent variables NI, ROE, ROA, and EPS were (-1.057, 4.043), (-1.349, 3.206), (-1.216, 4.339), and (-1.208, 2.969) respectively. Such residual statistics signify that the residuals are relatively normal. The standard residuals ranges between 1.5 and 2.5 indicate the assumption of normality is acceptable (Kryeziu & Hoxha 2021).

A p-value of less than .05 signifies significance and that of less than .01 ( $p < .01 < \alpha .05$ ) indicates statistically significance (Webster, 2012). Thus,  $p = 0.00$  signifies high significance, and it indicates substantial evidence against the null hypothesis. I rejected the null hypothesis for the dependent variables and accepted the alternative hypothesis. Next, I assess the assumption of outliers for normality.

### Figure 6

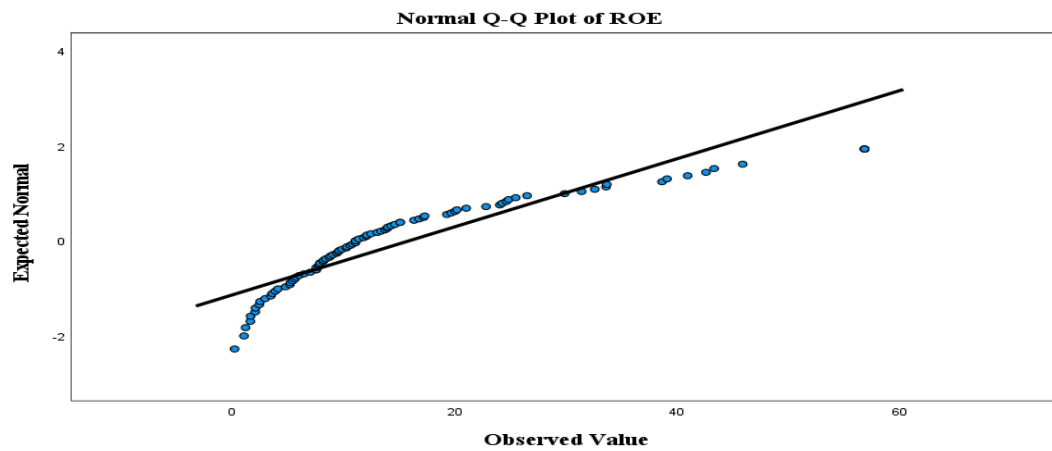
*Q-Q Plot to Assess Normality of NI*



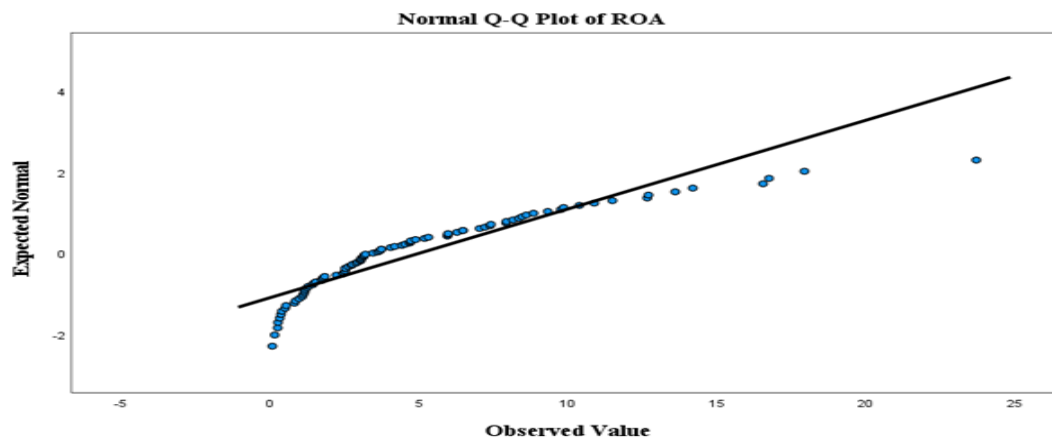


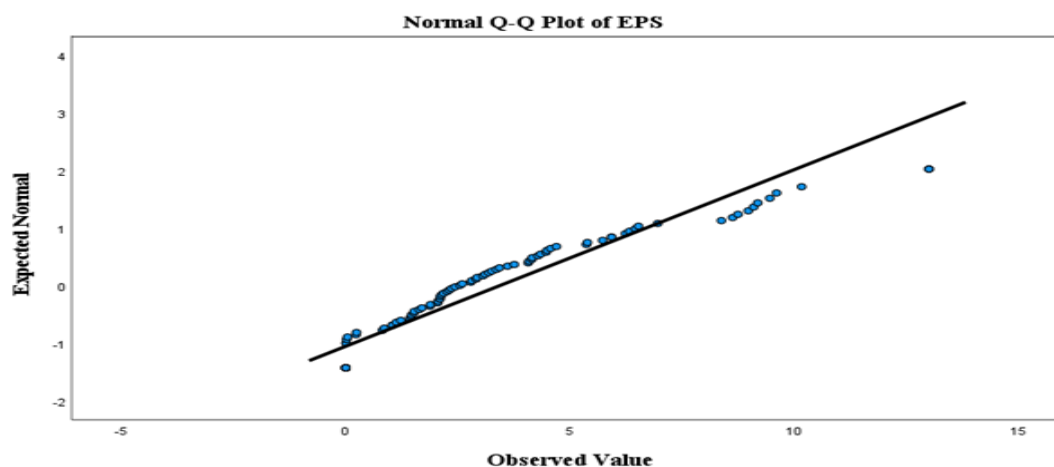
**Figure 7**

*Q-Q Plot to Assess Normality of ROE*

**Figure 8**

*Q-Q Plot Assess Normality of ROA*



**Figure 9***Q-Q Plot to Assess Normality of EPS***Table 7***Tests of Normality*

	<u>Kolmogorov-Smirnov<sup>a</sup></u>			<u>Shapiro-Wilk</u>		
	Statistic	df	Sig.	Statistic	df	Sig.
NI	.157	91	.000	.819	91	.000
ROE	.187	91	.000	.837	91	.000
ROA	.161	91	.000	.853	91	.000
EPS	.145	91	.000	.877	91	.000

a. Lilliefors Significance Correction

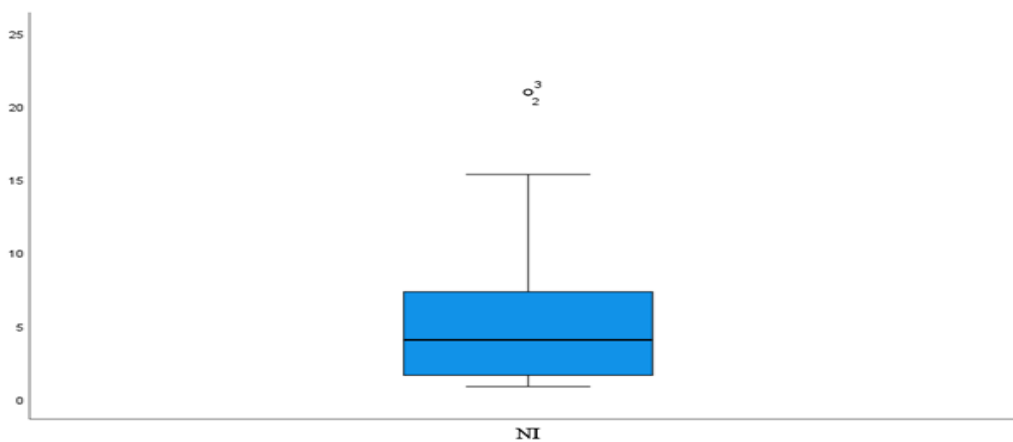
***Outliers***

I used the SPSS version 27 to generate the box plots for the dependent variables NI, ROE, ROA, and EPS (Figures 10, 11, 12, and 13). The middle section of the box plots represents 50% of the cases (Morgan, 2004). The whiskers represent the expected range of the data, and outliers are the data range that falls outside the whiskers. The box

plots containing asterisked outliers indicate significant outliers in the data — while the box plots containing cycled outliers indicate no significant violation in the assumptions (Figures 10, 11, 12, and 13).

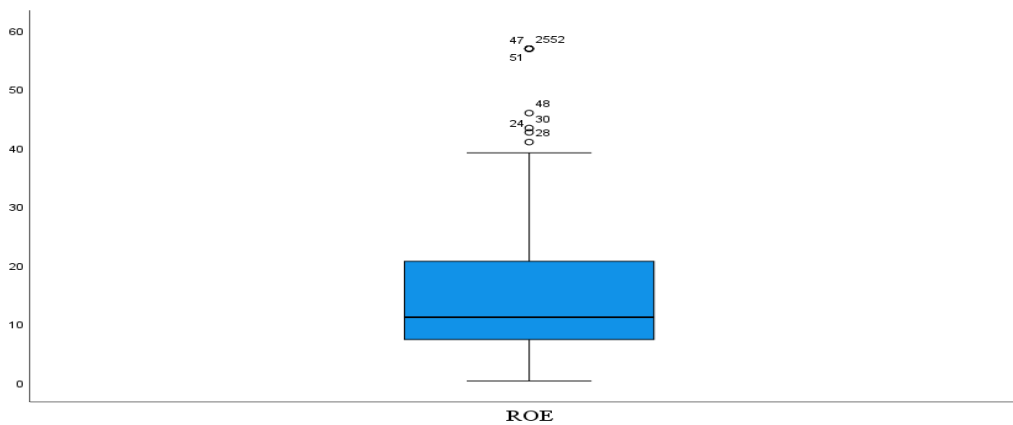
**Figure 10**

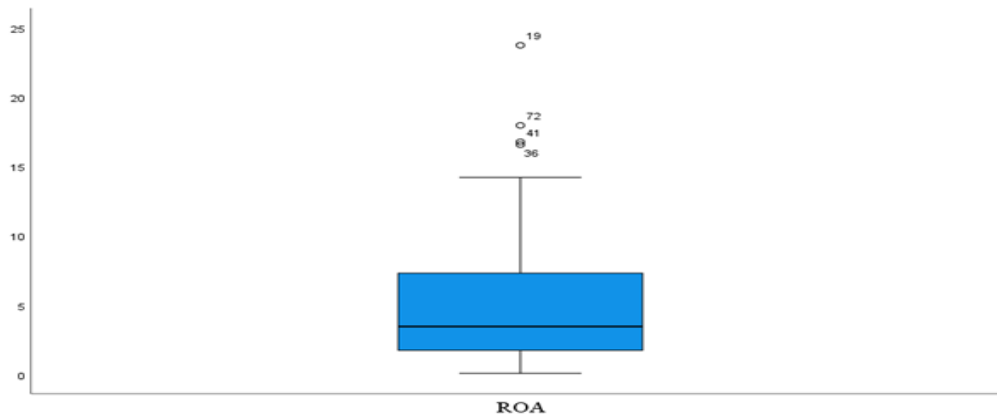
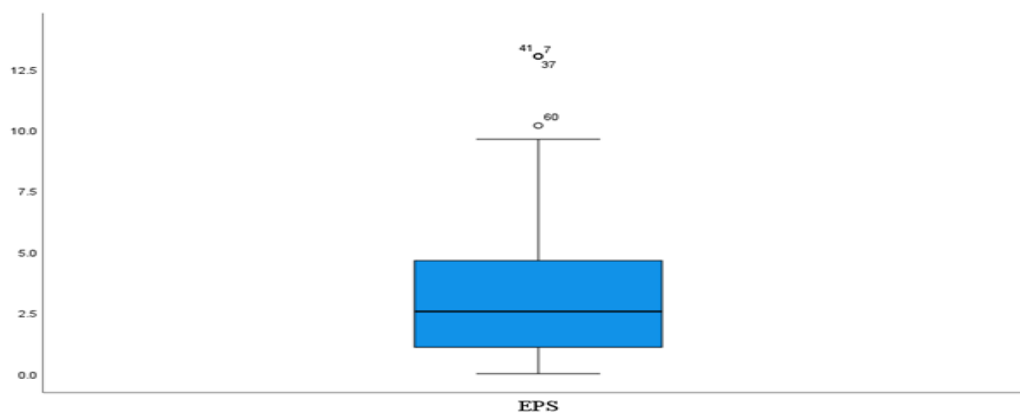
*Plot Box for NI*



**Figure 11**

*Plot Box for ROE*



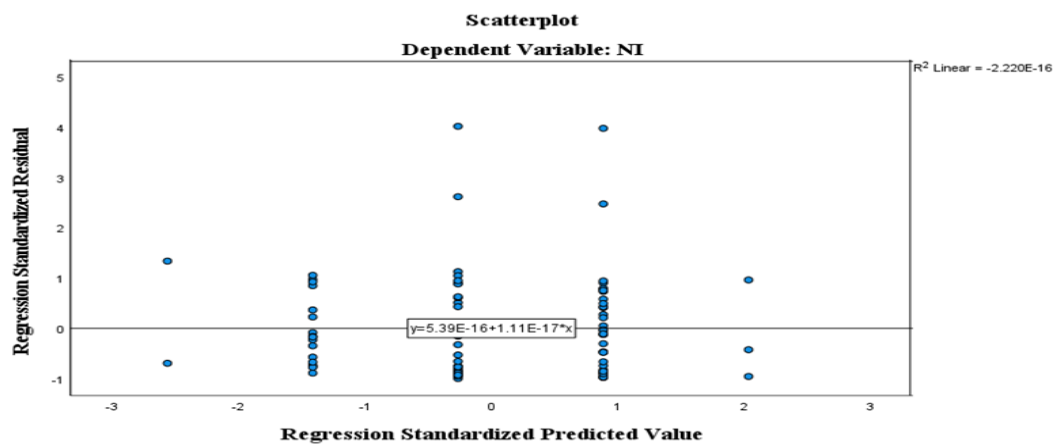
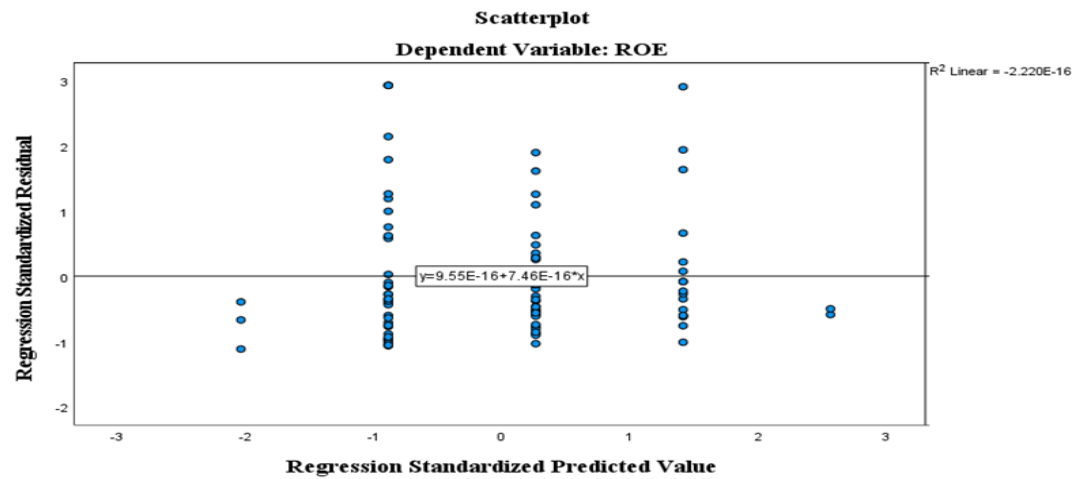
**Figure 12***Plot Box for ROA***Figure 13***Plot Box for EPS****Independence of Residuals***

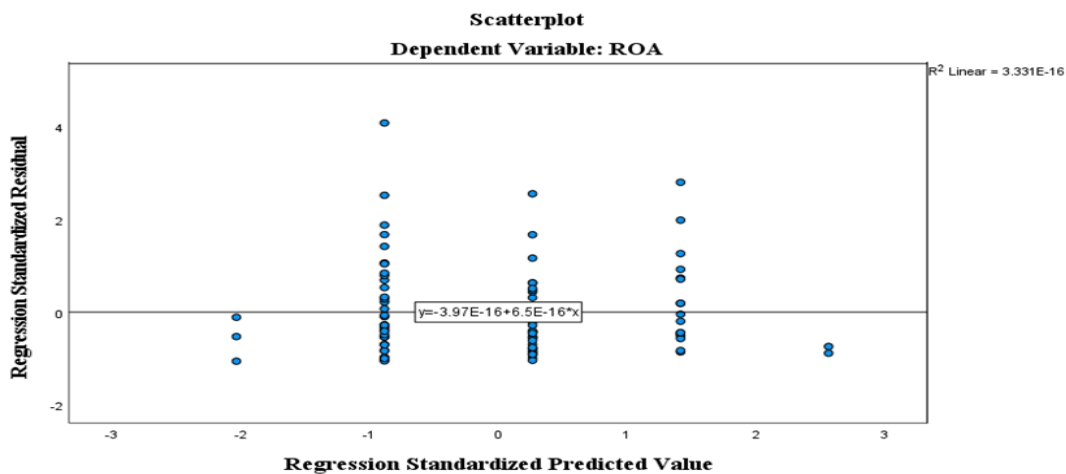
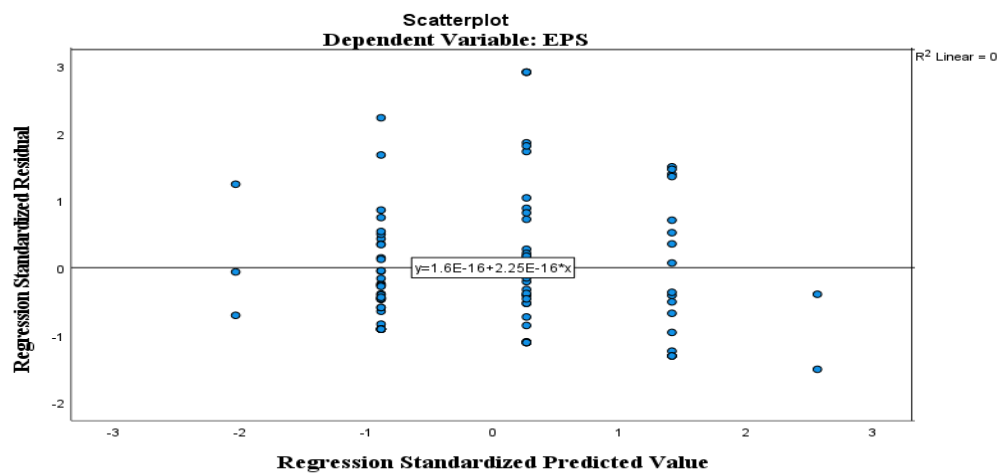
The Durbin Watson (DW) test measures autocorrelation in the residuals of regression analysis. Values for the DW range from zero to four (Webster, 2012). The values from 0 to less than 2 indicate positive autocorrelation in the DW test. The values between 2 to 4 signify negative autocorrelation (Webster, 2012). The DW value for EPS

= 2.234 indicates negative autocorrelation in the residuals of regression. Such autocorrelation does not threaten the model. In Table 11, DW values for NI = 1.407; ROE = 1.186; ROA = 1.574 and EPS = 2.253 indicate positive autocorrelation in the regression residuals. DW close to 2 suggests no autocorrelation identified in the sample. Therefore, the independence assumption is satisfied.

### ***Homoscedasticity***

I used the Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity to test homoscedasticity. KMO measures sampling adequacy and examines the observed correlation coefficients' sizes to the partial correlation coefficients' magnitudes. Bartlett's test of sphericity tests the hypothesis that the correlation matrix is an identity matrix. A KMO value greater than 0.5 and a significance level for Bartlett's test less than .05 imply a strong correlation in the data (Li et al., 2015). The results presented in Table 8 indicate KMO value = .549 and Bartlett's test of sphericity = .000. Such results signify a non-violation of the homoscedasticity assumption. I accepted the alternative hypothesis since the variables correlated significantly and diverged from the identity matrix.

**Figure 14***Scatter Plot of NI***Figure 15***Scatter Plot of ROE*

**Figure 16***Scatter Plot of ROA***Figure 17***Scatter plot of EPS*

**Table 8***KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.549
Bartlett's Test of Sphericity	Approx. Chi-Square	196.130
	df	15
	Sig.	.000

***Linearity***

Linearity means that the standardized regression residuals should have a straight-line relationship with the standardized predicted values. The scatter plots in Figures 14, 15, 16, and 17 show no apparent connection between the standardized residuals and the predicted values, which fits the assumption of linearity. The scatter plots should have random pattern dots clustered around the line zero standardized residual-value and over the standardized predicted values. The residuals' dispersion over the predicted value ranges between -1 and 1, which seems consistent for residual values above 1. The box plot depicted in Figures 10, 11, 12, and 13 indicated no significant outliers to violate the linearity assumption.

**Descriptive Statistics**

The analyzed data included the 91 sampled U.S publicly traded companies listed on NYSE for 2017, 2018, and 2019. The data for this study were obtainable from different industries, including finance and bank services, technology, healthcare, energy, gas, oil, and real estate. Table 9 presents the study variables' descriptive statistics, including mean, maximum, minimum, standard deviation, skewness, kurtosis, Z-



skewness, and Z-kurtosis of NI, ROE, ROA, and EPS. Table 10 presents the descriptive statistics for CSR and CSRD, including mean, maximum, minimum, standard deviation, skewness, kurtosis, Zskewness, and Z-kurtosis. Table 10 indicates that the independent variables CSR and CSRD have a positive skew of .145 and .154, respectively, which signifies a normal distribution (skew < 2). Table 10 also indicates that the independent variables CSR and CSRD have negative kurtosis values of -1.055 and -1.024, respectively, which signifies a normal distribution (Kurtosis < 7).

The distribution tail on the left side signifies a negative skew and the distribution tail on the right signifies a positive skew (Kim, 2013). A skewness number greater than 2 implies a significant normality violation (Kim, 2013). From Table 9, the dependent variable NI, ROE, ROA, and EPS have a positive skew of 1.776, 1.460, 1.581, and 1.176, respectively, which indicates that the distribution is normal. Kurtosis measures how the tails of distribution vary from the tails of a normal distribution. Kurtosis values greater than seven define apparent departure from normality. The kurtosis values exhibited in Table 9 for the dependent variables NI, ROE, ROA, and EPS confirmed that the variables are normally distributed (Kurtosis < 7).

**Table 9***Descriptive Statistics of Study Variable*

	N	Min.	Max.	Mean	Std. Deviation	skewness	Kurtosis	Z-Skewness	Z-Kurtosis
NI	91	.84	20.94	4.8813	3.9993	1.776	4.509	7.0198	9.018
ROE	91	.23	56.80	16.064	13.905	1.460	1.613	5.7708	3.226
ROA	91	.08	23.72	5.0313	4.5715	1.581	2.888	6.249	5.776
EPS	91	.00	13.01	3.4525	3.2624	1.176	.934	4.648	1.868

**Table 10***Descriptive Statistics for CSR and CSRD*

	N	Min.	Max.	Mean	Std. Deviation	skewness	Kurtosis	Z-Skewness	Z-Kurtosis
CSR Report	91	90.00	98.00	93.582	2.2164	.145	-1.055	.57312	-2.11
CSRD Score	91	92.00	1.00	.9564	.02273	.154	-.024	.6087	-2.048

**Pearson Product Moment Correlation Coefficient**

The Pearson product-moment correlation coefficient is the most standard measure of statistical assessments of the relationship between two variables — measured on the interval or ratio level and a significant test (Boslaugh, 2013). The Pearson correlation coefficient is a value between +1 and -1, with a number near 0 presenting an imperfect relationship (Rumsey, 2016; Schober et al., 2018). The Pearson product-moment correlation coefficient ( $r$ ) was applied to assess the linearity and intensity of the

relationship between the independent and dependent variables in the analysis. The value of  $r = 1$  implies a perfect positive correlation, and  $r = -1$  suggests a perfect negative correlation (Rumsey, 2016; Schober et al., 2018). Table 13 represents the Pearson product-moment correlation coefficients of the variables.

### **Inferential Results**

I applied MR analysis in the evaluation of the study because it helps to define the statistical correlation between two independent variables, CSR and CSRD, and dependent variable CP in terms of profitability. To determine the relationship between CSR, CSRD, and CP represented by NI, ROE, ROA, and EPS — I used the multiple regression,  $\alpha = .05$  (one-tailed). The independent variables used were CSR and CSRD, and the dependent variable CP. The linearity assumption was not in violation. The null hypothesis asserts that there is no relationship between CSR, CSRD, and CP. The alternative hypothesis states that; there is a relationship between CSR, CSRD, and CP — the dependent variable CP measured using the profitability ratios NI, ROE, ROA, and EPS.

#### ***Dependent Variable (NI)***

Table 11 shows the model CSR and CSRD as measured by NI,  $F(2, 88) = .670$ ,  $p = .514$ ,  $R^2 = .015$ . A  $p$ -value greater than .05 is not statistically significant and presents strong evidence for the null hypothesis (Boslaugh, 2013). I failed to reject the null hypothesis since  $p > .05$  showed no significant relationship between CSR, CSRD, and CP as measured by NI. The linear combination of the predictor values  $R = .122$  indicated a positive linear relationship between CSR and CSRD as measured by NI. Adjusted  $R^2 = -.007$ , meaning that -.7% of the variance in NI can be predictable from the combination of

CSR and CSRD, which also implies that the prediction is slightly negative and less accurate.

***Dependent Variable (ROE)***

Table 11 shows the model CSR and CSRD as measured by ROE,  $F(2, 88) = 4.274$ ,  $p = .017$ ,  $R^2 = .089$ . Since  $p < .05$ , I rejected the null hypothesis that there is a significant relationship between CSR, CSRD, and CP measured by ROE. The linear combination of the predictor values  $R = .298$  indicated a positive linear relationship between CSR and CSRD as measured by ROE. Adjusted  $R^2 = .068$ , meaning that 6.8% of the variance in ROE is predictable from the combination of CSR and CSRD, implying the prediction is positive and slightly accurate.

***Dependent Variable (ROA)***

Table 11 shows the model CSR and CSRD as measured by ROA,  $F(2, 88) = 1.931$ ,  $p = 1.51$ ,  $R^2 = .042$ . Since  $p > .05$ , I failed to reject the null hypothesis as there was no significant relationship between the variables CSR, CSRD, and CP measured by ROA. The linear combination of the predictor values  $R = .205$  indicated a positive linear relationship between CSR and CSRD as measured by ROA. Adjusted  $R^2 = .020$  meaning that 2% of the variance in ROA is predictable from the combination of CSR and CSRD, which is also signifies that the prediction is slightly positive and accurate.

***Dependent Variable (EPS)***

Table 11 shows the model CSR and CSRD as measured by EPS,  $F(2, 88) = .428$ ,  $p = .653$ ,  $R^2 = .010$ . The  $p$ -value is higher than .05. I failed to reject the null hypothesis as there was no significant relationship between accountability CSR, CSRD,

and CP measured by EPS. The linear combination of the predictor values  $R = .098$  indicated a positive linear relationship between CSR and CSRD as measured by EPS. Adjusted  $R^2 = -.013$  implies that the prediction is slightly negative and less accurate.

**Table 11**

*Module Summary*

Dependent Variable (Module)	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df 1	df 2	Sig. F Change	Durbin - Watson
NI	.122 <sub>a</sub>	.015	-.007	4.01404	.015	.670	2	88	.514	1.407
ROE	.298 <sub>a</sub>	.089	.068	13.42548	.089	4.274	2	88	.017	1.186
ROA	.205 <sub>a</sub>	.042	.020	4.52494	.042	1.931	2	88	.151	1.574
EPS	.098 <sub>a</sub>	.010	-.013	3.28331	.010	.428	2	88	.653	2.253

<sup>a</sup>Predictors: (Constant), CSRD Score, CSR Report

MR analyses was conducted to examine the relationship between CSR, CSRD, and CP. Table 12 summarizes the regression analysis for predictor variables CSR and CSRD. The t-test determines the linear relationship between two variables by testing the significance of a regression coefficient. The *t*-test results related with the variable NI, ROE, ROA, and EPS are as follows: NI:  $t(91) = -1.084$ ,  $p$  value = .281;  $t(91) = .820$ ,  $p$  value = .414; For ROE:  $t(91) = 2.292$ ,  $p$  value = .024;  $t(91) = 1.341$ ,  $p$  value = .183; For ROA:  $t(91) = 1.381$ ,  $p = .171$ ;  $t(91) = -.683$ ,  $p = .497$ ; For EPS:  $t(91) = .000$ ,  $p = 1.000$  and  $t(91) = -.381$ ,  $p = .704$ . The significant values for NI, ROA, and EPS are greater than .05 ( $p > .05$ ) and therefore, I rejected the null hypothesis. ROE  $p$  value was less than alpha ( $p < .05$ ) indicates a statistically significant relationship.

**Table 12***Regression Analysis Summary for Predictor Variables**Dependent Variable (NI)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>	<i>B</i> 95% Bootstrap CI
1(Constant)	16.454	18.248		.902	.370	-19.810, 52.718
Accountability (CSR)	-.502	.464	-.278	-1.084	.281	-1.424, .419
Transparency (CSR)	37.067	45.209	.211	.820	.414	-52.775, 126.910

*Dependent Variable (ROE):*

1(Constant)	-122.618	61.033		-2.009	.048	-243.908, -1.329
Accountability (CSR)	3.554	1.551	.566	2.292	.024	-.472, 6.635
Transparency (CSR)	-202.719	151.207	-.331	-1.341	.183	-503.211, 97.773

*Dependent Variable (ROA):*

1(Constant)	-29.233	20.571		1.421	.159	-70.112, 11.647
Accountability (CSR)	.722	.523	.350	1.381	.171	-.317, 1.760
Transparency (CSR)	-34.797	50.963	-.173	-.683	.497	-136.075, 66.481

*Dependent Variable (EPS):*

1(Constant)	16.921	14.926		1.134	.260	-12.742, 46.583
Accountability (CSR)	-5.027E- 5	.379	.000	.000	1.000	-.754, .754
Transparency (CSR)	14.078	36.979	.098	.381	.704	-87.565, 59.410

Table 13 presents the Pearson correlation analysis between CSR and CSRD measured by NI:  $r(91) = .086, p = .208$ , and  $r(91) = -.043, p = .343$ , for CSR and CSRD, respectively. Therefore, the models CSR and CSRD could not predict NI because  $p > .05$ .

Table 13 presents the Pearson correlation analysis between CSR and CSRD measured by ROE:  $r(91) = .264, p = .006$ , and  $r(91) = .185, p = .040$ , for CSR and CSRD, respectively. In this case, correlation between CSR and CSRD is statistically significant because  $p < .05$ .

Table 13 presents the Pearson correlation analysis between CSR and CSRD measured by ROA:  $r(91) = .192, p = .034$ , and  $r(91) = .146, p = .084$ , for CSR and CSRD, respectively. Correlation between CSR and ROA is statistically significant because  $p < .05$ . The correlation between CSRD and ROA is not statistically significant because  $p > .05$ . CSRD models could not predict the ROA.

Table 13 presents the Pearson correlation analysis between CSR and CSRD measured by EPS:  $r(91) = -.086, p = .200$ , and  $r(91) = -.098, p = .177$ , for CSR and CSRD, respectively. In this case, correlation between CSR and CSRD is not statistically significant because  $p > .05$ . CSR and CSRD models could not predict EPS.

**Table 13***Pearson Correlation Analysis*

		NI	CSR Report	CSRD Score
Pearson Correlation	NI	1.000	-.086	-.043
	CSR Report	-.086	1.000	.911
	CSRD Score	-.043	.911	1.000
Sig. (1-tailed)	NI	.	.208	.343
	CSR Report	.208	.	.000
	CSRD Score	.343	.000	.
N		91	91	91
		ROE	CSR Report	CSRD Score
Pearson Correlation	ROE	1.000	.264	.185
	CSR Report	.264	1.000	.911
	CSRD Score	.185	.911	1.000
Sig. (1-tailed)	ROE	.	.006	.040
	CSR Report	.006	.	.000
	CSRD Score	.040	.000	.
N		91	91	91
		ROA	CSR Report	CSRD Score
Pearson Correlation	ROA	1.000	.192	.146
	CSR Report	.192	1.000	.911
	CSRD Score	.146	.911	1.000
Sig. (1-tailed)	ROA	.	.034	.084
	CSR Report	.034	.	.000
	CSRD Score	.084	.000	.
N		91	91	91
		EPS	CSR Report	CSRD Score
Pearson Correlation	EPS	1.000	-.089	-.098
	CSR Report	-.089	1.000	.911
	CSRD Score			
Sig. (1-tailed)	EPS	.	.200	.177
	CSR Report	.200	.	.000
	CSRD Score	.177	.000	.
N		91	91	91



### **Overview of Stakeholder Theory**

I used the stakeholder theory as a framework to examine the relationship between CSR, CSRD, and CP. I collected the datasets for the sampled publicly traded companies for 2017, 2018, and 2019 from the SEC EDGAR database. Stakeholder theory suggests that the essence of business essentially lies in CSR engagement in the community and value creation for all its stakeholders. The findings indicated no relationship between CSR, CSRD, and CP in terms of profitability. The study results did not support the view of the stakeholder theorists that a company's best practices of CSR and CSRD play a significant role in improving performance in terms of profitability.

Previous studies used a stakeholder strategy when examining the field of CSR (Firmansyah & Estutik, 2020). The CSR studies have incorporated theoretical frameworks to address stakeholders' impact on the activities and CSR reporting (Firmansyah & Estutik, 2020). The CSR concept implies that an organization has a financial and legal responsibility to society. Companies aim to generate a profit, create stable communities, and have ethical business practices (Firmansyah & Estutik, 2020).

The theory behind the previous studies investigating the relationship between CSR and CP is the stakeholder theory. The stakeholder theory establishes that corporations can improve stakeholders' value by fully engaging in CSR activities (Kim & Oh, 2019). CSR practices do not always guarantee profitability (Atta Panin, 2015). Atta-Panin stated that the aim is profit maximization and meeting society's expectations. The results demonstrated that the U.S publicly traded companies do not engage in CSR activities only to gain financial benefit. Public companies also seek to serve society and

create value. Such conclusions align with Friedman in that company sustainability derives from the profitability of the company products and services and company engagements with the community (Galant & Cadez, 2017).

Businesses and society are interdependent, and there is the potential that some companies could earn enormous profits by adopting strong CSR practices. The findings of this study demonstrated that there was no relationship between CSR, CSRD, and CP. The positive relationship between CSR, CSRD, and CP implies that socially responsible companies could increase profitability and positively transform shareholder value. On the contrary, the non-existence of the relationship between CSR, CSRD, and CP does not ultimately suggest abandoning CSR actions.

### **Limitations and Future Research**

The quantitative ex-post-facto study data analysis for this study contains several limitations that may restrain its generalizability. First, this study is focused on the U.S. publicly traded companies listed on NYSE. Industry sector affiliation of the sampled companies includes finance and bank services; technology, healthcare, oil, energy, gas; and real estate. The sample size of 91 publicly traded companies arising from the small fraction of the over 2800 U.S. publicly traded companies listed on the NYSE. The findings of this study are only a small part of the total companies listed on the NYSE, which could reduce the generalizability of the study results.

Second, the CSR disclosure data used composes another limitation. I calculated the CSR and CSRD scores for each sampled company using the S&P disclosure guideline

and the 10-K annual reports as the primary source for the data. Replicating the study would be challenging, if not impossible, due to the potential bias to the overall results.

Third, another notable limitation to this study related to the application of both predictor and criterion variables. I used accounting-based approach and profitability ratios NI, ROE, ROA, and EP to determine CP. On the other hand, the use of CP that exists in empirical literature uses market-based ratios. I used content analysis to measure CSR disclosures. In contrast, researchers have measured CSR using different approaches such as third-party ratings, including Morgan Stanley Capital International (MSCI), Sustainalytics, and KLD. Differences in using the variables and alternative methods could yield inconsistent results and may not present a clear generalization of the study or effective comparison with other studies.

Fourth, the lack of unique metrics for measuring CSR reporting standards for all publicly traded companies is another significant limitation for this study. Should all the companies be assessed on a single acceptable CSR reporting standard — future studies could observe more definitive results.

For future research, this study suggests increasing the statistical sample by collecting more data from other industries — including expanding the scope of the study to at least five years. Doing so could help researchers determine the existing relationship between CSR, CSRD, and CP more positively over a reasonable time frame. More studies would enable researchers to reach firm conclusions regarding the relationship between CSR, CSRD, and CP in profitability. The statistics were limited, and thus results cannot be generalized to the general population.

### **Recommendations for Action**

The purpose of this quantitative ex-post-facto study was to examine the relationship between CSR, CSRD, and CP in terms of profitability. From the analysis, I could not reject the null hypothesis as there was no relationship between CSR, CSRD, and CP as measured by NI, ROE, ROA, and EPS. Giannarakis et al. (2016) identified a close relationship between socially responsible initiatives and financial performance. The study outcomes suggested that engaging in CSR programs could increase company performance in terms of profitability (Giannarakis et al., 2016). CSR disclosure practices are essential for enhancing performance and allowing public participation in a company's long-term goals.

Subroto and Saraswati's (2020) study aimed to prove the complexity of the relationship between CSR and FP and decompose the complexity of the connection using neo-institutional theory. The researchers employed a meta-analysis that integrated 55 various contexts studied between 1998 and 2017 using correlation coefficient as the effective size (Subroto & Saraswati, 2020). The study revealed that the relationship between CSR and FP was complex — CSR practices are contextual and inherent in the institutions that adopt CSR practices. In such a situation, individual testing of CSR and FP's relationship could produce contextual conclusions and a lack of generalization.

Opposite to the conclusions from Giannarakis et al. (2016) and Subroto and Saraswati (2020), I found non-existence of a relationship between CSR, CSRD, and CP. The findings of this study could help publicly traded companies, financial professionals, investors, academic researchers, regulators, and financial professionals. The

recommendation for action is to propose SEC-specific CSR metrics standards to be used by all U.S publicly traded companies throughout industries when reporting the 10-Ks annual reports and proxy statements. The findings of this study also identified evidence to support that all the publicly traded companies require a specific model to become official metrics for CSR disclosure so companies can effectively comply with the securities laws on financial reporting aspects.

### **Communication Plan**

I intend to communicate the study outcomes and present the prevailing research by partnering with professional associations. I also plan to share these research findings through conferences or other public alternatives to help achieve CSR social change to improve a company's performance and ethical behavior. Similarly, I intend to share this report with different business leaders by conferring good CSR disclosure practices to impact society.

### **Implications for Social Change**

This study's findings provide important implications for improving CSR disclosure practices to all publicly traded companies and the general public. Therefore, it is critical to understand the concepts of CSR and CSRD and how it is related to CP in terms of profitability. The implication for social change is that it could essentially help financial managers in the decision-making process to achieve corporate goals by employing high CSR disclosure standards. The implementation of the ethical standards could lead to social development and value creation in communities and societies.

### **Skills and Competencies**

This study examined the relationship between CSR, CSRD, and CP of the sampled U.S. publicly traded companies for 2017, 2018, and 2019. I began collecting data soon after my IRB approval in 2020. I retrieved the financial data (10-Ks) from the SEC EDGAR database for 91 U.S. publicly traded companies from five different industries: financial and bank services, technology, healthcare, energy, oil and gas, and real estate. The relationship between CSR, CSRD, and CP was measured using profitability ratios NI, ROE, ROE, and EPS. I compiled the data for the variables CSR, CSRD, and CP, from the sampled companies' annual reports (10-Ks) and calculated the required values for analysis. Knowing SPSS Software Version 27 and statistical analysis skills were necessary to complete this quantitative secondary data analysis.

In the company's traditional view, the company's responsibility is obliged to serve shareholders' needs, increasing profits. Therefore, the financial aspect is essential for the survival of the business. I gained considerable finance skills through financial management, corporate investment analysis, managerial accounting, and advanced auditing courses. Such skills are critical for understanding and interpreting 10-Ks annual financial reports. This quantitative ex-post-facto study has allowed me to apply my academic skills and knowledge in finance and accounting, which enabled me to complete my research study. My portfolio is obtainable at <https://skillsfirst.com/people/omari-mwayungu/galleries/portfolios/2944>.

## Conclusion

I examined the relationship between CSR, CSRD, and CP in terms of profitability. The data analysis results supported the rule to accepting the null analysis since the significance probability was more significant than the alpha level of .05 ( $\alpha >.05$ ). In this study, I failed to reject the *H<sub>0</sub>* that there was no significant relationship between CSR, CSRD, and CP in terms of profitability. The models could not predict CP as measured by NI, ROE, ROA, and EPS. These results oppose the stakeholder's theorists' views, suggesting that a combined stakeholder view does not improve its CP in terms of profitability. This study's literature review identified the need to support companies involved in CSR ventures beyond financial interests. Financial managers should be engaging more in business-related ethical activities beneficial to the industries under which they operate. Policymakers should formulate a sustainable causal tool linking CSR disclosure to profitability to understand a consistent and clear relationship trend over time. Eventually, it would be reasonable to postulate the relationship between CSR, CSRD, and CP indicators. Doing so would provide an important reason to investigate the time it takes for CSR impact to occur.

## References

- Andrei, D., Mann, W., & Moyen, N. (2019). Why did the q theory of investment start working? *Journal of Financial Economics*, *133*(2), 251–272.  
<https://doi.org/10.1016/j.jfineco.2019.03.007>
- Abel, A. B. (2018). The effects of q and cash flow on investment in the presence of measurement error. *Journal of Financial Economics*, *128*(2), 363–377.  
<https://doi.org/10.1016/j.jfineco.2018.02.005>
- Aini, Q., Zuliana, S. R., & Santoso, N. P. L. (2018). Management measurement scale as a reference to determine interval in a variable. *Aptisi Transactions on Management (ATM)*, *2*(1), 45–54. <https://doi.org/10.33050/atm.v2i1.775>
- Alshehhi, A., Nobanee, H., & Khare, N. (2018). The Impact of sustainability practices on corporate financial performance: Literature trends and future research potential. *Sustainability*, *10*(2), 494. <https://doi.org/10.3390/su10020494>
- Aureli, S. (2017). A comparison of content analysis usage and text mining in CSR corporate disclosure. *The International Journal of Digital Accounting Research*, *17*, 1–32. [https://doi.org/10.4192/1577-8517-v17\\_1](https://doi.org/10.4192/1577-8517-v17_1)
- Atta Panin, J. (2015). The Role of Profits ? Is profit maximisation tenable in the modern business environment? *Journal of Entrepreneurship & Organization Management*, *04*(02). <https://doi.org/10.4172/2169-026x.1000135>
- Aksu, M., & Kosedag, A. (2006). Transparency and disclosure scores and their determinants in the Istanbul Stock Exchange. *Corporate Governance: An*



*International Review*, 14(4), 277–296. <https://doi.org/10.1111/j.1467-8683.2006.00507.x>

Akhigbe, A., McNulty, J. E., & Stevenson, B. A. (2013). How does transparency affect bank financial performance? *International Review of Financial Analysis*, 29, 24–30. <https://doi.org/10.1016/j.irfa.2013.01.007>

Barnett, M. L., Henriques, I., & Husted, B. W. (2020). Beyond good intentions: Designing CSR initiatives for greater social impact. *Journal of Management*, 014920631990053. <https://doi.org/10.1177/0149206319900539>

Bartlett, R., & Partnoy, F. (2020). The Misuse of Tobin's q. *Vanderbilt Law Review*, 73(2), 353–424. <https://doi.org/10.2139/ssrn.3118020>

Becchetti, L., Ciciretti, R., & Conzo, P. (2020). Legal origins and corporate social responsibility. *Sustainability*, 12(7), 2717–2717. <https://doi.org/10.3390/su12072717>

Blythe, S. E. (2020). Financial statement fraud: Lessons learned from selected US legal cases in the past twenty years. *Journal of Modern Accounting and Auditing*, 16(1), 1–18. <https://doi.org/10.17265/1548-6583/2020.01.001>

Bertus, M., Jahera Jr., J. S., & Yost, K. (2019). Capital structure, corporate governance, and the effect of Sarbanes-Oxley. *Corporate Ownership and Control*, 17(1), 166–172. <https://doi.org/10.22495/cocv17i1siart1>

Bhagat, S., & Bolton, B. (2019). Corporate governance and firm performance: The sequel. *Journal of Corporate Finance*, 58, 142–168. <https://doi.org/10.1016/j.jcorpfin.2019.04.006>

- Buallay, A. (2019). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of environmental quality: An International Journal*, 30(1), 98–115. <https://doi.org/10.1108/meq-12-2017-0149>
- Baraibar-Diez, E., & Sotorrío, L. L. (2018). The mediating effect of transparency in the relationship between corporate social responsibility and corporate reputation. *Revista Brasileira de Gestao De Negocios*, 20(1), 5–21. <https://doi.org/10.7819/rbgn.v20i1.3600>
- Bartov, E., & Konchitchki, Y. (2017). SEC filings, regulatory deadlines, and capital market consequences. *Accounting Horizons*, 31(4), 109-131. <https://doi.org/10.2308/acch-51887>
- Boubaker, S., & Nguyen, D. K. (2017). Governance issues in business and finance in the wake of the global financial crisis. *Journal of Management & Governance*, 22(1), 1–5. <https://doi.org/10.1007/s10997-017-9379-3>
- Bosse, D. A., & Coughlan, R. (2016). Stakeholder Relationship Bonds. *Journal of Management Studies*, 53(7), 1197–1222. <https://doi.org/10.1111/joms.12182>
- Boslaugh, S. (2013). *Statistics in a Nutshell: A Desktop Quick Reference*. O'reilly Media.
- Brenner, B. (2001). Stakeholder management and ecosystem management: A stakeholder analysis on the great smoky mountains national park. *Ecology*, 82(2), 3563, doi.10.1890/0012-9658
- Banerjee, A., Chitnis, U., Jadhav, S., Bhawalkar, J., & Chaudhury, S. (2009). Hypothesis testing, type I and type II errors. *Industrial Psychiatry Journal*, 18(2), 127.

<https://doi.org/doi:10.4103/0972-6748.62274>

Civera, C., & Freeman, R. E. (2019). Stakeholder relationships and responsibilities: A new perspective. *Symphonya. Emerging issues in management*, (1), 40-58.

<http://dx.doi.org/10.4468/2019.1.04civera.freeman>

Constantinescu, M., & Kaptein, M. (2020). *Virtue ethics and CSR: The two sides of sustainable organizational performance*. Intrinsic CSR and Competition, 119–132. Palgrave Macmillan, Cham.

Coravos, A., Goldsack, J. C., Karlin, D. R., Nebeker, C., Perakslis, E., Zimmerman, N., & Erb, M. K. (2020). *Ethical principles and our responsibilities*. In *Fast Facts: Digital Medicine-Measurement* (pp. 42-47). Karger Publishers.

Crisóstomo, V. L., Brandão, I., & Lopez-Iturriaga, F. J. (2019). Large shareholders' power and the quality of corporate governance: An analysis of Brazilian firms.

*Social Science Research Network Journal*. <https://doi.org/10.2139/ssrn.3435399>

Cho, S.J., Chung, C.Y., & Young, J. (2019). Study on the Relationship between CSR and Financial Performance. *Sustainability*, 11(2), 343.

<https://doi.org/10.3390/su11020343>

Cristóbal, C., Anderson, M., & Reid, C. (2019). Key issues of research ethics and integrity in global challenges research. *Social Science Protocols*, 2, 1–8.

<https://doi.org/10.7565/ssp.2019.2653>

Cunningham, L. M., Kremin, J., & Warren, A. D. (2019). Using public company filings to plan the audit and perform risk assessment procedures. *Current Issues in Auditing*.

13(2), A1-A18. <https://doi.org/10.2308/ciia-52472>

- Cohen, Ronnie, J.D., & Lingenfelter, G. (2017). Money isn't everything: Why public benefit corporations should be required to disclose non-financial information. *Delaware Journal of Corporate Law*, 42(1), 115-147.  
<http://www.djcl.org/wp-content/uploads/2019/08/42.1.A4.pdf>
- Connell, M. (2017). The fall of Enron and the creation of the Sarbanes-Oxley Act of 2002.  
[https://digitalcommons.lasalle.edu/cgi/viewcontent.cgi?article=1029&context=honors\\_projects](https://digitalcommons.lasalle.edu/cgi/viewcontent.cgi?article=1029&context=honors_projects)
- Constantin, C. (2017). Using the regression model in multivariate data analysis. *Bulletin of the Transilvania University of Brasov. Economic Sciences. Series V*, 10(1), 27-34. <https://ezp.waldenulibrary.org/login?>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Christensen, D. M. (2016). Corporate accountability reporting and high-profile misconduct. *The Accounting Review*, 91(2), 377–399.  
<https://doi.org/10.2308/accr-51200>
- Colvin, R. M., Witt, G. B., & Lacey, J. (2016). Approaches to identifying stakeholders in environmental management: Insights from practitioners to go beyond the “usual suspects.” *Land Use Policy*, 52, 266–276.  
<https://doi.org/10.1016/j.landusepol.2015.12.032>
- Chabrak, N. (2015). Promoting corporate social responsibility and sustainability: A model of integrity. *Society and Business Review*, 10(3), 280–305.

<https://doi.org/10.1108/sbr-06-2015-0018>

- Dalati, S. (2018). Measurement and measurement scales. Modernizing the academic teaching and research Environment, 79–96. [https://doi.org/10.1007/978-3-319-74173-4\\_5](https://doi.org/10.1007/978-3-319-74173-4_5)
- Dewi, K., Delmat, H., & Mukhtarudin (2018). Relationship between corporate social responsibility, environmental performance and financial performance at mining companies listed in Indonesia Stock Exchange. Proceedings of the 4th Sriwijaya Economics, Accounting, and Business Conference. <https://doi.org/10.5220/0008438001690174>
- Diser, V., & Schhfer, U. (2017). The allocation of responsibility between CEO and CFO for financial misreporting: Implications for earnings quality. *Social Science Research Network (SSRN) Electronic Journal*. <https://doi.org/10.2139/ssrn.2978195>
- Dias, A., Rodrigues, L. L., & Craig, R. (2016). Global financial crisis and corporate social responsibility disclosure. *Social Responsibility Journal*, 12(4), 654–671. <https://doi.org/10.1108/srj-01-2016-0004>
- Dhaliwal, D., Li, O. Z., Tsang, A., & Yang, Y. G. (2014). Corporate social responsibility disclosure and the cost of equity capital: The roles of stakeholder orientation and financial transparency. *Journal of Accounting and Public Policy*, 33(4), 328–355. <https://doi.org/10.1016/j.jaccpubpol.2014.04.006>
- De Leeuw, E. D. (2001). Reducing missing data in surveys: An overview of methods. *Quality and Quantity*, 35(2), 147-160. <https://doi.org/10.1023/a:1010395805406>

- Ege, M., Glenn, J. L., & Robinson, J. R. (2020). Unexpected SEC resource constraints and comment Letter quality. *Contemporary Accounting Research*, 37(1), 33–67.  
<https://doi.org/10.1111/1911-3846.12505>
- Estaswara, H. (2020). Defining communication problems in stakeholder relations based on stakeholder. *Theory. Journal ASPIKOM*, 5(1), 87-101.  
<https://doi.org/10.24329/aspikom.v5i1.540>
- El Mahdy, D. F. (2019). Corporate governance and the financial crisis: What have we missed?. *Journal of Accounting and Finance*, 19(2).  
<https://doi.org/10.33423/jaf.v19i2.1387>
- Firmansyah, A., & Estutik, R. S. (2020). Environmental responsibility performance, corporate social responsibility disclosure, tax aggressiveness: Does corporate governance have a role? *Journal of Governance and Regulation*, 9(4), 8–24.  
<https://doi.org/10.22495/jgrv9i4art1>
- Francisco de Oliveira, G., & Rabechini Jr, R. (2019). Stakeholder management influence on trust in a project: A quantitative study. *International Journal of Project Management*, 37(1), 131–144. <https://doi.org/10.1016/j.ijproman.2018.11.001>
- Fonseca, L., & Domingues, J. P. (2017). ISO 9001: 2015 edition-management, quality and value. *International Journal of Quality Research*, 1(11), 149-158.  
<https://doi.org/10.18421/IJQR11.01-09>
- Freeman, R. E., Phillips, R., & Sisodia, R. (2018). Tensions in stakeholder theory. *Business & Society*, 59(2), 213–231. <https://doi.org/10.1177/0007650318773750>
- Freeman, R. E., & Dmytriiev, S. (2017). Corporate social responsibility and stakeholder

- theory: Learning from each other. *Symphonya. Emerging issues in Management*, (1), 7. <https://doi.org/10.4468/2017.1.02freeman.dmytriyev>
- Fox, E. G., Fox, M. B., & Gilson, R. J. (2016). Economic crisis and the integration of law and finance: The impact of volatility spikes. *Columbia Law Review*, 116(2) 325-407. [https://scholarship.law.columbia.edu/faculty\\_scholarship/41](https://scholarship.law.columbia.edu/faculty_scholarship/41)
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *Corporate Ethics and Corporate Governance*, 173–178. [https://doi.org/10.1007/978-3-540-70818-6\\_14](https://doi.org/10.1007/978-3-540-70818-6_14)
- Gallardo-Vázquez, D., Valdez-Juárez, L. E., & Castuera-Díaz, Á. M. (2019). Corporate social responsibility as an antecedent of innovation, reputation, performance, and competitive success: A multiple mediation analysis. *Sustainability*, 11(20), 5614. <https://doi.org/10.3390/su11205614>
- Grewal, J., Riedl, E. J., & Serafeim, G. (2019). Market reaction to mandatory nonfinancial disclosure. *Management Science*, 65(7), 3061–3084. <https://doi.org/10.1287/mnsc.2018.3099>
- Gao, R., & Sidhu, B. K. (2018). The Impact of mandatory international financial reporting standards adoption on investment efficiency: Standards, enforcement, and reporting incentives. *Abacus*, 54(3), 277–318. <https://doi.org/10.1111/abac.12127>
- Gold, S., & Heikkurinen, P. (2018). Transparency fallacy. *Accounting, Auditing & Accountability Journal*, 31(1), 318–337. <https://doi.org/10.1108/aaaj-06-2015-2088>

- Galant, A., & Cadez, S. (2017). Corporate social responsibility and financial performance relationship: A review of measurement approaches. *Economic Research-Ekonomska Istraživanja*, 30(1), 676–693.  
<https://doi.org/10.1080/1331677x.2017.1313122>
- Gaulin, M. P. (2017). Risk fact or fiction: The information content of risk factor disclosures. <https://hdl.handle.net/1911/96089>
- Green, S. B., & Salkind, N. J. (2017). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (8th ed.). Pearson
- Guo, Y., & Yang, D. C. (2017). Does the 2010 SEC climate change disclosure guidance change firms' corporate social responsibility reporting?. *International Journal of Business*, 22(1), 26-38. <https://doi.org/10125/100507>
- Giannarakis, G., Konteos, G., Zafeiriou, E., & Partalidou, X. (2016). The impact of corporate social responsibility on financial performance. *Investment Management & Financial Innovations*, 13(3), 171-182. [https://doi.org/10.21511/imfi.13\(3-1\).2016.03](https://doi.org/10.21511/imfi.13(3-1).2016.03)
- Girgenti, Richard H., & Hedley, T.P. (2016). *The new era of regulatory enforcement: A comprehensive guide for raising the bar to manage risk*. McGraw-Hill Education.
- Giannarakis, G. (2014). The determinants influencing the extent of CSR disclosure. *International Journal of Law and Management*, 56(5), 393–416.  
<https://doi.org/10.1108/ijlma-05-2013-0021>
- Galai, D., & Wiener, Z. (2008). Stakeholders and the composition of the voting rights of



the board of directors. *Journal of Corporate Finance*, 14(2), 107–117.

<https://doi.org/10.1016/j.jcorpfin.2008.02.005>

Hatherly, D., Mitchell, R. K., Mitchell, J. R., & Lee, J. H. (2020). Reimagining profits and stakeholder capital to address tensions among stakeholders. *Business & Society*, 59(2), 322-350. <https://doi.org/10.1177/0007650317745637>

Hoitash, R., Hoitash, U., & Morris, L. (2020). eXtensible business reporting language: A review and directions for future research. Social Science Research Network (SSRN) Electronic Journal. <https://doi.org/10.2139/ssrn.3595401>

Heryanto, H. (2019). The effect of work motivation and work environment on performance with satisfaction as intervening variables education personnel. Rektorat Andalas University. *Archives of Business Research*, 7(2), 103-120. <https://doi.org/10.14738/abr.72.5768>

Habeck, C. G., & Brickman, A. M. (2018). A common statistical misunderstanding in Psychology and Neuroscience: Do we need normally distributed independent or dependent variables for linear regression to work? <https://doi.org/10.1101/305946>

Hasan, I., Kobeissi, N., Liu, L., & Wang, H. (2018). Corporate social responsibility and firm financial performance: The mediating role of productivity. *Journal of Business Ethics*, 149(3), 671–688. <https://doi.org/10.1007/s10551-016-3066-1>

Haswell, S., & Evans, E. (2018). Enron, fair value accounting, and financial crises: A concise history. *Accounting, Auditing & Accountability Journal*, 31(1), 25-50. <https://doi.org/10.1108/AAAJ-04-2016-2525>

Hall, J. A (2016). *Information Technology Auditing and Assurance* (4th ed.). South-

Western, Cengage Learning.

Hope, O.-K., Hu, D., & Lu, H. (2016). The benefits of specific risk-factor disclosures.

*Review of Accounting Studies*, 21(4), 1005–1045. <https://doi.org/10.1007/s11142-016-9371-1>

Harrison, J., Freeman, R. E., & Cavalcanti Sá de Abreu, M. (2015). Stakeholder theory as an ethical approach to effective management: Applying the theory to multiple contexts. *Review of Business Management*, 17(55), 858–869.

<https://doi.org/10.7819/rbgn.v17i55.2647>

Harrison, J. S., & Wicks, A. C. (2013). Stakeholder theory, value, and firm Performance. *Business Ethics Quarterly*, 23(1), 97–124.

<https://doi.org/10.5840/beq20132314>

Harrison, J.S., Bosse, D., & Phillips, R.A. (2007). Stakeholder Theory and competitive advantage. *Academy of Management Proceedings*, 2007(1), 1-6.

<https://doi.org/10.5465/ambpp.2007.26530469>

Inoue, Y., & Lee, S. (2011). Effects of different dimensions of corporate social responsibility on corporate financial performance in tourism-related industries.

*Tourism Management*, 32(4), 790–804.

<https://doi.org/10.1016/j.tourman.2010.06.019>

Jianu, I., Pîrșcoveanu, L. M., & Tudorache, M. D. (2017). The impact of financial risks on economic growth in EU-15. *Theoretical and Applied Economics*, 1(610), 23-

44. <https://www.econstor.eu/handle/10419/194298>

Johnston, R., & Petacchi, R. (2017). Regulatory oversight of financial reporting:

Securities and Exchange Commission Comment Letters. *Contemporary Accounting Research*, 34(2), 1128–1155. <https://doi.org/10.1111/1911-3846.12297>

Jeon, J. (2015). The strengths and limitations of the statistical modeling of complex social phenomenon: Focusing on SEM, path analysis, or multiple regression models. *International Journal of Economics and Management Engineering*, 9(5), 1634-1642. doi:10.1999/1307-6892/10001434

Jou, Y.-J., Huang, C.-C. L., & Cho, H.-J. (2014). A VIF-based optimization model to alleviate collinearity problems in multiple linear regression. *Computational Statistics*, 29(6), 1515–1541. <https://doi.org/10.1007/s00180-014-0504-3>

Kryeziu, N. H., & Hoxha, E. (2021). Fiscal deficit and its effects on economic growth: Empirical evidence. *International Journal of Finance & Banking Studies* 2147-4486, 10(1), 62-70. doi:10.20525/ijfbs.v10i1.1064

Kirk, A. (2020). Profitability and Corporate Social Responsibility. <https://scholarship.richmond.edu/cgi/viewcontent.cgi?article=2467&context=honors-theses>

Kharel, S., Magar, S., Chaurasiya, N., Maharjan, S., & Rijal, C. P. (2019). Transparency and accountability in the Nepalese corporate sector: A critical assessment. *Quest Journal of Management and Social Sciences*, 1(1), 1–25. <https://doi.org/10.3126/qjmss.v1i1.25972>

Kim, J., Cho, K., & Park, C. K. (2019). Does CSR assurance affect the relationship between CSR performance and financial performance? *Sustainability*, 11(20),

5682. <https://doi.org/10.3390/su11205682>

Kim, W. S., & Oh, S. (2019). Corporate social responsibility, business groups and financial performance: A study of listed Indian firms. *Economic Research-Ekonomska Istraživanja*, 32(1), 1777–1793.

<https://doi.org/10.1080/1331677x.2019.1637764>

Klein, P. G., Mahoney, J. T., McGahan, A. M., & Pitelis, C. N. (2019). Organizational governance adaptation: Who is in, Who is out, and Who gets what. *Academy of Management Review*, 44(1), 6–27. <https://doi.org/10.5465/amr.2014.0459>

Karbwang, J., Koonrunsesomboon, N., Torres, C. E., Jimenez, E. B., Kaur, G., Mathur, R., ... & Malek, M. A. (2018). What information and the extent of information research participants need in informed consent forms: A multi-country survey. *BMC medical ethics*, 19(1), 79. <https://doi.org/10.1186/s12910-018-0318-x>

Koo, T. (2016). Corporate social responsibility and Corporate financial performance. *Social Science Research Network (SSRN) Electronic Journal*.

<https://doi.org/10.2139/ssrn.2768515>

Kim, H. Y. (2013). Statistical notes for clinical researchers: Assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics*, 38, 52-54. <https://doi.org/10.5395/rde.2013.38.1.52>

Khanna, T., Palepu, K. G., & Srinivasan, S. (2004). Disclosure practices of foreign companies interacting with US markets. *Journal of accounting research*, 42(2), 475-508. <https://doi.org/10.2139/ssrn.408621>

- Lund, D. S., & Pollman, E. (2021). The Corporate Governance Machine. *Social Science Research Network (SSRN) Electronic Journal*.  
<https://doi.org/10.2139/ssrn.3775846>
- Liddell, T. M., & Kruschke, J. K. (2018). Analyzing ordinal data with metric models: What could possibly go wrong? *Journal of Experimental Social Psychology*, 79, 328–348. <https://doi.org/10.1016/j.jesp.2018.08.009>
- Lavery, M. R., Acharya, P., Sivo, S. A., & Xu, L. (2017). Number of predictors and multicollinearity: What are their effects on error and bias in regression? *Communications in Statistics - Simulation and Computation*, 48(1), 27–38.  
<https://doi.org/10.1080/03610918.2017.1371750>
- Lee, J., & Kim, E. (2019). Foreign monitoring and predictability of future cash flow. *Sustainability*, 11(18), 4832. <https://doi.org/10.3390/su11184832>
- Li, H. (2019). Repetitive disclosures in the MD&A. *Journal of Business Finance & Accounting*, 46(9-10), 1063–1096. <https://doi.org/10.1111/jbfa.12405>
- Ling, Q., & Liu, Z. (2019). XBRL data comparability: Certified Public Accountant. *The CPA Journal*, 89(7), 44-48. <https://www.cpajournal.com/2019/08/21/xbrl-data-comparability/>
- Lim, J. S., & Greenwood, C. A. (2017). Communicating corporate social responsibility (CSR): Stakeholder responsiveness and engagement strategy to achieve CSR goals. *Public Relations Review*, 43(4), 768-776.  
<https://doi.org/10.1016/j.pubrev.2017.06.007>
- Lock, I., & Seele, P. (2016). The credibility of CSR (corporate social responsibility)

reports in Europe: Evidence from a quantitative content analysis in 11 countries.

*Journal of Cleaner Production*, 122, 186–200.

<https://doi.org/10.1016/j.jclepro.2016.02.060>

Loughran, T., & McDonald, B. (2016). Textual analysis in accounting and finance: A survey. *Journal of Accounting Research*, 54(4), 1187–1230.

<https://doi.org/10.1111/1475-679x.12123>

Lys, T., Naughton, J. P., & Wang, C. (2015). Signaling through corporate accountability reporting. *Journal of Accounting and Economics*, 60(1), 56–72.

<https://doi.org/10.1016/j.jacceco.2015.03.001>

Louangrath, P. I. (2013). Alpha and Beta Tests for Type I and Type II Inferential Errors Determination in Hypothesis Testing. *Social Science Research Network (SSRN) Electronic Journal*.

<https://doi.org/10.2139/ssrn.2332756>

Liang, Y. (2012). Global imbalances as root cause of global financial crisis? A critical analysis. *Journal of Economic Issues*, 46(1), 101–118.

<https://doi.org/10.2753/jei0021-3624460104>

Li, F. (2010). The information content of forward-looking statements in corporate

Filings-A naïve Bayesian machine learning approach. *Journal of Accounting*

*Research*, 48(5), 1049-1102. <https://doi.org/10.1111/j.1475-679x.2010.00382.x>

Langkamp, D. L., Lehman, A., & Lemeshow, S. (2010). Techniques for Handling

Missing Data in Secondary Analyses of Large Surveys. *Academic Pediatrics*,

10(3), 205–210. <https://doi.org/10.1016/j.acap.2010.01.005>

Mashali, A., Elbeltagi, E., Motawa, I., & Elshikh, M. (2020). Stakeholder management:

An insightful Overview of Issues. Proceedings of the International Conference on Civil Infrastructure and Construction (CIC 2020).

<https://doi.org/10.29117/cic.2020.0029>

MarketWatch (2021). Symbol Lookup.

<https://www.marketwatch.com/tools/quotes/lookup.asp>

Maxwell, J. A. (2019). Distinguishing between quantitative and qualitative Research:

A response to Morgan. *Journal of Mixed Methods Research*, 13(2), 132–137.

<https://doi.org/10.1177/1558689819828255>

Muslu, V., Mutlu, S., Radhakrishnan, S., & Tsang, A. (2019). Corporate

social responsibility report narratives and analyst forecast accuracy. *Journal of Business Ethics*, 154(4), 1119–1142. <https://doi.org/10.1007/s10551-016-3429-7>

McDonnell, B. H. (2018). From duty and disclosure to power and participation in social enterprise. *Alabama Law Review*, 70, 77.

<https://www.law.ua.edu/lawreview/files/2018/12/2-McDonnell-77-124.pdf>

Mehrotra, V., & Morck, R. (2017). *Governance and Stakeholders*. The Handbook of the Economics of Corporate Governance, 637–683.

<https://doi.org/10.1016/bs.hecg.2017.11.004>

Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and reliability. *Annals of Spiru Hared University. Economic Series*, 17(4), 59-82.

<https://doi.org/10.26458/1746>

Myšková, R., & Hájek, P. (2017). Comprehensive assessment of firm financial performance using financial ratios and linguistic analysis of annual reports.

*Journal of International Studies*, 10(4), 96–108. <https://doi.org/10.14254/2071-8330.2017/10-4/7>

Martin, W. E., & Bridgmon, K. D. (2012). *Quantitative and statistical research methods: From hypothesis to results* (Vol. 42). John Wiley & Sons.

McKnight, P. E., & McKnight, K. M. (2011). Missing data in secondary data analysis. *Secondary data analysis: An Introduction for Psychologists*, 83–101. <https://doi.org/10.1037/12350-005>

Morgan, G. A. (2004). SPSS for introductory statistics: Use and interpretation. <http://ebookcentral.proquest.com/lib/waldenu/detail.action?docID=3060348>

Nuber, C., Velte, P., & Hörisch, J. (2020). The curvilinear and time-lagging impact of sustainability performance on financial performance: Evidence from Germany. *Corporate Social Responsibility and Environmental Management*, 27(1), 232-243. <https://doi.org/10.1002/csr.1795>

Ntim, C. G. (2018). Defining Corporate Governance: Shareholder versus stakeholder models. Global encyclopedia of public administration, *Public Policy, and Governance*, 1328–1336. [https://doi.org/10.1007/978-3-319-20928-9\\_3132](https://doi.org/10.1007/978-3-319-20928-9_3132)

Noain-Sánchez, A. (2016). “Privacy by default” and active “informed consent” by layers. *Journal of Information, Communication, and Ethics in Society*, 14(2), 124-138. <https://doi.org/10.1108/jices-10-2014-0040>

Nor, N. M., Bahari, N. A. S., Adnan, N. A., Kamal, S. M. Q. A. S., & Ali, I. M. (2016). The effects of environmental disclosure on financial performance in Malaysia. *Procedia Economics and Finance*, 35, 117–126. <https://doi.org/10.1016/s2212->



[5671\(16\)00016-2](#)

Najjar, N. J. (2013). Can financial ratios reliably measure the performance of banks in Bahrain. *International Journal of Economics and Finance*, 5(3), 152-163.

<https://doi.org/10.5539/ijef.v5n3p152>

Ozili, P. K. (2020). Advances and issues in fraud research: A commentary. *Journal of Financial Crime*, 27(1), 92–103. <https://doi.org/10.1108/jfc-01-2019-0012>

Office for Human Research Protections (2018). The Belmont report: Ethical principles and guidelines for the protection of human subjects of research.

<https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html>

O'brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors.

*Quality & Quantity*, 41(5), 673-690. <https://doi.org/10.1007/s11135-006-9018-6>

Papoutsis, A., & Sodhi, M. S. (2020). A Sustainability disclosure index using corporate sustainability reports. *Journal of Sustainability Research*, 2(2), 1-24.

<https://doi.org/10.20900/jsr20200020>

Pazarskis, M., Drogalas, G., & Koutoupis, A. (2018). Mergers and accounting performance: Some evidence from greece during the economic crisis. *Accounting and Management Information Systems*, 17(1), 31-45.

<https://doi.org/10.24818/jamis.2018.01002>

Peters, R. H., & Taylor, L. A. (2017). Intangible capital and the investment-q relation. *Journal of Financial Economics*, 123(2), 251–272.

<https://doi.org/10.1016/j.jfineco.2016.03.011>

- Pargendler, M. (2016). The corporate governance obsession. *Journal of Corporation Law*, 42(2), 359-402. <https://doi.org/10.2139/ssrn.2491088>
- Park, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery or Justification?. *Journal of Marketing Thought*, 3(1), 1-7. doi:10.15577/jmt.2016.03.01.1
- Palmon, D., Peytcheva, M., & Yezegel, A. (2011). The Accounting standards setting process in the US: Examination of the SEC–FASB relationship. *Group Decision and Negotiation*, 20(2), 165-183. <https://doi.org/10.1007/s10726-009-9166-x>
- Patel, S. A., Balic, A., & Bwakira, L. (2002). Measuring transparency and disclosure at firm-level in emerging markets. *Emerging Markets Review*, 3(4), 325–337. [https://doi.org/10.1016/s1566-0141\(02\)00040-7](https://doi.org/10.1016/s1566-0141(02)00040-7)
- Patel, S. A., & Dallas, G. S. (2002). Transparency and Disclosure: Overview of methodology and study results - United States. *Social Science Research Network (SSRN) Electronic Journal*. <https://doi.org/10.2139/ssrn.422800>
- Qian, Y. (2020). A critical genre analysis of MD&A discourse in corporate annual reports. *Discourse & Communication*, 14(4), 424–437. <https://doi.org/10.1177/1750481320910525>
- Roychowdhury, S., Shroff, N., & Verdi, R. S. (2019). The effects of financial reporting and disclosure on corporate investment: A review. *Journal of Accounting and Economics*, 68(2-3), <https://doi.org/10.1016/j.jacceco.2019.101246>
- Rooij, B., & Fine, A. D. (2019). *Preventing corporate crime from within*. The handbook of white-collar crime, 229–245. <https://doi.org/10.1002/9781118775004.ch15>

- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5. doi:10.4172/2162-6359.1000403
- Rumsey, D. J. (2016). *How to interpret a correlation coefficient r*. Statistics For Dummies.
- Rezaee, Z. (2016). Business sustainability research: A theoretical and integrated perspective. *Journal of Accounting Literature*, 36, 48-64.  
<https://doi.org/10.1016/j.acclit.2016.05.003>
- Rutkowska-Ziarko, A. (2015). The influence of profitability ratios and company size on profitability and investment risk in the capital market. *Folia Oeconomica Stetinensia*, 15(1), 151–161. <https://doi.org/10.1515/fofi-2015-0025>
- Rangan, K., Chase, L.A., Karim, S. (2012). Why every company needs a CSR Strategy and how to build it. <https://hbswk.hbs.edu/item/why-every-company-needs-a-csr-strategy-and-how-to-build-it>
- Salvioni, D., & Gennari, F. (2020). Stakeholder Perspective of Corporate Governance And CSR Committees. *Symphonya. Emerging Issues in Management*, (1), 28-39.  
<https://doi.org/10.4468/2019.1.03salvioni.gennari>
- Securities and Exchange Commission (2020). Inline XBRL.  
<https://www.sec.gov/structureddata/osd-inline-xbrl.html>
- Siano, F., & Wysocki, P. D. (2020). Transfer learning and textual analysis of accounting disclosures: Applying big data methods to smaller data sets. *Social Science*

*Research Network. Electronic Journal (SSRN).*

<https://doi.org/10.2139/ssrn.3560355>

Subroto, B., T, S., & Saraswati, E. (2020). Explaining the complexity relationship of CSR and financial performance using neo-institutional theory. *Journal of Asian Business and Economic Studies*, 27(3), 227–244. <https://doi.org/10.1108/jabes-10-2019-0106>

Securities and Exchange Commission (2019). Accessing EDGAR Data.

<https://www.sec.gov/edgar/searchedgar/accessing-edgar-data.htm>

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation Coefficients. *Anesthesia & Analgesia*, 126(5), 1763–1768. <https://doi.org/10.1213/ane.0000000000002864>

Susanto, Y. K., & Bosta, E. (2018). Free cash flow, firm characteristic, corporate corporate governance on earnings management. Proceedings of the 7th International conference on entrepreneurship and business management.

<https://doi.org/10.5220/0008487300050010>

Schoen, E. J. (2017). The 2007–2009 financial crisis: An erosion of ethics: A case study. *Journal of Business Ethics*, 146(4), 805–830. <https://doi.org/10.1007/s10551-016-3052-7>

Securities and Exchange Commission (2017). Filings and Forms

<https://www.sec.gov/edgar.shtml>

Shin, H., & Oh, H. (2017). Mandatory adoption of IFRS and earnings transparency in Korea. *Journal of Applied Business Research (JABR)*, 33(6), 1129–1138. <https://doi.org/10.19030/jabr.v33i6.10050>

- Shukor, M. Y. (2016). Bartlett and the Levene's tests of homoscedasticity of the modified Gompertz model used in fitting of Burkholderia sp. strain Neni-11 growth on acrylamide. *Bioremediation Science and Technology Research*, 4(1), 18-19.  
<http://journal.hibiscuspublisher.com/index.php/BSTR>
- Sunder M., V. (2016). Lean six sigma project management – A stakeholder management perspective. *The Total Quality Management (TQM) Journal*, 28(1), 132–150.  
<https://doi.org/10.1108/tqm-09-2014-0070>
- Sainani, K. L. (2012). Dealing with non-normal data. *Physical Medicine and Rehabilitation (PM&R)*, 4(12), 1001-1005.  
<https://doi.org/10.1016/j.pmrj.2012.10.013>
- Securities and Exchange Commission (2012). Securities and Exchange Commission.  
<https://www.sec.gov/cgi-bin/srch-edgar>
- Soana, M.G. (2011). The relationship between corporate social performance and corporate financial performance in the banking sector. *Journal of Business Ethics*, 104(1), 133–148. <https://doi.org/10.1007/s10551-011-0894-x>
- Turcotte-Tremblay, A.-M., & Mc Sween-Cadieux, E. (2018). A reflection on the challenge of protecting confidentiality of participants while disseminating research results locally. *BMC Medical Ethics*, 19(S1), 45.  
<https://doi.org/10.1186/s12910-018-0279-0>
- Tantalo, C., & Priem, R. L. (2016). Value creation through stakeholder synergy. *Strategic Management Journal*, 37(2), 314–329. <https://doi.org/10.1002/smj.2337>
- Taskin, D. (2015). The relationship between CSR and banks' financial performance:

Evidence from Turkey. *Journal of Yasar University*, 10(39), 21-30.

<https://doi.org/10.19168/jyu.97694>

Valentinov, V., & Hajdu, A. (2019). Integrating instrumental and normative stakeholder theories: A systems theory approach. *Journal of Organizational Change*

*Management*, 34(4), 699–712. <https://doi.org/10.1108/jocm-07-2019-0219>

Vintilă, G., & Păunescu, R. A. (2016). Empirical analysis of the connection between financial performance and corporate governance within technology companies

listed on NASDAQ Stock Exchange. *Journal of Financial Studies and Research*,

2016, 1–20. <https://doi.org/10.5171/2016.629934>

Williams, M. N. (2021). Levels of measurement and statistical analyses. *Meta-*

*Psychology*, 5. <https://doi.org/10.15626/mp.2019.1916>

White, M. G. (2020). Why human subjects research protection is important. *Ochsner*

*Journal*, 20(1), 16–33. <https://doi.org/10.31486/toj.20.5012>

Wiggins, R. Z., & Metrick, A. (2019). The Lehman Brothers Bankruptcy E: The Effects on Lehman's US Broker-Dealer. *Journal of Financial Crises*, 1(1),

<https://elischolar.library.yale.edu/journal-of-financial-crises/vol1/iss1/6/>

Whelan, T. J., & DuVernet, A. M. (2015). The big duplicity of big data. *Industrial and*

*Organizational Psychology*, 8(4), 509-515. <https://doi.org/10.1017/iop.2015.75>

Webster, A. (2012). Introductory regression analysis: With computer application for business and economics.

<http://ebookcentral.proquest.com/lib/waldenu/detail.action?docID=1143718>

Wang, R., Sedransk, J., & Jinn, J. H. (1992). Secondary data analysis when there are

missing observations. *Journal of the American Statistical Association*, 87(420), 952–961. <https://doi.org/10.1080/01621459.1992.10476249>

Yoon, B., & Chung, Y. (2018). The effects of corporate social responsibility on firm performance: A stakeholder approach. *Journal of Hospitality and Tourism Management*, 37, 89-96. <https://doi.org/10.1016/j.jhtm.2018.10.005>

Youn, H., Hua, N., & Lee, S. (2015). Does size matter? Corporate social responsibility and firm performance in the restaurant industry. *International Journal of Hospitality Management*, 51, 127–134. <https://doi.org/10.1016/j.ijhm.2015.09.008>

## Appendix A. Section — Definition for 10-K Filings

**Table 14***Contents of a 10-K Annual Report*

Item	Name
Part I	
I	Business
1A	Risk Factors
1B	Unresolved Staff Comments
2	Properties
3	Legal Proceedings
4	Mine Safety Disclosure
Part II	
5	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities
6	Selected Financial Data
7	Management’s Discussion and Analysis of Financial Condition and Results of Operations
7A	Quantitative and Qualitative Disclosures About Market Risk
8	Financial Statements and Supplementary Data
9	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure
9A	Controls and Procedures
9B	Other Information
Part III	
10	Directors, Executives Officers and Corporate Governance
11	Executive Compensation
12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters
13	Certain Relationships and Related Transaction, and Director Independence
14	Principle Accounting Fees and Services
Part IV	
15	Exhibit, Financial Statement Schedules
16	Form 10-K Summary

Source: SEC EDGAR



## Appendix B. Transparency and Disclosure Survey

**Figure 18***Financial Transparency — Does the Company in its Annual Account Disclose:*

Item	Financial Transparency & Information Disclosure
1	Its accounting policy?
2	The accounting standards it uses for its accounts?
3	Accounts according to the local accounting standards?
4	Accounts according to an internationally recognized accounting standard (IAS/U.S. GAAP)?
5	Its balance sheet according to international accounting standard (IAS/U.S. GAAP)?
6	Its income statement according to international accounting standard (IAS/U.S. GAAP)?
7	Its cash flow statement according to international accounting standard (IAS/U.S. GAAP)?
8	A basic earnings forecast of any kind?
9	A detailed earnings forecast?
10	Financial information on a quarterly basis?
11	A segment analysis (broken down by business line)?
12	The name of its auditing firm?
13	A reproduction of the auditors' report?
14	How much it pays in audit fees to the auditor?
15	Any non-audit fees paid to auditor?
16	Consolidated financial statements (or only the parent/holding co)?
17	Methods of asset valuation?
18	Information on method of fixed assets depreciation?
19	A list of affiliates in which it holds a minority stake?
20	A reconciliation of its domestic accounting standards to IAS/U.S. GAAP?
21	The ownership structure of affiliates?
22	Details of the kind of business it is in?
23	Details of the products or services produced/provided?
24	Output in physical terms? (number of users etc.)
25	Characteristics of assets employed?
26	Efficiency indicators (ROA, ROE etc.)
27	Any industry-specific ratios?
28	A discussion of corporate strategy?
29	Any plans for investment in the coming year(s)?
30	Detailed information about investment plans in the coming year(s)?
31	An output forecast of any kind?
32	An overview of trends in its industry?
33	Its market share for any or all of its businesses?
34	A list/register of related party transactions?
35	A list/register of group transactions?

Source: S&amp;P 500

## Appendix B (Continued)

**Figure 19**

*Board and Management Structure — Does the Company in its Annual Account Disclose:*

Item	Board and Management Structure and Process
1	A list of board members (names)?
2	Details about directors (other than name/title)?
3	Details about current employment/position of directors provided?
4	Details about previous employment/positions provided?
5	When each of the directors joined the board?
6	Classification of directors as an executive or an outside director?
7	A named chairman listed?
8	Detail about the chairman (other than name/title)?
9	Details about role of the board of directors at the company?
10	A list of matters reserved for the board?
11	A list of board committees?
12	The existence of an audit committee?
13	The names on the audit committee?
14	The existence of a remuneration/compensation committee?
15	The names on the remuneration/compensation committee)?
16	Existence of a nomination committee?
17	The names on the nomination committee?
18	The existence of other internal audit functions besides the Audit Committee?
19	The existence of a strategy/investment/finance committee?
20	The number of shares in the company held by directors?
21	A review of the last board meeting? (e.g. minutes)
22	Whether they provide director training?
23	The decision-making process of directors' pay?
24	The specifics of directors' pay (e.g. the salary levels etc.)?
25	The form of directors' salaries (e.g. cash, shares, etc.)?
26	The specifics on performance-related pay for directors?
27	The decision-making of managers' (not Board) pay?
28	The specifics of managers' (not on Board) pay (e.g. salary levels etc.)?
29	The form of manager's (not on Board) pay?
30	The specifics on performance-related pay for managers?
31	The list of the senior managers (not on the Board of Directors)?
32	The backgrounds of senior managers disclosed?
33	The details of the CEO's contract disclosed?
34	The number of shares held by the senior managers disclosed?
35	The number of shares held in other affiliated companies by managers?

Source: S&P 500

## Appendix B (Continued)

**Figure 20***Ownership Structure — Does the Company in its Annual Accounts Disclose:*

Item	Ownership Structure and Investor Relations
1	Number of issued and outstanding ordinary shares disclosed?
2	Number of issued and outstanding other shares disclosed (preferred, non-voting)?
3	Par value of each ordinary share disclosed?
4	Par value of each other shares disclosed (preferred, non-voting)?
5	Number of authorized but unissued & outstanding ordinary shares disclosed?
6	Number of authorized but unissued & outstanding other shares disclosed?
7	Par value of authorized but unissued & outstanding ordinary shares disclosed?
8	Par value of authorized but unissued & outstanding other shares disclosed?
9	Top 1 shareholder?
10	Top 3 shareholders?
11	Top 5 shareholders?
12	Top 10 shareholders?
13	Description of share classes provided?
14	Review of shareholder by type?
15	Number and identity of shareholders holding more than 3%
16	Number and identity of shareholders holding more than 5%
17	Number and identity of shareholders holding more than 10%
18	Percentage of cross-ownership?
19	Existence of a Corporate Governance Charter or Code of Best Practice?
20	Corporate Governance Charter /Code of Best Practice itself?
21	Details about its Articles of Association. (e.g. changes)?
22	Voting rights for each voting or non-voting share?
23	Way that shareholders nominate directors to board?
24	Way shareholders convene an EGM?
25	Procedure for putting inquiry rights to the board?
26	Procedure for putting proposals at shareholders meetings?
27	Review of last shareholders meeting? (e.g.minutes)
28	Calendar of important shareholders dates?

Source: S&amp;P 500

## Appendix C. Historical Profitability Data

**Table 15**

*Financial and Bank Services Data for 2017, 2018, and 2019 (\$ in millions except ratio data)*

Ticker	Avg. NI	Avg. ROE	Avg. ROA	Avg. EPS
JPM	14.92	12.07	1.19	1.52
WFC	20.94	10.81	1.11	4.49
BAC	20.94	2.44	.37	.86
AXP	6.15	25.47	2.89	6.53
MS	8.62	3.60	.33	1.70
MTB	1.84	3.88	.51	.04
GS	8.43	8.84	.82	13.01
C	1.46	5.19	.54	4.35
ALLY	1.43	3.48	.27	.00
AIG	3.11	2.08	.26	1.43
COF	15.33	8.73	1.24	9.61
CMA	1.14	13.93	1.47	6.46
BK	4.34	11.38	1.15	4.47
MET	5.33	11.81	.98	6.96
BLK	4.53	2.52	2.52	2.18
KEY	1.69	10.26	1.16	.00
CFG	1.74	8.16	1.08	3.61
USB	6.89	13.38	1.43	4.15

Source: Author's calculations based on 10-K annual reports

**Table 16***Technology Data for 2017, 2018, and 2019 (\$ in millions except ratio data)*

Ticker	Avg. NI	Avg. ROE	Avg. ROA	Avg. EPS
MA	6.66	1.07	23.72	5.73
TWTR	1.12	12.47	8.47	1.13
ORCL	9.36	20.19	6.48	2.26
HPQ	3.77	2.10	10.89	.00
VMW	3.78	32.57	13.61	.01
NOW	2.72	42.56	12.71	3.19
MSI	7.33	56.80	5.98	3.43
FLT	.84	22.81	7.04	9.19
PANW	1.16	11.08	2.53	1.47
VZ	2.03	40.91	8.16	5.37
CRM	7.29	5.24	2.53	.82
IBM	8.58	43.29	5.96	8.75
APH	1.09	24.26	9.86	3.36
IQV	4.24	8.42	2.63	2.93
SQ	1.64	7.57	2.74	.23
FTV	4.84	33.59	11.50	4.57
PAYS	1.57	38.61	7.94	2.55
ANET	6.10	24.05	16.56	.24

Source: Author's calculations based on 10-K annual reports

**Table 17***Healthcare Data for 2017, 2018, and 2019 (\$ in millions except ratio data)*

Ticker	Avg. NI	Avg. ROE	Avg. ROA	Avg. EPS
UNH	1.31	24.83	7.93	13.01
CVS	4.22	7.89	2.46	3.76
SYK	2.39	19.29	8.36	5.93
PFE	1.54	24.63	9.77	2.79
ANTM	4.29	14.29	16.76	13.01
CNC	1.09	9.86	3.21	.00
MCK	1.09	19.68	3.15	9.46
UHS	8.08	15.09	1.29	8.63
ABBV	6.72	1.64	8.61	4.09
MDT	4.03	7.79	4.19	2.91
LLY	5.20	56.80	8.85	.00
MMM	4.88	45.85	7.42	8.38
MRK	7.36	21.03	7.22	2.31
BDX	9.04	4.81	1.84	3.11
ZTS	1.37	56.80	12.67	.00
HCA	3.99	56.80	9.33	9.10
WAT	4.97	33.65	10.39	5.93
VAR	2.34	13.73	6.28	2.44

Source: Author's calculations based on 10-K annual reports

**Table 18***Energy, Gas, and Oil Data for 2017, 2018, and 2019 (\$ in millions except ratio data)*

Ticker	Avg. NI	Avg. ROE	Avg. ROA	Avg. EPS
XOM	1.74	9.61	5.19	4.29
CVX	7.94	6.03	3.62	1.04
MPC	3.46	10.32	4.43	6.33
OXY	1.33	6.46	2.52	2.11
OKE	1.12	16.34	5.32	1.64
NEE	4.51	10.62	4.54	10.17
WMB	8.39	9.07	2.48	.00
EIX	8.91	15.09	3.05	5.39
DTE	1.44	16.80	3.04	6.24
ETR	9.88	9.39	1.74	.00
HAL	9.02	.23	.08	.02
HES	8.15	14.61	6.48	4.70
GE	1.14	31.39	4.05	.00
CNP	8.17	13.98	3.46	2.14
BMY	3.54	9.53	4.73	1.88
COP	5.59	13.04	5.97	.00
D	1.29	17.20	1.54	1.89
SO	3.29	39.06	17.95	2.60

Source: Author's calculations based on 10-K annual reports

## Appendix C. Historical Profitability Data

**Table 19***Real Estate Data for 2017, 2018, and 2019 (\$ in millions except ratio data)*

Ticker	Avg. NI	Avg. ROE	Avg. ROA	Avg. EPS
SPG	8.78	29.86	2.77	2.81
PLD	1.75	7.84	4.89	3.06
EQR	1.39	7.56	3.74	2.10
BXP	6.57	11.09	3.16	4.16
NLY	8.02	1.21	0.16	1.46
WELL	1.03	5.74	2.95	2.36
FRT	3.13	12.11	4.69	4.07
VER	1.78	1.66	0.86	1.23
PSA	1.58	17.29	14.20	8.98
BRX	3.09	11.09	3.69	1.04
EQR	8.38	7.56	3.74	2.10
ARE	2.21	4.12	2.23	3.26
CPT	1.99	5.63	3.06	2.05
CCI	6.98	5.44	1.79	1.53
AMT	1.58	26.49	0.40	0.00
VTR	5.85	7.03	3.11	2.06
AVB	8.64	8.24	4.72	0.01
DLR	4.56	2.96	1.75	0.00
CBRE	1.12	20.02	7.39	0.00

Source: Author's calculations based on 10-K annual reports