

**THE RELATIONSHIP OF CEO DUALITY TO FINANCIAL PERFORMANCE AND
EFFICIENCY IN ELECTRONICS FIRMS**

by

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Abstract

The goal of a board of directors is to provide oversight and guidance to management to ensure the ongoing profitability and wealth of an organization. Part of that responsibility includes meeting the needs and interests of shareholders and stakeholders. The chair of the board of directors is considered the spokesperson for the board. In some structures, the roles of chair of the board of directors and chief executive officer (CEO) are combined, resulting in CEO duality. There has been much debate over which structure is better and if there is a significant relationship to financial performance. Agency theory and stewardship theory formed the theoretical frameworks for this study. Stakeholder theory provided a contrasting perspective to agency theory and stewardship theory. Upper echelon theory (UET) provided a framework for CEO charisma as a driver for financial performance. The purpose of this quantitative correlational study was to examine to what extent a relationship existed between CEO duality and financial performance in electronics firms. Secondary metadata was collected and analyzed from a sample of 226 publicly traded companies in electronics firms listed on the Standard & Poor's 500 index. The data were collected for years 2016-2018. A simple linear regression to assess the relationship between CEO duality and financial performance in electronics firms was used to analyze the data. Further analyses of the data revealed no statistically significant relationship between CEO duality and financial performance in electronics firms. The reduction of agency problems and the associated costs that lead to lower firm profits and less shareholder wealth may result in less conflict in organizational decision making. Also, this reduction of conflict in decision making and agency problems provide implications for positive social change.

Dedication

I dedicate this study to my family, specifically my mother and my sisters, who have been with me through every step of this long journey. My mother, Johnnie, who kept me grounded and focused, told me to stay prayed up when I could see no light at the end of the tunnel. My sisters, Bebbly, Devona, and Veronica were my sunshine in times of rain and continued to remind me that I would get there and to keep pushing. My daughter, TeShara, who always holds me up and keeps me smiling, was the small voice in my ear constantly telling me not to give up. To all of you, I am eternally grateful for your love and support. Finally, to my Aunt Ruby (Jones), who wanted so badly to present me and this accomplishment to the church congregation personally, but who passed away before she could, I made it. Thank you for being one of my biggest earthly and now, heavenly cheerleaders.

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CHAPTER 1. INTRODUCTION

Introduction

The directors on the board of directors of an organization are important decision-makers who should provide oversight and policy guidance. A board structure consisting of independent and non-independent directors shares a common goal of increasing shareholder wealth. Yatim, Iskandar, and Nga (2016) noted that boards structured to favor independent directors are essential to effectively managing stakeholder interests. For board members to be independent, they should be able to exercise their ability to manage free of inside influence from management (Fuji, Halim, & Julizaerma, 2016). Vera (2016) noted that corporate governance mechanisms protect shareholders' interest and control opportunistic behavior that may be evident because of the chief executive officer (CEO) duality. CEO duality results when the chair of the board of directors and CEO shares the same role (Tarus & Ayabei, 2016).

In previous studies on corporate governance, researchers discovered a link between board independence and agency theory and suggested that inside directors are susceptible to undue influence by the CEO (Glinkowska & Kaczmarek, 2015; Joseph, Ocasio, & McDonnell, 2014; Kultys, 2016). Such control poses a broader concern for board independence and financial performance. Researchers continue to debate board independence and CEO duality structures (Allam Mohammed & Muneer Mohamed Saeed, 2017; Naseem, Sun Xiaoming, Riaz, & Rehman, 2017; Rashid, 2015). However, researchers indicated that there were mixed results when attempting to establish a direct link between board characteristics and a firm's financial performance (Naseem et al., 2017). Cheffins (2015) noted that a lack of corporate governance in U.S. financial firms contributed to the corporate scandals and financial crises of 2008. Further

study on corporate governance mechanisms such as board independence can provide insight into organizational practices that hinder managerial discretion (Filatotchev & Nakajima, 2014).

This quantitative study aimed to examine the extent to which CEO duality in electronics firms relates to performance. Yan-Jie, Chen, Qian, and Chen (2013) asserted that electronics firms need to remain innovative in a competitive environment to grow and remain profitable. The success and failure of a company in effecting positive financial performance are highly dependent on the effectiveness of the manager (Fujianti, 2018). When measuring inputs and outputs, electronics firms should be motivated to improve firm efficiency through various processes relative to performance outcomes (Yan-Jie et al., 2013). Yan-Jie et al. (2013) also asserted that electronics firms have notable agency conflict incidences because of information asymmetry between managers and owners.

The population for the study consisted of 226 publicly traded electronics firms from 2016-2018. Board independence indicates a board structure with more than 50% of the directors from outside the firm (Joseph et al., 2014). CEO duality occurs when the CEO of a firm also serves as the chair of the board of directors (Tarus & Ayabei, 2016). Tang (2017) explained when the CEO also serves as the chair of the board of directors; more power is vested in the CEO, which reduces the monitoring effectiveness of the board.

Chapter 1 explained the significance of the business problem, contextualized the study, and introduced the chapter's basic components. The chapter begins by describing the background of the study, discusses the specific business problem related to the topic, and states the research purpose. Next, the theoretical framework provides a construct of theories to explain the relationship between CEO duality and financial performance and the link to the overarching

research question. In Chapter 1, a synthesis of the study's major components provides alignment with the research question. The justification for the study provides the rationale and significance of the study. It explains how the research may add to the existing body of knowledge and affect positive social change. Key terms and definitions will provide clarity and understanding of the concepts and terms used throughout the study. The assumptions and limitations will explain the research conditions that form the basis of the methodology and the restrictions that may limit the research.

Background of the Study

CEO duality plays a significant role in board independence and board structure. In the context of CEO duality, board independence is a core component in the effective monitoring of management (Dah, Dah, & Zantout, 2017). The inability of boards to monitor management because of CEO duality places board members in a position to be negatively influenced by the CEO. This lack of board independence increases the likelihood of management misconduct (Rose, 2005).

Agency and stewardship theorists believe a case could be made for and against CEO duality when linking board independence to firm efficiency (Bendickson, Muldoon, Liguori, & Davis, 2016a; Bosse & Phillips, 2016). According to agency theorists, managing a company is an opportunistic endeavor that causes agency conflicts (Bendickson, Muldoon, Liguori, & Davis, 2016b). Pechersky (2016) noted that a monitoring mechanism that protects shareholder's interests could mitigate agency conflicts. Tang (2017) indicated that there are benefits and costs associated with CEO duality. These benefits become evident when there are also agency costs. One type of agency problem centers the separation of management and company ownership,

where the shareholder is the principal, and management is the agent for the company (Panda & Leepsa, 2017). Pechersky (2016) suggested that although not explicitly stated, the board's interests align with the shareholder rather than the CEO. The CEO most often supports the board. The agency problem applies to the outside directors and is most critical to internal directors whose careers can be influenced by and dependent on the CEO (Pechersky, 2016). Soelton, Ramli, Anggrain, and Khosasi (2020) suggested that while good corporate governance is a mitigating factor for reducing agency conflicts, the policies are only as good as the monitoring systems put in place to ensure their effectiveness.

Hambrick (2007) noted that the UET perspective identified executives' specific characteristics, such as their experiences, values, and personality that may influence decision-making. Researchers have employed UET to explore CEO characteristics (Derda, 2017; Haas & Speckbacher, 2017; Hattke & Blaschke, 2015; Oppong, 2014). From this perspective, the focus is on financial performance and how performance outcomes relate to CEO attributes (Acar, 2016). The original research conducted by Hambrick and Mason (1984) suggested that the central premise of UET is that CEO experiences, values, and personalities affect their choices, which could also affect financial performance.

One way to achieve board independence is to separate the CEO and chair roles of the board of directors (Allam, 2018). The fraudulent activities and unethical behaviors of corporate giants such as WorldCom, Enron, and Lehman Brothers have brought more scrutiny to corporate governance (Reckers & Samuelson, 2016). An effective governance protocol is important for achieving a high level of financial performance (Virk, 2017). Allam (2018) stated that board independence provides a better monitoring system of the CEO and top management. Virk (2017)

noted that board composition and leadership should be a major focus for directing strategy and making decisions that affect company financial performance and that non-compliance with the law and regulatory requirements might lead to illegal activity, minimizing shareholder confidence. External environmental factors may motivate managers to engage in wrongdoing when presented with the opportunity to exercise free choice and may result in corporate misconduct (Virk, 2017).

Researchers have noted that a majority of governance codes support outside or independent directors. Under the agency theory, board directors' primary duty is to monitor managers to deter self-serving behavior (Ilhan Nas & Kalaycioglu, 2016). A board of directors structured with a majority of outside directors is considered independent and, therefore, more effective at protecting shareholder's interests. Outside directors are less susceptible to potential conflicts of interest than inside directors (Ilhan Nas & Kalaycioglu, 2016). Dah, Jizi, and Sbeity (2018) argued that more board independence presents a disadvantage. Inside directors have access to more firm-specific information, making them better informed and equipped to make decisions regarding firm operations. Outside directors lack this knowledge, and as a result, there are more costs associated with converting their knowledge to experience that is beneficial to the firm (Dah et al., 2018).

According to a study on Taiwanese electronics firms conducted by Yan-Jie et al. (2013), complex ownership structure and information asymmetry in electronics firms may cause agency conflicts that can negatively impact firm efficiency and performance. Yan-Jie et al. (2013) noted that this study was the first paper to examine the separation of ownership and control and its impact on Taiwanese firms' financial efficiency. Taiwan is one of the most industrialized

countries in the Asian-Pacific region, and 70% of the firms are electronics firms (Yan-Jie et al., 2013). Electronics firms in Taiwan are a major contributor to the country's economic growth. Rapid growth in electronics firms may lead to a high incidence of agency problems (Yan-Jie et al., 2013). According to Yan-Jie et al. (2013), negative entrenchment effects were present in the Taiwanese electronics firms. Dah et al. (2018) noted the opposition to CEO duality in agency theory, which empowers the CEO and leads to entrenchment. CEO duality was used as a dummy variable to distinguish between the groups used for the study. This study's objective was to examine the extent to which a relationship existed between CEO duality and financial performance in electronics firms.

Business Problem

The general business problem is the ability of boards of directors to monitor CEOs effectively. The specific problem is the potential impact on companies' financial performance because of a lack of effective corporate governance and CEO duality, which may lead to agency conflict (Peni, 2014). Researchers have discussed the topics of board independence and CEO duality broadly in the literature (Abels & Martelli, 2013; Naseem et al., 2017; Rashid, 2016). The ability to determine whether CEO duality relates to financial performance has become more challenging to assess, furthering debate on the subject (Duru, Iyengar, & Zampelli, 2016). According to Naseem et al. (2017), the link between board characteristics, which includes CEO duality, and financial performance has not been well established in the industries used in previous studies.

CEO duality and board composition represent effective measures of good corporate governance (Adrian, Wright, & Kilgore, 2017). Effective corporate governance mechanisms are

critical to aligning management interests with shareholders' expectations (Adjaoud & Hermassi, 2017). According to Adjaoud and Hermassi (2017), the quality of monitoring established by shareholders depends on the quality of the policies implemented, such as board independence and the separation of the CEO and board chair position. The researchers suggested that alignment of management and shareholder interests mitigates agency costs.

Central to the debate on effective corporate governance is CEO duality. Separate CEO and board chair positions ensure checks and balances on management control and decision-making within an organization (Palanissamy, 2015). According to Palanissamy (2015), one can separate corporate governance structures into two categories: internal or external. Internal governance structures include the board of directors and subcommittees of the board formed to operate in the best interest of the shareholders and managers. The systems should also align with corporate control processes. External board structures include accounting and regulatory compliance functions (Palanissamy, 2015).

According to a study conducted by Yan-Jie et al. (2013), there are no other studies related to board composition on electronics firms exclusively outside Taiwan. Yan-Jie et al. (2013) asserted that electronics firms are associated with rapid growth primarily because of information asymmetry, which results in a higher incidence of agency conflict. Freire (2019) suggested that CEO duality may have an inverse effect on the performance of independent directors, which increases the need for internal management supervision.

Research Purpose

The purpose of this study was to examine the extent to which CEO duality relates to financial performance in electronics firms. CEO duality is the predictor or independent variable,

and return on equity (ROE) is the dependent or outcome variable used as the measurement for financial performance. Stuebs and Sun (2015) stated that effective corporate governance is instrumental in measuring financial performance and success. Specifically, standardized financial performance measures include evaluating ROE, sales growth, asset growth, and profitability (Zhou, Hu, & Shi, 2015).

Appropriate corporate governance mechanisms affect different dimensions of financial reporting and performance (Stuebs & Sun, 2015). Attributional leadership theories are a resource for evaluating CEO leadership qualities based on past organizational performance (Jacquart & Antonakis, 2015). Peni (2014) suggested that CEO duality may cause agency conflicts that negatively impact financial performance, which increases the need for more board independence to protect shareholders' interests. Conversely, duality leadership may lead the CEO to consider the firm's success along with a personal challenge and focus on ensuring shareholders are served more effectively (Peni, 2014). Research on corporate governance has focused primarily on the level of board independence. However, results appear mixed when linking board structure to financial performance because boards' effectiveness depends on many other factors, such as board size, audit committee independence, and gender diversity. (Naseem et al., 2017).

Independent boards aim to balance the CEO's power and reduce corporate control that leads to an adverse impact on financial performance (Villanueva-Villar, Rivo-López, & Lago-Peñas, 2016). Based on the literature's opposing views, Manna, Sahu, and Gupta (2016) argued that CEO duality presents a conflict for corporate governance. Further study of board independence and CEO duality may add to the current body of knowledge on the relationship between the level of board independence and financial performance. Additional insight into the

impact on firms' profit margins and shareholder equity presents implications for positive social change, specifically, the effect of CEO duality on operational decision making that affects shareholder wealth.

Research Question

The purpose of this research study was to examine the extent to which a relationship exists between CEO duality and financial performance in electronics firms. CEO duality and leadership characteristics, within the context of board independence, were also explored. The theoretical construct of this study addressed the following research question:

RQ: To what extent does a statistically significant relationship exist between CEO duality and financial performance in electronics firms?

Rationale of the Study

CEO duality has become increasingly important to researchers in determining the appropriate level of board independence and the impact of CEO influence. Researchers have not adequately identified a process to determine when a board is completely independent. Furthermore, the debate continues as to the level of board independence and the impact on financial performance (Rashid, 2015). Previous studies show mixed results on the impact of board independence on financial performance because there are other factors to consider, such as gender diversity, audit committee structure, and board size (Naseem et al., 2017). While there is a belief that effective corporate governance leads to better financial performance, there are studies that provide evidence to the contrary when using particular indices such as CEO duality (Pintea & Fulop, 2015). Addressing whether the level of board independence correlates to financial performance is vital to corporations and the research community (Duru et al., 2016).

The general rationale for this study was to address a board of directors' ability to monitor CEOs using sound governance policies. More specifically, the potential impact on companies' financial performance because of a lack of effective corporate governance in CEO duality firms may lead to agency conflict.

Theoretical Framework

The three theories that will be the applications in this study include agency theory, stewardship theory, stakeholder theory, and upper echelon theory (UET). Agency theory serves as the foundation theory for this study. The idea that boards should be independent with autonomy and oversight authority is an influence of agency theory. Stewardship theory, stakeholder theory, and UET provide a different context for board independence and CEO duality. Jensen and Meckling (1976) contended that a board of directors should maintain control, independent of the CEO. Jensen and Meckling (1976) also argued that an effective governance system would address agency costs associated with CEO duality.

Jensen and Meckling (1976) used agency theory to explain the relationship between agents and principals, noting the agent should operate in the principal's best interest without self-regard. The relevance to corporate governance concerns the board of directors controlling the company while the shareholders serve in an ownership capacity. The inherent agency problem that arises from the agency theory may result in cost inefficiencies. Bosse and Phillips (2016) found that when owners do not recognize negative CEO behavior, self-interested CEOs engage in actions that increase agency costs for the firm. According to Bosse and Phillips (2016), CEOs with an equity share in the firm are more inclined to align their interests with those of the firm and increase shareholder wealth.

The board of directors members' primary responsibility is to manage the quality of an organization's financial operations and ensure the highest level of integrity throughout the organization. According to Yangyang, Knechel, Marisetty, Truong, and Veeraraghavan (2017), board independence provides the level of monitoring and control over a firm's activities necessary to reduce internal weaknesses. Control mechanisms are needed to minimize conflict between principals and agents in a way that leads to accomplishing a firm's strategic and financial goals. The board has the primary responsibility of monitoring management's actions to promote shareholders' interests to control agency costs (Boshkoska, 2015).

Dah et al. (2017) asserted that effective board monitoring has a substantial impact on managerial policy and decision-making, along with the appropriate allocation of the firm's limited resources. According to Dah et al. (2017), independent directors make better monitors because of their independence from CEOs. Board composition could affect the quality of the board if a majority of the members are internal, and the employees are not willing to challenge the CEO (Wu & Li, 2015).

Researchers link CEO duality and board independence to agency theory and stewardship theory (Choi, Chatfield, & Robert, 2018; Glinkowska & Kaczmarek, 2015; Rutledge, Karim, & Lu, 2016; Shrivastav & Kalsie, 2016). According to Jensen and Meckling (1976), board independence reduces agency costs. Keay (2017) asserted that more independent directors under the stewardship theory would reduce board effectiveness and firm accountability. Glinkowska and Kaczmarek (2015) noted, under the premise of stewardship theory, managers are considered stewards with non-financial motivation for directing the activities of a firm and whose motivation comes from the satisfaction of doing a good job. Agency theorists believe the dual

role of CEO and chair of the board of directors contribute to the abuse of power and control, which weakens the board (Shrivastav & Kalsie, 2016). Both theories offer contrasting views of CEO duality and the relationship to board independence.

Researchers of the upper echelons theory (UET) found that CEO charisma or characteristics such as personality, experience, age are indicators of a CEO's ability lead (Keil, Maula, & Syrigos, 2017). According to the concepts of UET, CEO characteristics are apparent in a firm's strategic activities that could affect a firm's performance (Wang, Holmes, Oh, & Zhu, 2016). Hambrick (2007) noted that the central theme of UET is that the influences of CEO charisma affect CEOs' decision-making, depending on the current situation. These influences may result in self-serving behavior, and Dion (2016) posited that the self-interest of agents and CEOs must differ and not converge. The focus of this study was to examine the extent to which a relationship exists between the level of board independence and CEO duality on financial performance. Figure 1 shows the author's depiction of the theoretical framework for this study.

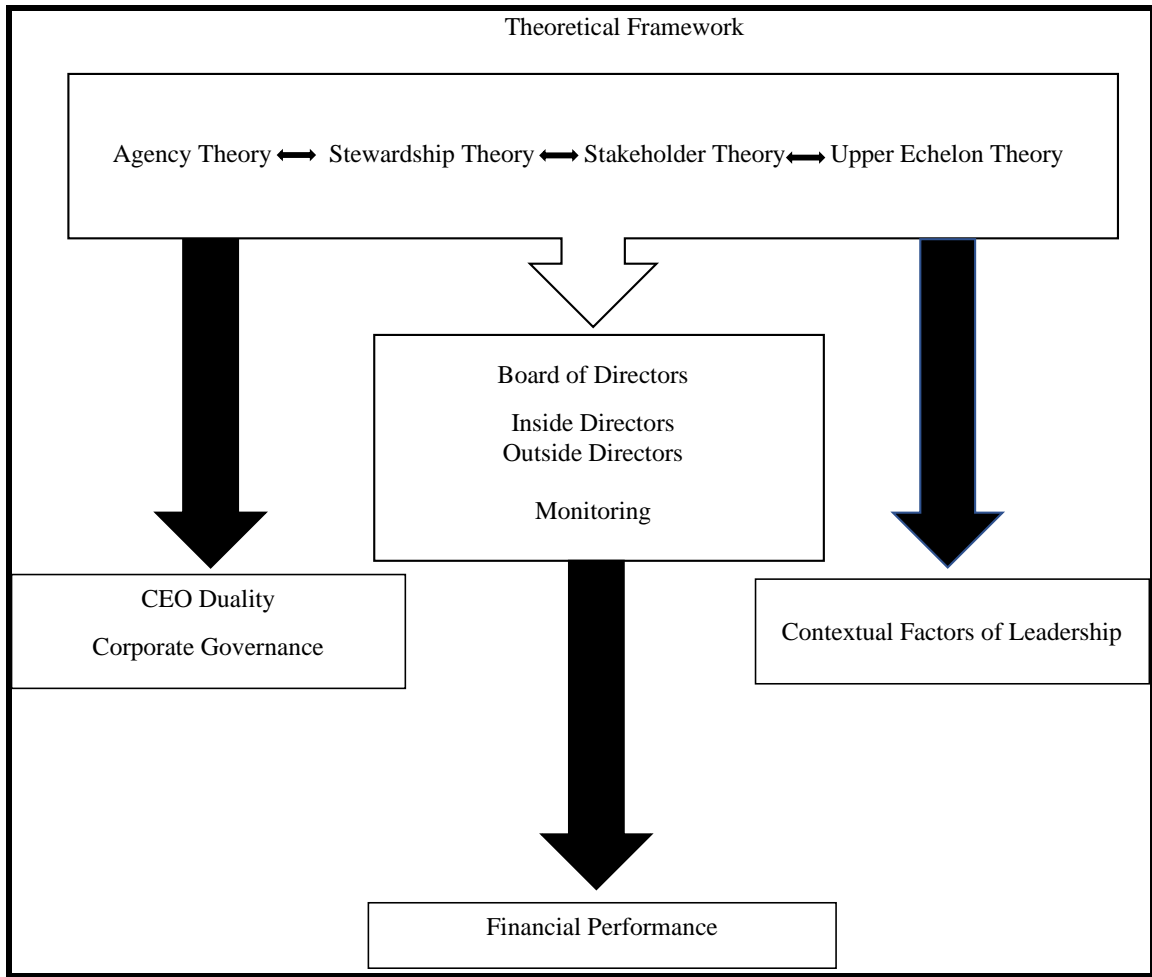


Figure 1. Financial performance and board independence and CEO duality theoretical framework.

Significance of the Study

Board independence and CEO duality are components of corporate governance. The ongoing debate on the impact of board structures in the literature in the past few years is noteworthy. Researchers of agency theory have provided different perspectives on whether board independence affects financial performance (Naseem et al., 2017). Jensen and Meckling (1976) believed that to reduce agency costs and establish a system of controls that the board of directors should be independent of the CEO. Examining the phenomenon will allow for additional

research on the relationship of financial performance and board structure, specifically CEO duality and the role charisma plays in their ability to implement strategies that dictate financial performance. From a theoretical perspective, an examination of the stewardship theory would add to the existing body of knowledge that contradicts agency theory on CEO duality and board independence. Researchers from prior studies have provided arguments for both theories without conclusive evidence to suggest a reliable financial performance link. This quantitative study includes a descriptive analysis of the relationship between corporate board independence to financial performance, including the implications of CEO charisma on management capabilities. This study's research consists of a random sample of publicly traded electronics firms.

Definition of Terms

Agency theory. Agency theory is a theory that examines the principal/agent problem of companies controlled by directors while owned by shareholders (Jensen & Meckling, 1976).

Board independence. Board independence is the degree to which the majority of the board of directors come from outside the firm (Joseph et al., 2014).

Board of directors. The board of directors is the governing body called the board that determines the organizational direction and leadership of a company and protects shareholders' interests (Kinsey, 2019).

CEO duality. CEO duality is the practice of one person serving in the role of CEO and chair of the board of directors (Tarus & Ayabei, 2016).

Contextual factors of charisma. Charisma is CEO qualifications such as age, qualifications, and experience (Tosi, Misangyi, Fanelli, Waldman, & Yammarino, 2004).

Corporate governance codes. Corporate governance codes are an involuntary set of norms that provide guidelines for improving corporate governance (Humphries & Whelan, 2017).

Corporate governance. Corporate governance is a system of processes and structures designed to direct and control an organization's functions through a set of rules, formats, and procedures that guide management decisions (Palaniappan, 2017).

Financial performance. A quantitative analysis of a firm's performance, reputation, and competitive position in the market is a determination of financial performance (Ivanovic-Djukic & Lepojevic, 2015).

Insider directors. Insider directors are board members who are or have been employed by the firm (Palmberg, 2015).

Outsider directors. Outsider directors are board members who have not been employed by the firm (Palmberg, 2015).

Return on Equity (ROE). A financial ratio calculated as net operating profit (net income) divided shareholder equity (Mubeen, Han, Abbas, & Hussain, 2020).

Stakeholder theory. Stakeholder theory is a view that considers internal and external groups such as employees, customers, suppliers, and the community as important business partners with a shared stake in the success of a corporation (Richter & Dow, 2017).

Stewardship theory. Stewardship theory emphasizes the decision of managers to act without self-interest in promoting the best interests of the company (Glinkowska & Kaczmarek, 2015).

Upper echelon theory. Upper echelon is a theory that states that the experiences, values, and personalities of executives' influence over their decisions (Hambrick, 2007).

Assumptions and Limitations

Assumptions

Relevant prior research exists on the relationship between board composition and financial performance. In this study, assumptions came from the theoretical models of agency theory, stewardship theory, stakeholder theory, and the upper echelon's theory. Previous studies have indicated that outside directors are more effective at monitoring management. There is an assumption that outside directors are less susceptible to agency conflicts (Ilhan Nas & Kalaycioglu, 2016). The tenets of agency theory posit that the CEO exerts influence over internal directors (Joseph et al., 2014). Furthermore, there is an assumption that the lack of board independence leads to management misconduct, and external forces can influence opportunistic behavior in CFOs (Rose, 2005; Virk, 2017).

The population provides a broad base for extracting a sample of publicly traded electronics companies. First, there is an assumption the independent or predictor variable of CEO duality and the dependent or outcome variable of financial performance are appropriate for the study, and that board size is not a necessary variable to measure financial performance. Secondly, there is an assumption that the sample groups are normally distributed, of equal variance, and independent. Thirdly, the recommended sample size of 111 was estimated using G*Power and considered representative of the population. Another assumption is that the return on equity rate (ROE) is an adequate measure of financial performance. Based on the literature, there is an assumption that the relationship of CEO duality to financial performance in this study

can be measured using ROE as a performance indicator (Krafft, Qu, Quatraro, & Ravix, 2014). Lastly, there is an assumption that the financial statements from the secondary data obtained using EDGAR SEC filings are audited and presented as a true and accurate reflection of the companies' financial position.

Limitations

Study limitations describe design or methodology characteristics that may influence research findings (Ross & Zaidi, 2019). A standard measure of financial performance outcomes is corporate governance. Board composition that not only includes CEO duality but also board size and diversity is a feature of corporate governance (Borlea, Achim, & Mare, 2017). According to Reguera-Alvarado, de Fuentes, and Laffarga (2017), agency theory's underlying premise is the enhancement of financial performance through diversity in board leadership. Kalsie and Shrivastav (2016) also noted that according to agency theory, board size positively affects financial performance, while stewardship theory advocates smaller board size and suggests board size negatively impacts financial performance. As a result, not using board size or board diversity as variables may limit the research scope.

The data collected for this study was from secondary sources. Without standard instrumentation, measuring financial performance could be a limitation when determining the appropriate method for data analysis and data collection. The use of secondary data could also present a limitation to the accessibility of relevant information. Finally, measures of statistical or historical data over time could change, which may make comparisons more difficult.

Organization for Remainder of Study

The foundation and background for the study, which includes the business problem, purpose, theoretical framework, and significance, are discussed in Chapter 1. Definitions and terms provided additional context and meaning for terms used in the study. The assumptions and limitations explained the suppositions relevant to the research methods and restrictions inherent in the research.

Chapter 2 provides a review of the literature related to board independence, CEO duality, CEO charisma, and financial performance. In Chapter 3, the study's methodology is detailed, describing the research design and justification for the research methods used to address the study's research question. Chapter 4 summarizes the actual research, how the data were collected and analyzed, and reports the findings. Chapter 5 presents the implications and recommendations for the study. The references list cites the work used for the study.

CHAPTER 2. LITERATURE REVIEW

Introduction

The following literature review will provide foundational information on the quantitative study of the extent to which a relationship exists between board independence and financial performance. The review is structured to provide an overview of board independence, CEO duality, financial performance, and the contextual factors of CEO charisma. The theories that form the theoretical framework of the study relate to the importance of the research problem. The theories addressed are agency theory, stewardship theory, stakeholder theory, and upper echelon theory (UET). The articles used for the literature review came from Capella University databases. The search criteria were delimited to filter articles from scholarly and peer-reviewed journals using the key phrases management, efficiency, board independence, CEO duality, ROE, and charisma. Additionally, search criteria focused on the theories examined in the study: agency theory, stewardship theory, and UET. The primary sources used to research the articles was ABI/INFORM Collection and Business Source Complete.

Financial Performance and Efficiency

Rico, Rohman, and Zulaikha (2018) defined financial performance as a process by which a company efficiently uses the methods necessary to ensure financial viability. Financial ratios are standard measures for rating financial performance. Ratios are used in financial analysis to address four critical areas of a firm's operations. Those areas include debt, liquidity, the efficient use of assets, and profitability (Korol, 2018). Frequently identified financial performance measures include internal and external factors such as corporate governance, growth, and capital investment. Each of these areas is a key indicator of a firm's financial position relative to its

capital structure (Ayako, Githui, & Kungu, 2015). Capital structure management is an essential aspect of sound fiscal policy and integral to maximizing firm value (Maina, Olweny, & Wanjau, 2018).

According to Michelberger (2016), well-governed firms exhibit better performance and higher firm value, noting that the relevant factors for financial performance and success are revenue and market share. For market success, the metrics are net income, earnings per share, and profit by measuring return on equity (Michelberger, 2016). Gordon and Nazari (2018) noted that governance regulations established by the Sarbanes-Oxley Act (SOX) of 2002 provided guidelines for improving corporate governance. According to Adriaty, Purwanto, and Ermawati (2019), evidence strongly supports the theory that better corporate governance leads to better performance at the firm level and improves rates of return on equity and higher firm valuation, as well as higher profits and sales growth.

Board Independence and CEO Duality

The relevance and importance of a board of directors to the corporate governance structure continues to be a topic of discussion by academicians and scholars. Researchers recognize and accept corporate failures and abuse of managerial power, which has become prominent to the debate on corporate governance (Simoes, 2013). Boards remain a prominent topic of discussion as do ethical concerns and failures of due diligence by directors and managers. Activists for board reform and regulatory agencies have led to governance codes of practice for listed companies (Simoes, 2013). As Simoes (2013) discussed, the critical element for board effectiveness is how well corporate leaders enhance the ability of a board to work together as a unit, rather than in isolation.

Because of mandatory directives, many corporations have made the necessary changes to increase board independence. Boards of public companies, specifically, have made changes in various ways, including board size, independence levels, composition, and focus (Lee, Bosworth, & Kudo 2016). The extant literature on board independence shows that independent directors are more objective and may contribute to the increase in shareholder wealth, which may decrease the agency costs that result in goal conflict between management and shareholders (Lee et al., 2016). As it relates to financial performance, Rebeiz (2017) concluded that boards with more outside directors might provide the leadership to guide a firm toward positive outcomes.

Established guidelines for board composition based on the assumption that directors who represent the firm and shareholders have inside knowledge of the firm. In contrast, independent directors contribute to the monitoring of management because of their objectivity (Palmberg, 2015). Christensen, Kent, Routledge, Stewart, and Monroe (2015) associated the distribution of internal and external boards of director members and the relationship to shareholder wealth with individual member characteristics such as tenure, education, age, and experience. García-Sánchez, Rodríguez-Domínguez, and Frías-Aceituno (2015) stated that the primary responsibility of independent directors is to ensure that the interests of the shareholders are protected. Directors described as affiliated or grey, have a long-term business relationship with the firm and can impact shareholder wealth (Faleye, 2015).

Redor (2016) asserted that inside directors who report to the CEO and dependent on continued employment are less likely to challenge the CEO's strategic decisions. Redor (2016) also noted that outside directors who are influenced by the CEO based on an affiliation with the firm or management might not exercise objectivity when monitoring the firm management.

Coles, Daniel, and Naveen (2014) acknowledged that CEO duality leads to less board oversight and more CEO power. Redor (2016) believed that the more power held by the CEO could negatively impact board independence because it would be difficult for the board to challenge the CEO in cases of CEO duality.

Naseem et al. (2017) asserted that the board characteristics are essential components of effective corporate governance. The typical structure of a board includes internal and external directors, with the responsibility of protecting shareholder interests. The basic tenet of board independence is to provide non-executive directors with the power to make unbiased decisions and use independent judgment (Neville, Byron, Post, & Ward, 2019). Joseph et al. (2014) suggested that board structures with a majority of external directors lead to CEO entrenchment rather than a focus on the primary goal of increasing shareholder value.

Guo and Masulis (2015) suggested that the relationship between monitoring of the CEO by independent boards is unclear on the merits. Guo and Masulis (2015) based this assumption on the assertion that independent directors are more inclined to monitor senior management. Less independent directors may only increase the monitoring of management under performance-based scenarios.

Board independence became a significant area of concern and gained more prominence after the financial scandals in the mid-1900s and early 2000s. Regulatory reforms for corporate governance were established by the New York Stock Exchange (NYSE) and the National Association of Securities Dealers Automated Quotations System (NASDAQ) and later approved by the Securities and Exchange Commission (SEC) in 2003 (Chen, Cheng, & Wang, 2015). The

scandals provide evidence that the reforms were necessary and central to effective governance (Rashid, 2015).

The purpose of the corporate governance regulatory reforms was to require firms listed with the SEC to implement a board structure with a majority of the directors from outside the firm (Chen et al., 2015). The United States Congress enacted the Sarbanes-Oxley (SOX) Act of 2002 to provide for increased monitoring of management. In theory, increased oversight would reduce board influence and reduce the likelihood of managerial misconduct (Banerjee, Humphery-Jenner, & Nanda, 2015).

The passage of SOX provided a mandate for increased oversight by majority independent boards and improved management decision making, which is worth exploring in this context. After the implementation of SOX, the board was more likely to be larger and independent to reduce conflict of interest. Directors were more likely to hold professional positions such as lawyers and financial experts and less likely to be current executives of the company (Wintoki & Xi, 2019). Dah et al. (2018) suggested that while SOX legislation strengthened corporate governance controls, boards may have less monitoring authority. As a result, the SOX guidelines that require boards to increase their independence may lead to a decrease in firm value.

The objective of SOX is to increase the effectiveness of boards through increased independence, which could affect a company's entire corporate governance structure (Bhagat & Bolton, 2013). The implementation of SOX effectively placed more pressure on firms that were not compliant with the regulation. According to Chang, Lee, and Shim (2018), because of increased monitoring, firms with a CEO duality structure more readily adapted to the changes

than non-CEO duality firms as the SOX regulations placed non-CEO duality firms under more scrutiny to adopt more robust monitoring policies.

Board independence is often a preference in institutional investors and financial regulators because of the presence of oversight. Individuals assigned the responsibility of monitoring management activities, prefer an independent structure because of their ability to challenge the CEO more readily than an outside director (Lixiong & Masulis, 2015). According to Neville et al. (2018), internal and external board members might have different reasons that influence their motivation to monitor management activities. Separation of the CEO and chair of the board of directors positions is a mitigating factor for determining the level of motivation because the CEO has limited power.

Recent studies suggest there is conflicting evidence supporting the level of board independence. Some studies indicate that firms that have a majority of external board members are less profitable. In these instances, a moderate number of independent directors could be more beneficial (Dah et al., 2017). The debate over the optimal board structure centers on the optimal number of outside directors. Kim, Mauldin, and Patro (2014) believed that outside director tenure could positively affect on advising and monitoring CEOs because of their objectivity.

Researchers continue to discuss whether governance codes improve corporate governance practices (Cuomo, Mallin, & Zattoni, 2016). Kumar and Zattoni (2018) noted that boards of director members appear qualified to carry out policies that promote the firm's best interest. Policymakers and financial investors continually advocate for laws that support good governance to prevent boards from approving decisions without regard for fiduciary consequences (Kumar & Zattoni, 2018). Adopting corporate governance policies that address

rising agency costs resulting from a misalignment of values between principles and agents remains a central issue for those responsible for enforcing policies and regulations (Katti & Raithatha, 2018).

Rebeiz (2015) stated that independent directors may find it challenging to exercise independent judgment based on the boardroom's culture and how the CEO controls information. Rebeiz (2015) also asserted that the emotional connection to the CEO out of gratitude or courtesy might limit their ability to exercise independent and objective judgment without the approval of the CEO. This emotional dependency is made worse because of the CEO's power, stature, and prominence with other organizational leaders. Park, Kim, Chang, Dong-Hyun, & Yun-Dal (2018) noted that entrenched CEOs wield an enormous power that neutralizes the board members' ability to provide checks and balances.

In a recent study, Faleye (2017) examined the possible downside to full board independence. The structure of the board has shifted because of corporate governance scandals to move to fully independent boards, where the CEO is the only internal director. Survey data from Institutional Shareholder Services showed that 36% of S&P 500 companies had no other internal director besides the CEO. That percentage had risen to 75% by 2015 (Faleye, 2017).

Duru et al. (2016) argued that independent directors are known as leaders with little attachment to the CEO, with the ability to provide better oversight and protect the interest of shareholders and other stakeholders. Faleye (2017) further stated that increasing the number of independent directors can enhance board performance and allow the company to access external resources and connections. García-Sánchez et al. (2016) also pointed out that a more significant

number of independent board members will enable directors to provide more efficient oversight and reduce the incidences of misconduct.

Chen (2014) stated that external directors pose a solution to agency problems within organizations. Compared to internal directors, external directors are less entrenched, making them more capable of monitoring management activities. Banerjee et al. (2015) suggested that improved internal governance structures restrain CEOs, using overconfidence in CEOs to optimize shareholder wealth. Conversely, Bukalska (2020) asserted that an overconfident CEO might negatively impact financial decision-making, which may have an adverse effect on financial performance.

The concept of CEO duality relates to boards that are structured where the CEO also serves as the chair of the board of directors (Firth, Wong, & Yang, 2014). Boards structured with the CEO serving dual roles provide more internal power to the organization, which may lead to policies and decisions that are self-serving and not focused on increasing shareholder value (Dion, 2016). CEO duality inhibits board members' ability to implement monitoring protocols, which may compromise the firm's operational decisions (Tang, 2017).

CEO duality and corporate governance implications are often debated in the literature by agency and stewardship theorists. Arguments exist in favor of CEO duality, suggesting a favorable relationship to financial performance and consistent with stewardship theory. In contrast, agency theorists believe the CEO and chairperson should remain separate to avoid conflicts of interest (Palaniappan, 2017). The issue of CEO duality is vital to corporate governance because the CEO and the board chairperson may have some influence on financial performance (Palaniappan, 2017).

When delineating the responsibilities of the board of directors, the question of CEO duality becomes evident. A board structure that combines the CEO and board chairperson position creates a situation where the board of directors makes management accountable to management (Krenn, 2014). Such a structure may involve the CEO evaluating his performance. Opinions on how this may affect financial performance diverge (Krenn, 2014). Krenn (2014) also noted that 70% of companies are combining the role of CEO and chairperson.

From an economic perspective, the prevalence of companies adopting this structure may result in cost savings. This logic assumes that the primary goal of the board of directors is to select value-maximizing governance policies that align CEO interests with those of shareholders (Krenn, 2014). The cost of separating the two roles would increase agency costs and costs associated with CEO succession. The economic logic would favor CEO duality in firms under certain conditions where cost savings of combining the two roles would outweigh any benefit gained by separating the two functions (Krenn, 2014).

Park et al. (2018) discussed corporate governance tendencies that power dynamics between the CEO and boards. Boards use entrenchment as a managerial maneuver to control hubristic CEOs. Keil et al. (2017) argued that CEOs use entrenchment as a means to neutralize the governance controls imposed by principals and make it difficult to penalize negative behavior.

Advocates of agency theory suggest that the role of the CEO and the chair of the board of directors should be separated to prevent CEOs from engaging in self-interest rather than the interests of shareholders (Shrivastav & Kalsie, 2016). Studies on CEO duality have failed to provide conclusive evidence of which structure is better to improve financial performance. In

contrast to agency theory, stewardship theory emphasizes one individual serving both roles (Moscu, 2015).

Whether board independence or CEO duality is preferable in board structure has not been adequately addressed in the literature and remains open for debate (Yangyang et al., 2017). Shrivastav and Kalsie (2016) noted that the research literature is inconclusive on which structure is optimal for financial performance. CEO duality might be advantageous for some firms, while non-CEO duality may better improve others' financial performance (Shrivastav & Kalsie, 2016). The existing theory on board leadership is a trade-off between CEO duality, with the belief that the firm benefits from the dual roles of CEO and board chair, and board independence, in which hierarchal leadership is less defined (Krause, Withers, & Semadeni, 2017). To further complicate the concept of CEO duality, in the last 15 years, a third option emerged in the literature that may serve as a compromise to CEO duality and board independence. Some corporations opted to select a lead independent director when pressured to separate the two positions (Krause et al., 2017). The call to separate the board chair and CEO was heeded by some corporations, while others refused to make changes to their leadership.

The importance of exploring the impact of CEO duality on board structure lies in the power the CEO possesses. The more power a CEO has relative to the board, which can lead to activities that promote self-interest, can also negatively influence decision-making. Also, this can negatively impact business outcomes (Chin, Hambrick, & Treviño, 2013). Governance decisions motivated by self-interest invites controversy. Prior research studies have found that the threat of damage to reputation has mitigated unacceptable management behaviors (Bednar, Love, & Kraatz, 2015).

Shareholders use corporate governance mechanisms to reduce the opportunistic behaviors of executives. However, rather than monitor and correct these behaviors, CEOs are often rewarded with incentives, which further strain the agent-principle relationship (Dion, 2016). Baker (2019) noted that incentives promote the agent's self-interested behavior, and they become less motivated to perform.

Boards are more likely to be actively engaged in monitoring managers of poorly performing firms. CEOs that perform poorly need to be appropriately evaluated and terminated, as necessary (Pugliese, Minichilli, & Zattoni, 2014). Subsequently, the existing literature supports a course of action for poor performance. Jongjaroenkamol and Laux (2017) stated that weak control measures allow poorly performing CEOs to misrepresent performance outcomes. The lack of robust internal control measures may cause boards to fill the position with an external CEO to mitigate these weak control measures to reduce conflict of interest and poor performance by internal CEOs.

CEO duality creates an agency problem because the same person responsible for the company's performance is also responsible for assessing the effectiveness of business operations. Companies that favor this type of board structure give too much power to the CEO, which could lead to inefficiencies (Moscu, 2015). According to agency theory, CEOs that serve in a dual role as chair of the board are more likely to forego opportunities that owners view in their best interests to pursue their self-interest (Abels & Martelli, 2013).

Duality roles allow the CEO to exert more power over the board of directors, making it easier for the CEOs to pursue personal objectives over those that optimize wealth for the shareholders (Abels & Martelli, 2013). An external chair of the board of directors, not employed

by the company, provides a higher level of board independence and creates greater separation between the board and management. Since the collapse of the financial markets, there has been a push to separate the two roles. For example, the SEC has mandated that companies justify the board leadership structure (Abels & Martelli, 2013). Abels and Martelli (2013) also asserted that only independent directors should lead the process to change governance policies and directors. Except for the management team, internal CEOs should not serve as the chair of the board of directors. To this point, Ilhan Nas and Kalaycioglu (2016) argued that while board director members are responsible for the oversight of executive management, CEOs who serve in a dual capacity evaluate themselves, which can result in a conflict of interest.

The proliferation of studies focused on board independence and corporate governance have analyzed the concept in various contexts, including the types of firms, company size, and performance (Tihanyi, Graffin, & George, 2014). Also, more studies are examining the roles of CEOs and boards based on internal processes and practices relative to the social and regulatory environment, as well as stakeholder preferences (Tihanyi et al., 2014). Researchers have conducted studies on the responsibility of the board of directors and the role of the CEO, which have explored the decision-making process of managers during times of uncertainty and risk (Tihanyi et al., 2014). The types of firms studied suggested a need to establish different governance mechanisms to deal with a wide range of corporate activities.

Most corporate governance policies include a financial rationale and effective corporate governance, which dictates how a board performs its fiduciary responsibilities related to setting values for the company (Tihanyi et al., 2014). These duties are distinct and separate from the responsibilities carried out by full-time executives (Tihanyi et al., 2014). Koskinen and Anna-

Maija (2016) discussed the relational risks between the board and the CEO from the viewpoint of agency theory. The relationship broadens the understanding of the broad range of tasks performed by boards. There has been little theoretical support in the literature for relational risks. Researchers that apply agency theory believe that the board's primary responsibility is to exercise control over the CEO (Zhang, 2013). Monitoring the opportunistic behavior of CEOs provides checks and balances that ensure optimization of shareholder value. In this context, the relationship between the board and the CEO involves control. According to Koskinen and Anna-Maija (2016), the leadership role in the CEO-board relationship belongs to the chairman of the board.

There continues to be a gap in the literature linking CEO duality to financial performance. The subject has been widely debated and remains unsettled. Despite the absence of a multi-level study on CEO duality, Gove et al. (2017) noted that continued research on the subject is essential, pointing to other variables that could moderate the duality. The dichotomy of CEO duality continues to drive the need for further study.

In the study conducted by Miller and Yang (2015), they found that large, sophisticated firms are more likely to use one person in the role of chair of the board of directors and CEO. In the study, Miller and Yang (2015) also noted that complex firms with high growth and more substantial assets benefit the most from the combined roles demonstrated a positive correlation to financial performance. Bird, Huang, and Lu (2018) found that firms with higher board independence had less powerful CEOs and experienced decreased financial performance fluctuations. The causal relationship resulted from more intense monitoring of the CEO.

Krause, Semadeni, and Cannella (2014) stated that agency and stewardship's competing theories, which focus on board oversight and CEO power, have been used to test the construct of duality. Krause et al. (2014) acknowledged that CEO duality minimized board oversight and increased power for the CEO. The power held by the CEO could adversely impact board independence, making it difficult to oppose decisions made by a CEO, also serving in a dual role as the chair of the board of directors (Redor, 2016). Taniman and O'Shannassy (2015) acknowledged that the global financial crisis of 2008 enhanced the importance of corporate governance practices and, more specifically, the influence of the CEO to deliver positive organizational performance. Taniman and O'Shannassy (2015) also noted that CEO characteristics such as qualifications, knowledge, and experience of the CEO as a key executive and a seat on the board of directors are driving factors for achieving organizational performance.

The theory of CEO duality and the link to performance is a complicated issue. The empirical research on the subject provides conflicting evidence of a relationship between these variables. Krause et al. (2014) suggested that non-duality would be more beneficial to enhance financial performance when issues of environmental uncertainty and risk exist. Krause et al. (2014) also suggested that independent board chairs experience the same agency issues as CEOs, and these costs would increase if the chair of the board of directors and CEO are separated and present problems for CEO succession.

Agency Theory

Agency theory is part of the theoretical framework for this study and the empirical and theoretical research has identified the theory's correlation to board independence. Jensen and Meckling (1976) defined agency theory as the relationship between principals and agents.

Principals delegate responsibility to agents, with each engaging in activities that enhance shareholder value. Agents are fiducial to principles, represent them, and carry out the duties delegated to them. Rashid (2016) explained that the search to understand corporate governance problems and whether managerial ownership adds value to firms has resulted in researchers who have primarily depended on the agency theory and stewardship theory. In the self-interest context of agency theory, when agency costs are closer to absolute or when managers of the firm hold a substantial ownership stake in the firm, agency costs can be reduced. The potential reduction in agency costs may occur because managers are likely to refrain from opportunistic behavior (Rashid, 2016).

Two perspectives on agency theory have been discussed in the literature: principal-agent research and positivist agency theory (Bendickson et al., 2016b). Risk-sharing and agent monitoring are two possible problems of the principal-agent concept based on principle-agent research. Bendickson et al. (2016b) stated that an aversion to risk-sharing links the two issues, which has created information asymmetries and made it difficult for principals to monitor agent behavior. Wang (2018) argues that management's efforts to conceal and control information undermines the principal-agent relationship and diminishes oversight capabilities. In theory, these governance procedures would align the goals and objectives of principals and agents (Bendickson et al., 2016b).

Agency theorists believe that internal directors are more vulnerable to the CEO (Joseph et al., 2014). CEO and director behavior impact firm management. Prudent managerial decisions are important to a firm's long-term profitability and growth. Bosse and Phillips (2016) believed

that agency theory brings more considerable attention to CEOs and boards' specific behaviors. The researchers suggested that there are conflicting findings in support of this assumption.

The underlying principle of board independence is control of management activities to reduce instances of mismanagement that do not serve the interests of the shareholders. The lack of control inherent in the relationship can create an environment for opportunistic behavior, with the principal and agent behaving in activities that exploit the other (Zardkoohi, Harrison, & Josefy, 2017).

An effective board will supervise the actions of management to ensure the efficacy of firm operations. Agency theorists emphasize constant monitoring of management activities to control management behaviors (Glinkowska & Kaczmarek, 2015). Rashid (2015) noted that an independent board has more control over management actions, which will result in adding value to the firm (Rashid, 2015).

Researchers have addressed management's ethical behavior and the potential for economic distress to varying degrees in the literature. Agency critics believe that agency theory personifies the idea that unethical behavior is inherent in corporate governance. Conversely, agency theorists do not discount the theory and believe that normative moral conduct is necessary for successful agency interactions (Pouryousefi & Frooman, 2017).

Agency theorists presume that humans will always act in ways that promote self-interest and result in organizational conflicts. Governance mechanisms function to limit the agent's self-interested behavior (Dion, 2016). Under agency theory principles, the self-interest of shareholders and executives cannot be the same (Dion, 2016).

According to Dion (2016), a potential threat of opportunism means there is a possibility than an opportunistic manager could threaten or neglect the interests of shareholders. Unless there is a threat to the corporate image or profitability, shareholders do not tend to be concerned with managers' opportunistic behavior (Dion, 2016). In this situation, shareholders appear to be more opportunistic than managers (Dion, 2016). Fama and Jensen (1983) argued that board independence allows non-executive managers to confront managers' self-interest opportunistic behavior and reduce agency costs. Wahba (2015) concluded that a relationship exists between the proportion of non-executive directors and positive financial performance.

Till and Yount (2018) attributed the rise in agency theory to the weak economy in the late 1970s and early 1980s. During this time, stocks also fell, bringing the productive mode of the management corporation into question (Till & Yount, 2018). It was also during this same period that hostile takeovers were on the rise. As a result of the weak economy, shareholders had more control and were able to remove board members by purchasing stock, which diminished the authority of the board (Till & Yount, 2018).

Tumbat and Grayson (2016) noted that agency theory classifies agent control as behavior-based and outcome-based. Each type of control explains the level of authority the principal holds over the agent. Behavior-based control is based upon the principal structuring the activities for the agent to follow. Then, the principal monitors the agent to ensure performance. This type of performance monitoring would be more typical of an independent board of directors (Tumbat & Grayson, 2016).

The theoretical foundation of the agency theory focuses on private sector organizations with a cross-section of shareholders that have limited time and interest in monitoring the

behavior of managers (Smith, Umans, & Thomasson, 2018). The agency problem becomes apparent when conflicting interests between the principals and agents exist because of the agent's self-interest. Smith et al. (2019) noted that the literature emphasizes strategies designed to monitor behavior through control and incentives to align the interests of the parties in the principal-agent relationship (Smith et al., 2018).

Agency theory serves as the foundation for institutional logic wherein the board's structure and composition are entrenched in organizational values and beliefs. Joseph et al. (2014) argued that board independence based on shareholder value logic advocates for independent directors who monitor managers and CEOs more effectively. Structural change and board reform are dependent on how competing interests converge to promote change. Power and influence at the board level connect to this process (Joseph et al., 2014).

The primary responsibility of a board of directors is to increase the capital base of a firm. Therefore, boards monitor the financing decisions of the organization. The performance of a corporate board is related to the degree of board independence (Ferreira & Laux, 2016). Rashid (2015) argued that independent boards have a far-reaching concern for the financial health of the firm, which is rooted in the agency theory.

Agency theory's underlying premise is the board's responsibility to monitor management (Ferreira & Laux, 2016). Board independence creates a separation from the company and provides an environment that encourages unbiased decision-making. The number of board members that are outside the company determines true independence. Outside directors are not involved with the management of the company, nor are they involved in the business transactions or shareholding (Ilan Nas & Kalaycioglu, 2016). Hence, outside directors have less

of a stake in the company, thus are less biased, more independent, and effective at monitoring. Ferreira and Laux (2016) suggested that under agency theory, independent boards are more effective at monitoring the actions of agents. Independent directors can provide sound guidance to management that aligns with shareholders' interests. The advantages presented by an independent board and their effectiveness at monitoring agents depend on the institutional environment. CEO duality remains at the center of the debate for advocates of the agency theory. They believe that CEO duality inhibits board independence and reduces the effectiveness of oversight and governance monitoring (Ilan Nas & Kalaycioglu, 2016).

Agency theorists have explored how principles, in this context, can minimize the negative actions of its agents and managers. Systems are put in place to align management activities with those of the owners rather than the opposite of ensuring owners' behavior aligns with shareholder interests (Evans & Tourish, 2017). The position that boards should have control and oversight authority is an influence of agency theory. However, because of the diffused ownership within firms, conflicts of interest are created. Although these conflicts exist, outside directors are essential to governance mechanisms that help resolve agency problems objectively (Maseda, Iturralde, & Arosa, 2015).

One of the specific roles of the board described in the literature is control. In this capacity, the board has a legal obligation to monitor and supervise a firm's activities and monitor business decisions (Madhani, 2017). As explained by agency theory, the board does not engage in strategy formulation but supports and leads management in fulfilling the firm's missions and goals (Madhani, 2017). Good corporate practices can minimize agency conflict, which should result in improved financial performance. Madhani (2017) noted, using the basic premise of

agency theory, that while monitoring management is a significant role of the board that may improve performance, it does not consider the impact of other board roles that could also enhance financial performance.

According to the literature, agency theory initially functioned to limit managerialism to align shareholder-relationship goals. Within this context, shareholders focus on maximizing wealth, and managers are more concerned with personal value. Consequently, these two adversarial positions compete for the distribution of scarce resources (Raelin & Bondy, 2013). Franco, Nalick, Rivera, and Gomez (2017) asserted that leaders assume the position of principals when establishing corporate governance policies. The researchers stated there is an expectation that governance policies apply equally in the interest of the stakeholder, regardless of who holds the position (Franco et al., 2017).

An element of financial performance is valuation. Market corrections can occur because of limitations on managerialism, which can devalue a firm (Zardkoohi et al., 2017). The traditional agency problem acknowledges that deceit, which can occur in human behavior, allows for opportunistic behavior. Zardkoohi et al. (2017) concluded that agency literature centers on the position that managers' potential to engage in opportunistic behavior comes in the form of shirking responsibilities, which increase costs for shareholders.

A board's responsibility is wide-ranging, with primary responsibility for ensuring that management activities do not adversely impact shareholder value. In the broad context of agency theory, the understanding that directors may need skills and expertise to effectively execute their duties has not been adequately addressed (Volonté & Gantenbein, 2016). Although most of the studies on boards based on the principles of agency theory focus on board independence and

CEO duality, the theory has not provided consistent results on the board's role (Volonté & Gantenbein, 2016). Fama and Jensen (1983) highlighted the importance of independent directors with specific skills, indicating that not all directors have the same purpose on the board.

The key to increasing value in an agency relationship is information policy. Implementing performance measures and gathering information about the agent's performance, assists in creating effective information policies. These policies serve to limit the amount of incentive an agent needs to take the actions necessary to maximize value in the relationship (Foss & Stea, 2014).

Gaur, Hanoku, and Singh (2015) conducted a study to examine the relationship between firm-level governance mechanisms and financial performance. One of the elements used in the contingency framework was agency theory. The central theme of agency theory is managers' self-interest behavior, which does not protect shareholders and drive up costs for the firm, along with the costs to control and monitor the behavior (Gaur et al., 2015). Contracts between principals and agents often address the mitigation agency problems. However, the process may include complications.

Researchers in previous studies have noted the use of governance mechanisms to address agency problems (Gaur et al., 2015). Gaur et al. (2015) cited previous studies that discussed ownership structure as a means through which owners can influence managers and protect their interests. A wide distribution of ownership would lessen a single owner's ability to influence board constitution, which makes the role of monitoring firm management more important (Gaur et al., 2016).

Corporate governance structures relative to agency theory are concerned with reducing agency costs that arise because of the relationship between managers and shareholders. These governance mechanisms limit managers' ability to make autonomous decisions (Kultys, 2016). Kultys (2016) suggested that corporate governance under the agency theory framework reduces large corporations into separate groups for managers and shareholders. The assumption is that humans are egotistical, and rational individuals pursue personal interests.

In a study of Bangladesh firms by Rashid (2016), the researcher found that institutional ownership and external ownership increases the gap between the separation of ownership and control. Rashid (2016) posited that such ownership increases agency costs. Rashid (2016) further believed that managerial ownership would increase the likelihood of goal alignment between management and owners.

Corporate governance mechanisms strengthen internal controls and prevent managers from acting in their interests rather than shareholders (Kultys, 2016). Internal instruments of power are in the form of a supervisory board and salary structures and incentives that guide managers toward shareholders' interests. External mechanisms include capital markets and job markets that control managers' actions (Kultys, 2016).

Researchers have noted that the focus of agency theory has primarily centered on the bad behavior of managers (Du & Xu, 2018; Glinkowska & Kaczmarek, 2015; Nguyen, Rahaman, & Zhao, 2018). Researchers of board effectiveness based on agency theory have focused on board independence and the effect on financial performance (Dah et al. & Zantout, 2017; Naseem et al., 2017). Clarke (2014) believed that agency theory continues to be a dominant interpretation of corporate governance in an external and universal context. Clarke (2014) explained that the

theory is also a product of Anglo-American corporations and capital markets. Not only was agency theory founded on the premise of economics and finance, but it has even gone beyond policy and practice to a better understanding of board duties in the context of corporate law.

Stewardship Theory

In contrast to agency theory, stewardship theory has an optimistic perspective on the principal-agent relationship. Chrisman (2019) suggested that agents are good stewards of the financial responsibility entrusted to them, with the goals of the organization the man priority. In this sense, monitoring management is not necessary and may produce undesirable outcomes. Bernstein et al. (2016) noted that stewardship theory addresses the principal-agent relationship from a position of trust rather than control.

Song, Van Hoof, and Park (2017) argued that from the perspective of stewardship theory, financial performance coincides with having more inside directors. Inside directors are uniquely qualified to make sound decisions based on their understanding of the business. Duru et al. (2016) noted that the stewardship theory favored CEO duality and suggested that it leads to improved financial performance because of unified leadership and goal alignment. Song, Van Hoof, and Park (2017) posited that non-financial factors associated with character and reputation motivated CEOs to engage in activities that increase firm value. Moscu (2015) believed that from the stewardship perspective, CEOs focus on long-term outcomes of the company rather than personal gain. In contrast, a corporate culture that places too much power with the CEO may cause performance inefficiencies.

The main contrast of the two theories is the focus on self-interest with agency theory, and a concern for the well-being of others relative to stewardship theory (Hiebl, 2015). According to

Hiebl (2015), agency-oriented managers might undertake short-term performance goals to secure their jobs or advance their careers. Steward-oriented managers may risk their jobs to obtain long-term performance and success for the firm. Martin and Butler (2017) also argued that principals and agents have differing goals. An attempt to resolve these conflicts produces agency costs that are difficult to reconcile. In contrast, the same dynamic under the stewardship theory assumes the steward will seek ways to resolve conflict and reduce monitoring costs (Martin & Butler, 2017).

Stewardship theorists believe that managers are not interested in opportunistic behavior and will be good stewards and engage in a manner that is beneficial to shareholders or principals (Gebba, 2015). From the stewardship perspective, the success of the firm motivates managers. Organizational success provides them with a sense of satisfaction without regard for self-interest. Companies with effective governance policies that align management and director goals motivate managers to pursue objectives that protect the interests of shareholders and encourage monitoring (Gebba, 2015). Stewardship theory was formed based on the dissatisfaction with the self-interest behavior of agents and the inherent conflicts of interest that arose within the principal-agent relationship (Schillemans, 2013). Schillemans (2013) explained how stewardship theory examines the extent to which agents are less likely to engage in activities that promote self-interest and act as stewards that serve the goals that are in the best interest of their principals. Understanding the conditions under which good stewardship is developed, changes the perspective of the principal-agent and agent-steward relationship. Van Puyvelde, Caers, Du Bois, and Jegers (2016) discussed the need to analyze both stewardship theory and agency theory to align goals. When considering the different assumptions rooted in both theories, it is necessary to promote collaboration, build trust, and lessen control (Van Puyvelde et al., 2016).

The performance of boards and governance issues have been researched in the literature using agency theory and stewardship theory as the theoretical framework. Stewardship theory addresses the principal-agent relationship using the assumption that collaboration and goal alignment, rather than control, leads to better implementation of board responsibilities (Bernstein, Buse, & Bilimoria, 2016).

While agency theorists promote self-interest, stewardship theorists emphasize the principal-agent relationship on a larger scale, moving beyond personal gain. Information exchange, along with alignment with established goals, reduces risks, and further develops the professional relationship (Snippert et al., 2015). Snippert et al. (2015) also suggested that a contractual relationship between the principal and agent is necessary for goals to align.

Ballesteros-Sola (2015) noted that the origins of stewardship theory were borne out of the inability of agency theory to explain the impact of non-economic assumptions on an organization. Intrinsic reward is part of the premise of the stewardship theory. It is a model of self-actualization. Based on the Yunus social business model, Ballesteros-Sola (2015) asserted that mission-driven organizations ascribe to a culture that encourages collective behavior and goal alignment.

Balakrishnan, Malhotra, and Falkenberg (2017) used Gandhi's view of corporate responsibility and business ethics to frame the modern concept of stewardship theory. Balakrishnan et al. (2017) concluded that trusteeship could help firms and stakeholders achieve shared values. Zhang, Wei, Yang, and Wu (2018) stated that trust is the central component of stewardship theory. Trust allows managers to achieve goals that align with the expectations of stakeholders.

Stakeholder Theory

Stakeholder theory is a contrast in terms to agency theory and stewardship theory. The concept of the stakeholder theory originated with Freeman and Reed (1983). It held the view that other groups also have a stake in the corporation, namely employees, consumers, suppliers, and creditors. In contrast, agency theorists and stewardships theorists believe maximizing shareholder wealth is important to the financial performance of a firm (Chrisman, 2019; Foss & Stea, 2014; Rashid, 2016). Agency theorists promote self-interest in the principal-agent relationship, while stewardship theorists emphasize the need to move beyond personal gain to strengthen personal business relationships and reduce risks (Snippert et al., 2015). Shahzad, Rutherford, and Sharfman (2016) noted that, from the perspective of stakeholder-centric corporate governance, managers should not only be concerned with maximizing shareholder wealth, but also ensure that strategic decisions benefit all stakeholders.

Richter (2017) asserted that part of the stakeholder theory's premise is the concern for shared values and attitudes, noting that managers should address stakeholder needs while balancing stakeholder interests. Conversely, stewardship theorists believe that agents should be good stewards of the financial responsibility entrusted to them with the shareholders' priorities as the primary focus (Chrisman, 2019). Agency theorists have noted that ineffective management leads to opportunistic behavior that adversely impacts shareholder interests (Baker, 2019; Dion, 2016; Shrivastav & Kalsie, 2016).

Balakrishnan et al. (2017) described the descriptive, instrumental, and normative justification of stakeholder theory tenets relative to how managers conduct business in real-life. Under these assumptions, managers consider stakeholder interests in business decisions, which

should result in optimal firm performance. Further, managers that engage in moral and ethical practices would attempt to address stakeholder interests. Harrison, Felps, and Jones (2019) asserted that developing a consistent relationship with stakeholders is a viable strategy for managers who focus primarily on bottom-line financial performance.

Upper Echelon Theory

Hambrick and Mason (1984) asserted that from the perspective of upper echelon theory (UET), the characteristics of upper managers are critical to effective firm management. Derda (2017) explained that the theory seeks to reason how management characteristics affect company management based on limited rationality, goal conflict, and aspirations. Hambrick and Mason (1984) defined organizational outcomes and depicted values and power as the upper echelons in organizations. As a result, the senior management team has access to numerous strategic choices that affect organizational performance. The senior management team implements both internal and external objective situations (Hattke & Blaschke, 2015). For example, managers work within a legal framework, which provides them with the competencies and resources to act on strategic choices, which requires adherence to legal obligations (Hattke & Blaschke, 2015).

Upper echelon theorists use the bounded rationality concept where individuals face phenomena that are too complex to comprehend and process, in situations of strategic choice (Derda, 2017). As a result, individuals try to simplify conditions by constraining the descriptive information in detail. This filtering information process creates a managerial perception that other alternatives are not available, which negatively affects corporate-level decision outcomes (Derda, 2017).

The CEO of a firm has the primary responsibility for defining strategic goals, as well as leading and guiding middle and lower managers to execute strategy (Haas & Speckbacher, 2017). Most of the empirical research on CEO leadership deals with traits and behavior. Upper echelon theorists interpret these traits, such as age, tenure, and educational background (Haas & Speckbacher, 2017). The upper echelon literature primarily focuses on education and a determinant factor in predicting management behavior that can affect financial performance (Haas & Speckbacher, 2017).

Opong (2014) noted that UET states that top managers' perceptions of their corporate environment influence their decisions, which can affect financial performance. Further, these environmental perceptions influence personal tendencies and dispositions. Opong (2014) also asserted that the individual characteristics inform what managers perceive in the environment around them, which inform the decisions that affect bottom-line performance.

Wang et al. (2016) noted that corporate governance research recognizes the influence exerted by CEOs on boards. Hambrick (1984) asserted that UET research explains that CEO characteristics and cognitive influences associated with a CEO's perception of reality can affect decision-making. As a result, these views can be expressed in board meetings and impact decision-making processes and related outcomes.

Epstein (2013) noted in his study of top management team (TMT) that the antecedents of TMT tenure, which are related to CEO and board characteristics, enhance UET. In this study, the researcher examined the relationship between board independence and financial performance. Epstein (2013) found that board tenure and CEO tenure were positively related to the characteristic of TMT tenure, and board independence was significantly negatively related to

both types of tenure. Further, the study showed the interesting finding that CEO duality was not associated with TMT tenure. Duality was related to a decrease in top management tenure.

Epstein (2013) advanced the understanding of UET by providing additional data regarding TMT tenure and the numerous impacts on organizational outcomes.

Derda (2017) noted that UET highlighted top management's managerial characteristics through the level of aspirational goals of company leaders. Researchers suggested that executives' demographics, such as age, race, and education, are associated with organizational processes and outcomes (Balta, Woods, & Dickson, 2013). Balta et al. (2013) conducted a study on Greek executives and firm innovation and noted that sound financial processes led executives to take investment risks. Balta et al. (2013) also found that the education level of executives positively linked to financial reporting and rules formalization (Balta et al., 2013). Additionally, Balta et al. (2013) found a correlation to board members' characteristics and the firm's decision-making processes.

Contextual Factors of CEO Charisma

Rashid (2015) linked CEO duality and firm efficiency to contextual factors such as a CEO's age, qualifications, and experience explained by Tosi et al. (2004) as charisma. Researchers have asserted that charismatic leaders can think beyond their environment, which allows them to motivate others and create a vision for the future (Schneider & Jones, 2017). Hambrick and Mason (1984) described the demographic characteristics of top management teams as age, qualifications, education, and tenure. They argued that these characteristics affect management's decisions and the actions adopted by the organizations they lead.

Darmadi (2013) stated that the management literature had addressed the influence of the educational attainment of upper echelons, which include the CEO, top management teams, and board members' management behavior. According to Hambrick and Mason (1984), UET associates a higher educational level with a willingness to consider all points of view, the ability to process information more readily, and tolerance. Evert, Payne, Moore, and McLeod (2018) stated that top management team knowledge and experience are instrumental in human and social capital because of the direct and indirect access it provides a firm to knowledge and information. Additionally, Evert et al. (2018) asserted that a higher education level is critical to human capital and increases the capacity and expertise of top management teams.

Peni (2014) argued that executive age has an impact on a firm's success. There is an assumption that older executives have a competitive advantage over younger executives with less experience. Qi, Lin, Tian, and Lewis (2018) found that older executives are more conservative with making decisions and less likely to engage in risky behavior that would pose a threat to the firm. In contrast, Peni (2014) noted that younger CEOs might focus more on short-term goals and become driven by their career aspirations. Mukherjee and Nguyen (2018) stated that younger CEOs are more likely to take chances to demonstrate their value to the firm, while older CEOs become less concerned with career aspirations as retirement approaches.

Bulog (2016) discussed the effect of management demographics on decision-making – noting that managers are required to make effective decisions based on trends and changes in the business climate that will shape financial performance. The business environment is complex, unpredictable, and filled with uncertainty. The way management perceives these environmental conditions result from their particular characteristics. These characteristics affect how managers

collect, process, and disseminate information, which impacts organizational outcomes (Bulog, 2016). Nguyen et al. (2018) suggested that while older managers have a more intuitive decision-making style, they are also averse to risk and unwilling to change. Nguyen et al. (2018) also noted that younger managers tend to be more rational in decision-making and are willing to put forth more effort and challenge the status quo to promote change. Bulog (2016) also noted that age signifies experience and signals risk aversion and a shift in attitude. Additionally, Bulog (2016) stated that tenure within a company indicates an influence over organizational processes and choices.

Wang et al. (2016) examined UET to determine a relationship between CEO tenure, age, education, and prior experience to financial performance. Wang et al. (2016) noted that younger CEOs lack the knowledge and cognitive skills to make strategic choices that meet their expectations. As a result, they may overcompensate on strategic actions. Conversely, Wang et al. (2016) argued that older CEOs might initiate fewer strategic actions. The cognitive skills of older CEOs have matured, making them less willing to learn or integrate new information quickly. Additionally, Wang et al. (2016) noted that older CEOs have more time to accumulate wealth and have a greater interest in protecting this wealth because of their age.

Researchers of UET have suggested that CEOs with longer tenure initiate fewer strategic actions than CEOs new to the job. While Nguyen et al. (2018) posited that more tenured CEOs are more focused on their legacy and less willing to engage in risky behavior that may threaten that legacy. As a result, Zhang (2019) noted that long-tenured management receives less oversight from the board, which may negatively affect financial decision-making. Wang et al. (2016) also indicated that autonomy increases as a CEO's tenure increases. Wang et al. (2016)

also argued that formal education may enhance a CEO's desire for new processes and skills. Further, formal education may also motivate CEOs to pursue more innovative, complex, and significant firm strategies.

Wang et al. (2016) also addressed prior experience relative to financial performance. Upper echelon theorists assert the amount of time spent in previous roles before becoming CEO shapes how they approach strategic decisions. Wang et al. (2016) noted that UET addresses three types of prior experience. The first is functional experience, which relates to the CEOs' knowledge and background in primary business disciplines common in most organizations. Second is their experience in strategic actions on an international level. Third, experience in general occupations in a particular industry (Wang et al., 2016). The empirical evidence of the moderating effect of CEO charisma on financial performance provides contrasting viewpoints.

Summary

An analysis of the scholarly literature on board independence and CEO duality synthesized the foundation for the literature review. The chapter began with a review of the existing literature on the significance of board independence and the effect of CEO duality on financial performance. The researchers cited in the literature review provided extensive support for a study that examines the effect of board independence and CEO duality and any potential impact on financial performance. A separate analysis of financial performance outlined the determinants of effective financial performance and the metrics used to quantify financial performance and efficiency. A discussion on agency theory, stewardship theory, stakeholder theory, upper echelon theory, and contextual factors of CEO charisma provided a summary of the theoretical framework for the study. These theories provided the context for the dynamics of

specific board structures and strategies for managing CEO duality and financial performance.

Chapter 3 will include information to explain the methodology used for the study.

CHAPTER 3. METHODOLOGY

Introduction

Board independence has been analyzed extensively in the literature. Many corporate boards in America have a majority of outside directors. Company management believes that outside directors are more effective at monitoring executives' activities (Du & Xu, 2018). The concern that management may participate in opportunistic behavior, which could adversely affect financial performance, gave rise to agency theory. In the foundational study of agency theory by Jensen and Meckling (1976), the researchers asserted that managers may be inclined to misuse company assets at the expense of shareholders. The level of influence exerted by the CEO is a critical element of board independence (Du & Xu, 2018). Central to the debate on board independence is CEO duality. A 1989 Forbes compensation survey used a sample of 661 U.S. firms to analyze board structures, chair of the board of director characteristics, and performance consequences (Miller & Yang, 2015). Depending on the firm's size, CEO duality has benefits and costs (Miller & Yang, 2015).

This quantitative research study aimed to examine the extent to which a relationship exists between CEO duality and the financial performance of publicly traded electronics firms from 2016-2018. The research data originated from the annual report and proxy statements available from the EDGAR database. Financial data to determine financial performance came from the annual reports. Governance and director information came from the proxy statements (DEF 14A). The DEF 14A is a form required by the SEC and provides information on boards of directors.

Design and Methodology

A research design is considered the overall strategy for conducting a research study to address the research questions (Bloomfield & Fisher, 2019). The focus of quantitative research is hypothesis testing, which is usually the null hypothesis and the assumption about the relationships between the dependent and independent variables (Bloomfield & Fisher, 2019). In this quantitative study, a nonexperimental research design integrated the elements of the research study and to address the research questions. A nonexperimental research design is characterized by its purpose to predict, describe, or explain the variables in relationship to the research question (Glasofer & Townsend, 2020). The design's strength is less robust than an experimental design because there is no manipulation of the independent variable, randomization, or use of control groups (Glasofer & Townsend, 2020).

Nonexperimental research includes studies that are descriptive, causal-comparative, correlational, ex post facto, and surveys (Khaldi, 2017). A correlational study was appropriate for this study to measure the relationship between the dependent variable, financial performance, measured by ROE, and the independent variable, CEO duality. A researcher can measure financial performance by profitability, growth, market value, shareholder return, valuation, and customer satisfaction as determined by stakeholder expectations (Velte, 2019). To determine market success and efficient financial performance, the most used metrics are net income, earnings per share, and profit by measuring (ROE) (Michelberger, 2016).

The raw data for this study came from secondary sources. The data included publicly traded electronics firms and sorted for analysis using a simple random sample. The sample included companies with CEO duality and non-CEO duality board structures from 2016 to 2018.

Data analysis did not require the use of standard instrumentation. The secondary data used for this study came from publicly available information listed Compustat database.

Population and Sampling

All data were collected from secondary sources and obtained from public databases. I used Compustat (Standard and Poor's) to identify companies listed on the S&P 500 index from 2016-2018. The extent to which the level of board independence is related to financial performance was examined by analyzing financial statements included in annual reports. The population used for this study included 226 publicly traded electronics firms listed on the S&P 500 index from 2016-2018. The S&P 500 is a well-known benchmark for obtaining financial information on large U.S. and global companies (Peni, 2014; Shulman, 2017).

The EDGAR database provided access to comprehensive data from annual reports and proxy statements on publicly traded companies. The data included financial statements to assess performance and board structure to examine whether the positions of CEO and chair of the board of directors are separate positions within the company. Financial data and board structure information were entered into a Microsoft Excel® spreadsheet and randomized using Excel's random number function.

G* Power Analysis

According to Lunt (2015), linear regression uses predictors to analyze normally distributed data. The target sample for this study was selected using G*Power 3.1.9.2. A correlation bivariate normal distribution model for a priori power analysis was used to compute sample size given χ , power, and effect size. A G*Power linear bivariate regression model: one group and size of slope, was used in a regression analysis to test the relationship between the

independent and dependent variables. The appropriate measure for power level for the study is $\beta = .95$, for a confidence interval of 95%, which decreases the chance of making Type II errors, and $\alpha = .05$ (one-tail test) with a medium effect size of slope $H1 = 0.3$, for a slope $H0 = 0$. These input parameters for examining the relationship between the dependent and independent variables returned a total recommended sample size required for the study of 111 participants. The randomized sample for this study was selected from secondary data records of 226 electronic firms. To achieve a truly random sample for the research data, the random sample function in Microsoft Excel® sorted the data, and the first 111 records became the participant sample.

Setting

Secondary data collected for this study did not involve the use of human subjects or require a physical location. Data were collected from the EDGAR database using annual report filings and DEF 14A proxy statements. The data to obtained included financial, governance, and director information to address the hypotheses developed to examine the extent to which a relationship exists between CEO duality and financial performance. Johnston (2017) noted that secondary data collection is a practical way for researchers with limited time and resources to obtain data from existing sources for a primary purpose. This data is available in the public domain.

Data Collection

Compustat (S&P) served as the source for identifying the companies used in this study. The database is comprehensive and provides company data over a 40 to 50-year period, including information on Global Industry Standards pricing data and earnings data. The data

collection process consisted of a simple random sample of publicly traded electronics firms. Data were collected from the years 2016 through 2018. Specifically, the data collected included board structure, which contained the number of outside directors compared to inside directors, CEO duality board structures, financial data, and CEO characteristics. The records gathered for the study only contained data meeting the collection parameters. Inclusion in the sample required companies to (1) appear on the S&P 500 for 2016-2018, (2) have a filed annual report on record with the SEC all three years, (3) have the same board structure for all three years, and (4) have a proxy statement filed with the SEC all three years.

The data were arranged in columns for the years 2016-2018. The data included columns for board structure, net income, and shareholder's equity. The data were gathered from annual reports and proxy statements through the EDGAR database and analyzed using Statistical Package for the Social Sciences (SPSS). SPSS is a statistical software commonly used for data analysis in the social sciences (Kimani, 2016).

The data were filtered to create separate datasets for each component of the collected data. The data were delimited to separate firms with CEO duality and firms without CEO duality and merged to form datasets representing the dependent variable ROE and independent variable CEO duality. Each company was entered into a Microsoft Excel® spreadsheet and assigned numbers using a random sample function. The final dataset of companies represented the raw data entered into SPSS for analysis.

Instrumentation

Secondary data collected from public databases provided financial information and board structure details for publicly traded electronics firms. SEC filings listed in the EDGAR database

provided the requisite data. Financial data and board structure information were entered into a Microsoft Excel® spreadsheet and randomized using the random number function in Excel. The raw data was also sorted, calculated, and processed. Secondary data analysis involves analyzing data that someone collected. Researchers with limited time and resources consider secondary data analysis a viable option (Johnston, 2017). Mishra, Pandey, Singh, and Gupta (2018) noted that data are a collection of facts represented as values or measurements. Mishra et al. (2018) stated that there are four types of variables: nominal, ordinal, discrete, and continuous. Nominal and ordinal data are qualitative data, and discrete and continuous are quantitative data.

Fernando and Webb (2017) stated that a dataset's numerical attributes are interpreted as one of four scales of measurement: nominal, ordinal, interval, or ratio. Ratios represent measures of exact zero points with equal distances between attributes (Fernando & Webb, 2017). A simple linear regression measured the variables in this study. Altman & Krzywinski (2015) defined simple linear regression as a statistical method that measures the significance and correlation of the relationship between two variables. Table 1 below shows the variables and the scale of measurement for each.

Table 1

<i>Variables and the Scale of Measurement</i>		
Variables	Nominal	Scale of Measurement
CEO Duality Independent Variable	0=no or 1=yes	Nominal
Return on Equity (ROE) Dependent Variable		Ratio

Hypotheses

The relationship between the level of corporate board independence and CEO duality and financial performance provided the basis for analysis in this study. The theoretical construct of this study examines the following research question: To what extent does a statistically significant relationship exist between CEO duality and financial performance in electronics firms?

The following hypotheses address the research question:

RQ: To what extent does a statistically significant relationship exist between CEO duality and financial performance in electronics firms?

H_0 : There is not a statistically significant relationship between CEO duality and financial performance in electronics firms.

H_A : There is a statistically significant relationship between CEO duality and financial performance in electronics firms.

Data Analysis

One of the key philosophies rooted in the science of quantitative research is positivism, which, at its core, suggests the real test of authoritative knowledge is the logical and mathematical analysis of data (Smith, 2014). During the data analysis state of research, data analysis occurs soon after the data is collected, which is an ongoing process of constant comparison (Gelling, 2015). There is a need to ensure that the data gathered answers the research question. Distractions from the original research question can undermine the research quality, reducing its validity and reliability (Gelling, 2015). The Compustat (S&P) database provided the

raw data for the companies used in this study. The collected information did not include data that failed to meet the collection parameters required for analysis through SPSS.

The threshold probability value of $p \leq 0.05$ represents evidence against the null hypothesis and is commonly used to indicate statistical significance in research studies. Concato and Hartigan (2016) noted that the p value is not the probability that the null hypothesis of association in a random choice is true. From a practical approach, the probability of the observed result occurs randomly, if no association exists (Concato & Hartigan, 2016). The p value is a test used to eliminate datasets that do not meet the confidence parameters established for data collection.

I used a simple linear regression to assess the relationship between CEO duality and financial performance. There are several assumptions regarding the data used in a linear regression that involves testing to ensure the validity of the results (Lunt, 2015). CEO duality indicates that the CEO also serves as the chair of the board of directors (Tarus & Ayabei, 2016). Simple linear regression is a statistical method used to measure the significance and correlation of the relationship between two variables (Altman & Krzywinski, 2015). The model is used to predict the value of the independent variable based on the value of the dependent variable (Kumari & Yadav, 2018). Ernst and Albers (2017) noted that the standard linear regression model considers four assumptions. Those assumptions include:

- Linearity – which means the relationship between X and the mean of Y is linear
- Normality – any fixed value of X presents a normal distribution in Y
- Homoscedasticity – which means the value of errors is the same for all independent variables

- Independence – errors are independent of each other

Linear regression is appropriate for this study because it measures the statistical significance between two variables.

Validity and Reliability

Validity and reliability are critical components of research. Providing evidence that supports how rigorously researchers address these components in a research study is crucial in determining if the findings should be applied (Heale & Twycross, 2015). Watson (2014) asserted that designing a good instrument is the first step to ensuring the validity and reliability of measurements. Additionally, Watson (2014) noted that an instrument that is considered reliable does not mean that it is valid. Also, Reeves and Marbach-Ad (2016) noted that one of the tests of assessment validity is the evidence provided on the relationship between variables.

Research has two important validity components: internal and external. Internal validity determines the legitimacy of the research in the way groups are selected and how data is recorded and analyzed (Lakshmi & Mohideen, 2013). Generalizability, or external validity, concerns whether the results of the study apply to other groups. When discussing internal and external validity, Lakshmi and Mohideen (2013) asserted that external validity could not exist without internal validity and that reliability threatens internal validity.

Heale and Twycross (2015) noted that there are three major types of validity. The first is content validity, which is the extent to which a measure represents all content elements. The second is construct validity, which measures how well the instrument measures the intended construct. Finally, criterion validity is the extent to which the instrument relates to other

instruments designed to measure the same variable (Heale & Twycross, 2015). Academic rigor provides additional support for the results achieved through validity and reliability.

Internal Validity

Internal validity measures research credibility and whether the research outcomes are accurate relative to the research method (Hays, Wood, Dahl, & Kirk, 2016). The absence of internal validity indicates that the results do not support the truth, and the researcher cannot draw the appropriate conclusions (Patino & Ferreira, 2018). To increase internal validity, Patino and Ferreira (2018) noted that researchers must ensure the integrity of data collection, analysis, and sample size. One of the factors that improve internal validity is a random selection of participants (Dülmer, 2016). A simple random sample identified the participants for this study. Further, this study design was correlational and nonexperimental. No inferences to a causal relationship existed in this study and, therefore, internal validity did not apply.

External Validity

External validity relates to how well the outcome of a study generalizes to other populations (Stuart, Ackerman, & Westreich, 2018). When research has poor external validity, the study is less credible. Random sampling more readily assures that the sample represents the population (Kalmoe, 2015). To produce a random sample for this study, the random sample function in Microsoft Excel® sorted the data, and the first 111 records became the participant sample. Renbarger, Sulak, and Kaul (2019) noted that secondary data collected from national databases generally provide a higher quality of information than single sources. Data collection methods are typically more rigorous and use nationally representative samples, which provide more generalizable results (Renbarger et al., 2019). All data were collected from secondary

sources and obtained from public databases. The Compustat (Standard and Poor's) database served as a resource for identifying companies listed on the S&P 500 index.

Reliability

Conversely, reliability measures consistency over time. Reliability determines the degree to which measures are free from error and yield consistent results. Results consistently applied or reproduced are considered reliable (Lakshmi & Mohideen, 2013). Heale and Twycross (2015) also described three attributes that describe reliability. These attributes are internal consistency or homogeneity. Internal consistency/homogeneity is the extent to which all items on a scale measure one construct; stability, which represents the consistency of the results in repeated testing and equivalence. The repeated testing and equivalence measure the consistency of response from multiple users of an instrument or various versions of the instrument.

Quality research can be adequately addressed by how well these factors are applied, as well as how well one can assess the validity and reliability of the research (Heale & Twycross, 2015). As asserted by Campbell and Cowton (2015), the issues concerning validity and reliability relate to how the research method adequately addresses the research question and provides valid conclusions. Olabode, Olateju, and Bakare (2019) noted that reliability concerns the overall consistency, accuracy, completeness of a measure, as well as the repeatability of findings that result from processed data. Olabode, Olateju, and Bakare (2019) also stated that researchers determine the reliability of an instrument or process based on the belief that a reliable instrument will produce reliable data from the originally generated data.

Financial data and board structure information were entered into a Microsoft Excel® spreadsheet and randomized using the random number function in Excel. The raw data was also

sorted, calculated, and processed within the spreadsheet. The use of secondary archival data for this study did not require standard instrumentation.

Ethical Considerations

The research was conducted in a manner to ensure the anonymity of the companies used in the study. According to Osei (2013), researchers need to ensure that the confidentiality of participants and information collected is protected. Secondary data available from public sources were used, and no informed consent for the use of the data was required. The data used for this study does not include identifying information, and the data collected will remain confidential, with no access provided to other researchers. The data excluded any identifiable information on participant companies, further ensuring confidentiality. The Microsoft® Excel random sort function applied a number to each participant company. Tripathy (2013) noted that secondary data that is properly coded and does not use identifying markers is compliant with ethical review standards.

Data must be controlled and appropriately stored to ensure the legitimacy of the data collection process (Osei, 2013). The data collected for this study is secured in a locked, fireproof file cabinet and a password-encrypted spreadsheet. Per Capella University's data storage guidelines, I will retain the data for seven years. After the seven-year data retention period has expired, all research data will be destroyed. The Institutional Review Board (IRB) is responsible for ensuring that researchers follow established professional guidelines and protocols for conducting research in an ethical manner (Osei, 2013). All established protocols, as set forth and required by the IRB of Capella University, were satisfied. As suggested by Osei (2013),

academic rigor conducted through validity and reliability testing reduces the risk of negligence and mistakes on the part of the researcher.

CHAPTER 4. RESULTS

Introduction

This quantitative correlational study aimed to examine the extent to which a statistically significant relationship existed between CEO duality and financial performance in electronics firms. The independent variable was CEO duality, and the dependent variable was return on equity (ROE). I used annual reports and proxy statements from the EDGAR database to gather financial information and board structure. ROE, calculated using net income and shareholder equity, was used to measure financial performance from 2016-2018. Board governance data from the proxy statements were used to determine board structure and whether the CEO and chair of the board of directors were separate positions.

CEO duality occurs when the CEO of a firm also serves in a dual role as the chair of the board of directors (Tarus & Ayabei, 2016). CEO duality often presents a conflict for implementing effective corporate governance procedures (Manna et al., 2016). Virk (2017) asserted that effective governance protocol is vital to achieving a high level of financial performance.

The two central theories discussed in the literature regarding the effect of CEO on financial performance are agency theory and stewardship theory. The theories offer contrasting views on the issue of CEO duality and financial performance. Nguyen et al. (2018) stated that from an agency theory perspective, CEO duality weakens internal controls and leads to ineffective boards, which causes financial performance to decline. Stewardship theorists maintain that CEO duality strengthens boards through the concentration of power and makes them more effective. Nguyen et al. (2018) noted that the agency theory position places unlimited

power in the CEO, which inhibits board independence and gives the CEO undue influence over the board. Such power can cause a CEO to exhibit self-serving behaviors and act in his or her interests rather than the interests of shareholders (Nguyen et al., 2018). The extant literature provides compelling arguments for support of both theories with little evidence of a link to financial performance. This study will add to the existing body of knowledge on the extent to which a statistically significant relationship exists between CEO duality and financial performance.

The raw data for the study originated from the Compustat database, which included publicly traded companies with SEC filings from 2016-2018 and who maintained the same board structure all three years: CEO duality or non-CEO duality. The sources for data analysis included the annual report and proxy statements. The information was sorted in a Microsoft Excel® spreadsheet and analyzed using SPSS statistical software.

Chapter 4 begins by providing details on the data collection results. A descriptive analysis of the data will follow. The chapter concludes with an analysis of the hypotheses relative to the research question.

Data Collection Results

This research study examined the extent to which a relationship exists between CEO duality and financial performance in electronics firms. The theoretical construct of this study addressed the following research question: To what extent does a statistically significant relationship exist between CEO duality and financial performance in electronics firms?

Subsequently, I examined publicly traded companies listed on the S&P 500 that filed SEC reports between 2016-2018 for this study. The original sample consisted of 111 companies.

The confidence level for the study was .95, which decreases the chance of making Type II errors, with an alpha of $\alpha = .05$ significance. The independent variable was CEO duality, and the dependent variable was ROE. The research question is addressed by testing the following hypotheses:

H₀: There is not a statistically significant relationship between CEO duality and financial performance in electronics firms.

H_A: There is a statistically significant relationship between CEO duality and financial performance in electronics firms.

Data inspection and cleaning. Inspecting and cleaning data is essential for ensuring the validity of a study. Identifying data errors and inconsistencies in statistical models such as duplications, outliers, and missing data save the researcher time and the cost of re-checking data (Huebner, Vach, & Le Cessie, 2016). It is difficult to detect errors from actual deviations in certain types of data. All data are subject to errors that require cleaning before conducting an analysis (Woolley, Handel, Bronsvort, Schoenebeck, & Clements, 2020).

To identify the mistakes in coding, missing data, and duplicate records, descriptive statistics in SPSS software were employed to examine mean, mode, median, and standard deviation. Then, raw data were gathered and collected from the EDGAR database. The data was transferred to an Excel spreadsheet and coded to prepare a random sample for analysis. Subsequently, each company's proxy statements for the years 2016-2018 provided information to assess if the board structure separated the chair and CEO or if CEO duality existed. Companies that were inconsistent with their board structure in any year were excluded from the dataset. The balance sheet provided total shareholders' equity, and the income statement

provided the net income after tax data. These numbers were entered into the Microsoft Excel spreadsheet and calculated to determine ROE. The data was then transferred from Microsoft Excel® to SPSS Windows version 26 for final data analysis.

There were 25 outliers in the original sample of 111 companies resulting in a final sample of 86 companies. A statistically significant relationship did not exist between CEO duality and financial performance, as represented by ROE. After a review of the results, there was no basis to reject the null hypothesis.

Test of Assumptions

Outliers. Outliers represent extreme or significant variations in data (Leys, Delacre, Lakens, & Ley, 2019). A common practice for ensuring data accuracy is a manual inspection for data entry and measurement errors. Jones (2019) noted that the manual inspection and removal of outliers are not without merit compared to other removal methods. Outliers are values that disrupt the results of statistical analysis methods (Leys et al., 2019). The histogram of the dependent variable ROE in Figure 2 showed a skew on the right side of mean with two outliers.

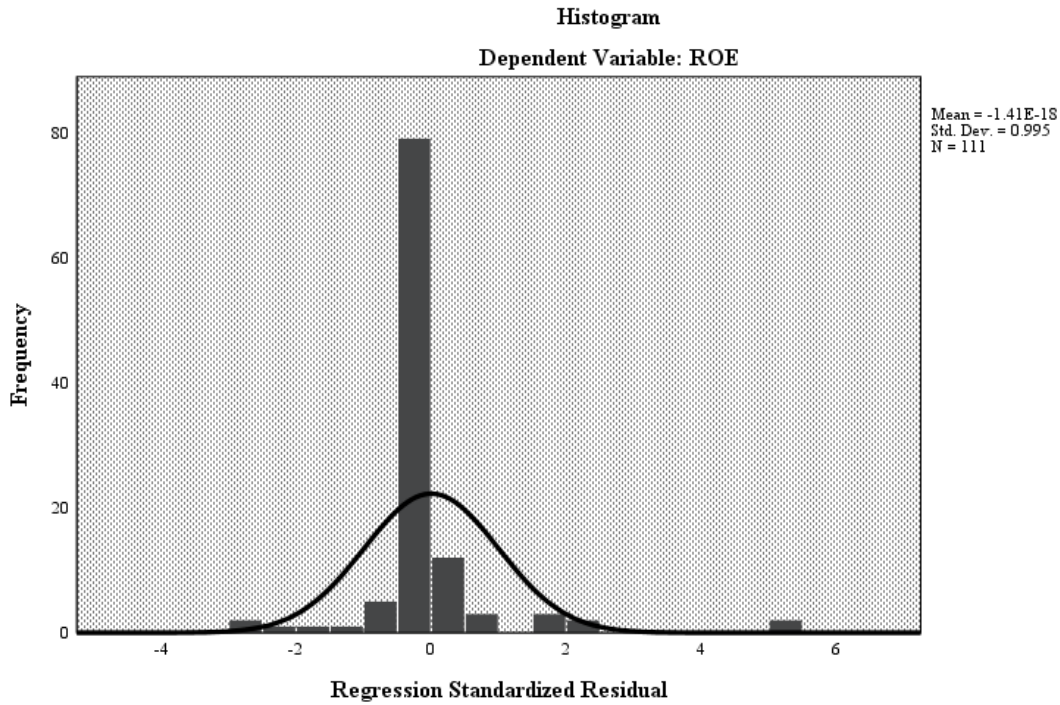


Figure 2. Histogram of the dependent variable ROE $N = 111$.

The outliers represented negative ROE for one firm with CEO duality and one non-duality firm. Removing these outliers did not result in a normal distribution. The additional outliers represented companies with negative shareholder's equity and net income, which resulted in extremely negative ROE. Extreme negative ROE presented in the raw data for companies with and without CEO duality could indicate poor management or business processes (Petryni, 2017). As depicted in the second histogram in Figure 3, outliers are present to the right of the mean.

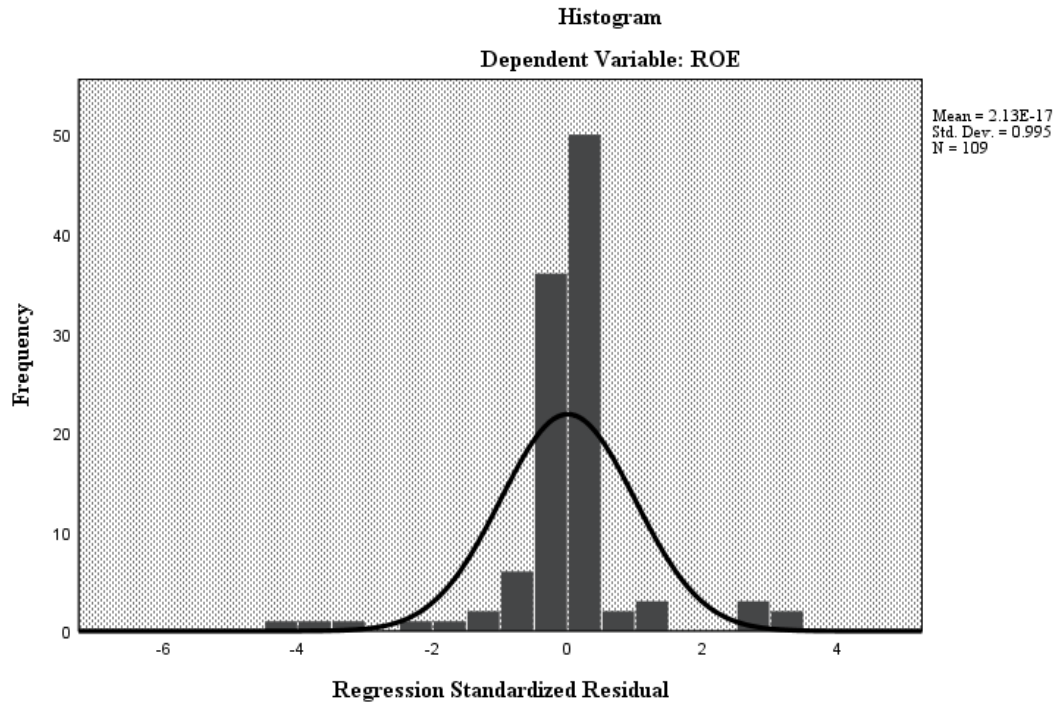


Figure 3. Histogram of dependent variable ROE $N = 109$.

Further analysis of the data using the normal probability plot showed that the data suffered from positive kurtosis, as shown in Figure 4.

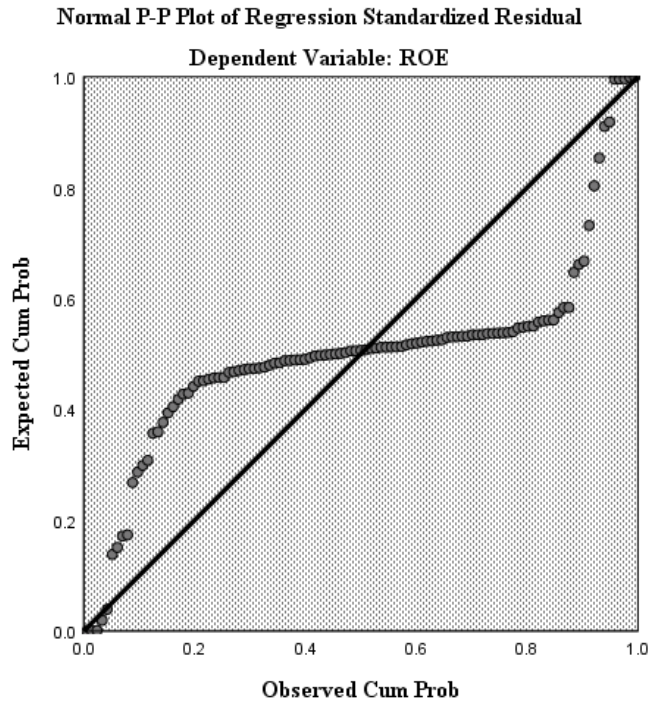


Figure 4. Normal P-P Plot of regression standardized residual.

I visually inspected boxplots of the independent variable, ROE, to assess additional outliers. One of the companies did not have CEO duality. All five companies had a combination of negative net income and negative shareholders' equity. ROE was positive in one company with CEO duality and one without CEO duality because of negative net income and negative shareholder's equity. ROE was negative in three CEO duality companies because of negative net income. Figure 5 shows five additional outliers.

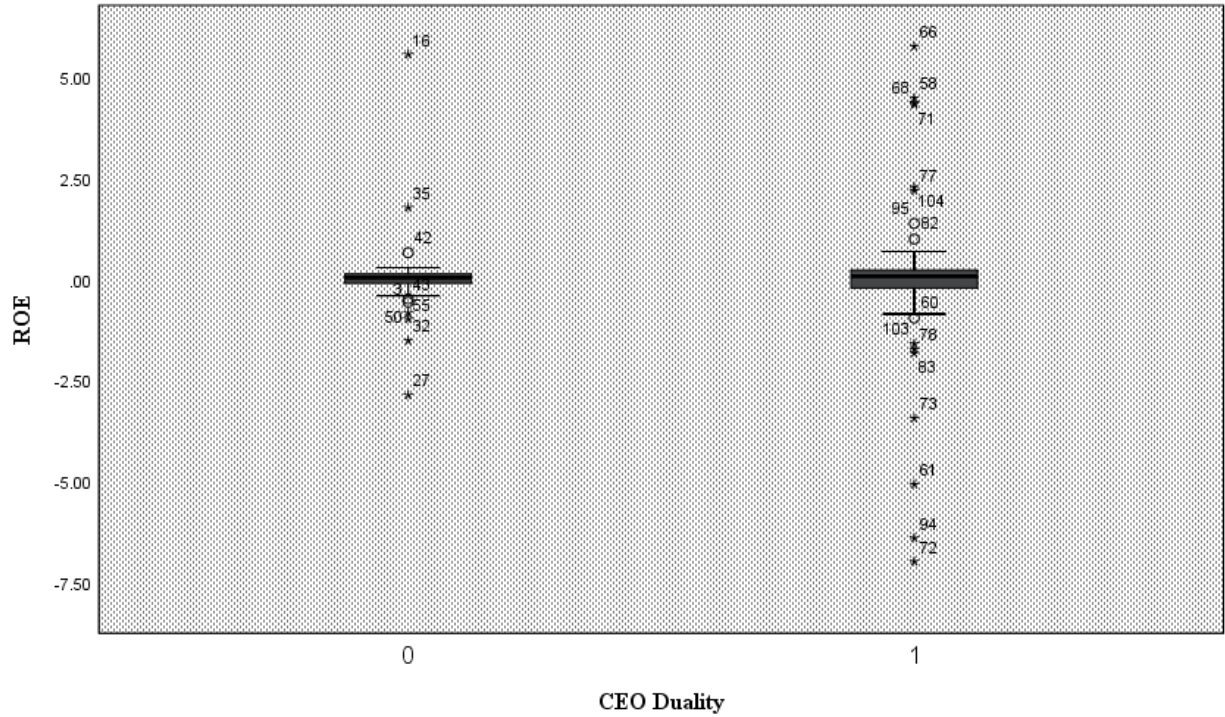


Figure 5. Simple boxplot of dependent variable ROE by CEO duality with five outliers.

Figure 6 shows seven additional outliers. Six of the companies had CEO duality, and one did not. All of the companies were below the mean of 3%. Five companies had negative net income and negative shareholders' equity, and two of the companies had only negative income. Figure 6 reflects the additional outliers for CEO duality.

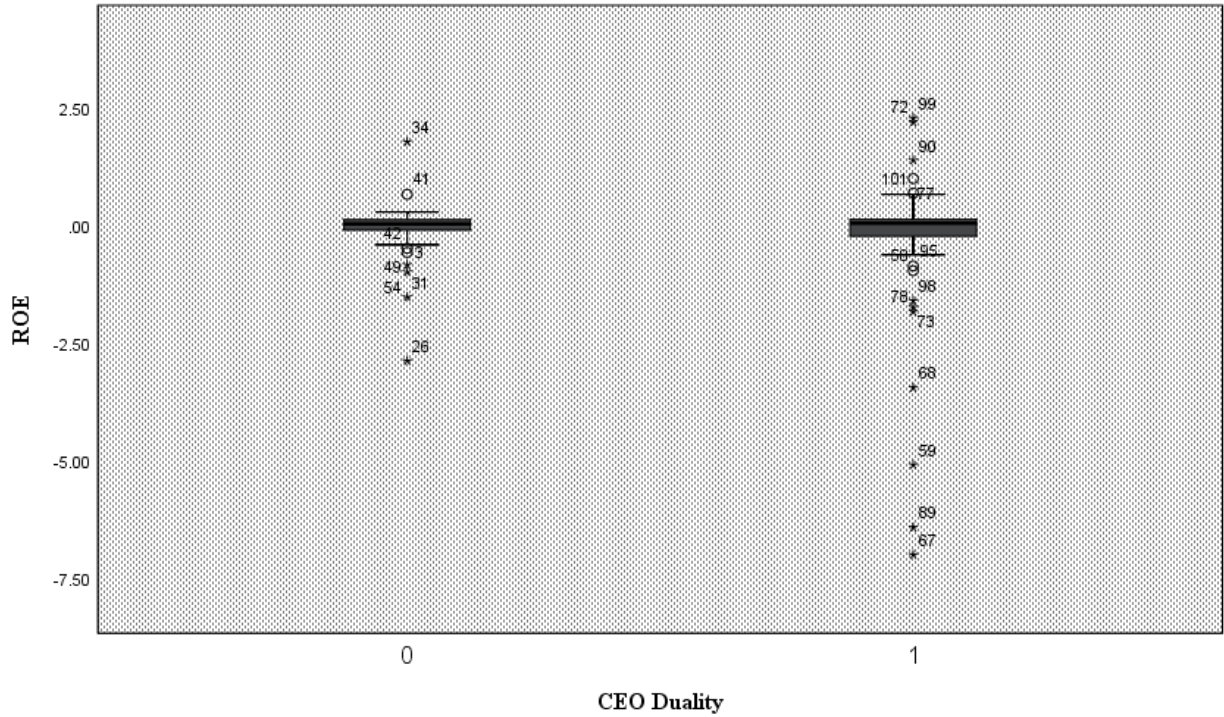


Figure 6. Simple boxplot of dependent variable ROE by CEO duality with seven outliers.

After further analysis of the data, I identified 11 additional outliers for the dependent variable, ROE. The pattern for these outliers represent companies with a combination of negative net income and negative shareholder's equity. After removing of 14 previous outliers, the mean for the dataset of $N = 97$, was -2%. Seven companies had CEO duality, and four companies did not. Of the seven companies with CEO duality, five had negative income, and two had negative income and negative shareholders' equity. Of the four companies that did not have CEO duality, one had negative income, and three had negative income and negative shareholder's equity.

Figure 7 below shows the additional outliers and the corresponding dataset.

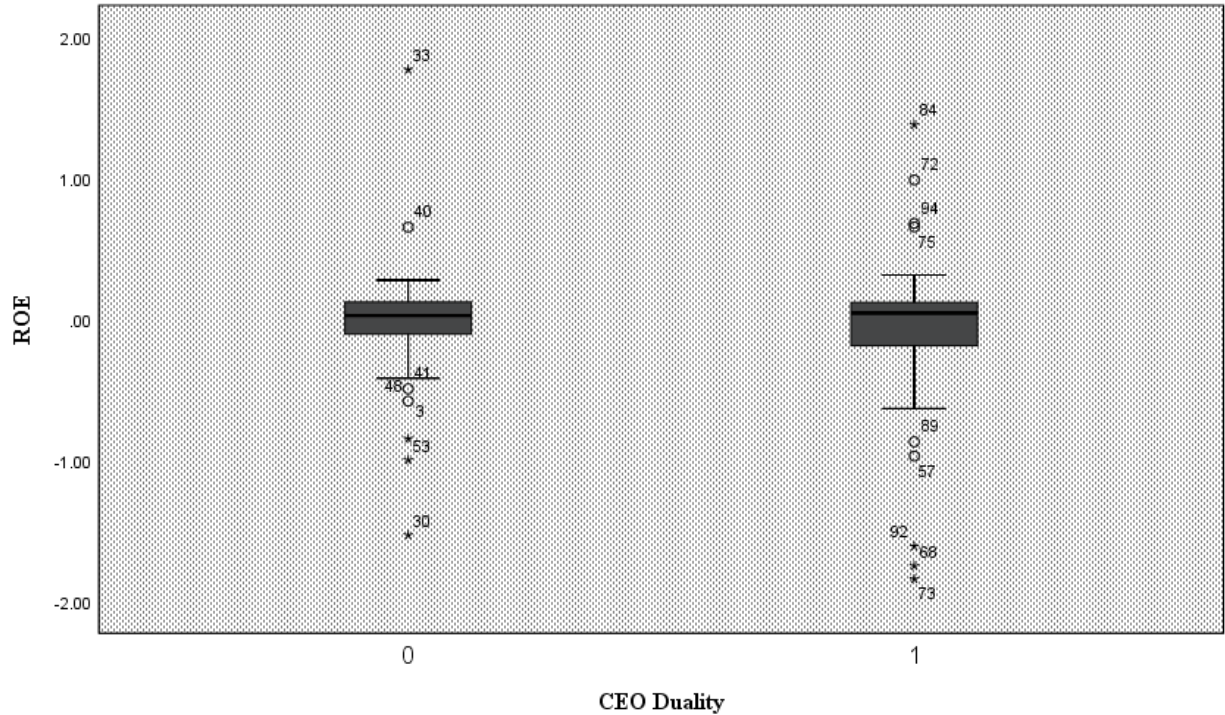


Figure 7. Simple boxplot of dependent variable ROE by CEO duality with outliers $N = 97$.

Multicollinearity. Multicollinearity occurs when two or more independent variables are highly correlated, which reduces the reliability of coefficients (Sadahiro & Wang, 2018). This study included one independent variable – CEO duality and one dependent variable – ROE. Therefore, a test for multicollinearity was not required.

Normality. One of the essential functions in statistical analysis is testing for normality. The data distribution for dataset $N = 109$ revealed a strong positive skew. As a result, through data inspection and cleaning, 23 additional outliers were removed, for a total of 25. The analysis of outliers showed that 19 CEO duality companies had negative net income and negative shareholders' equity compared to six that had a separate CEO and chair of the board of directors. These companies had negative net income or a combination of negative income and negative shareholders' equity, which resulted in negative ROE. There were 19 companies with CEO

duality and six with a separate CEO and chair of the board of directors. To assess normality, I examined the normal probability plot (P-P) in Figure 8 for the dependent variable ROE.

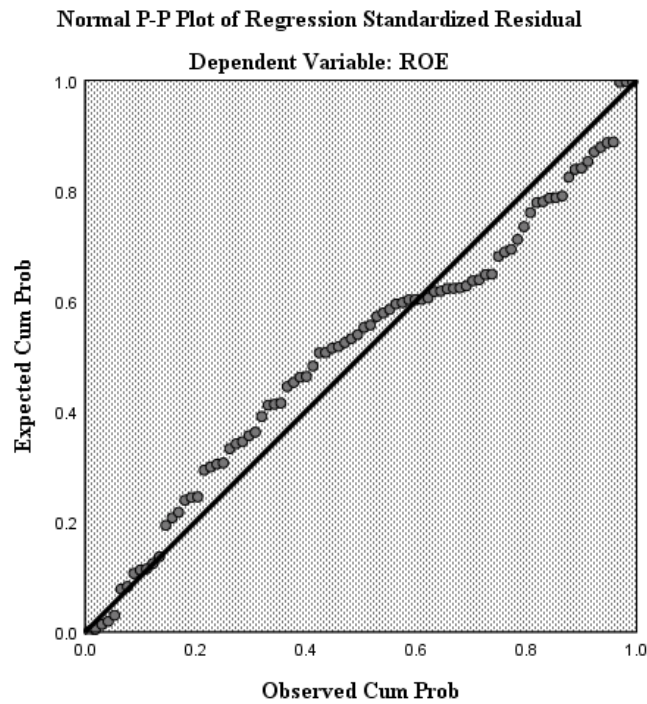


Figure 8. Normal P-P Plot of regression standardized residual for the dependent variable ROE.

The histogram in Figure 9 for dataset $N = 86$ also showed the data to be approximately distributed.

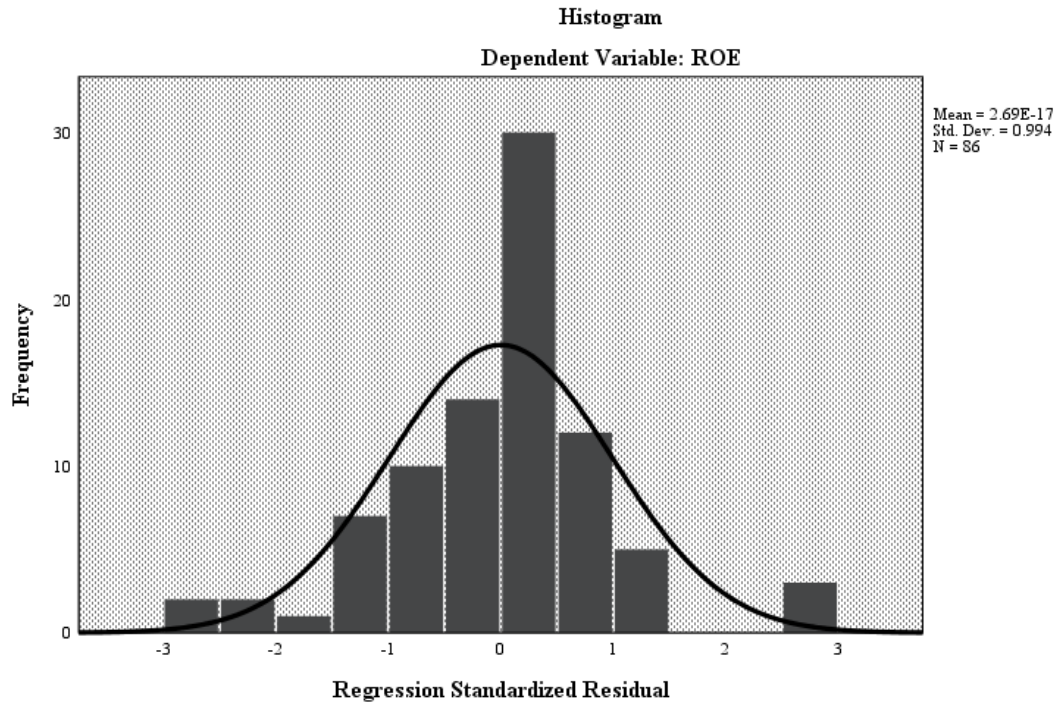


Figure 9. Histogram of the dependent variable ROE.

The assumption of normality is critical in many research models, including simple linear regression, which assumes normally distributed residuals. As such, the degree of nonnormality poses a potential problem for the researcher (Ho & Yu, 2015). Additional analyses were performed using skewness and kurtosis statistics and histograms to support normality in distributions. In SPSS, an absolute z value less than two with a corresponding $\alpha = .05$ indicates a normally distributed sample. A final analysis of the independent variable CEO duality and the dependent variable ROE supported a finding of normality, with no outliers. Table 2 presents the skewness and kurtosis coefficients of the independent variable CEO duality for $N = 86$.

Table 2

CEO Duality Coefficients for Skewness and Kurtosis

N	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
86	.336	.260	-1.933	.514

The absolute value for skewness (.336) and the standard deviation (.260) represented a z score of 1.3, which is less than two and normally distributed. The absolute value for kurtosis (-1.933) and the standard deviation (.514) represented a z score of -3.8. The equation for the z score is:

$$Z = \frac{\text{Skew value}}{\text{SE}}, Z = \frac{\text{Excess kurtosis}}{\text{SE}}$$

The accompanying histogram in Figure 10 shows the frequency for the CEO dependent variable with no outliers.

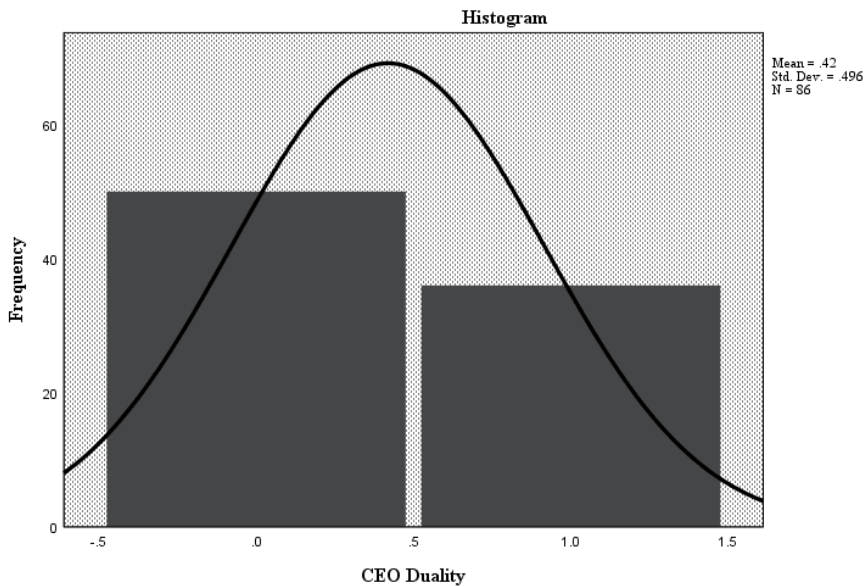


Figure 10. Histogram of dependent variable CEO duality kurtosis.

Table 3 presents the skewness and kurtosis coefficients of the dependent variable ROE duality for $N = 86$.

Table 3

<i>ROE Coefficients for Skewness and Kurtosis</i>				
N	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
86	-.051	.260	1.942	.514

The absolute value for skewness (-.051) and the standard deviation (.260) represented a z score of -.20, which less than two and normally distributed. The absolute value for kurtosis is (1.942), and the standard deviation (.514) represented a z score of 3.8. The equation for the z score is:

$$Z = \frac{\text{Skew value}}{\text{SE}}, Z = \frac{\text{Excess kurtosis}}{\text{SE}}$$

The accompanying histogram in Figure 11 shows the frequency for the CEO dependent variable with no outliers.

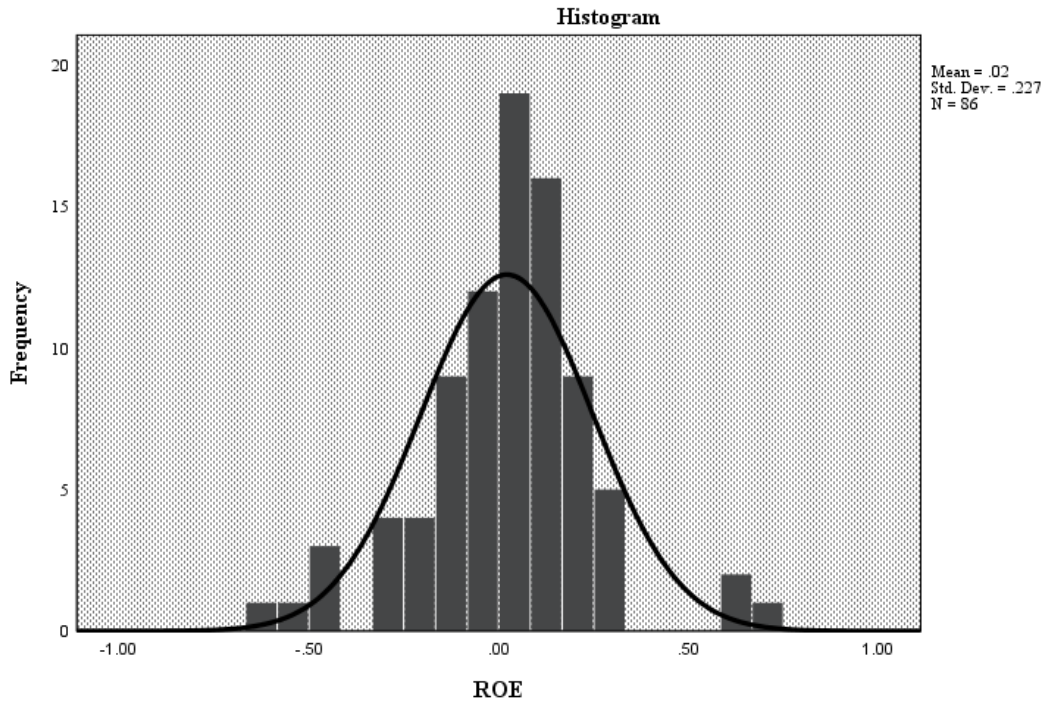


Figure 11. Histogram of independent variable ROE kurtosis.

Linearity, homoscedasticity, and independence of residuals. Scatterplots are designed to assess linearity between two variables and are a statistical measure of correlation (Sher, Bemis, Liccardi, & Chen, 2017). Visual inspection of the scatterplot of the residuals for the predicted values of variables shown in Figure 12 indicates homoscedasticity of residuals. Homoscedasticity is the equality of variances in normal populations (Chang, Pal, & Lin, 2017).

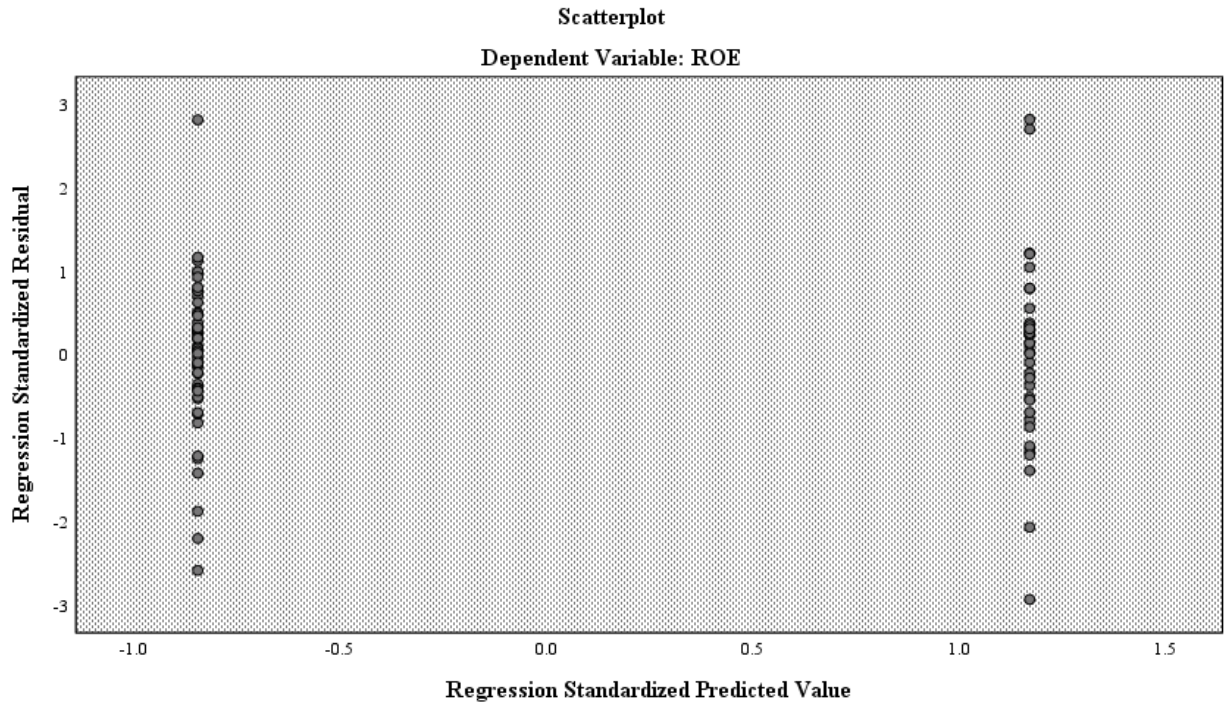


Figure 12. Scatterplot of the dependent variable ROE regression of standardized residuals.

Descriptive Analysis

In this study, 111 companies were analyzed to assess the relationship between CEO duality and ROE. After visual inspection, testing for assumptions, and data cleaning, 25 total outliers were removed from the original data, which produced a final dataset of $N = 86$ companies with no outliers. There were 57 non-CEO duality companies and 54 CEO duality companies in the original dataset. After further data cleaning, 50 non-CEO duality companies and 36 with CEO duality remained for a total dataset of $N = 86$. Based on a Durbin-Watson score of 2.311, as shown in Table 4, residual errors are independent and not autocorrelated—the Durbin-Watson test checks for serial correlation of residual errors. A value between 1.5 and 2.5 indicates no autocorrelation and acceptance of the null hypothesis (Chen, 2016).

Table 4 provides an inferential analysis for model fit. Table 5 provides descriptive statistics for the mean and standard deviation for the dependent variable ROE.

Table 4

Inferential Statistics for Model Fit

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.057 ^a	.003	-.009	.22799	2.311

Note. $N = 86$

Note. $R^2 = -.009$

Table 5

Descriptive Statistics for Mean and Standard Deviation of Dependent Variable ROE

Variable	M	SD
ROE	.0211	.22701

Note. $N = 86$

Inferential Results

Simple linear regression $\alpha = .05$ examined the relationship between CEO duality and ROE as a measure of financial performance in electronics firms. The independent variable was CEO duality, and the dependent variable was ROE. CEO duality accounted for 0.3% of the variation in ROE with adjusted $R^2 = -0.9\%$, which is indicative of a medium effect size based on guidelines for Cohen's d on effect sizes (Gignac & Szodorai, 2016). The null hypothesis stated that there is no statistically significant relationship between CEO duality and financial performance in electronics firms. The alternative hypothesis states there is a statistically significant relationship between CEO duality and financial performance in electronic firms. The

ANOVA in Table 6 below informs whether the model's statistical significance is a better prediction of the dependent variable of ROE than merely using the mean. CEO duality does not statistically significantly predict ROE.

Table 6

Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.014	1	.014	.271	.604 ^b
Residual	4.366	84	.052		
Total	4.380	85			

Note. $N = 86$

Note. $F(1, 84) = .271, p > .005$

The coefficient in Table 7 for CEO duality is .026, which represents the change in the dependent value for one unit of change in the independent value. The 95% confidence level for CEO duality is between -.073 and .125. The p -value is .604, $p = > .05$, which suggests that the slope coefficient is not statistically significant.

Table 7

Coefficient for CEO Duality

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error				Lower Bound	Upper Bound
1	(Constant)	.010	.032		.316	.753	-.054	.074
	CEO Duality	.026	.050	.057	.521	.604	-.073	.125

Note. $N = 86$

Analysis of Hypotheses

Using a simple linear regression model to assess the extent to which CEO duality is related to financial performance, the null and alternative hypotheses are:

H_0 : There is no statistically significant relationship between CEO duality and financial performance in electronics firms.

H_A : There is a statistically significant relationship between CEO duality and financial performance in electronic firms.

The independent variable was CEO duality, and the dependent variable was ROE. The data based on the original sample was not normally distributed and contained two outliers and could not reach normality. After testing for assumptions and cleaning the data, the removal of 23 additional outliers returned a normal distribution on a dataset of $N = 86$. CEO duality accounted for 0.3% of ROE variation with adjusted $R^2 = -0.9\%$ (Table 3). The mean of the dependent variable ROE was .0211, with a standard deviation of .22701 (Table 5).

An analysis of variance detailed in Table 6, determined that CEO duality was not a statistically significant prediction of ROE. As shown in Table 7, the 95% confidence level for CEO duality was between, -.073 and .125. The p -value is .604, $p = > .05$, which suggests that slope coefficient is not statistically significant. These findings supported the null hypothesis.

Discussion of Relevant Findings

This study's findings did not support a relationship between CEO duality and financial performance (ROE) in publicly traded electronics firms. The theoretical constructs used for this study were agency theory and steward theory. Stakeholder theory provided a contrasting

perspective on agency theory and stewardship theory, while UET provided a CEO charisma framework as a potential driver for financial performance.

Agency theorists promote separating the role of the CEO and the chair of the board of directors to prevent CEOs from engaging in opportunistic behavior rather than serving the interests of the shareholders. Stewardship theorists emphasize one individual serving as the CEO and chair of the board. Studies on CEO duality have failed to provide conclusive evidence of which structure is better to improve financial performance, as evidenced in this study's findings. To improve financial performance and to maximize shareholder wealth, the board of directors has a responsibility to balance the power of the CEO by implementing governance policies that maximize firm value (Krenn, 2014). The electronics and technology sectors are high growth industries that implement governance policies that suitable corporate governance policies to support shareholder interests (Hou, 2018).

Bhatt and Bhattacharya (2015) found no relationship existed between the agency theory perspective and financial performance. In this study, there was a significant link between non-duality and financial performance when the chair of the board was also an independent director. If this finding holds, other factors such as the level of board independence in addition to CEO other fundamental CEO characteristics may be significant in determining if future studies can merge agency theory and stewardship theory attributes to reach desired outcomes. As suggested by Schillemans and Bjurstrøm (2019), the two theories are juxtaposed. Agency theory is formal and based on a principal-agent contract, while stewardship theory is informal and requires collaboration. At the center is a need to include all stakeholders to reach a performance goal.

This analogy may suggest supporting a more measurable, combined metric to link corporate governance policy (CEO duality) to financial performance.

Summary

The purpose of this quantitative research study was to examine the extent to which a relationship exists between CEO duality and the financial performance of publicly traded electronics firms from 2016-2018. CEO duality was the independent variable, and ROE was the dependent variable. Several analyses tested the assumptions for normality. A simple linear regression model provided support for statistical data analysis—this secondary data analysis assessed whether a relationship existed between the two variables. I gathered research data from the annual report and proxy statements available from the EDGAR database, including financial data, to assess financial performance. Subsequently, governance and director information originated from the proxy statements (DEF 14A). The DEF 14A is a form required by the SEC and provides information on boards of directors.

The raw data included 111 participants. The initial results presented two outliers for ROE in a CEO duality firm. The removed outliers returned a dataset that was nonlinear and positively skewed. Based on this analysis, I removed 23 additional outliers. As a result, the data returned with a normal distribution and a linear relationship between variables. No additional outliers remained, and the test of assumptions for linearity presented no violations.

Based on ANOVA, CEO duality does not statistically significantly predict, in relationship to the mean ($\mu = .021$), ROE, $F(1, 84) = .271, p > .05$. The p -value is $.604, p = > .05$, which suggests that slope coefficient is not statistically significant. The null hypothesis was supported, as evidenced in Tables 5 and 6.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

Introduction

The literature remains unclear on the absolute effect of CEO duality on financial performance (Naseem et al., 2017). Effective monitoring by boards is a central component of firm effectiveness (Dah et al., 2017). The absence of internal controls can lead to CEO misconduct, which could negatively impact a firm's performance. This study focused specifically on the growing electronics and technology industry. These industries typically find it challenging to incorporate good corporate governance policies that favor shareholder interests (Hou, 2018). Previous research on corporate governance links board independence and agency theory and noted that inside directors are more vulnerable to undue influence imposed by the CEO (Glinkowska & Kaczmarek, 2015; Joseph et al., 2014; Kultys, 2016). CEO control may pose a more significant concern for board independence relative to financial performance. Board independence and CEO duality structures are topics of ongoing discussion for researchers wanting to examine a relationship to firm value and performance (Allam Mohammed & Muneer Mohamed Saeed, 2017; Naseem, Sun Xiaoming, Riaz, & Rehman, 2017; Rashid, 2015). When attempting to establish a direct link between board characteristics and a firm's financial performance, the correlation is difficult to establish in this context (Naseem et al., 2017). A lack of effective corporate governance policies and guiding principles present a problem for efficient financial management in some organizations Cheffins (2015).

A gap in the research exists, linking CEO duality to financial performance using CEO characteristics. CEO charisma relative to CEO duality and financial performance proved incidental and not used as essential components for this study. However, CEO characteristics

such as age, education, and tenure as drivers for predicting financial performance were discussed, which could serve as control variables in future studies. The purpose of this quantitative correlational study was to examine the extent to which a relationship existed between CEO duality in publicly traded electronics companies to financial performance. Researchers have most often found no correlation between CEO duality and financial performance. Agency and stewardship theorists believe that a case can be made for and against CEO duality when linking board independence to firm efficiency (Gebba, 2015; Bendickson et al., 2016a; Bosse & Phillips, 2016; Snippert et al., 2015). Chapter 5 focuses on the research question in the context of the hypotheses. In this chapter, the fulfillment of the research question and contribution to the business problem provide additional empirical discussion. Chapter 5 ends with recommendations for future research and a conclusion to the study.

Evaluation of Research Question

Researchers have debated the subject of board independence and CEO duality extensively in the literature (Abels & Martelli, 2013; Naseem et al., 2017; Rashid, 2016). Assessing whether CEO duality relates to financial performance has become increasingly more difficult to evaluate, causing further debate (Duru et al., 2016). A link between board characteristics, which includes CEO duality and financial performance in industries used for previous studies, has not been well established Naseem et al. (2017). Independent boards serve to lessen the power of the CEO. Reducing corporate control may mitigate an adverse impact on financial performance (Villanueva-Villar et al., 2016).

The position of CEO control assumes that the primary objective of the board of directors is to choose governance policies that maximize firm value and that align CEO interests with

those of shareholders (Krenn, 2014). The inherent cost of separating the CEO and chair of the board would increase the agency costs associated with CEO succession. Under certain conditions, economic logic would favor CEO duality in firms where the cost savings of combining positions would outweigh the potential gain obtained from separating the two roles (Krenn, 2014). From the self-interest perspective of agency theory, when agency costs are approximate to absolute or when managers own stake in a company, agency costs can be reduced as managers are more apt to refrain from opportunistic behavior (Rashid, 2016).

The research question for this study is: To what extent does a statistically significant relationship exist between CEO duality and financial performance in electronics firms?

The hypotheses are as follows:

H₀: There is not a statistically significant relationship between CEO duality and financial performance in electronics firms?

H_A: There is a statistically significant relationship between CEO duality and financial performance in electronics firms?

An analysis of variance for CEO duality did not statistically significantly predict ROE, $F(1, 84) = .271, p > .05$. The coefficient for CEO duality represents the change in the dependent value for one unit of change in the independent value. The 95% confidence level for CEO duality is between $-.073$ and $.125$. The p -value is $.604, p = > .05$, which suggests that slope coefficient is not statistically significant. CEO duality accounted for 0.3% of the variation in ROE with adjusted $R^2 = -0.9\%$.

The research question was answered by confirming that no statistically significant relationship exists between CEO duality and financial performance. A similar study conducted

by Routray and Bal (2016) found a significant association between ROA and firms with CEO duality. However, there was no relationship to ROA and performance for non-CEO duality firms. There is no statistical basis for determining whether electronic companies would be better with or without a CEO duality structured board of directors.

Fulfillment of Research Purpose

The purpose of this study was to examine the extent to which CEO duality relates to financial performance in electronics firms. The core of the study was to determine if firms would perform better or worse, given their board structure. This study established no statistical significance at $p = .604$ between the variable of CEO duality and financial performance. Researchers suggest there is room for debate on which structure is better. An element of agency theory is valuation, which was part of the analysis for this study to address the research question. The results presented in this study adequately addressed the research question.

Contribution to Business Problem

Agency theorists posit that ineffective management of a company provides the opportunity for the promotion of self-interest. To counter this behavior, agency theorists promote creating a board structure that protects the shareholder's interests (Pechersky, 2016). Tang (2017) suggested that benefits and costs associated with CEO duality materialize when there are also agency costs. The agency problem focuses on the separation of management and company ownership in which the shareholder is the principal and management are the agents of the company.

At the center of the debate on effective corporate governance is CEO duality. Separating the positions of CEO and board chair positions provides checks and balances on management

control and decision-making within an organization (Palanissamy, 2015). One can separate corporate governance structures into internal and external categories. Internal governance policies include a board of directors and subcommittees aligned to function collectively in the interest of the shareholders and managers. These structures mirror corporate control policies and procedures. Accounting and regulatory compliance functions fall under external governance protocols (Palanissamy, 2015). The elements of corporate governance research address the influence of CEOs on boards (Wang et al., 2016) Hambrick (1984) asserted that UET research attempts to quantify CEO characteristics and perceptive powers associated with a CEO's idea of reality and how it affects decision-making. As such, these interpretations can be articulated in board meetings to redirect decision-making practices that align with desired outcomes.

From the agency theory lens, corporate governance includes policies, rules, and procedures that direct and define agents' and principals' roles and responsibilities. Rebeiz (2017) asserted that an independent boardroom is less vulnerable to conflicts that increase agency costs. This study's results did not show a statistically significant link between CEO duality and financial performance, which was consistent with previous research. Naseem (2017) noted that researchers continue to produce mixed results when attempting to establish a direct relationship between board characteristics and a firm's financial performance. Arora (2019) suggested that when firms are financially bankrupt, with no money available for shareholders, board independence becomes less important.

Based on the findings of this study, the relationship between ROE as a measure of financial performance and CEO duality, ROE alone may not be an adequate indicator to determine if a link exists. One underlying assumption was if the return on equity rate (ROE) was

an appropriate measure of financial performance. The literature supported the assumption that the relationship of CEO duality to financial performance can be measured using ROE as a performance indicator (Krafft et al., 2014).

A board of directors' primary objective is to ensure that an organization's financial activities exemplify the highest level of integrity. Yangyang et al. (2017) stated that board independence provides the necessary monitoring and control over a firm's financial activities required to reduce internal control weaknesses. Control mechanisms are essential for minimizing the conflict that may exist between principals and agents to better accomplish the firm's strategic and financial goals. The board has the primary objective of promoting shareholders' interest through the management of management's actions (Boshkoska, 2015). In this regard, independent directors may be considered better monitors of management. To create a position of financial strength, the high incidence of companies adopting this structure may result in additional cost savings. This logic follows the premise that the primary goal of the board of directors is to create governance policies that align CEO interests company shareholders, which is to increase the financial value and performance of the firm (Krenn, 2014).

Bhatt and Bhattacharya (2015) found no relationship existed between the agency theory perspective and financial performance. The researchers did establish a significant link between non-duality and financial performance when the chair of the board was also an independent director (Bhatt and Bhattacharya, 2015). This finding appeared to suggest that other factors, such as the level of board independence and board size, may provide a significant link to financial performance.

Yan-Jie et al. (2013) noted that there are no other studies related to board independence at electronics firms exclusively outside Taiwan. Yan-Jie et al. (2013) asserted that the growth associated with electronics firms is primarily the result of information asymmetry, which results in a higher incidence of agency conflict. Wahba (2015) suggested that when examined separately, board composition and CEO duality may positively affect financial performance; together, the two structures may negatively impact financial performance. This study did not include board composition beyond the chair of the board of directors and CEO positions and only considered CEO duality.

Recommendations for Further Research

Based on the results of this study, the conclusion was that there is no statistically significant relationship between CEO duality and financial performance. This result is consistent with most of the scholarly research. However, the debate is ongoing whether an absolute link exists between CEO duality and financial performance (Allam Mohammed & Muneer Mohamed Saeed, 2017; Naseem, Sun Xiaoming, Riaz, & Rehman, 2017; Rashid, 2015). As suggested by (Naseem et al., 2017), results remain mixed when attempting to establish a relationship between board characteristics and a firm's financial performance (Naseem et al., 2017).

Additional research on industries not previously studied may provide more insight and add to the existing body of knowledge. Research on corporate governance has focused primarily on the level of board independence; however, results remain mixed when linking board structure to financial performance to include CEO duality. Some firms continue to believe that separating the chair of the board and CEO position increases the integrity of the board of directors and leads to better financial performance (Valencia, 2018).

Board composition and CEO duality are representative of good corporate governance (Adrian et al., 2017). Effective corporate governance aligns management interests with those of shareholders (Adjaoud & Hermassi, 2017). According to Adjaoud and Hermassi (2017), further stated that the level of monitoring established by shareholders depends on the quality established policies, such as the separation of the CEO and board chair position. Adjaoud and Hermassi (2017) suggested that policy alignment between management and shareholder interests mitigates agency costs.

More in-depth research that examines CEO charisma with CEO duality and financial performance may provide additional insight into the dynamics of the relationship between CEO duality and financial performance. As a component of leadership, the theoretical construct of CEO charisma includes the factors of age, qualifications, and experience. The success and failure of a company in effecting positive organizational outcomes are highly dependent on the effectiveness of the manager (Fujianti, 2018). Researchers have linked CEO duality and financial performance to other influences such as a CEO's age and experience (Papagiannakis, & Lioukas, 2018; Rashid, 2015). Schneider & Jones (2017) noted that charismatic leaders who possess the ability to think beyond their current environments are better situated to provide inspiration to others and serve as a visionary. Management characteristics such as age, qualifications, education, and tenure influence organizational decisions the established policies of the companies they lead (Hambrick & Mason, 1984)

Management literature addresses the impact of CEOs' educational background and management behavior (Darmadi, 2013). Hambrick and Mason (1984) noted that UET links higher educational attainment to the ability to consider all points of view, an openness to change,

and tolerance. Additionally, Evert et al. (2018) stated that advanced education levels play a significant role in increasing critical to human.

Peni (2014) argued that older executives often possess more experience, which can positively influence the financial success of a firm. Researchers believe that executive age provides a competitive advantage over executives with less experience (Qi, Lin, Tian, & Lewis, 2018). Older executives are more conservative in decision making and less likely to engage in behavior that would put the firm at risk (Qi et al., 2018).

In today's management environment, practical leadership qualities are necessary attributes for making operational decisions that improve financial performance (Bulog, 2016). The business environment presents many complex situations, is often volatile, and is filled with uncertainty. Long-tenured management receives more autonomy than managers with less experience from the board of directors after proving the ability to navigate a business environment continually changing. The board instills confidence in the CEO to make positive decisions that move the company forward to financial sustainability (Zhang, 2019). Increased CEO tenure may increase autonomy from the board of directors. Wang et al. (2016) also argued that formal education and experience enhances a CEO's desire to explore new processes and skills may also motivate CEOs to engage in more innovative, complex, and significant firm strategies. A CEO that creates cohesion with the organization results in the trust of team members that will allow the CEO to carry out objectives that lead to financial success (Chang, 2018). The level of credibility attained by the CEO from the trust of others moves the organization in the direction of acceptance toward change and modern innovation strategies (Chang, 2018).

The added driver of CEO charisma represents a gap in the literature between the effect of CEO characteristics such as age and experience. The current research on charisma has not established a specific relationship between CEOs and financial performance in this context (Tosi et al., 2004). Examining the phenomenon will provide future researchers with background on the possible relationship of financial performance and board structure and how CEO duality and the role charisma contributes to strategies that dictate financial performance. Exploring the role CEO charisma may have on management decision making that affects financial performance is worthy of future study.

Conclusions

The purpose of this quantitative correlational study was to examine the extent to which CEO duality in electronics firms relates to performance as measured by return on equity (ROE). The independent variable was CEO duality, and the dependent variable was ROE. The study analyzed data from 2016-2018. The original sample consisted of 111 companies. Data analysis the identification of 25 outliers. The analysis showed that 19 CEO duality companies had negative net income and negative shareholders' equity compared to six with a separate CEO and chair of the board of directors. These companies had negative net income or a combination of negative income and negative shareholders' equity, which resulted in negative ROE. The negative financial position presented in the data showed that these companies experienced losses over more than one period and carried high debt on their balance sheets. There were 19 companies with CEO duality and six with a separate CEO and chair of the board of directors. After the final analysis and data cleaning, the data was truncated to $N = 86$ and included publicly traded electronics firms listed on the S&P 500. The findings for the final sample of $N = 86$

showed $\mu = .0211$ (2.1%) for ROE. For every dollar in shareholder equity, the companies made only \$0.02 in profit. A simple linear regression did not produce results that supported a statistically significant relationship between the independent variable of CEO duality and the dependent variable of ROE.

Peni (2014) suggested that CEO duality encourages agency conflict, which could negatively impact financial performance. Agency conflict increases the need for more board independence to protect shareholders' interests. Conversely, duality leadership may serve the firm's best interests if the CEO views success as a personal challenge and focuses on ensuring that shareholders are served more effectively (Peni, 2014). The cost of separating the two roles would increase agency costs and costs associated with CEO succession. The economic logic would favor CEO duality in firms under certain conditions where cost savings of combining the two roles would outweigh any benefit gained by separating the two functions (Krenn, 2014).

Institutional investors and financial regulators often prefer board independence because of the presence of oversight. Individuals responsible for monitoring management activities believe an independent structure challenges the CEO more readily than outside directors (Lixiong & Masulis, 2015). Neville et al. (2018) asserted that internal and external board members might have different reasons that influence their motivation to monitor management activities. When a CEO has limited power, separation of the CEO and chair of the board of directors positions is a mitigating factor for determining motivation. The potential for positive social change may become possible with the reduction of agency problems and the associated costs that may lead to less efficiency in financial operations.

In previous studies on corporate governance, researchers have established a link between board independence and agency theory. Lack of external board members can result in directors' undue influence by the CEO (Glinkowska & Kaczmarek, 2015; Joseph et al., 2014; Kultys, 2016). Such control can negatively impact board independence and financial performance. Agency theorists believe the dual role of CEO and chair of the board of directors contribute to the abuse of power, and control produces a weak board (Shrivastav & Kalsie, 2016).

Stewardship theorists view the manager as the steward with non-financial motivation for directing the (Glinkowska & Kaczmarek, 2015). Both theories offer contrasting views of CEO duality and the relationship to board independence. Based on the results produced in this study, there is no affirmative link between CEO duality and financial performance. Future research should include the additional factors of CEO charisma and its effect on financial performance.

The objective of independent boards is to balance the power of the CEO. Corporate control may lead to poor financial performance (Villanueva-Villar, Rivo-López, & Lago-Peñas, 2016). Manna, Sahu, and Gupta (2016) argued that CEO duality presents a conflict for corporate governance. Further study of board independence and CEO duality will add to the current body of knowledge on the relationship between the level of board independence and financial performance. Additional insight into the impact on firms' profit margins and shareholder equity presents implications for positive social change, specifically, the effect of CEO duality on operational decision making that affects shareholder wealth.

This study addressed financial performance in electronic firms. When measuring inputs and outputs, electronics firms should be motivated to improve firm efficiency through various processes relative to performance outcomes (Yan-Jie et al., 2013). According to Yan-Jie et al.

(2013), electronics firms have notable incidences of agency conflict because of information asymmetry between managers and owners. Effective corporate governance serves as an appropriate measure to evaluate the financial performance and success of an organization (Stuebs & Sun, 2015).

Financial growth ratios that reflect the overall profitability and growth of a firm include ROE, sales growth, and asset growth (Zhou, Hu, & Shi, 2015). For this study, the calculated value of ROE provided the measure of financial performance in relationship to CEO duality. Jacquart and Antonakis (2015) noted that well planned and organized corporate governance policies cover varying dimensions of financial reporting and performance. Agency conflicts caused by CEO duality increase the need for board independence to protect the firm's assets and shareholders' interests (Peni, 2014). However, mixed reviews on the subject suggest that CEO duality leadership may alter a CEO's decision-making so that it becomes a personal challenge to ensure shareholder wealth. Freire (2019) noted that three bodies exist within organizations: shareholders, directors, and the CEO. In situations where CEO duality exists, conflicts inherent in these structures create agency costs. The conflicts that arise between the shareholders and the CEO make a case for more internal controls.

Freire (2019) stated that the effectiveness of the board to mitigate agency problems depends on compliance with its processes. The agency issues exist in companies that purposely create duality schemes that adversely affect overall operational outcomes but have the potential to reduce operational costs significantly. Advocating for CEO duality solely to increase profitability is risky and places the board at risk of losing its internal control. As a result, compliance is affected, and financial policy objectives become more difficult to obtain (Freire, 2019).

It was determined that there was no statistically significant relationship between CEO duality and financial performance in electronics firms. A reduction of agency problems and the associated costs may lead to less internal conflict and inefficiencies. The opportunity for less conflict in organizational decision making may provide additional implications for positive social change with improved business ethics.

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