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College of Management and Technology

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Dier Tong Ngor-Chol

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Walden University
2022

Abstract

Corporate Governance Attributes of Board Independence and Board Education as

Predictors of Financial Performance of Banks in South Sudan

by

Dier Tong Ngor-Chol

M.Phil., Walden University, 2018

MBA, University College Dublin, 1996

BS, University of Khartoum, 1986

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

May 2022

Abstract

Corporate governance has attracted much attention in the past few years due to cycles of corporate scandals and frauds that have resulted in momentous cases of financial failures and the collapse of some major corporations. Although the renewed interest in corporate governance has generated considerable insights and a better understanding of the prevailing corporate governance practices, much of this interest has concentrated on experiences in developed and emerging economies. There remains a significant lack of understanding of the practice and impact of corporate governance on firms' performance in developing countries. This quantitative, nonexperimental study tested the predictive relationship between corporate governance attributes and the performance of banks in South Sudan. Agency theory is the theoretical foundation for this study. Archival data were obtained from the central bank records, and the significance of the relationship between corporate governance attributes and the financial performance of banks in South Sudan was grounded on the results of multiple regression analysis. The research findings indicated a significant predictive relationship between the corporate governance attributes of the level of board independence and level of board education and the financial performance of banks in South Sudan. The findings could support the future formulation of quality corporate governance policies capable of promoting a sound banking system in the country. Banks that are prudently managed and sound financially can increase corporate financial prosperity and long-term sustainability. Sustainable banks in South Sudan will contribute to positive social change, as that will contribute to sustainable economic growth, job security, and higher returns to shareholders.

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Dedication

I dedicate this study to my wife, Awor, and children, Ngor, Appiok, Kuol, and Ngok, who have supported and encouraged me to pursue my dream of completing doctoral studies. You have been understanding and patient all along the years of my study. Your love and support have always touched my life. I also dedicate this study to my late brother, Mario Kuol Tong, who encouraged us in the family to pursue education and to keep going to achieve our dreams in education. This doctoral work is one of the harvests of your endless inspiration.

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Chapter 1: Introduction to the Study

Corporate governance has gained prominence and continued to evolve since the emergence of the modern-day corporation (Agyei-Mensah, 2017c; Khanna, 2017). Shah and Napier (2016) identified the shareholders' activism, corporate disclosure standards, and the board of director's quality as the three most critical mechanisms to address corporate governance concerns. However, the literature on the impact of corporate governance on corporate sustainability reveals variation across countries and industries (de Haan & Vlahu, 2016; Tuan & Tuan, 2016).

In this study, I focused on South Sudan and examined how corporate governance practices in the South Sudanese banking explain the industry's financial performance. The study's findings might improve understanding of the link between board attributes (i.e., corporate governance) and performance in the industry. This can promote corporate sustainability and foster positive social change among stakeholders and the associated communities. In the remaining part of this chapter, I present the background of the study, define the problem, state the purpose, and introduce the theoretical framework underpinning the study. I also state the research questions and research hypothesis and discuss the nature, significance of the study, assumptions, scope, and delimitations of the study. The chapter concludes with a summary and transition to Chapter 2.

Background of the Study

Corporate governance has gained prominence in academic research during the past few decades (Anand, 2017). Cunha and Rodrigues (2018) linked this interest to the sequences of the collapse of some prominent corporations, like the Lehman Brothers,

WorldCom, and ENRON. The downfall of these corporate giants has revealed critical shortcomings in organizations' corporate governance system and the practice of fiduciary role by the corporate boards (Nakpodia et al., 2018). The poor corporate governance outcomes have, in turn, raised legitimate concerns and generated loss of confidence and respectability among regulators and shareholders regarding the functioning of boards of directors (Al Okaily et al., 2019).

These developments have revived the debates among shareholders and regulators regarding the effectiveness of corporate governance and the role of the board of directors in corporate monitoring (Albu & Flyverbom, 2019). The increasing demand for corporate openness, in turn, has attracted significant governance reforms (e.g., Cadbury Committee, 1992; Organization for Economic Cooperation and Development [OECD], 2015; Sarbanes-Oxley Act, 2002), to reinforce corporate transparency and to prevent a recurrence of cases similar to ENRON (Albu & Flyverbom, 2019; Al Okaily et al., 2019). This, in turn, has encouraged worldwide diffusion of corporate governance principles and research to gain a better understanding of corporate governance mechanisms and their impact on corporate performance (Peasnell et al., 2000; Rughoobur, 2018).

While the renewed interest in corporate governance has generated significant insight into the relationship between governance mechanisms and organizational performance, available literature shows inconsistencies in the findings (Nakpodia et al., 2018). Tshipa et al. (2018) attributed the observed variation, between corporate governance and corporate performance, to country-specific factors caused by cultural and legal differences across countries. Tuan and Tuan (2016) considered industry-specific

factors as the primary source of differences in the practice of corporate governance across countries. Levine (2004) described how the corporate governance practice of banks differ from those of non-bank firms. de Haan and Vlahu (2016) found in their study of the corporate governance characteristics of banks and non-bank firms that the traditional links between corporate governance and performance of non-bank firms do not hold for banks.

Ciftci et al. (2019) observed that the inconsistencies in the literature on the corporate governance outcomes, across countries and industries, call for the need to improve understanding across countries. Focusing on examining the experiences of South Sudan's banks could expand knowledge of the link between corporate governance and financial performance. Gaining more understanding is significant, given the central role that banks play in the economies and their role in facilitating the movement of financial resources between savers and borrowers (Levine, 2004). Accordingly, improving the understanding of corporate governance in the South Sudanese bank could have social and economic value, as it may improve financial performance and the long-term sustainability of the country's banking system. In turn, this can make more jobs available and secure the welfare of the stakeholders and the country's economy.

Problem Statement

The collapse of corporate giants like ENRON and Lehman Brothers signaled the urgency of restoring confidence and respectability in corporations (da Costa, 2017). Literature has increasingly documented corporate governance as a principal tool for improving corporate performance and sustainability (Cunha & Rodrigues, 2018;

Rughoobur, 2018). However, the extent to which corporate governance attributes impact corporate performance varies across countries (Ciftci et al., 2019). Pasic et al. (2016) attributed such variations to the presence of cross-country differences caused by disparities in cultural and legal practices. For example, although Agyei-Mensah (2017b) found a significant link between board independence, the educational level of board members, and Botswana's corporate performance, the author also found the relationship to be less significant in Ghana. Pasic et al. (2016) also found variations in how corporate governance attributes impact Polish and Slovenian banks' performance. South Sudan witnessed a noticeable improvement in banks' performances since the introduction of corporate governance regulations in 2012. The consolidated return on assets (ROA) of South Sudanese banking grew from 2.8% to 5.5% between 2012 and 2014 (Bank of South Sudan, 2018). This high rate of growth indicates a significant change if compared to 2.46% average ROA of banks in continental Africa, and 1.1% average ROA of banks in developed countries (European Investment Bank, 2018). The general problem is that stakeholders do not understand the extent to which corporate governance rules have contributed to performance improvement in banks. The specific problem addressed in this study is that stakeholders do not understand the extent to which corporate governance attributes are predictive of performance in the South Sudanese banking industry.

Purpose of the Study

The purpose of this quantitative nonexperimental study was to investigate the extent to which corporate governance attributes were predictive of the financial performance of banks in South Sudan. The target population was the banks in South

Sudan. The predictor variables used in this study were two attributes of the corporate board of directors: level of board education, and level of board independence. ROA is the proxy used to measure banks' financial performance (criterion variable). Chapter 3 includes concise definitions of these variables.

Research Question and Hypotheses

Fischer et al. (2014) explained that research questions and hypotheses provide focus to the purpose of the study. A quantitative research question addresses the relationships among variables that the study sought to investigate. In essence, a quantitative hypothesis is a prediction about the expected relationships among the study variables.

In this quantitative nonexperimental study, I searched for specific attributes of corporate governance that are predictive of banks' financial performance in South Sudan. The predictor (independent) variables used in the study are two corporate governance attributes of banks in South Sudan – level of board education, and level of board independence. The criterion (dependent) variable is corporate financial performance, defined as the banks' ROA.

The research question of the study was as follows:

RQ: To what extent is there a predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan?

H_0: There is no significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan.

H_1: There is at least one significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan.

I used multiple linear regression analysis to test the relationship between the two predictor variables and the criterion variable. I then performed *t* tests to test the relationship between each predictor variable and the criterion variable, as the multiple linear regression was statistically significant.

Theoretical Foundation

In this study, I adopted agency theory as a theoretical foundation. Agency theory, one of the dominant theories of organizations and management, provides insights into the optimization of costs and risks associated with the principal–agent relationship (Payne & Petrenko, 2019). Literature traces back the origin of the concepts of agency theory to more than a century ago (e.g., Berle & Means, 1932; Smith, 2000) when the authors highlighted the extent to which the separation of ownership and management can produce a condition where the interests of owners and managers diverged. The authors attributed the emergence of the divergence to factors such as self-interest and information asymmetry (Berle & Means, 1932; Smith, 2000).

Payne and Petrenko (2019) accredited the modern development of the agency theory to the seminal work of Michael Jensen and William Meckling. In a journal article

entitled “Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure” in 1976, Jensen and Meckling outlined the critical elements of the modern-day agency theory, sometimes known as principal–agent theory (Payne & Petrenko, 2019). Two centuries after Adam Smith had outlined the central tenets of the agency problem, Jensen and Meckling (1976) applied the concepts to the theory of the firm and defined the agency problem as the relationship that exists between two or more parties, where one party (the principal) engages another party (agent) to perform specific tasks and duties on its behalf.

According to Jensen and Meckling (1976), the principal–agent relationship, in the context of firm structure, can be problematic and potentially costly because of factors such as divergent interests, risk preferences, and differences in the utility functions among the parties (Payne & Petrenko, 2019). Jensen and Meckling contended that the principal–agent relationship creates two problems that generate costs and suboptimal outcomes for the firm. The first problem is the adverse selection that may arise when the agent lacks the skills to make decisions that meet the principal’s expectations. The second is the risk of moral hazard, where the agent adopts opportunistic behavior and works for their own interest rather than for the interest of the principal (Bergh et al., 2018; Jensen & Meckling, 1976).

Several assumptions underlie the development of agency theory. One such fundamental assumption is that once the principals delegate the authority to agents, they often have problems controlling them, as agents’ goals often conflict with those of principals, and because agents often have better information about their capacity and

activities than the principals (Jensen & Meckling, 1976; Payne & Petrenko, 2019). The costs that arise because of these differences are the bases for the theory. The theory's focus is to find the ways principals try to mitigate this agency problem and the discovery of monitoring mechanisms for mitigating such risks.

Agency theory is among the dominant theories of economic organization and management that explain the ubiquitous agency problem (Bosse & Phillips, 2016). The theory monitors the agent's behavior and its impact on organizational performance (Fauzi & Locke, 2012). Therefore, agency theory is relevant to this study as it sufficiently addresses the role of the board of directors in the South Sudanese banking industry and the extent to which this role explains the observed variation in bank's performance. I discuss the key assumptions and propositions of the theory in more detail in Chapter 2.

Nature of the Study

In this quantitative nonexperimental study, I examined the performance of banks in South Sudan and investigated the extent to which corporate governance attributes predicts the performance of banks in South Sudan. I considered the choice of quantitative nonexperimental design appropriate for this study, as I sought to determine relationships between variables. Guetterman et al. (2015) posited that a quantitative method is suitable when researchers plan to use numerical data to examine relationships or differences between dependent and independent variables. Researchers employ quantitative nonexperimental design to make predictions and understand the nature of the relationship between naturally occurring variables (Fischer et al., 2014). As such, the design is most appropriate for this type of study to investigate the extent to which the practice of

corporate governance in the South Sudanese banking industry predicts the financial performance of banks in the country.

Alternative research methods considered for this study were the qualitative and mixed methods. According to Guetterman et al. (2015), qualitative methodology is more applicable to studies with the intent to explore phenomena in their natural context or studies aimed at understanding participants' lived experiences. Therefore, the approach would not have been appropriate for this study because its intent was not the exploration of participants' experiences with the implementation of corporate governance in banks in South Sudan. Mixed-methods studies combine elements of quantitative and qualitative methodologies (Guetterman et al., 2015). The method was, therefore, not found suitable because a qualitative approach was not applicable.

The study variables were the corporate governance attributes, the predictor variables, and the financial performance of banks, used as the criterion variable. I used the ROA ratio as a proxy for the financial performance of the banks operating in South Sudan and selected board attributes as the predictors for the study. These attributes are level of board education and level of board independence.

Data relating to these variables were available from the archival records of the Central Bank of South Sudan. As Fischer and Parmentier (2010) explained, archival data involves extracting information from archival records held in collecting institutions. Such data include materials such as annual reports, minutes of meetings, statutory reports to regulators, and others.

In order to perform the study, I compiled a list of all members of the board of directors of each bank from the archival records. Based on this list, I established the study's board attributes of interest. Using the IBM SPSS Statistics software platform, I used multiple regression analysis to analyze the data generated to determine any predictive relationships between the performance of each bank and the attributes of the board of directors.

Definitions

In this research study, I use several terms, which carry special operational meanings in the context of the definitions provided.

Archival data: Archival data or archival research involves extracting information from archival records held in collecting institutions. Such data include materials such as the annual or periodical reports and minutes of meetings (Fischer & Parmentier, 2010).

Attributes of the board of directors: These are the traits, features, and skills that the board of directors possesses and which can help them exercise diligence that a reasonably prudent person would exercise in comparable circumstances (Palaniappan, 2017).

Bank of South Sudan: This is the central bank of the Republic of South Sudan, established by an Act of Parliament in 2011. Bank of South Sudan also performs the role of the regulator of all banks and other financial institutions in the country (Bank of South Sudan, 2011).

Board of Directors: A board of directors is a group of people elected to office by shareholders to govern and manage the affairs of the corporation and to execute specific fiduciary duties on behalf of the shareholders (Jordan, 2019).

Board size: Board size refers to the number of directors that comprise the board of directors of the organization (Al Smadi, 2019).

Cadbury Report 1992: This is a report published by the committee on the financial aspects of corporate governance, chaired by Adrian Cadbury. The recommendations formed the bases for corporate governance reforms in the past decades and have become essential outline in the institutionalization of corporate governance in organizations today (Cadbury Committee, 1992).

Corporate governance: A set of mechanisms that guide the distribution of responsibilities among stakeholders and which supports organizational monitoring, policy-setting, and decision-making processes (Ballinger & Marcel, 2010).

Corporate/firm performance: These are arrays of financial and nonfinancial standards used to measure the extent to which the corporation/firm has achieved the set goals (Akbaba, 2012).

Gender diversity: Refers to the representation of men and women on board of an organization (Joecks et al., 2013).

Level of board education: A bundle of intellectual capital that enables a board to perform its fiduciary duties (Wang et al., 2017). Level of board education is an independent variable in this study.

Level of board independence: The level to which a board of an organization consists of members who do not directly have a material relationship with the organization, whether in the form of being a partner, shareholder or officer of the organization (Zhang & Gimeno, 2016). Level of board independence is an independent variable in this study.

OECD principles of corporate governance: These are the six principles of corporate governance agreed among the OECD member states and which provide an international benchmark for good corporate governance (Rughoobur, 2018).

Positive social change: This is the process of transforming patterns of thought, behavior, social relationships, and institutions to generate outcomes that improve human and social conditions for the betterment of society. Such change can occur at many levels, including individuals, communities, organizations, government, and the environment, beyond the benefits for the instigators of such transformations (Stephan et al., 2016).

Return on assets (ROA): This is the ratio of the firm's net profit to the value of its total assets. The ratio explains how much the firm generates from the assets it has invested (Velnampy, 2013). ROA is the dependent variable in this study.

Sarbanes-Oxley Act 2002: This is a law passed by the U.S. Congress that expanded the responsibility requirements for publicly trading companies. The Act placed greater responsibilities on management, the board of directors, and auditors, regarding the decisions they make on behalf of the organization (Sarbanes-Oxley Act, 2002).

Assumptions

Several assumptions underlie the conduct of this study. As explained by Marshall and Rossman (2016), research assumptions are the researcher's expectations whose absence could render the research irrelevant. The first assumption made in this study is that the ROA ratio of banks, used as a proxy for financial performance (the criterion variable), is comparable among banks. This assumption is necessary because accounting and financial reporting standards affect financial performance (Kemal & Zunic, 2014). It is, therefore, assumed that banks operating in South Sudan follow uniform accounting policies and standards. The second assumption made in this study is that the archival records of data on the predictor variables (attributes of board of directors) are reliable. This assumption is necessary as each institution is separately responsible for the compilation of the data used in this study (annual and periodical reports). Therefore, this study assumes that data compilation will be according to the central bank guidelines and the generally accepted practices. The third assumption is that the use of agency theory as the theoretical framework is appropriate. The assumption is necessary as there are alternative theoretical frameworks used in the study of corporate governance. The fourth and final assumption is that the study of corporate governance has relevance to the banking industry. This assumption is necessary as banks perform a critical role in the economy, and its relevance could ensure that findings from the study contribute to theory and practice as well as contributing to positive social change.

Scope and Delimitations

In this study, I examined the performance of banks in South Sudan and investigated the specific attributes of corporate governance that are predictive of the banks' performance. Current literature identifies the corporate disclosure, shareholders' rights, and the role of corporate boards as the three main characteristics through which corporate governance impacts corporate performance (Shah & Napier, 2016). From the three characteristics of corporate governance, this study's scope is delimited to the role of the board of directors and the extent to which its attributes impact the corporate financial performance of banks in South Sudan. Although there are several corporate governance attributes that could impact the corporate performance, in this study, I delimited the board attributes to two specific types: level of board independence and level of board education. These delimitations support the generalization of the findings to improve the board's professional practice in the South Sudanese banking industry. Accordingly, the study did not include corporate disclosure and shareholder's rights. Future research may expand the scope of this study by considering the impact of these characteristics on the performance of banks in South Sudan.

Limitations

Rossman and Rallis (2003) defined research limitations as the potential weaknesses that researchers encounter during a study. It is critical that a researcher anticipates possible limitations and prepare plans to minimize the effects of such risks (Rossman & Rallis, 2003). For this particular study, the primary limitation anticipated was in the use of archival sources. The process of collecting data from archival sources

could have resulted in some analysis errors, which could impact the study findings. To reduce this risk, I restricted the archival data extraction to two sources only: central bank records and banks included in the study. Another limitation that I might have faced in this study was the comparability of the ROA figure collected from banks included in the study due to the possible effect of accounting and financial reporting standards used (Kemal & Zunic, 2014). To derive meaningful conclusions from this study, I subjected the ROA figures to screening and adjustments before including them in the final analysis.

Significance of the Study

I expected the study's findings to significantly improve the understanding of corporate governance and its relationship to firm performance. A review of the literature covered in Chapter 2 indicates significant cross-country and cross-industry variations in corporate governance practice (Duong et al., 2016). As there has never been any study on the practice of corporate governance in the South Sudanese banking industry before, this study could help in closing the gap in the literature by extending knowledge on the practice of corporate governance in the South Sudanese banking industry. This is critical, given the principal role that banks play in the economy. Because of these factors, the current study could make significant contributions to the field. In the paragraphs below, I discuss three possible contributions this study could make to theory, practice, and social change among the stakeholders.

Significance to Theory

Corporate governance has gained prominence in research during the past few decades following the collapse of leading corporations like ENRON (Anand, 2017).

Recent research has generated significant knowledge on the role of corporate governance characteristics in the mitigation of agency costs (Al Okaily et al., 2019). At the same time, other findings have highlighted the existence of a cross-country as well as cross-industry variations of such impacts (Duong et al., 2016). This study was the first of its kind in the South Sudan banking industry. Its findings could highlight the attributes of the board of directors of banks that are highly predictive of financial performance. Identifying the board attributes that are highly predictive of performance in the South Sudanese banking can extend the body of knowledge and expand the scope of previous research. The findings would further validate the propositions of the agency problem and agency costs. In this context, the findings of this study might expand knowledge on how corporate governance practices in South Sudan relate to banks' financial performance and sustainability in the country. Overall, what I expect this study to contribute is a new perspective from the South Sudanese banking industry—a perspective that I hope might contribute to the ongoing effort to build a broader model of corporate governance that is flexible and expressive of the experiences of countries and industries' good practices across the globe.

Significance to Practice

The history of banking in South Sudan is as new as that of the country. Before its independence, branches of banks headquartered in Sudan were the only ones operating in the region. It was not until South Sudan gained independence that the country established a full-fledged central bank with the powers to license and regulate banks. The Central Bank of South Sudan introduced its first-ever corporate governance guidelines in 2012.

Ado et al. (2017) argued that ensuring corporate sustainability requires a sufficient understanding of the link between corporate governance and performance. In the same vein, Levine (2004) showed how better governance practices in banks support sustainability and improve the way the financial sector affects investments and productivity in a country.

As this study is the first of its kind that examines the relationship between corporate governance practice and performance in South Sudan's banks, its findings could inform future practice in the industry. For both the shareholders and regulators, this study will provide first-hand empirical results regarding the existing regulations' successes or failures. Such learnings could improve corporate governance practice in the industry (Ghosh & Nandi, 2013). The findings could also provide shareholders with a better understanding of boards of directors' specific attributes that are highly predictive of banks' financial performance. Shareholders could use such findings to inform their activism in promoting good corporate governance and in decision-making during the formation of the board of directors (Azim, 2009). Equally, the findings could provide regulators (i.e., Central Bank of South Sudan) with new insight on the practice of corporate governance in the banking industry. Regulators could use these new findings to adopt reforms and improve the current regulations.

Significance to Social Change

Stephan et al. (2016) considered a positive social change as the process of transforming patterns of thought, behavior, social relationships, and institutions to generate outcomes that improve human and social conditions for the betterment of

society. Walden University defines social change as the contribution that delivers outcomes leading to positive transformation in society (Walden University, n.d.). In the pursuit to become scholar-practitioners, Walden students strive to contribute toward this goal by engaging in research that promotes positive social development at local and the broader communities. Studies on corporate governance show malpractices, including deficiencies in internal control systems and lack of adequate monitoring by the board of directors, as the major causes of corporate failures (Ciftci et al., 2019). Such failures can have detrimental adverse welfare effects on stakeholders and society at large. As the aim for this study is to discover the corporate governance attributes that are highly predictive of performance in the South Sudanese banking industry, findings could have a positive social change to South Sudanese society.

By identifying the key attributes that are highly predictive of corporate performance, this study could help shareholders and regulators to improve the quality of the board of directors of banks in South Sudan. An improved board of directors could have the ability to mitigate risks, reduce fraud, and other malpractices within the industry (Naseem et al., 2017). An improved board, in turn, could improve banks' performance and sustainability. This has significant implications for positive social change as sustainable banks bring benefits to stakeholders and society at large, through job security, generation of a good return to shareholders, and revenues to the government through taxes. Besides these direct benefits to stakeholders, sustainable banks have a multiplier effect on social change in the sense that the financing they provide to various sectors of the economy also results in additional benefits to society. Businesses that receive funding

from sustainable banks would also prosper and bring about extended positive social change to broader society.

Summary and Transition

This chapter serves as an introduction for the study. It provides contextual background regarding the origin of corporate governance thoughts. Literature traces corporate governance's origin to the emergence of the modern-day corporation, in which there is an absolute separation between ownership and control. Under this new reality, owners (shareholders) rely on the actions of those who run the corporation, thus resulting in agency risk to shareholders. It is against this perceived risk that corporate governance emerged as one of the tools through which shareholders monitor the activities of the agents assigned to run the corporation's day-to-day affairs.

Literature highlights three critical characteristics of corporate governance that corporations used to mitigate agency risk. This includes the level of shareholder activism, the quality of the disclosure function, and the role of the board of directors. Although empirical studies demonstrate the effectiveness of these mechanisms in mitigating the agency risks, other findings reveal significant variations across countries and industries.

This study's scope is delimited to the role of the corporate board. Its purpose is to uncover the attributes of the board of directors that are highly predictive of banks' financial performance in South Sudan. I used the ROA as a proxy for financial performance (criterion variable in the study). A selected number of board attributes are the predictor variables. Agency theory is the theoretical foundation for this study. Agency theory is more relevant to studies that seek the optimization of costs and risks associated

with the principal–agent relationship (Payne & Petrenko, 2019). I adopted a quantitative nonexperimental design as it seeks to determine relationships between variables. I employed multiple regression for the analysis of the data using SPSS Statistics (Version 27). This study's results could have significant implications in advancing the theory and practice of corporate governance. Findings could also have implications for positive social change, given the critical role that banks play in countries' economic development. The next chapter provides a comprehensive review of the literature on corporate governance to provide the context for the study.

Chapter 2: Literature Review

The problem I sought to address in this study was that stakeholders do not understand the extent to which corporate governance attributes are predictive of performance in the South Sudanese banking industry. The purpose of this quantitative nonexperimental study was to investigate the extent to which corporate governance attributes are predictive of the financial performance of banks in South Sudan. The available literature on the link between firm performance and corporate governance is strong (Agyei-Mensah, 2017c; Anand, 2017; Rossouw & Styan, 2019). The literature, however, indicates that available studies on the subject predominantly focus on the experiences of developed countries (S. Lee et al., 2019). Given the effect of country-specific factors, there was a need for further research on the relationship between corporate governance and financial performance in developing countries (Mahadeo & Soobaroyen, 2016; Mechelli & Cimini, 2019). The significance of this study is that it might improve the understanding of the impact of corporate governance practices on the financial performance of banks in South Sudan.

In this chapter, I provide a review of the current literature on the subject. The first section outlines the literature search strategy adopted for this study, followed by a discussion of the theoretical foundation for the study and the main corporate governance theories as well as an introduction to the agency theory as the main theoretical framework for the study. I then examine the available literature on the link between corporate governance and firm performance and the gaps in the literature. The final section presents the chapter summary and the transition to Chapter 3.

Literature Search Strategy

Corporate governance has gained significant interest in the past few decades. There has been considerable research on the subject over the years and several published peer-reviewed materials in academic journals and related publications. This material is the basis for the literature reviewed in this chapter, using sources in Walden University's business and management databases, including ProQuest Dissertations, ERIC, EBSCOhost, SAGE Journals Online, ABI/INFORM selection, Business Source Complete, Emerald Insight, SAGE Journals, and ScienceDirect. These databases offer various peer-reviewed journal resources, covering topics in international business, management practice and theory, and corporate strategy. In addition to these databases, I used the Google Scholar search engine to obtain literature not found in the Walden University databases. Additional sources accessed included, handbooks, encyclopedias, both online and in print.

To access the articles, I used key search terms. This included terms such as: *corporate governance theory*, *history of corporate governance*, *theory of the firm*, *board of directors*, *profitability*, *corporate governance quality*, *organizational management*, *firm performance*, *corporate governance in developing and emerging economies*, *corporate governance in Africa*, *corporate governance in South Sudan*, *agency theory*, *agency costs*, *and firm/organizational performance*. I searched for these keywords, both individually and connected by Boolean operators. The literature search consisted of searching for seminal works and peer-reviewed journal articles relating to corporate governance and performance. Using this literature search strategy, I identified several

articles relating to corporate governance and performance on Walden's databases. Out of these articles, only a few were on the state of corporate governance in Africa. There were no studies found focusing on South Sudan. I used Google Scholar to search for material on corporate governance in South Sudan to find additional reviews on the topic. However, examining the site did not produce any other articles on South Sudan. Table 1 summarizes some of the key characteristics of the literature search-terms and journal articles used in the study.

Table 1

Summary of Literature Search Terms and Databases

Topic	Key search-terms used	Databases and Journals
Definition of corporate governance	*Corporate governance; History of corporate governance*	SAGE Journals online; ABI/INFORM selection.
Corporate governance theories	*Agency theory; stakeholders' theory; stewardship theory; theory of the firm*	Google Scholar search engine; Handbooks; encyclopedias, both online and in print.
Corporate governance and performance	*Corporate governance quality; corporate governance and firm performance; corporate governance and performance in emerging economies; corporate governance in Africa; corporate governance in South Sudan.*	ProQuest Dissertations; ERIC; EBSCOhost; SAGE Journals online; ABI/INFORM selection; Business Source Complete; ScienceDirect; Google Scholar search engine.
Corporate governance and board of directors	*Board independence, and educational level of board members.*	Emerald Insight; Handbooks; encyclopedias, both online and in print.

Theoretical Foundation

Corporate Governance Perspectives

Although the concept of corporate governance has become prominent in recent decades, researchers have traced the term back to the emergence of the notion of limited liability company more than a century ago (Blankenburg et al., 2010; Chandler, 1977; Fligstein, 1990). Notwithstanding this long history, there is still no universally agreed-upon understanding of corporate governance. Parkinson (2003) presented two perspectives on corporate governance. The first relates to the "public interest" view of the corporation, attributed to the societal purposes that oblige authorities to regulate the behavior of the company, such as the imposition of state's regulations like employment laws, consumer, environmental law, and others. The other view of corporate governance posed by Parkinson relates to the company-specific governance factors that require aligning various stakeholders' interests.

Claessens (2006), on the other hand, categorized corporate governance's level understanding into the aspects that focus on a set of behavioral patterns and those concerned with the normative frameworks. The former focuses on the actual behavior of corporations, in terms of such measures as performance, efficiency, growth, financial structure, and treatment of shareholders and other stakeholders. The concern of the latter is about issues, such as the laws under which firms operate, the sources of such laws, the type of the legal system, the judicial system, financial markets, and labor markets (Claessens, 2006). Allen et al. (2004), on the other hand, categorized corporate governance's meanings into those based on narrow or broader perspectives. According to

Allen et al., while the narrow perspectives of corporate governance take the interests of shareholders as the priority, the broader view focus on ensuring that the corporation's resources benefit all stakeholders and society at large.

Corporate Governances Definitions

Definitions of corporate governance vary with the various perspectives and understanding of corporate governance. The Committee on the Financial Aspects of Corporate Governance, known as the Cadbury Committee (1992), defined *corporate governance* as "the system by which companies are directed and controlled" (1992, p. s2.5). Shleifer and Vishny (1997) defined *corporate governance* as "a means by which various stakeholders exert control over a corporation by exercising certain rights as established in the existing legal and regulatory frameworks as well as corporate bylaws" (p. 374). The World Bank defined it as "concerned with the resolution of collective action problems among dispersed investors and the reconciliation of conflicts of interest between various corporate claimholders" (Claessens, 2006, p. 4-5). The OECD (2015) defined corporate governance as a framework that "comprises elements of legislation, regulation, self-regulatory arrangements, voluntary commitments and business practices that are the result of a country's specific circumstances, history and tradition" (p. 13).

As it is clear from the varied definitions above, there is no one agreed-upon definition that describes all the aspects of corporate governance. Whereas some of the definitions focus on a set of behavioral patterns, others emphasized normative frameworks. Nevertheless, most of the definitions outlined touch on the key themes and concepts of organizational governance theories, which are the control and supervision of

the corporations and management (Aguilera & Jackson, 2010). This study relied on the OECD's definition, which subsumes within it most aspects of other definitions. Literature shows that researchers consider this definition the most accepted corporate governance definition available to date (da Costa, 2017).

Corporate Governance Theories

The origins of the concept of corporate governance can be traced back to the writings of Adam Smith in the 18th century. In his famous book *The Wealth of Nations* Smith (1776/2000) stated that:

> The directors, being the managers of other people's money than of their own, one cannot expect that they should watch over it with the same anxious vigilance with which the partners in a private company frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not for their master's honor and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in management of the affairs of such a corporation. (p. 700)

Since Smith's assertion, various theoretical frameworks have emerged to advance thoughts on the impact of the separation between ownership and control on the corporation. Kiel and Nicholson (2005) identified the agency theory and the stewardship theory as the two principal approaches that provide sound theoretical frameworks for the study of corporate governance. Agency theory, sometimes referred to as the principal–agent theory, focuses on the separation of control from ownership of the corporation (Jensen & Meckling, 1976). Here, the corporation directors manage a firm on behalf of

the owners, and the conflict of interests arises from this separation (Jensen & Meckling, 1976). The theory is the essential theoretical foundation for this study. I will discuss the key propositions and assumptions of the theory in more detail in this chapter.

In contrast to the agency theory, the stewardship theory suggests that a corporation's directors act as stewards motivated to work in the best interests of the corporation rather than for their selfish interests (Davis et al., 1997). Stewardship theorists adopt more generous assumptions of human motivation and assume that, given a choice between self-serving behavior and pro-organizational behavior, a steward will place a higher value on cooperation than self-interest. Stewards are considered to be collectivists, pro-organizational, and trustworthy. Stewardship theory involves wholesale changes to several of the core agency theory assumptions of divergent interests between agent and principal (Davis et al., 1997; Sundaramurthy & Lewis, 2003). Alongside the agency and stewardship theories, other alternative theoretical perspectives bridge variations in the principal–agent relationship. The resource dependency theory, principal–principal agency theory, and the behavioral agency theory are among the prominent alternatives to extend, challenge, expand, or relax the basic assumptions of the classical agency theory.

The resource dependence theory considers the board of directors as mechanisms for managing external dependencies, as they bring to the organization valuable resources, such as objectivity and technical expertise gained from their knowledge and business experience (Pfeffer & Salancik, 1979). With their skill, independent directors can influence the board decisions and ultimately add value to the firm. As such, the board of

directors' backgrounds, such as their age, tenure, managerial experience, industry experience, functional education, skills, and knowledge, plays a critical role in creating value to stakeholders (Pfeffer & Salancik, 1979). Therefore, outside directors may act as a means of facilitating the acquisition of external resources that are critical to the firm's success, such as legitimacy, advice, and counsel (Pfeffer & Salancik, 1979).

The principal–principal agency theory is a deviation from the classical view of agency theory in that it accounts for the different groups of principals involved in the firm, as is the case with concentrated ownership organization, which tend to have higher levels of principal–principal conflict and associated costs (Young et al., 2008). According to Walsh and Seward (1990), the theory expects that the different principals to have different levels of authority and control, which lead to conflict (Walsh & Seward, 1990). The application of the principal–principal perspective involves understanding the antecedents and consequences of this conflict and how organizations might mitigate the associated costs (Young et al., 2008).

Another notable refinement of agency theory is behavioral theory. This theory offers a more flexible framework that assumes bounded rationality, accounts for human capital, and departs from the rational choice model of agency theory (Gomez-Mejia & Wiseman, 1998; Gore & Pepper, 2015). This theoretical perspective focuses on maximization of the agent's performance as a function of ability, and of intrinsic and extrinsic motivation. The theory also assumes major modifications of the classical agency perspectives on performance, risk and uncertainty, time, and equitable pay, highlighting the major differences and uses of this alternative theory.

Agency Theory as Theoretical Foundation

The theoretical foundation that guided this study is agency theory. Agency theory integrates the disciplines of economics, institutional theory, the theory of property rights, and finance to explain how the conflicting objectives of corporation owners and the management are in equilibrium (Styhre, 2015). Current literature credits the modern agency theory thoughts to Jensen and Meckling (Bosse & Phillips, 2016; Payne & Petrenko, 2019; Styhre, 2015). In a seminal article, Jensen and Meckling (1976) developed the agency theory from the concept of agency costs. According to Jensen and Meckling, agency cost is the result of the separation between corporate ownership and control in the modern-day corporation, which delegates professional management to oversee the interests of dispersed shareholders. The agency theory demonstrates who bears costs and why, and it investigates the Pareto optimality of the principal–agent relationship (Jensen & Meckling, 1976).

Agency theory relies upon three key assumptions. The theory assumes that both the agents and principals are self-interested parties who seek to maximize self-interest, that the actors are boundedly rational, and that agents are more risk-averse than principals (Jensen & Meckling, 1976). Payne and Petrenko (2019) explained that the foundation of agency theory, based on these assumptions, is that one party (i.e., the principal) employs another party (i.e., the agent) with the expectation that this will result in future value creation. As both the agent and principal are self-interested utility maximizers, a problem arises when the two parties have divergent interests, and the agent has better information than the principal (Jensen & Meckling, 1976). This divergent interest creates the

fundamental agency problem and the belief that the agent will not act in the principal's best interests.

Jensen and Meckling's approach to the agency problem differs fundamentally from other contributions. Bosse and Phillips (2016) showed that previous literature on agency costs have predominantly focused on the normative aspects of the agency relationship. According to Bosse and Phillips (2016), the focus of the pre-agency theory was on how to structure the contractual relationship between the principal and agent to provide appropriate incentives for the agent to make choices that can maximize shareholder's wealth.

Application of the Agency Theory

Empirical studies testing the agency theory are impressive in support of the general propositions of the theory. Peasnell et al. (2000) reviewed the literature on corporate governance and found the proliferation of research aimed at improving the understanding of corporate governance practice and its impact on monitoring agency costs and improving organizational performance. Researchers summarized these findings under three key corporate governance themes. They include the role of audit and disclosure function, the rights and responsibilities of shareholders, and the structure and obligations of the corporate boards (Rashid, 2015; Shah & Napier, 2016).

Research has identified the role of shareholders as a critical force that influences the quality of corporate governance and, thus, the firm performance (Shah & Napier, 2016). With the present-day corporate dynamics, dominated by shareholders with conflicting rights and obligations, as well as with the varying degree of information and

control over the corporate action, Khanna (2016) studied the impact of ownership structure on firm performance. The findings indicate that shareholders' involvement impacts firm sustainability. Sorensen (2007) measured the impact of ownership structure on cost efficiency and found that ownership structure has a significant impact on corporate performance and cost-efficiency.

Payne and Petrenko (2019) studied how to align the board of director's interests to that of shareholders' by allowing board members and management to hold equity in the firm. The study found that members of corporate management who are also shareholders are more interested in decisions that maximize the value of the firm than those who are not. Corporate governance literature also focused on the importance of the corporate board as an essential mechanism of mitigating agency costs. Walsh and Seward's (1990) study concluded that the agency theory logic relied on the efficacy of board monitoring role, which depends mainly on board members' characteristics, including board independence. According to this argument, the study showed that corporate performance should generate better results when the board performs its monitoring role (Dalton & Dalton, 2011).

Khanna (2017) stressed the impact of audits and disclosures on corporate sustainability. The author demonstrated the link between the degree of corporate disclosures and organizational performance. Kangarlouei and Jam (2018) examined the practice of corporate governance by examining the role of external auditors in Macedonia. They found the commitment to maintain a high degree of transparency and disclosure of data and information as one of the characteristics of firms with proper

corporate management in the country. Agyei-Mensah (2017c) studied the role of the audit function and concluded that it was through transparent disclosure of financial information that the firms inform stakeholders about the financial position and performance.

Rationale for Choosing Agency Theory

Agency theory has been remarkably successful in advancing the shareholders' value creation, as the legitimate core objective of the firm (Styhre, 2015). The agency theory bases argue for the structuring of that the relationship between the agent and principal in a way that aligns both parties' interests (Fama & Jensen, 1983; Jensen & Meckling, 1976). In this context, the theory mitigates the proposition of the agency costs that arise from the diverging interests of the principal and agent in firms (Payne & Petrenko, 2019). Agency theory suits this study because it explains how principals efficiently organize exchanges with agents to employ mechanisms, including incentive alignment, disclosure, and monitoring to enhance shareholders' value (Eisenhardt, 1989; Jensen & Meckling, 1976).

Relevance of Agency Theory to the Study

Agency theory stands on the fundamental proposition of 'principal–agent' conflict of interests (Cai et al., 2015; Jensen & Meckling, 1976). The theory is among the dominant theories of economic organization and management that can challenge and explain the ubiquitous agency costs (Bosse & Phillips, 2016). Research use the theory to monitor the agent's behavior and its impact on organizational performance (Fauzi & Locke, 2012). In this sense, the theory is relevant to this study as it sufficiently addresses

the role of the board of directors in the South Sudanese banking industry and the extent to which it relates to the financial performance of banks in the country.

Literature Review

Corporate governance has received much attention in the past few decades. Researchers attribute this interest to the enormous financial crises and the series of corporate debacles that have engulfed the world in the past decades (Al Smadi, 2019; Chazi et al., 2018; Rughoobur, 2018). These failures have generated widespread recognition of the role of corporate governance in the success or failure of the modern-day corporation (Amrin, 2019). This recognition, in turn, has generated a growing drive to build knowledge and understanding of the role of corporate governance in corporations and how its practice affects performance (Ciftci et al., 2019).

Scholars trace the first significant contemporary attempts to reform corporate governance to the publication of the Cadbury Report (Crespi & Renneboog, 2010; Peasnell et al., 2000). The Cadbury Committee (1992), in their report, identified the corporate governance mechanisms necessary for the establishment of greater corporate accountability and transparency. The report has contributed positively to the promotion of good corporate governance and became an essential outline for the institutionalization of corporate governance in organizations (Hong & San, 2016; Mees, 2015).

Since the publication of the Cadbury Report, interest in corporate governance, as a mean of improving corporate performance, has been dramatic. Rughoobur (2018) observed that the post-Cadbury report had witnessed worldwide diffusion of corporate governance principles. Researchers have followed these developments with increasing

empirical research aimed at understanding the critical corporate governance mechanisms and the impact they have on corporate performance (Peasnell et al., 2000). Shah and Napier (2016) identified three critical corporate governance mechanisms that influence to corporate performance - the role of the audit and disclosure; the rights and responsibilities of shareholders/ stakeholders; and the structure and responsibilities of the corporate boards.

Corporate Audit and Disclosure Function

Since the publication of the Cadbury Report, researchers have widely addressed the vital role of the disclosure and audit function in corporate governance. Dimitrova et al. (2016) studied the practice of corporate governance in Macedonia by examining the role of external auditors. Dimitrova et al. found the commitment to maintain a high degree of transparency and disclosure as a critical characteristic of firms with quality corporate management in the country. Agyei-Mensah (2017c) studied the role of the audit function in Ghana and concluded that it was through transparent disclosure of financial information that firms in Ghana inform stakeholders about the financial position and performance. Similarly, Khanna (2016) found firm disclosures to have a positive impact on corporate profitability.

Khan and Ibrahim (2017) examined the impact of the quality of the audit function on firm financial performance in Malaysia and found a significant relationship between audit quality and firm financial performance. Kumar and Langberg (2009) studied the impact of corporate fraud and corporate audit quality to reconcile corporate fraud and investment distortions with efficient markets. The author developed a model that

associates corporate fraud with over-investment in low-return states and under-investment in high-return states. The model predicts that fraud is more likely to occur in firms with weak corporate governance.

Agyei-Mensah (2017c) examined the relationship between corporate governance mechanisms and IFRS 7 compliance in Ghana. The findings showed that discrepancies in the way listed firms in Ghana make risk disclosures under the IFRS7 requirements in the country. Kim (2015) examined the role of regulatory authorities and government interference through financial supervision. The study discussed this challenge from the perspective of financial regulation and supervision as additional and non-legal determinants of bank corporate governance. Kim argued that the stakeholder model should not legitimize the state intervention into the corporate governance activities of private sector banks through such non-legal measures as financial supervision. Thus, the author sought alternative mechanisms in corporate regulation to enhance corporate governance from a comparative perspective.

Shareholders'/Stakeholders' Rights

The role of shareholders/stakeholders in the corporation is another essential characteristic of corporate governance, which researchers have extensively addressed in recent years. Scholars have attributed the increasing focus on shareholders/stakeholders rights to the nature of the present-day corporation, which comprised mainly of groups with diverse and conflicting rights and obligations; and who vary in the degree of information and control they have on the corporate actions (Admati, 2017; Shah & Napier, 2016). In recognition of the prevailing shareholding patterns, Khanna (2016)

studied the impact of the ownership structure of corporations and found that the low ownership concentration leads to lower financial performance. In the same vein, Sorensen (2007) measured the impact of ownership structure on cost efficiency and found that ownership structure has a significant impact on corporate performance and cost-efficiency. Buallay et al. (2017) also confirm these findings.

Other researchers have focused on the broader stakeholders' relationships and the impact that has on corporate governance. Anand (2017) carried out an empirical study on the link between corporate governance, employee engagement, and the achievement of firm corporate excellence. The study revealed that there is a significant impact of employee engagement on customer experience and corporate performance. The importance of employees as crucial stakeholders was also investigated by Ibrahim and Zulkafli (2015) and concluded that sound human resource practices enhance the internal capabilities of an organization to deal with current and future challenges. Klock et al. (2005) investigated the impact of corporate governance on bondholders by examining the relationship between the cost of debt financing and governance index. Klock et al. (2005) showed that there is a negative relationship between the governance index and the cost of debt financing.

K. Lee and Barnes (2017) examined corporate governance and performance among founding family firms and non-founding family firms. The study results indicated that the founding family firms do not outperform nonfamily firms, and the founding family firms with founders as Chief Executive Officers (CEO) are one of the best performers among founding family firms. The study provides some sense about the

decisive role of the founding members of family firms and the importance of the succession plan by the founding members. Sreenu (2017), studied the perspective of financial managers' decision making on critical corporate finance matters. Sreenu's (2017) findings show that corporate finance and sustainability practices vary depending on the firm and management characteristics.

The Role of Corporate Board

Corporate board is the third dimension of effective corporate governance mechanisms in organizations, and many studies have highlighted the duties and roles expected from a useful board of directors (Casey et al., 2011; Khanna, 2016). According to Jordan (2019), the importance of the corporate board in governance stems from the fact that directors manage corporations on behalf of shareholders. Jordan argued that members of the board of directors owe the shareholders specific fiduciary duties. Zhao and Lv (2011) consider fiduciary functions as the law that guides the board of directors to act prudently. Zhao and Lv highlighted two types of fiduciary responsibilities attached to the role of the board of directors - the duty of care and duty of loyalty.

Duty of Care

Zhao and Lv (2011) describe the duty of care, expected from the board of directors, as the obligation on members of the board of directors to make rational decisions. As explained by Jordan (2019), though the duty of care does not necessarily mean that board members should have expertise knowledge in their area of responsibilities, nevertheless, they should have some basic understanding of the laws and regulations that govern the corporation. As such, board members should stay informed of

corporate conditions, through regular attendance of meetings; regularly review the reports and other materials provided to them; and that they must exercise independent judgment in decision-making (Tucker, 2010). Accordingly, the duty of care requires that the board of directors conduct its business according to applicable legislation and policies of the organization. The board should ensure the appropriateness and adequacy of internal controls and risk management guidelines, as well as the integrity of financial reporting.

Fulfilling the duty of care requires directors to implement and monitor information and reporting systems in a manner that will allow them to reach informed judgments concerning both the corporation's compliance with the laws and its business performance (Jordan, 2019). As such, the duty of care obliges that the board is accountable and transparent in what it does (Soobaroyen & Mahadeo, 2012). According to Soobaroyen and Mahadeo (2012), the accountable board ensures clarity in the systems and structures and allows clarity in the day-to-day management of the organization. Sarbanes-Oxley (2002) has enhanced the accountability of the board by making it mandatory that directors sign and certify that financial reports are not misleading and that they represent the fair financial position of the organization. Sarbanes-Oxley (2002) also demands that the board operates transparently, and reveals all material and relevant information about the organization. Transparency principles require that all publicly trading companies adhere to disclosure requirements such as the Generally Accepted Accounting Principles (GAAP), the requirements of Sarbanes-Oxley, and the New York Stock Exchange Corporate Governance Rules (Sarbanes-Oxley, 2002).

Duty of Loyalty

Jordan (2019) described the duty of loyalty as the expectation that the board acts in the corporation's best interest. To fulfill the duty of loyalty, members of the board of directors should ensure that relationships with the corporation are consistent with those the corporation grants to persons who are not board members. Zhao and Lv (2011) emphasized that fulfilling the duty of loyalty, the board should take precautions to avoid the appearance of a conflict of interest. As explained by Jordan (2019), conflicts of interest refer to when the board engages in transactions that would not comply with laws and regulations governing the industry or the corporation. Such instances include conditions that govern transactions with insiders and connected juristic persons; board member is taking advantage of a business opportunity for his or her benefit; payment of excessive remuneration or dividends, given the corporation's size or level of capital or earnings.

Researchers equate the duty of loyalty to the principle of responsibility. Nur'ainy et al. (2013) described board responsibility as the needed conformity and compliance with rules and regulations applicable to the governance system. Duty of loyalty also implies being fair to all stakeholders and exercise of roles and duties of the board of directors in a professional manner (Anand, 2017). Fulfilling the fiduciary duty of care and loyalty, therefore, requires the board to develop strategies that attract and retain competent management with the corporation (Mees, 2015). More importantly, it demands that the corporate board have the level of attributes that can help them exercise diligence and skill that a reasonably prudent person would exercise in comparable circumstances

(Mees, 2015). It is these attributes of the board of directors that are the focus of this study. In the next paragraphs, I discuss some of the key attributes of a successful corporate board of directors.

Attributes of Board of Directors

Researchers have examined the desired attributes that can help the board to perform its duties and enhance corporate decision-making. Srivastav and Hagendorff (2016) listed the board size, board independence, and board committees as the key attributes of the board of directors that fulfill oversight duties. Augustine (2012) investigated the impact of board gender composition on corporate performance.

Equally, Iqbal, and Kakakhel (2009) measured required board attributes in terms of board size, independent director, board committees, board remuneration, and level of education of board members. Khanna (2016) discussed specific board attributes in the manufacturing sector in India, including the impact of board composition, board-level committees, role and power of audit committee expected to enable the board to better fulfil its monitoring role to protect the interest of shareholders. In the remaining part of this section, I will examine some of the key attributes of the board of directors that are of relevance to this study, mainly: board independence, board size, the educational levels of board members, and the gender composition of the board of directors.

Board Independence

Another critical determinant of board effectiveness that has been the focus of research is the board independence (Fama & Jensen, 1983; Zhang & Gimeno, 2016). Zhang and Gimeno (2016) defined an independent board as the one in which the majority

members do not directly have a material relationship with the organization, whether in the form of being a partner, shareholder, or officer of the organization. The literature traces back the justifications for the independent directors to the concept of the reputational capital of directors, developed in the seminal work by Fama and Jensen (Fama & Jensen, 1983). According to the authors, independent directors contribute to corporate value through their reputation, visibility, and relationships. This reasoning is consistent with the later work of Cook and Wang (2011), which shows that directors' performance relates more to their business skills rather than ease of access to insider information. Ciftci et al. (2019) investigated the relationship between corporate governance and firm performance in Turkey, focusing on the role of independent boards and found a positive relationship between corporate governance elements and performance. Darrat et al. (2016) also found the board's independence to have a positive influence on corporate performance. Cuomo et al. (2016) found a positive association between the operating performance of European firms and board independence.

Other researchers were skeptical about the effectiveness of an independent board as there are other factors that affects board independence, such as CEO bargaining power and directors' diligence (Duchin et al., 2010). O'Sullivan (2000) showed weak evidence linking board independence to organizational performance. Carcello et al. (2002) suggested better corporate results in the absence of independent boards. The literature attributes the lack of conclusive evidence to many reasons. First, the current definition of independence is too loose and is affected by other types of factors (Hwang & Kim, 2009). Second, supervisory skills and cognitive abilities constrain the board of directors' views

(Hwang & Kim, 2009). Finally, the previous analysis of the board of directors did not adequately combine different levels of analysis, i.e., personal, corporate, and sectorial (Lopez-Iturriaga & Morros-Rodriguez, 2014).

Board Size

Board size refers to the number of directors that comprise a board of an organization. Board size in this study is a proxy for the determination of the dominance of the board over the executive management (Al Smadi, 2019; Nakano & Nguyen, 2012). The size of the board differs from country to country, depending on the applicable laws and regulations. Effectiveness of board size has been a critical topic of research, and the findings, regarding what could be the ideal size of a useful board, point to conflicting results (Al Smadi, 2019; Jensen, 1993). While some researchers argue that smaller board size is more effective and makes board easy to coordinate and organize (Nakano & Nguyen, 2012), others argued in favor of larger board sizes (Conger & Lawler, 2009).

From the agency theory perspective, Fama and Jensen (1983) argued that larger board size provides more effective monitoring, as it can relatively reduce the CEO's authority through the active participation of the other directors in board meetings. Balatbat et al. (2004) criticized the larger board that it leads to less meaningful discussion, time-consuming, and often results in a lack of cohesiveness on the board. Other researchers also argue that when a board becomes too large, it often moves to more symbolic roles without fulfilling its intended functions, and its role in planning, coordinating, making decisions, and holding regular meetings becomes difficult (Balatbat et al., 2004). For these reasons, Shakir (2008) argued in favor of smaller boards. The

main criticism on smaller boards is that they miss out on having a more extensive range of experts' advice (Ho et al., 2016). Shakir (2008) contended that the advancements made, particularly in the field of technology, have resulted in changing the way boards participate and have brought about massive cost reductions.

Board of Directors' Education

The literature on corporate governance associates knowledge and level of education of board members with superior corporate performance (Gottesman & Moery, 2015). Wang et al. (2017) describe aboard as a bundle of intellectual capital that enables it to perform its fiduciary duties. As such, studies consider the knowledge that comes with individual board members to have a considerable impact on corporate performance. Prospective investors often search for capable managers who can increase the value of the firm, and the educational background of board members is an essential attribute to this end (Gottesman & Moery, 2015). As the information about the education of firm leadership is often available, investors use this as an indicator of how they will run the firm. Gottesman and Moery (2015) studied firms on the New York Stock Exchange to test if their education and experience related to firm success and found the association between education and long tenure with performance.

Other studies on board education produced opposite results. Fedaseyeu et al. (2017) considered years of long experience of the board members to indicate superior performance. Barker and Mueller (2002) examined the relationship between a board member's age, tenure, and educational background and innovation adoptions in the

United States. The findings indicate that the association between these attributes and innovation adoptions not to be significant.

Board Gender Composition

Gender diversity, as a vital characteristic of an effective board, has become a significant issue in corporate governance research in the past few years (Sultana et al., 2020). Board of directors has traditionally comprised of male members, and the inclusion of female board members brought up discussions on gender diversity (Adeabah et al., 2019). As argued by Augustine (2012), findings show that diversification of life experiences provide new insights and perspective, which in turn can support the execution of fiduciary duties and the improvement of the value and performance of an organization. Adams and Ferreira (2009) argued that a gender-diverse board facilitates a diversity of voice, and thus, enriches creativity, which can lead to improved governance and performance. Letza et al. (2008) stated that women directors bring new insights into the process of decision making in the organization. Other research have found female directors to have a better understanding than male directors in business issues, which improves the quality of board decisions (Muttakin & Khan, 2014). Jizi and Nehme (2017) also found gender-diverse board to improve the organizational image and is reflective of the absence of discrimination.

A vital explanation of these findings is the observation that women have risk-averse behavior, and as such, women board members are likely to be more independent in decision-making and more transparent in disclosing public information (Jizi & Nehme, 2017). However, a study by Joecks et al. (2013) concluded that women's participation in

the board could positively influence the performance if their representation is more than 30%. The reaction of the investors to women's board participation shows that the representation of female directors on the boards can enhance monitoring and improve earnings (Sultana et al., 2020). The implication is that shareholders can positively perceive women on the board to bring about significant changes, which make shareholders more confidence in the success of the company (Adeabah et al., 2019).

Corporate Governance in South Sudanese Banks

South Sudan is the youngest country in the world after it gained independence from Sudan in July 2011. The independence of the country was the outcome of an internationally recognized referendum following the peace agreement concluded between the two parts of Sudan in 2005 (Gurtong Trust, n.d.). Before the signing of the peace agreement, branches of banks based in northern Sudan provided banking services in the then southern Sudan region based on Sharia law (Islamic banking system). The peace agreement exempted South Sudan from all forms of the Sharia codes that were applicable in the country before the signing of the peace agreement (Gurtong Trust, n.d.).

As the implementation of the agreement came into force in 2005, the branches of northern Sudanese banks operating in the southern Sudan region pulled out as they did not want to operate under the new conventional interest-bearing banking system in southern Sudan. Because of this decision, the region was without any banking services. Therefore, the regional administration took measures to attract banks that are willing to come to southern Sudan to operate a conventional banking system. Several banks from the eastern, southern, and western Africa regions were welcomed to southern Sudan to

open branches and subsidiaries. It is these banks that became the nucleus of the current banking system in the young country. Today, there is a total of 35 banks in the country out of which 40% are joint-venture banks, 32% local-owned banks, and 28% are either branches or subsidiaries of foreign-owned banks, mainly from Eastern African, Southern African, Western African regions and Qatar (Bank of South Sudan, 2018).

An Act of parliament established the Bank of South Sudan (the Central Bank) in August 2011, shortly after South Sudan's independence (Bank of South Sudan, 2011). Following its establishment, the Bank of South Sudan embarked on putting in place the necessary banking sector's regulatory frameworks. The Bank sponsored a set of banking laws, which were later passed by the national parliament, including the Banking Act 2012; Foreign Exchange Act 2012; and a dozen regulations and circulars that outline how regulated entities conduct the business of banking in the new country.

One of the principal regulations the Bank of South Sudan introduced in 2012 is the Corporate Governance Regulations. The regulations set forth the guidelines that establish the minimum expectations for the promotion of sound management in the banks operating in South Sudan (Bank of South Sudan, 2012a). The regulations are comprehensive and cover the three major areas of corporate governance, mainly areas that deal with the shareholders' activism; audit and disclosure; and the role of the board of directors.

Specifically, the Corporate Governance Regulations outline the organization of the board of directors of banks in South Sudan. It sets the minimum expected educational qualifications of the board and senior management members, the independence of the

board, and the minimum/maximum number allowable member on any board (Bank of South Sudan, 2012a). This includes the role to ensure that there are appropriate policies in place to guide and monitor the performance of executive management. When performing these responsibilities, the board of directors and members of senior management should perform their duties with honesty, good faith, and in the best interest of the stakeholders. Also, they should exercise care and diligence that a reasonably prudent person would exercise, promote fairness, and avoid conflicts of interest when making decisions (Bank of South Sudan, 2012a).

Corporate Performance Measures

To fulfill fiduciary duties, organizations have the responsibility to regularly assess progress to measure performance (Uyar, 2010). Performance measurement is an enduring subject used indiscriminately to describe different things (Akbaba, 2012; Hoopes et al., 2003). In this regard, researchers have advanced several theoretical approaches to measuring organizational performance. Such concepts include the stakeholder's approach, competitive value approach, the system resource approach, and the goal approach (Akbaba, 2012; Shukeri et al., 2012). The stakeholder and competitive value approaches provide an integrated view of the organizational performance against competitors, while the system resource approach assesses the organization's ability to obtain resources to maintain the organizational systems (Akbaba, 2012). On the other hand, the goal approach measures the extent to which an organization achieves its set goals (Akbaba, 2012; Richard et al., 2009).

Out of these performance measurement approaches, the literature indicates that the goal approach enjoys wider acceptance (Larimo et al., 2016). As explained by Akbaba (2012), the goal approach relies on the use of financial measures, as proxies, for gauging organizational performance. Researchers justify the widespread use of financial measures for the reasons that they are more objective, simple, and easy to compute (Larimo et al., 2016). However, Akbaba (2012) criticized the use of financial measures in that they ignore other nonfinancial aspects of performance; and that they sometimes lack accuracy and exposed to manipulation. Literature generally classifies the financial measures of performance into two categories: accounting-based and market-based measures of financial performance (Carini et al., 2017; Combs et al., 2005; Nizamuddin, 2018). The following sections discuss each of these measures in more detail.

Accounting-Based Measurement of Performance

As explained by Yeniyurt (2003), Chow and Van der Stede (2006), Gjerde and Hughes (2007), the accounting-based measures refer to those groups of performance measures derived from financial data. Yeniyurt (2003) categorized the accounting-based measures as profitability measures. Masa'deh et al. (2015) explained that the accounting-based measures demonstrate the level to which the firm has earned at a point in time. Among the widely used types of the accounting-based measures are the ROA, Return on Equity (ROE), Return on Sales (ROS), and Return on Capital Employed (ROCE).

The proponents of the accounting-based measures credit it with the advantages that their computations are straightforward and comparable across the firms (Al-Tuwaijri et al., 2004). However, some of the criticism often labeled against the accounting-based

measures is that they conceptualize to be reflective of past and short-term financial performance (Hoskisson et al., 1994). Accounting-based measures also lack predictive ability to explain future performance. The measures also tend to provide inadequate consideration to difficult-to-quantify intangible assets (Ittner & Larcker, 1998). In the following sections, I discuss some of the key accounting-based measures often used.

ROA. ROA was developed in the 1900s by DuPont Power to evaluate corporate financial success (Brewer et al., 1999). The literature classifies ROA among the family of profitability ratios (Chowdhury & Rasid, 2017; Menicucci & Paolucci, 2016). Corporations use the ROA to assess the firm's operating performance, relative to investments it has made in assets (Nguyen, 2019).

Velnampy (2013) compute the ROA as the ratio of the firm's net profit to its total assets. It explains what the firm can do with what it has got and how many dollars of earnings it can obtain from each dollar of assets invested. Haniffa and Hudaib (2006) explained how to determine the effectiveness of ROA. According to Haniffa and Hudaib (2006), the higher the ROA, the more effective is management in the use of firm's assets to the advantage of shareholders. Higher ROA also reflects the company's effective use of its assets in serving the economic interests of its shareholders (Ibrahim & AbdulSamad, 2011). As a result, a firm that shows a positive ROA achieves prior planned high-performance goals (Nuryanah & Islam, 2011). ROA, therefore, assesses firm efficiency in generating earnings from the uses of its assets (McClure, 2018).

The literature considers ROA to be among the best accounting-based measure of financial performance, as it reflects the level of efficiency in the use of organization

assets (Athanasoglou et al., 2008; Staikouras & Wood, 2004). Other researchers, however, highlighted ROA disadvantages. Mbekomize and Mapharing (2017) criticized ROA in that it shows biased during comparisons among different industries, given the variation in age, structure, and asset size across industries. Goddard et al. (2004) also consider the ratio as backward-looking for its reliance on historical financial data. Moreover, Kapopoulos and Lazaretou (2007) argued that the profit figures used in calculating the ratio rely on limited accounting standards with biases of the accounting practices. Notwithstanding these shortcomings, ROA has been the most widely used accounting-based measure in the studies relating to corporate governance (Ibrahim & AbdulSamad, 2011; McClure, 2018).

ROE. ROE, like ROA, is an accounting-based financial performance measure that assesses corporate efficiency in generating earnings from shareholders' equity (McClure, 2018). ROE is a ratio of profitability that indicates how much profit a firm generates as a percentage of shareholders' equity. The measure was also developed by DuPont Power in the 1900s to evaluate the success by comparing operating income to the firm's total equity (Brewer et al., 1999). ROE is useful for comparison of performance across firms and industries (McClure, 2018). ROE indicates the management's success or failure at maximizing the return to stockholders based on their investment in the firm (Chowdhury & Rasid, 2017). ROE, however, does not tell the owners whether the firm is creating shareholders' wealth or destroying it (Masa'deh et al., 2015).

ROS. Sometimes referred to as net profit margin, ROS is a financial performance indicator used by firms to benchmark performance. The ratio indicates how successful

the firm is in creating profits from its sales. Masa'deh et al. (2015) defines ROS as the net profit divided by total sales. Although a higher ROS indicates the firm's excellent financial performance, literature criticized the ratio that it relies only on the profits created but ignores the firm's balance sheet and cash flow statements. McClure (2018), therefore, considers the ROS to provide an incomplete view of management performance.

ROCE. ROCE is the net profit divided by the sum of owners' equity and the firm's long-term borrowings (Umobong & Agburuga, 2018). ROCE looks at the business capital employed as a whole and is a vigorous measure of efficiency compared to ROE (Umobong & Agburuga, 2018). Generally, a higher ROCE ratio is a sign of the effective utilization of the firm's capital employed. A fundamental shortcoming against ROCE is that the measure is difficult to contrast across firms due to the challenges of accounting for intangibles (Chowdhury & Rasid, 2017). As explained by Chowdhury and Rasid (2017), it is possible that firms with a low level of intangibles, like goodwill can judged to be more successful, due to higher ROCE than firms with a high level of intangibles.

Market-Based Measurements

Unlike the accounting-based measures, market-based measures are those types of financial measurements that focus on the stock market evaluation of the firm's financial performance (Hoskisson et al., 1994). Market-based measurements represent the stock market's assessment of the firm's performance and the ability to sustain in the market in the long run (Cochran & Wood, 1984). Market-based measurement has the feature that they are forward-looking, and they reflect long-term expectations of the firm's future performance (Hoskisson et al., 1994). As such, these measures should provide incentives

for investors regarding future prospects of the firm (Sanchez-Ballesta & Garcia-Meca, 2007). Some of the main disadvantages labeled against market-based approach are that they apply to listed companies only. The measures are also not sensitive to firm-specific perceptions (Sanchez-Ballesta & Garcia-Meca, 2007). Some of the commonly used market-based measures include Tobin's Q, and economic value added (Simerly & Li, 2001). The following sections discuss these two measures.

Tobin's Q. Tobin's Q is a financial measure of performance that uses the market value of a firm's outstanding stock and debt as the replacement cost of the assets of the firm (Lindenberg & Ross, 1981). Tobin's Q was first introduced by Nicholas Kaldor in 1966 and later popularized by Nobel Laureate, James Tobin of Yale University. The measure is a forward-looking alternative for the traditional accounting-based financial measures of performance (Shan & McIver, 2011). The measure is the sum of the market value of equity, the book value of the preferred stock, and the book value of the total debt divided by the book value of the firm's assets (Lindenberg & Ross, 1981). The measure is, therefore, calculated as a ratio of the firm's market capitalization plus total debt divided by the total assets of the company.

Like the other market-based measures, Tobin's Q is a forward-looking measure of performance (Shan & McIver, 2011). Tobin's Q is, however, criticized because of the difficulty in its computation due to challenges in the determination of the market value of some assets (Shan & McIver, 2011).

Economic Value Added. Economic Value Added (EVA) is a modern corporate financial performance measure that Stern and Stewart developed in the 1990s. EVA is the

difference between a company's profit and the cost of its capital (Madhavi & Prasad, 2015). The measure takes into account earnings remaining after the deduction of all costs, including opportunity costs relating to the firm activities (Madhavi & Prasad, 2015). According to Reddy et al. (2011), a firm earns a positive EVA and thus created wealth to its shareholders when it meets all its obligations.

The strength of EVA is that it takes into account the cost of capital and also provides a better predictive measure compared to accounting-based measures (Reddy et al., 2011). Madhavi and Prasad (2015) conducted a comparative study between EVA and traditional accounting-based measures and found the EVA to be a better predictor of the market value of the firm. Other findings, however, do not support the superiority of EVA as a measure of financial performance. Maditinos et al. (2006) conducted a study on EVA and share prices and concluded that share prices are more closely associated with other market-based measures like earnings per share (EPS) than with EVA. Patel and Patel (2012) conducted a study on Indian banks, and the findings did not show the impact of EVA on its share price. Furthermore, a shortcoming of the EVA is that its values are not published by companies, as part of financial reports. As such, the calculation of EVA can be time-consuming (Patel & Patel, 2012).

Board Attributes and Performance

Studies on the link between governance attributes and corporate financial performance reveal mixed results. While there is a wealth of literature that establishes the presence of an association between the board attributes and performance (Aggarwal, 2013; C. Lee et al., 2017; Ueng, 2016), findings from other studies do not clearly show

the existence of a strong relationship between the variables (Azami, 2016; Darrat et al., 2016). Azami (2016) examined the relationship between corporate board attributes and financial performance in listed companies in Iran. The author adopted quantitative research approach, using multivariate regression analysis. Azami's (2016) findings show the vital role that the board structure have on financing decision-making of firms.

Ganapathy and Kabra (2017) examined the implications of specific board characteristics on environmental performance in India. The results show that the firm's specific characteristics, like the firm's size and environmental certification, can influence environmental outcomes. Naseem et al. (2017) carried out a nonexperimental quantitative study on the relationship between board size and corporate performance and found a positive directional relationship between board size and corporate financial performance. Darrat et al. (2016) studied the relationship between the corporate board and the risk of bankruptcy. The study concluded that a firm with a larger board size could reduce the risk of bankruptcy. Buallay et al. (2017) found a significant relationship between the size of the board of directors and performance.

Board independence has considerable influence on firm performance. Khanna (2016) found that a higher proportion of independent directors to have a positive impact on the profitability levels of the manufacturing companies in India. Agyei-Mensah (2017a) also identified that there is a positive association between the proportion of non-executive directors on the board and the level of risk disclosure and compliance in organizations. The author found that the value of the firm, with the board with independent majority members to have a higher number of independent directors in

comparison to dependent directors. Wessels et al. (2016) also investigated how high performing publicly traded S&P500 firms organize their corporate governance functions. Wessels et al. (2016) found a positive correlation between board attributes and financial performance, which implies that improved corporate governance practices' association with high financial performance.

Other studies, however, did not establish a conclusive relationship between board attributes and corporate performance. Shawtari et al. (2016) studied the impact of board committees on performance and found the coefficient of intense monitoring not to be significant, which implies that board committees may not add value to performance. Abbadi et al. (2016) discussed the impact of the independent board on earnings management, using industrial and service firms in the Kingdom of Jordan. The findings show that the earnings are negatively affected by the overall index of corporate characteristics. Ganapathy and Kabra (2017) found that CEO duality increases the agency cost and has a significant impact on the firm's financial performance, primarily due to the restricted board's oversight function.

Gaps in the Literature

Current literature on the relationship between corporate governance and firm performance highlights the presence of gaps in the literature at both the country as well as at industry levels. Tuan and Tuan (2016) examined the link between corporate governance characteristics and the financial performance of publicly listed firms in Singapore and Vietnam. The study found the size, composition, and diversity of the boards in the two countries to be significantly different. Agyei-Mensah (2017b) studied

the relationship between corporate board and corruption in Botswana and Ghana. The study results generally found the perception of corruption in Ghana to be higher than in Botswana. Domadenik et al. (2016) investigated the link between political connectedness, as a proxy for CEO duality, and firm performance. The findings revealed that political connectedness could thrive in countries with weak democratic institutions. Duong et al. (2016) investigated the relationship between corporate governance and national culture and the implication it imposed on a firm's performance. The results revealed that national cultural characteristics have a significant influence on cross-country variations, regarding the practice of corporate. Blanc (2016) studied the relationship between corporate governance and the concept of social justice. The author concluded that the relative hierarchy of political values differs significantly from one country to another.

On the industry level, the literature reveals variations in the relationship between corporate governance and performance within the banking industry. Levine (2004) classified this literature into three strands. The first strand described how corporate governance practices of banks differ from those of non-banking firms. The second strand of literature looks at how better governance practices in banks can help financial sector development and the channels through which information disclosure in the financial sector affects investments, productivity, and firms' added value. The third strand, with its origin in agency theory, is the impact of corporate governance practices on banks' performance and efficiency. This study draws on the third strand of literature and uses the agency theory as its theoretical foundation.

Several studies indicated that factors like bank ownership structure, the level of credit risk, bank's size, bank age, industry, and group affiliation have influence on corporate governance and bank performance (Ciftci et al., 2019). Ciftci et al. (2019) found that the ownership structure of state-owned banks is a critical factor in poor performance. Islam et al. (2015) supported these findings and show that non-state-owned banks had better performance than state-owned banks. Ado et al. (2017) examined the relationship between the attributes of corporate governance and performance of banks in Nigeria and the findings indicate a positive relationship between board size and performance and an insignificant negative relationship between the audit committee and performance.

de Haan and Vlahu (2016) examined the results of a survey conducted on the empirical literature on corporate governance characteristics in banks and non-banks firms. The survey focused on three key characteristics of corporate governance in banks, namely board composition, ownership structures, and executive compensation. de Haan and Vlahu (2016) review indicate that the traditional links between performance and corporate governance of non-banks do not often hold for banks. John et al. (2016) also examined the literature on the relationship between corporate governance and performance of banks in the United States and observed the difference between banks and non-banks practices.

Pillai and Al-Malkawi (2016) examined the quality of corporate governance in banks within the countries of the Gulf Cooperation Council (GCC) to test if there are differences in corporate governance adherence levels between banks and non-banks

companies. Pillai and Al-Malkawi (2016) show that the market dynamics of the GCC countries, regarding corporate governance practice, is still a new concept to non-banks. Enhancing board effectiveness is key to improving the governance scores in the GCC countries. Similarly, Peters and Bagshaw (2014) measured the impact of corporate governance on the performance of the manufacturing, oil-gas, and financial sector companies of Nigeria. The authors found that corporate governance practices were very high in the banking sector in comparison to manufacturing and oil-gas companies.

Lin and Chang (2016) discussed the determinants of corporate governance structure in the banking industry in Taiwan. The study found a correlation between performance and larger board size and more independent directors. The findings indicate that banks tend to face a more sophisticated market, and as such, they need a skillful number of directors to provide professional knowledge. Pasic et al. (2016) examined the practice of critical corporate governance characteristics in Polish and Slovenian banks measured by the corporate governance index. Findings indicate that unlike Poland, Slovenia was able to achieve lower index scores. The study found that the density of banks, with the highest corporate governance index scores, was higher in Poland than in Slovenia. The study results have highlighted areas of similarities and differences across the two countries.

Summary and Transition

Globalization, corporate scandals, and increased demand for corporate transparency all have place corporate governance and the role of the board of directors at the forefront of corporate sustainability research in the past few years. Review of

literature carried out in this chapter highlighted main theoretical perspectives and has also generated a considerable amount of material on the link between governance attributes and corporate financial performance.

In summary, the literature reviewed revealed inconsistencies in findings regarding the connection between corporate governance and performance. While a large body of literature confirms the relationships between corporate performance and board attributes (Azami, 2016; Bhasin, 2009; Cosset et al., 2016), there is also a significant amount of literature showing a weak relationship between the variables (Dedman, 2002; Ibrahim et al., 2017; Iskander & Chamlou, 2000). The literature generally attributes this variation to the country as well as industry-specific considerations (de Haan & Vlahu, 2016; Tuan & Tuan, 2016).

Because of the mixed results and divergent findings across countries and industries, the author contends that there is a strong need to conduct this research. By investigating the link between the attributes of corporate governance and performance in South Sudan's banking industry, there is potential that findings might add value to existing corporate governance literature. In this sense, the study findings might contribute to the understanding of the association between corporate and performance in South Sudan's banking industry. In order to determine this association, the study employs a quantitative nonexperimental correlational design, as discussed in Chapter 3.

Chapter 3: Research Method

In this quantitative, nonexperimental study, I analyzed the extent to which the two corporate governance attributes of level of board independence, and level of board education predicted the banks' financial performance in South Sudan. A review of the available literature on corporate governance established the relevance of the research problem addressed by this study. The objective in this chapter is to outline the plan and procedures that I followed in carrying out the study. The chapter begins with a restatement of the study variables, and an outline of a research design that is suitable to answer the research question posed. Next, I provide a definition of the target population and the sampling method, as well as a description of the procedures for instrumentation and the data collection plan. This is followed with a presentation of the data screening and analysis procedures and a discussion of the threats to study validity and any ethical issues related to the study. Finally, I provide a concise summary and the transition to Chapter 4.

Research Design and Rationale

Study Variables

Banks are vital players in the economic wellbeing of any country, given their intermediating role of facilitating the movement of financial resources between savers and investors (Ado et al., 2017). For banks to be effective in this role, their sustainability has always been a concern to policymakers (John et al., 2016). One of the fundamental prerequisites for banks' sustainability is the need to have a strong board of directors that is capable of delivering on the fiduciary role and address problems that arise when the

interest of principals and agents' conflicts (Jensen & Meckling, 1976). As argued by Srivastav and Hagendorff (2016), a successful board of directors should possess specific attributes. In this study, I examined the performance of banks in South Sudan and investigate the extent to which the attributes of the board of directors are predictive of the industry's performance. The outcome variable of the study was the banks' financial performance, measured by ROA. The predictive variables were two attributes of the board of directors, which represent the practice of corporate governance in the South Sudanese banking industry: level of board independence and level of board education. Chapter 1 and the instrumentation section of this chapter include a more elaborate definitions of these variables.

Research Design

One of the critical decisions a researcher has to make, following the establishment of a robust theoretical framework and the identification of research questions, is the choice of the appropriate research design (Fischer & Bloomfield, 2019). Fischer and Bloomfield (2019) described the research design as the overall strategy used by researchers to answer a research question. In conducting a study, a researcher may consider three design approaches: quantitative, qualitative, and mixed (Guetterman et al., 2015). The qualitative methodology suits situations where the researcher wishes to understand the meanings that individuals or groups ascribe to a social phenomenon (Fischer et al., 2014). To this end, qualitative researchers collect data in a natural setting that is sensitive to people and places under study; and where data analysis is both inductive and deductive and establishes patterns and themes (Fischer et al., 2014). A key

limitation of qualitative methodology is the limited generalization of findings to a broader study population (Yin, 2017). The qualitative approach would not have been suitable for this study as the intent was to establish a predictive relationship among variables rather than to explain participants' experiences with the implementation of corporate governance in banks in the country. Mixed methods studies combine elements of qualitative and quantitative methodologies. Researchers employ mixed methods design if qualitative and quantitative methods are not alone adequate to understand best the research problem (Fischer & Fethney, 2016). Mixed methods were also not suitable for this study because a qualitative approach would not have been appropriate.

The third design option, the quantitative approach, provides the means to test hypotheses based on theory regarding the relationships among the study variables (Fischer & Bloomfield, 2019). It requires the use of measured variables, thereby making it possible to perform statistical procedures to test the strength of the relationship between variables (Fischer et al., 2014). Guetterman et al. (2015) argued that quantitative design helps reduce observer-induced bias. The choice of a quantitative design was appropriate for this study as the goal was to determine relationships between variables. A quantitative method is suitable when researchers plan to use numerical data to examine relationships or differences between dependent and independent variables (Guetterman et al., 2015). The design also helps identify the best predictors of outcomes (Fischer et al., 2014).

There are various types of quantitative research designs that researchers use to obtain evidence to answer specific research questions. Among these, the two main quantitative design types are experimental and nonexperimental (Fischer & Bloomfield,

2019). According to Fischer et al. (2014), in experimental designs, researchers expose at least one group to treatment in a particular manner and compare the expected outcomes to data collected from a control group that receives a different treatment. Nonexperimental designs, on the other hand, typically involve studies that seek to identify characteristics of a population and the relationship between such characteristics (Fischer et al., 2014). A quantitative nonexperimental design also enables researchers to make predictions based on their understanding of the nature of the relationship between naturally occurring variables (Fischer et al., 2014). This design was the more appropriate to address the stated research questions and hypotheses in this study, which was an investigation of the extent to which the practice of corporate governance in the South Sudanese banking industry predicts the financial performance of banks in the country.

Methodology

Population

The population in a research study refers to a group of people or objects with shared characteristics, and on which the researcher wishes to draw conclusions or inferences (Fischer et al., 2014). The target population for this study consisted of the current 35 banks operating in South Sudan as well as banks that are expected to enter the industry in the future in South Sudan. Banks have agency-related problems because of the inability of owners (shareholders) to directly monitor the management (Ciftci et al., 2019). As such, good corporate governance mechanisms in South Sudanese banks may decrease agency problems and improve the performance of the banks operating in the country in the future.

As an acknowledgment of the importance of corporate governance in banks, the Bank of South Sudan (i.e., the central bank/regulator) introduced its first-ever regulations on corporate governance in 2012. The regulations are mandatory for adoption by all the banks currently operating in South Sudan, as well as the banks that may enter to operate in the country in the future. The Bank of South Sudan required any bank operating in the country to compile periodical financial reports (Bank of South Sudan, 2011). All banks are also required to report details of board members for the central bank approval before such members assume their responsibilities. The targeted population of the existing and future banks, expected to enter the South Sudanese market, are the source of this study's sample.

Sampling and Sampling Procedures

Sampling in the research context is the process of choosing a subset of sufficient size from among the targeted population for statistical analysis to represent the population (Fischer & Fethney, 2016). In choosing the sample for this study, I utilized a sampling frame consisting of 35 banks operating in South Sudan. The sampling frame included banks that have adopted corporate governance regulations for at least 2 years.

The minimum sample size found adequate to detect an effect, if there was one, was 31 banks. I determined this sample size based on power analysis for multiple regression, using the G*Power 3.1.9.6 tool for the test family of *F*-tests, the statistical test of multiple linear regression fixed model, R^2 deviation from zero. Using this tool requires values for alpha, effect size, power, and the number of predictors in the model to determine the sample size. The chosen values for these parameters were an alpha of 0.05,

an effect size of 0.35, a power of 0.80, and two predictors. Inputting these values into the G*Power window produced a sample size of 31 with an actual power of 0.8040921. Appendices (A and B) show screenshots of plots of the G*Power calculations.

To select the sample, I used a simple random probability sampling method. In this type of sampling, every member of the sample frame has an equal chance of being selected (Mohsin, 2016). I allotted each bank included in the sample frame a unique number and used a lottery technique to select the sample. This process involved placing slips containing numbers of all the banks in the sample frame in a bag or bowl. They were then mixed thoroughly before the representative sample of banks was drawn out one by one and in a manner that avoided the possibility of sampling biases. As the objective of this study was to generalize the findings, the assumption that the random probability sampling helps to avoid bias (Mohsin, 20) provided a higher degree of confidence that the research findings could be generalized to the banking industry.

Data and Data Sources

In conducting this study, I relied entirely on secondary archival data. Using archival data involves the extraction of information from the repository and any other records held with a collecting institution (Fischer & Parmentier, 2010). Following the selection of the study sample, I computed the data on the outcome variable, represented by ROA for each sampled bank using the available data on the profits and total assets in the audited annual financial reports of each bank. Such information was available in hard copy from each commercial bank or the Bank of South Sudan. This information was also available from banks' websites in soft copy.

Similarly, I obtained data on the predictor variables from records of the board of directors of the sampled banks. For this purpose, I compiled a list of board members of each sampled bank from the archival records of the central bank or the commercial banks included in the study, based on the 2012 data. According to the requirements of the corporate governance regulations, each bank in South Sudan can have five to 10 members on its board of directors (Bank of South Sudan, 2012a). Based on the board of directors' list, I researched the characteristics of board attributes from the biographies of board members of each bank.

Sources of data for the study were mainly the Bank of South Sudan and the commercial banks' records. The Bank of South Sudan, as the regulator, has the statutory authority to compile financial and nonfinancial information about banks and all the financial institutions in the country. The Bank of South Sudan (2011) stated,

> The Bank [central bank] may require all banks and other regulated entities operating within the territory of South Sudan to provide to the Bank annual, quarterly or more frequent reports covering monetary statistics, income, and expense reports. … The Bank shall be obliged to compile statistics per international standards and practices. (p. 36)

Similarly, the Banking Act 2012 obliges banks and other financial institutions to maintain accurate financial records that show a fair state of its financial position. It is mandatory to audit such financial position by external auditors approved by the regulator (Bank of South Sudan, 2012b). In addition to the banks' statutory requirements to maintain and provide financial reports, banks also provide information on board members

(Bank of South Sudan, 2012c). The two secondary data sources stated above maintain more than 8 years of relevant historical data on banks and other financial institutions operating in South Sudan. Data stored by the Central Bank of South Sudan and the commercial banks are freely accessible for public use.

Instrumentation and Operationalization of Constructs

Instrumentation refers to how researchers attempt to measure variables or items of interest in the data-collection process (Salkind, 2010). In this study, instrumentation involves how banks' financial performance (the criterion variable) and the two attributes of corporate governance (the predictor variables) are measured. This process inevitably involves the procedure for establishing instruments' validity and reliability as well as minimizing possible measurement errors (Salkind, 2010). The next paragraphs define the criterion and predictor variables used in this study, consistent with prior studies and literature sources that validate their use.

ROA

ROA is an accounting performance ratio used to measure how efficiently the firm uses its assets to generate profits (Velnampy, 2013). ROA in this study is the ratio of the firm's net profit to the total value of its assets (Chowdhury & Rasid, 2017; Ibrahim & AbdulSamad, 2011; Menicucci & Paolucci, 2016; Nguyen, 2019; Velnampy, 2013). The base data for the net profit and value of total assets are the figures of each bank's external audit report for 2014. Copies of these reports are available from the Bank of South Sudan (Central Bank) and commercial banks' websites.

Level of Board Education

Level of board education (BEDU) is a bundle of intellectual capital that enables a board to perform its fiduciary duties (Wang et al., 2017). In this study, the level of education of each board member was measured as a score from 1 to 5 points on the ordinal scale (Payne & Petrenko, 2019), where High school = 1; Ordinary diploma = 2; Bachelor's degree = 3; Master's degree = 4; and PhD = 5. A mean score of all members on a bank's board will indicate the BEDU of each bank's board of directors.

Level of Board Independence

Level of board independence (BIND) is the extent to which a board of an organization consists of members who do not directly have a material relationship with the organization, whether in the form of being a partner, shareholder or officer of the organization (Zhang & Gimeno, 2016). The BIND is measured as the ratio of independent (non-executive) members on the board to the total number of members on the board of each bank (Singh et al., 2017; Zhang & Gimeno, 2016).

Table 2 provides summary information on the instrumentation and operationalization of the study variables. The table includes the name of each variable, its measurement formula, and the symbol used in the regression equation.

Table 2

Measurement of the Variables

Variables	Measures	Symbols
ROA (Outcome variable)	(Profit after interest & tax)/total assets	ROA
Level of board education (Predictor variable 1)	Measured on 1–5 on ordinal scale: High school = 1 Diploma = 2 Bachelor degree = 3 Master degree = 4 PhD = 5 A mean of each board indicates the level of education of board of directors of each bank.	BEDU
Level of board independence (Predictor variable 2)	BIND is the ratio of independent (non-executive) members on the board to the total number of members on the board of each bank.	BIND

Note. ROA = return on assets; BEDU = level of board education; BIND = level of board independence.

Data Analysis Plan

In this quantitative nonexperimental study, I analyzed the extent to which the attributes of corporate governance employed in this study were predictive of banks' financial performance in South Sudan. The predictor (independent) variables used in the study were two corporate governance attributes of banks in South Sudan – BEDU and BIND. The criterion (dependent) variable was corporate financial performance, defined as the banks' ROA.

The research question of the study was as follows:

RQ: To what extent is there a predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan?

H_0: There is no significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan.

H_1: There is at least one significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan.

I used the multiple regression analysis, from SPSS Statistics, to test the relationship between the two predictor variables and the criterion variable. If the multiple linear regression is statistically significant, t -tests are performed to test the relationship between each predictor variable and the criterion variable. IBM's SPSS Statistics is a computer-based data management and inferential statistical analysis program widely used in fields such as psychology, market research, and business management (Bronstad & Hemmesch, 2012).

I assessed the reliability of the data collected by carrying out data screening procedures to ensure that the data collected meets the assumptions of normality, linearity of the independent variables and dependent variable, independence of errors, homoscedasticity, and multicollinearity of the independent variables. In addition, I assumed that there was no undue influence of possible presence of outliers on the study's outcomes.

To conduct the screening, I plotted a histogram of the criterion variable and each of the predictor variables to examine the shape of the distribution of scores and to ensure that there was no undue influence of outliers. Ideally, all quantitative variables, particularly the *Y* criterion variable, should have approximately normal distribution shapes (Bronstad & Hemmesch, 2012). Further, I generated a scatter plot of the two independent variables (quantitative) which included a variance inflation factor (VIF) to check for linearity and multicollinearity among predictors. I also examined if the assumption of homoscedasticity was met by verifying that the variance of the dependent variable scores was fairly uniform across levels of independent variables.

After ensuring the reliability of the assumptions of tests and scales, I used the following general form of the linear multiple regression model to determine the impact of corporate governance on financial performance in the South Sudanese banks:

$$Y = B_0 + B_1X_1 + B_2X_2 + \varepsilon \qquad (1)$$

Where:

Y is the value of the criterion/dependent variable, which is the banks' financial performance in this study and ROA is used as the proxy for banks' financial performance in this study.

X_1 and X_2 are the values of the predictor/independent variables, which are the attributes of corporate governance used in this study, namely level of board independence (BIND), and level of board education (BEDU) respectively;

B_1 and B_2 are the regression coefficients, which describe the slope of the line;

B_0 is the *Y* intercept (value of ROA) when X_1 and X_2 values are 0; and

ε is a possible error of the prediction.

Researchers usually use linear regression analysis in quantitative nonexperimental design situations where they have not manipulated any of the variables (Warner, 2013). Multiple linear regression is suitable when a researcher aims at predicting the values of a particular variable based on knowledge of the linear association with known values of other variables (Segrin, 2012). Multiple linear regression is also suitable to test associations among continuous and categorical variables, as well as the associations between an individual or multiple predictors and criterion variables (Segrin, 2012). In this context, several studies of quantitative designs have used multiple regression analyses to examine the relationship between corporate governance and firm performance. For example, Singh et al. (2017) studied the impact of board independence on firm performance using linear multiple regression models. Wang et al. (2017) studied the link between corporate sustainability using education as a key attribute of board members. Al Smadi (2019) used board size as a proxy for the determination of the dominance of the board of directors over executive management. Ciftci et al. (2019) and Sultana et al. (2020) used multiple linear regression to examine the relationship between earnings and the presence of a gender-balanced board.

I adopted the multiple regression model for this study after careful assessment of alternative options. For example, the simple linear regression was assessed and found to be appropriate when one variable explains the variation in another variable (Reynolds, 2012). The correlation statistic describes the magnitude and nature of a relationship between two or more variables, and one cannot draw conclusions on the cause-effect

relationship among the variables (Sheskin, 2012). The correlation was also found to be inappropriate for this study, as it only shows a linear relationship between variables without providing a distinction between predictor and criterion variables (Sheskin, 2012). The analysis of variance ANOVA test, on the other hand, was eliminated as its focus generalizes the idea of the two-sample *t-test* for the comparison of normally distributed responses across categories of one or more factors (Wahed & Tang, 2012). Non-parametric methods deal with data measured using nominal and ordinal levels of measurement and do not require fulfillment of the critical assumptions of normality and homogeneity (Warner, 2013), and as such, they are not appropriate as well.

Multiple regression model is only appropriate as a data analysis tool based on certain assumptions about the data (Warner, 2013). As explained by Segrin (2012), the user of multiple regression analysis assumes that there are linear relationships between the independent variables and the dependent variable. When this is not the case, researchers use nonlinear regression, which a more sophisticated version of multiple regression. Another assumption is that the independent variables are not linearly related with each other - the multicollinearity issue. Further, the use of multiple regression assumes that at each possible value of an independent variable, the estimated dependent variable is normally distributed (Warner, 2013). Multiple regression assumes homoscedasticity, meaning that for each possible value of every independent variable, the variance of the residuals or errors of prediction is consistent (Segrin, 2012).

The use of linear multiple regression analysis enabled me to test the study hypotheses and to confirm or deny the relationship between corporate governance

attributes (predictor variables, represented by two attributes of board of directors) and the banks' financial performance (criterion variable, represented by ROA). No linear relationship exists between the board attributes (predictor variables) and the financial performance of banks (criterion variable) if the null hypothesis, H_0 is true. To reject the null hypothesis, there has to be statistical evidence to support a significant regression relationship between at least one of the board attributes and performance.

To test the relationship between both predictor variables taken collectively and the criterion variable, I used multiple regression analysis. To reject the null hypothesis that there is no relationship between the two predictor variables and the criterion variable, I used the *F*-test statistic. If the *F*-test for the regression were significant, I would have to reject the null hypothesis. This would indicate that the model with two predictor variables explained a significant amount of the variation in the predictor variable. Only if the *F*-test is significant, would I then examine the *t*-test statistic for each of the two predictor variable terms in the regression model to determine which of the terms, if any, was significant (i.e., explained a significant amount of the variation in the criterion variable). A *t* test for the significance of the relationship between the single predictor variable in the regression model and the criterion variable would determine if that predictor variable explained a significant amount of the variation in the financial performance of banks (criterion variable ROA). For this study, I set the alpha (α) level of the test to 5%. This indicates that I would reject the null hypothesis if the *p* value were less than α, 0.05 (Warner, 2013). This will also ensure that the maximum probability of Type I error was α or 5%.

Threats to Validity

External Validity

External validity is essential to studies in which researchers have the intent to generalizing the findings to a broader population of interest (Leighton, 2012; Zellmer-Bruhn et al., 2016). In this study, I examined the extent to which the practice of corporate governance in the South Sudanese banking industry predicts financial performance. I used probability sampling to generalize the results to the whole banking sector in the country. With this objective in mind, ensuring external validity was critical (Zellmer-Bruhn et al., 2016).

Palinkas et al. (2015) contended that in order for a study to have a reasonable chance of achieving external validity, the sample must be sufficiently representative of the population to which the researcher wants to generalize the findings. Bevan et al. (2013) stated that if a sample does not adequately represent the target population, a selection bias may be a threat to external validity, and a researcher cannot generalize the findings to the broader population from a biased sample. Researchers select the most representative samples of populations in a manner where every member of the population has an equal chance of being chosen (Mohsin, 2016). As this study used probability sampling techniques, the chances of external validity risks are low, which strengthens the generalizability of the study. Furthermore, and as Mohsin (2016) explained, the use of an adequate sample also reduces threats to external validity.

Internal Validity

Internal validity addresses whether the results of a study support a causal relationship between variables (Zellmer-Bruhn et al., 2016). According to Zellmer-Bruhn et al. (2016), a low internal validity may indicate an alternative explanation for the relationship between the study's variables exists. In a seminal work, more than half a century ago, Campbell (1957) highlighted seven classes of extraneous variables that can undermine the internal validity of a study. These factors are history, maturation, testing, instrument decay, statistical regression, selection, and mortality. Out of these seven possible threats to internal validity, history, and maturation are common as they are often present when an independent variable is part of a study (Flannelly et al., 2018).

For a researcher to address the internal validity issues in any study, it is critical to keep these variables in mind as rival explanations of findings. However, internal validity concerns are most significant for studies involving experimental or quasi-experimental designs (Tene & Polonetsky, 2016). Accordingly, and as this study uses a quantitative nonexperimental design, threats to internal validity may be low (Tene & Polonetsky, 2016). According to Abbadi et al. (2016), internal validity for nonexperimental studies is only a concern when researchers rely on data from surveys and interviews. This conclusion strengthened the view that internal validity in this study could be high, as it relies on secondary archival data rather than surveys or interviews.

Construct Validity

Construct validity for a study addresses the question of whether the scores of instruments sufficiently measure the distinct construct they intend to measure (Markus &

Chia-Ying, 2012). It outlines the collection and application of validity evidence intended to support the interpretation and use of test scores as measures of a particular construct. Messick (1989) highlighted two types of threats to construct validity. The first threat is construct deficiency, which occurs when a test fails to measure some aspects of the construct that it should measure. The second threat to construct validity is the construct-irrelevant variance, which involves the situations when the test measures things unrelated to the construct of interest. As such, and according to Messick (1989), a test that has optimal construct validity measures everything that it should measure but nothing that it should not.

The threat of construct deficiency in this study is low due to the use of secondary data, rather than data from interviews or survey instruments. As explained by Patterson et al. (2018), instrument reliability has considerable influence on the deficiency of instruments used in the study. Sources of data on the dependent and independent variables will consist of audited accounts of banks and statutory reports to the central bank that are subject to validation for reliability purposes. To ensure a focus on elements related to the construct, I defined the variables and established the criteria for their measurement. Furthermore, the study provides sufficient evidence from the previous studies and how the constructs applied to research situations.

Ethical Procedures

There are a wide variety of ethical issues that researchers must consider in any research study due to the impact on stakeholders and study participants. Dolan (2015) highlighted a set of moral principles that researchers must consider when conducting a

study. These principles require researchers to carefully weigh the study's expected risks and benefits, act responsibly and with integrity, and to respect people's rights and dignity (Simon et al., 2014). These standards are in several ethics codes and guidelines that include the Nuremberg Code, the Declaration of Helsinki, the Belmont Report, and others (Dolan, 2015). These codes include many standards, among which the informed consent is primary. Informed consent involves obtaining and documenting people's agreement to participate in a study, as well as having them informed of everything that might affect their decision (Simon et al., 2014).

In fitting with these ethical concerns, a researcher must accept and acknowledge the ethical responsibilities of the study. I took these concerns into account. Therefore, this research study only started after the approval by the institutional review board of Walden University to ensure that research protocols conformed to expected ethical standards. This study did not involve interaction with human participants, as its design relies solely on secondary data from the central bank and commercial banks included in the study. The data that is accessible to the public free of charge. Accordingly, no informed consent was necessary to carry out the study. The Bank of South Sudan only admits the incorporation of banks in the country as public liability entities. Both the company Act and the Banking Act require the audit and publication of financial statements (Bank of South Sudan, 2012b). Also, banks report information on the board of directors to the central bank according to corporate governance and fit and proper regulations (Bank of South Sudan, 2012c) imposed on banks by the central bank. The study will, therefore, did not involve the recruiting of any human participants. As a result, the study did not require informed

consent and no conflict of interest or power differentials and justification for the use of incentives. There were no ethical issues as the data was from secondary sources; hence, no human contact with participants was involved in collecting the study data.

Summary and Transition

This chapter contains a plan for conducting the study. In the first section, I described the study variables and a research design found appropriate to conduct the study. This included a justification for the decision to adopt a quantitative nonexperimental design as the most suitable approach to answering the research question posed by the study. The second section included a discussion of the methodology and the target population, comprised of all the banks operating in South Sudan, as well as the sampling strategy. It also included a description of the procedures for data collection and the procedures for instrumentation and operationalization of constructs. The third section included the plan for data analysis. Section four included a discussion of the threats to validity and ethical procedures for the study, indicating the low chance of threats to external and internal validity. The section also contained a discussion of construct validity and the extent to which the instruments' scores sufficiently measure the study constructs. The next chapter contains the study results, including a description of the process of data collection and screening used to verify the integrity of the data.

Chapter 4: Results

In this quantitative nonexperimental study, I investigated the performance of banks in South Sudan to determine the extent to which corporate governance attributes predicts the financial performance of banks in the country. The aim was to address the existing gap in literature and the extent to which the practice of corporate governance in South Sudan relates to financial performance. To provide focus to this study, I posed the following research question: To what extent is there a predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan? The null hypothesis was that there is no significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan. The alternative hypothesis was that there is at least one significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan. The predictor variables used in the study were the level of board education and the level of board independence. The criterion variable was the corporate financial performance, defined as the ROA.

The remaining sections of this chapter are organized as follows: First, I describe the data collection process and the key characteristics of the study sample. Second, I present the study results, report the descriptive statistics of the sample, and discuss in detail the statistical outputs of the study analysis. Finally, I close the chapter with a concise summary of the findings and a transition to Chapter 5.

Data Collection Procedures

I completed the data collection process for this study over a period of 1 month, from mid-May to mid-June 2021 after obtaining the Institutional Review Board (IRB) approval for the study. The IRB approval was number 05-12-21-0566579. Data came from one main source, the Bank of South Sudan (i.e., the central bank/regulator of financial institutions in the country). Banks operating in South Sudan are required by law to submit financial and nonfinancial information to the regulator on a periodic basis (Bank of South Sudan Act, 2011). This study data consisted of two types: data submitted by banks to the Bank of South Sudan (i.e., the annual audited financial statements), and the corporate governance data and detailed information about the board of directors.

Regarding the audited financial statements, banks operating in South Sudan must submit audited financial statements at the end of each calendar year in accordance with international financial reporting standards (IFRS). The audited financial statements are submitted to the general assembly of shareholders and to the Bank of South Sudan (central bank/regulator) 3 months after the end of a calendar year. Based on the provisions of the Banking Act, an external auditor approved by Bank of South Sudan (central bank/regulator) performs the audit. The duty of an external auditor of each bank is to audit and present to the board of directors of the bank a report and audit opinion as to whether the financial statements present a full and fair view of the financial position of a bank.

Banks must also submit information on corporate governance system attributes to the Bank of South Sudan in fulfilment of the requirements of corporate governance's "fit

and proper" guidelines. Each member of board of directors must submit information on level of education, experience, age, and also if the board member is an executive or a nonexecutive board member.

I collected data on the ROA, the criterion variable for the study, from data extracted from the audited financial statements of banks in the year 2014. First, from the profit and loss account, I extracted the profit before interest and tax (PBIT) figure of each bank. Second, I extracted the total assets (TA) figure of each bank from the balance sheet of banks. I calculated the ROA figure of each bank used for this study as the ratio of PBIT to TA.

I collected data on the two attributes of corporate governance, used in this study as predictor variables, from the corporate governance reports submitted by banks to the Bank of South Sudan in 2012. All banks submit these types of reports to the Bank of South Sudan, detailing information on members of board of directors. The Bank of South Sudan determines whether a person is fit to serve in designated capacities with respect to banks and bank holding companies operating in South Sudan on the basis of this information.

I computed data on the level of board independence by determining the number of nonexecutive board members of each bank and then calculating the ratio of the nonexecutive members to the total number of members on the board of each bank to arrive at the BIND in each bank. I extracted data on the level of board education from the information obtained from corporate governance reports on board members submitted to the Bank of Sudan (i.e., the central bank/regulator) by each operating bank in South

Sudan. I assigned a score from 1 to 5 points on the ordinal scale to measure the level of educational of each board member, with: high school = 1; ordinary diploma = 2; bachelor's degree = 3; master's degree = 4; and PhD = 5. The mean score of all board members indicated the level of board education (BEDU) in each bank.

I collected data from the 35 institutions included in the study. I sought permission from the Central Bank of South Sudan to access its archives to extract the required information. The first step in extracting the required data was to assign a unique identification number to each participating bank and each board member. Thus, the information collected from each board member did not include any personally-identifying information.

There were no significant discrepancies between the data collection plan and the actual data collection process. One divergence from the research plan is that I collected data from all of the existing 35 banks instead of limiting data collection to the original sample size of 31 banks identified in the plan. The essential advantage of this choice was that the larger sample size results would be more accurate and representative of the population of current and future banks in the country. In this sense, the choice of a larger sample size rather than a smaller sample can reduce the risk of a nonrepresentative sample, which could have negatively impacted external validity. Another minor discrepancy was that out of the 35 banks included in the study, two banks did not have their audited accounts for the financial year 2014, so I used the data for 2015 accounts for these two banks instead.

Study Results

Data Screening

The preliminary data screening and testing of multiple linear regression assumptions is necessary to help researchers identify and remedy potential problems with the data before analyzing the study data (Pallant, 2016). Such action is necessary because analysis based on data that contain errors or violate the assumptions of the chosen statistical method of analysis can yield misleading results. Some of the key assumptions associated with multiple linear regression analyses involve normality of distribution of scores and the absence of extreme outliers, linearity of relations between quantitative variables, homoscedasticity, and lack of multicollinearity in data for the dependent variables (Pallant, 2016). To conduct data screening against these assumptions, I used the software platform SPSS (Version 27). The intention was to identify any problems with data and to remedy them before conducting an analysis.

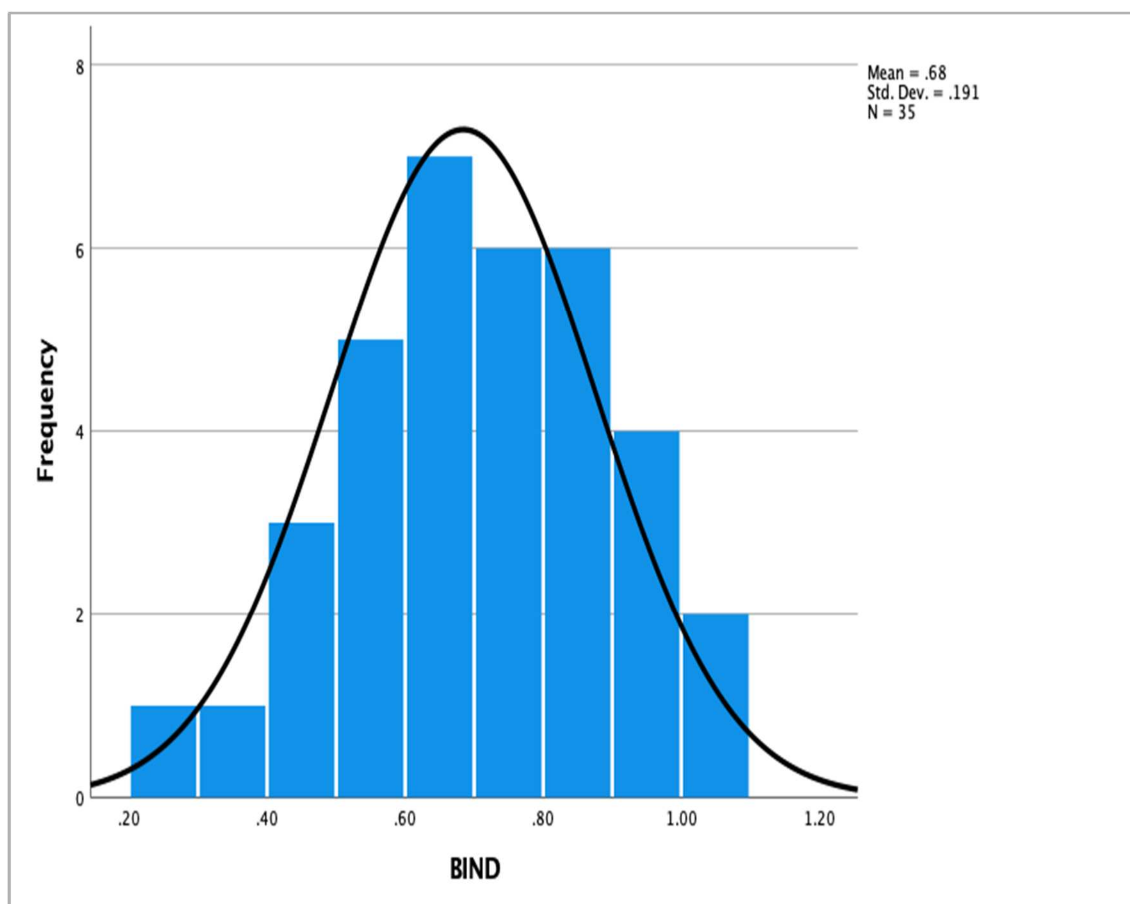
Normality

Normality is a common assumption associated with all parametric analyses. Normality assumes that scores on quantitative variables should be reasonably normally distributed (Psaradakis & Vávra, 2018). I assessed the normality of variable score distribution by examining a histogram of scores, to confirm that they are approximately "bell-shaped" and symmetric. The histograms of the study variables did not reveal any significant violations of normality assumptions (see Figures 1, 2, and 3). These results suggest that the distributions have approximately normal distribution shapes with no

extreme outliers. These results, therefore, allowed me to use parametric statistics such as means and correlations.

Figure 1

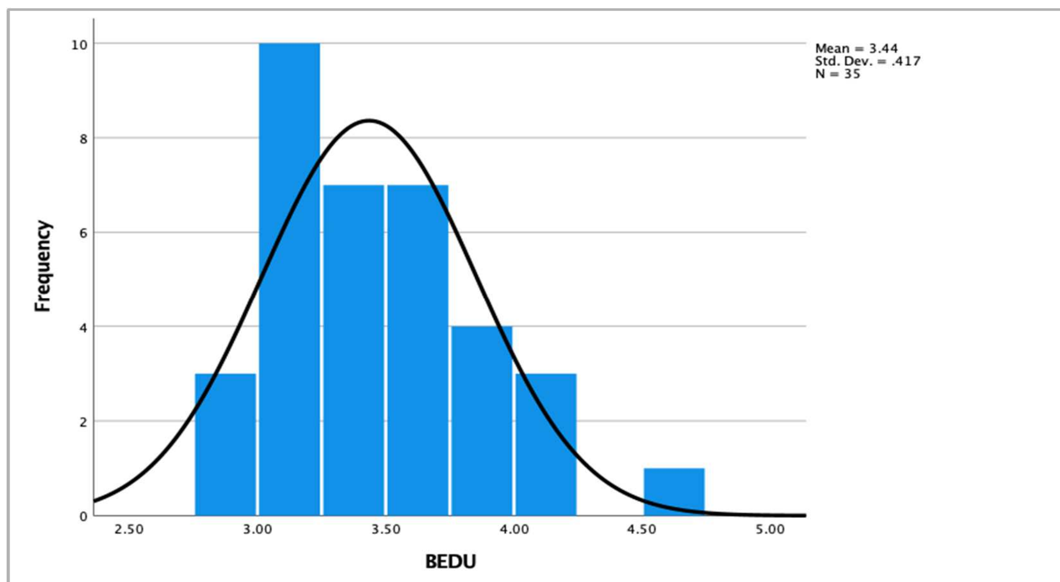
Frequency Distribution Histogram to Examine the Normality of the BIND



Note. BIND = level of board independence.

Figure 2

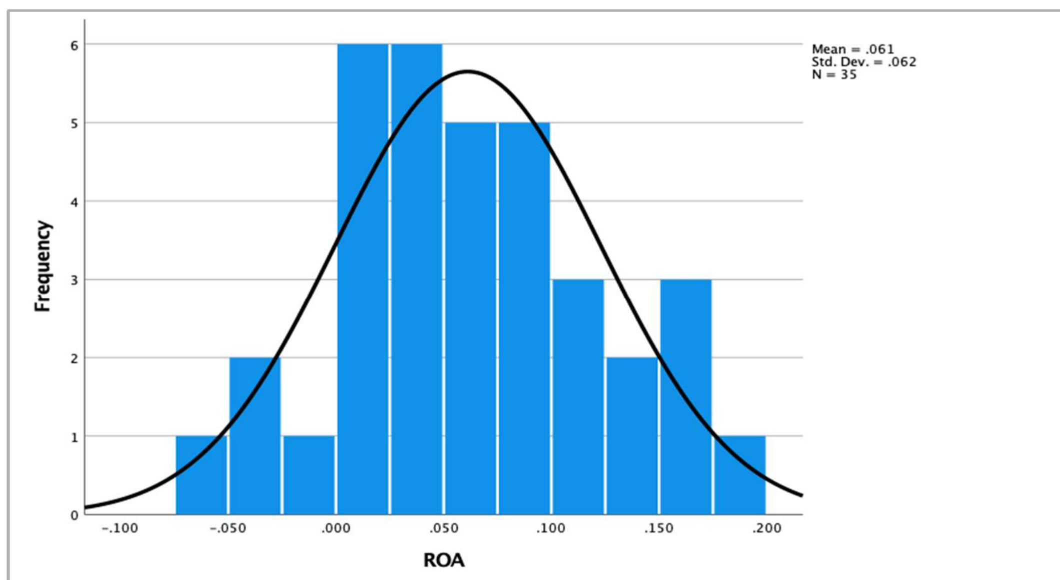
Frequency Distribution Histogram to Examine the Normality of the BEDU



Note. BEDU = level of board education.

Figure 3

Frequency Distribution Histogram to Examine the Normality of the ROA



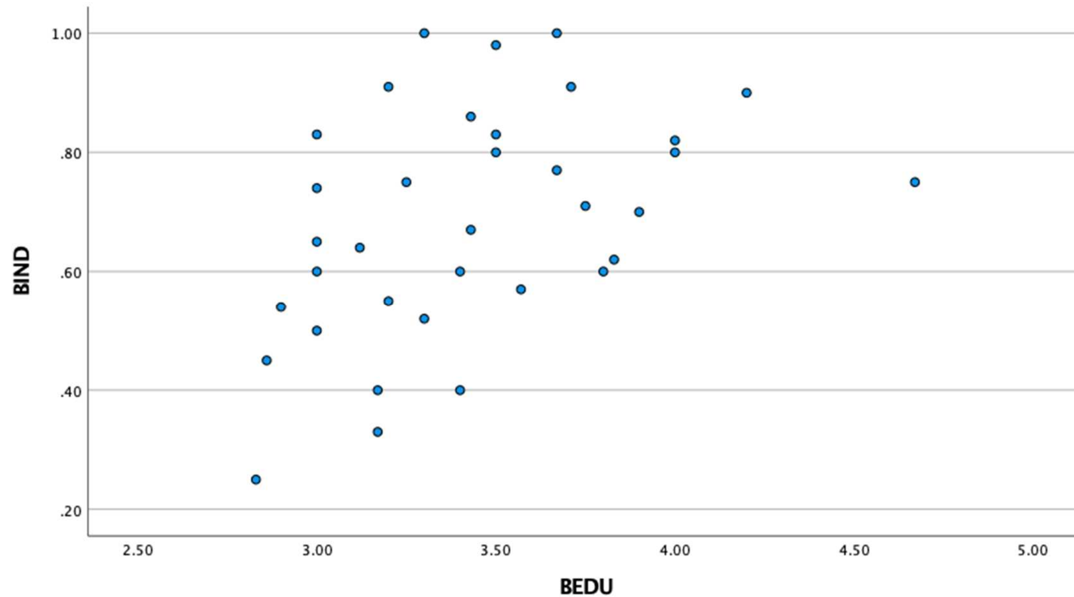
Note. ROA =return on assets.

Linearity

The linearity assumption supposes a linear relationship between each pair of dependent and independent variables (Harrell, 2015). Preliminary examination of the scatter plot enables the researcher to assess whether there is such a linear relationship between variables. The scatter plots of the study variables did not reveal any significant violations of linearity assumptions (see Figures 4, 5, and 6). These results suggest that a linear relationship exists among each pair of study variables. These results, therefore, allowed me to use parametric statistics.

Figure 4

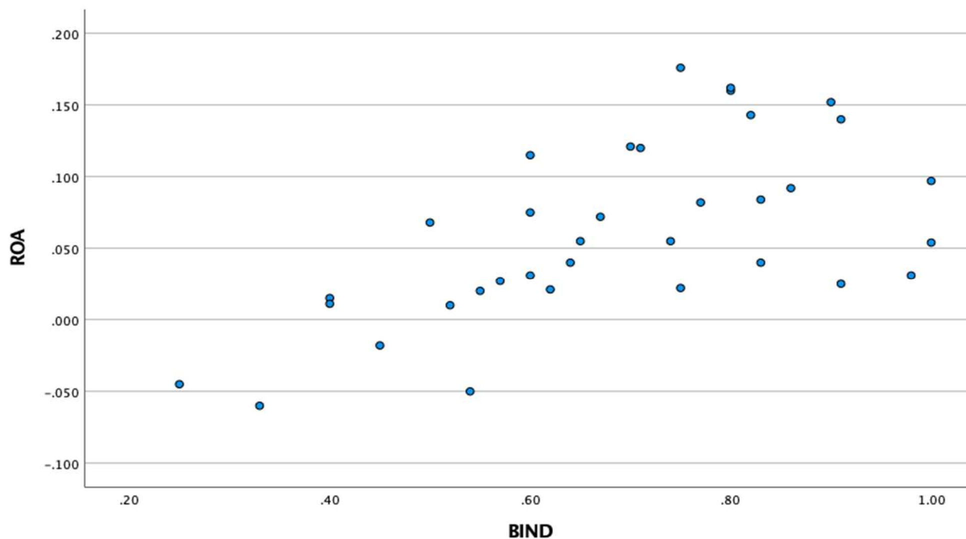
Scatterplot to Examine Linearity Between BEDU and BIND



Note. BEDU = level of board education; BIND = level of board independence.

Figure 5

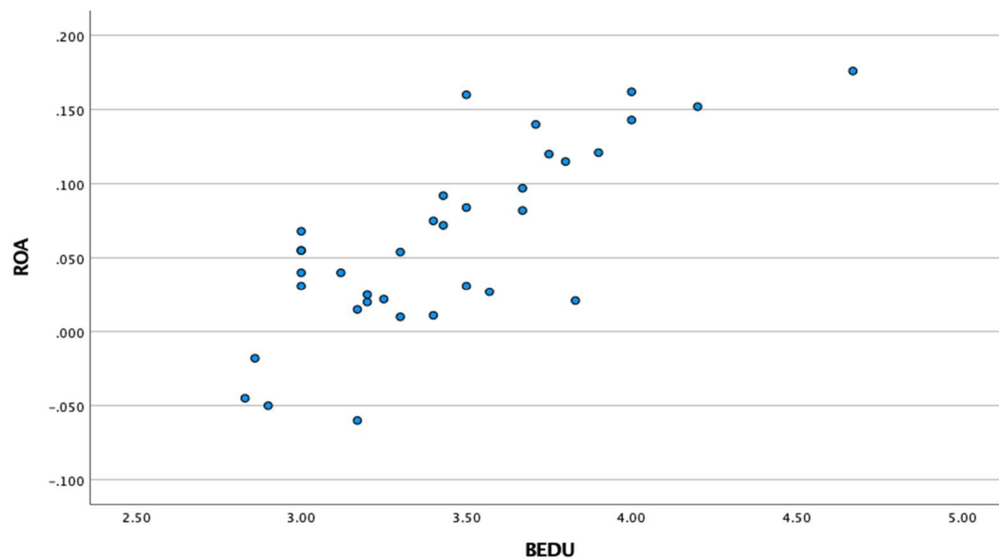
Scatterplot to Examine Linearity between ROA and BIND



Note. ROA =return on assets; BIND = level of board independence.

Figure 6

Scatterplot to Examine Linearity between ROA and BEDU



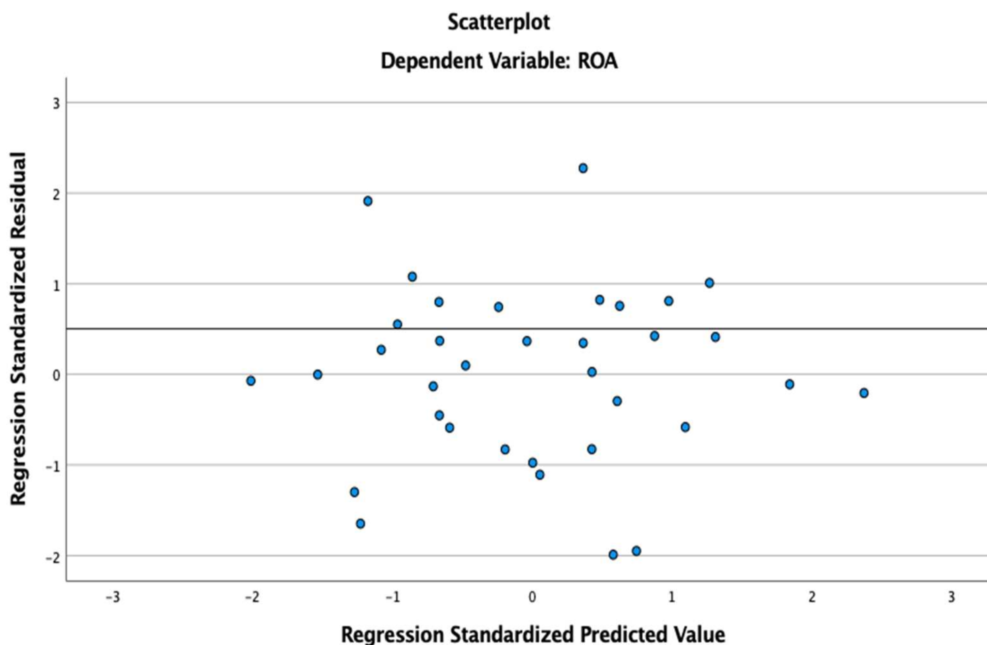
Note. ROA =return on assets; BEDU = level of board education.

Homoscedasticity

Homoscedasticity is an essential assumption of parametric statistical tests. Homoscedasticity assumes equal or similar variances across scores on other variables (Hopkins & Ferguson, 2014). Uneven variances in samples result in biased and skewed test results. I tested the homoscedasticity assumption by plotting the scatterplot of the standardized residuals using SPSS. The scatterplot of standardized residuals (see Figure 7) did not delineate any clear and systematic patterns of homoscedasticity. As such, the absence of a clear pattern in the scatterplot of the standardized residuals supports the homoscedasticity assumption.

Figure 7

A Scatterplot of Regression Standardized Residual



Note. ROA = return on assets.

Multicollinearity

Multicollinearity refers to the degree of intercorrelation among predictor variables (Pallant, 2016). Multicollinearity, which exists when two predictor variables are highly correlated, makes it difficult to assess the effect of the predictor variables on the dependent variable. Multicollinearity can lead to unreliable results, large standard errors, and a false null hypothesis not being rejected. McClelland et al. (2016) explained that multicollinearity is detected by examining the bivariate relationship between independent variables. A high correlation usually indicates that the multicollinearity assumption has been violated.

To test for the multicollinearity among predictor variables, I used SPSS to run a VIF test (see Table 5). The VIF provides an index that measures how much variance of an estimated regression coefficient is increased because of collinearity (Zuur et al., 2010). The results of the VIF test among the predictor variables (level of board independence and level of board education) was 1.235. A VIF value less than 4.0 indicates no multicollinearity problem (Hair et al., 2010). The result of the multicollinearity test for the predictor variables indicates that the multicollinearity assumption was not violated.

Descriptive Statistics

Statistics used to summarize information about a sample, such as mean and standard deviation, are called descriptive statistics (Pallant, 2016). It is always advisable to check for descriptive statistics to confirm that the data values make sense. The descriptive statistics of the study variables are in Table 3. The total sample number of the study was 35 banks ($N = 35$). The ROA is normally distributed. The measure of level of

board independence (BIND) - measured as a ratio of the number of non-executive board members to the total number of board members - was normally distributed, with an overall mean of 0.6843 independent members and a standard deviation of 0.19144. The scores for the level of board education (BEDU), on an interval scale from 1 to 5 (where 1 = less than high school; 2 = high school; 3 = Bachelor's degree; 4 = Master's degree; and 5 = Doctoral degree) were normally distributed, with an overall mean of 3.4351 and standard deviation of 0.41738.

Table 3

Descriptive Statistics

Variable	*M*	*SD*	*N*
Return on investment (ROA)	0.06123	0.061781	35
Level of board independence (BIND)	0.6843	0.19144	35
Level of board education (BEDU)	3.4351	0.41738	35

Inferential Results

I used multiple linear regression analysis, with a two-tailed significance level of 5% ($\alpha = 0.05$), to examine the relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan. The independent variables were level of board independence (BIND) and level of board education (BEDU), and the dependent variable was the

financial performance of banks in South Sudan, measured by ROA. The research question posed was as follows:

RQ: To what extent is there a predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan?

H_0: There is no significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan.

H_1: There is at least one significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan.

Tables 4 and 5 show the resulting outputs of the SPSS regression analysis to predict the financial performance of banks from the level of board independence and level of board education variables. As Table 4 shows, the overall regression model was able to significantly predict the financial performance of banks, with $R^2 = 0.69$ and the adjusted R^2 was 0.67. This result indicates that when we used both the level of board independence and level of board education attributes of corporate governance as predictors, we could account for about 69% of the variance in the financial performance of banks. Thus, the overall regression was statistically significant, with $F(2, 32) = 36.383$, $p = .000$. Based on the results, I rejected the null hypothesis that there was no significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in

South Sudan. Therefore, there is sufficient evidence at the alpha equal to .05 level to support the alternative hypothesis that there is at least one significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan.

Table 4

Model Summary

					Change statistics				
Model	*R*	R^2	Adjusted R^2	*SE* of the estimate	R^2 change	*F* change	*df*1	*df*2	Sig. *F* change
1	0.833 [a]	0.695	0.675	0.035195	0.695	36.383	2	32	0.000

Note. Dependent variable: ROA = return on assets.

[a] Predictors: (Constant), BEDU = level of board education, BIND = level of board independence.

Moreover, Table 5 shows that each of the individual predictor variables has a statistically significant contribution. The predictor variable of level of board independence was significantly predictive of the financial performance of banks when the variable of level of board education was statistically controlled, with $t(32) = 3.11$, $p = .004$. The slope to predict the financial performance of banks from the level of board independence (BIND) was $B_1 = 0.109$. This B_1 slope coefficient differed significantly from 0 since the $p = .004$ which is less than the stated alpha of .05. The positive slope for level of board independence (BIND), as a predictor of the financial performance of banks, indicated that there was about a 10.9% increase in the financial performance of banks for every .01 increase in the level of board independence, controlling for level of

board education. In other words, an increase in the level of independent board members would increase the financial performance of banks. I obtained the corresponding effect size for the proportion of variance in financial performance (ROA) that is uniquely predictable from the level of board independence (BIND) by squaring the value of the part correlation of level of board independence with financial performance (.304), as in Table 5, to yield $sr^2_{BIND} = 0.092$. This result indicated that about 9% of the variance in the financial performance of banks was uniquely predictable from the level of board independence (BIND) attribute of corporate governance (when BEDU) was statistically controlled.

Similarly, the predictor variable of level of board education was also found to be significantly predictive of the financial performance of banks when the variable of level of board independence was statistically controlled, with $t(32) = 5.79$, $p = .001$. The slope to predict the financial performance of banks from the level of board education was $B_2 = 0.093$. This B_2 slope coefficient differed significantly from zero since the $p = .001$ which is less than the stated alpha of .05. The positive slope for the level of board education (BEDU), as a predictor of the financial performance of banks, indicated that there was about a 9.3% increase in the financial performance of banks for every .01 increase in the level of board education, controlling for the level of board independence. In other words, a higher level of board education would increase the financial performance of banks. I obtained the corresponding effect size for the proportion of variance in financial performance (ROA) that is uniquely predictable from the level of board education (BEDU) by squaring the value of the part correlation of level of board education with

financial performance (.566), as in Table 5, to yield $sr^2_{BEDU} = 0.32$. This result indicated that about 32% of the variance in the financial performance of banks was uniquely predictable from the level of board education (BEDU) attribute of corporate governance (when BIND) was statistically controlled.

Table 5

Coefficients

		UC		SC			95% CI for *B*		Correlations			Collinearity Statistics	
Model		*B*	*SE*	Beta	*T*	Sig.	*LL*	*UL*	Zero-Order	Partial	Part	Tolerance	VIF
1	Constant	-0.333	0.050		-6.656	0.000	-0.43	-0.23					
	BIND	0.109	0.035	0.338	3.112	0.004	0.03	0.18	0.612	0.482	0.304	0.810	1.235
	BEDU	0.093	0.016	0.629	5.790	0.001	0.06	0.13	0.776	0.715	0.566	0.810	1.235

Note. Dependent variable: ROA; UC = Unstandardized coefficients; SC = Standardized coefficients; CI = Confidence interval; *LL* = Lower limit; *UL* = Upper limit; BIND = Level of board independence; BEDU = level of board education.

In sum, the regression results indicate that even when we control the level of board education, the level of board independence would uniquely still account for 9% of the variance in the financial performance of banks. Likewise, when we control the level of board independence, the level of board education still uniquely accounts for 32% of the variance in the financial performance of banks. One possible interpretation of this result is that both, the level of board independence and the level of board education, were partly redundant as predictors of the financial performance of banks in South Sudan. In this sense, both predictor variables (level of board independence and level of board

education) compete in explaining the variances in the financial performance of banks in South Sudan. The resulting predictive equations from this analysis were as follows:

Raw score version: ROA = -0.333 + 0.109BIND + 0.093BEDU

Standard score version: $Z_{ROA} = 0.338Z_{BIND} + 0.629Z_{BEDU}$

Each predictor was significantly associated with the financial performance even when we control the other variable. As such, both predictors contributed uniquely beneficial predictive information about the financial performance of banks in South Sudan. The result means that the predictive model could not explain 31% ($1 – R^2 = 1 – 0.69 = 0.31$) of the variance in the financial performance of banks in South Sudan from the variables of level of board independence and level of board education. As 9% of the variance in the financial performance of banks was uniquely predictable from BIND, another 32% of the variance in financial performance was uniquely predictable from BEDU. The remaining 28% of the variance in financial performance ($1 – 0.09 – 0.32 – 0.31 = 0.28$) of the variance in the financial performance of banks could be predicted equally well by BIND or BEDU because these two predictors were confounded or redundant to some extent. The fact that both predictors jointly explain only 28% of the variance indicates that the two predictors were not highly correlated and therefore did not strongly compete in explaining the same variance.

Summary and Transition

The analysis carried out in this chapter presented the regression analysis results on the predictive usefulness of the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in

South Sudan. I conducted a data screening exercise to identify any missing variables and possible outliers in the data collected for $N = 35$ banks in South Sudan. I did not exclude any bank from the study as there were no missing variables or outliers found. The study outlined the descriptive statistics for the two attributes of corporate governance of level of board independence and level of board education and the financial performance. I used multiple regression analysis to determine the relationship between the dependent and the two predictor variables.

The findings indicate a significant predictive relationship between the two corporate governance attributes of level of board independence and board education and the banks' financial performance in South Sudan. The resulting regression statistics were not compromised as there were no violations of the theoretical assumptions of normality, linearity, multicollinearity, or heteroscedasticity. The multiple linear regression equation, using a standardized coefficient, predicted that the financial performance of banks (ROA) would improve with each improvement in the average proportion of board members with a superior education or in the average proportion of independent board members.

The model was able to significantly predict the financial performance of banks, with $F(2, 32) = 36.383$ with $p < .001$ and $R^2 = 0.69$. Thus, the two variables jointly explain a significant proportion (69%) of the variance in the financial performance of banks (ROA). The findings imply that there are other unmeasured variables responsible for some of the variance in ROA. As the model predicted that the attributes of level of board independence and level of board education were predictive of ROA, this model could help banks develop a board of directors with the competencies and experience that

could help the company become successful. Chapter 5 provides a more detailed evaluation of the findings and considers the implications, recommendations, and conclusions.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative nonexperimental study was to examine the extent to which corporate governance attributes predict the financial performance of banks in South Sudan. The aim was to address the existing gap in the literature on the extent to which the practice of corporate governance relates to financial performance in the context of South Sudan. The independent variables were the level of board independence and level of board education. The dependent variable was the financial performance of banks, measured by ROA.

Results of the statistical analysis indicated that the two corporate governance variables of level of board independence and level of board education significantly predict the financial performance of banks in South Sudan, with $R^2 = 0.69$. The results also showed that each of the individual predictor variables has a statistically significant predictive contribution in explaining the variance in the financial performance. The predictor variable of level of board independence was significantly predictive of the financial performance, controlling for the level of board education. Likewise, the predictor variable of level of board education was also found to have a significant predictive relationship with the financial performance, controlling for the level of board independence.

In this chapter, I discuss my analysis and interpretation of the study's findings and the implications of the study results by examining the research question and hypothesis and highlighting the logical conclusions from the findings. I then describe the limitations

of the study and present recommendations, possible further research areas, the implications, and the study conclusion.

Interpretation of Findings

I used the agency theory as the theoretical framework to underpin this study. The agency theory argues for the need to structuring the relationship between agents and principals to align the interests of all corporate stakeholders (Fama & Jensen, 1983; Jensen & Meckling, 1976). In this context, I used the agency theory to examine the extent to which there is a predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan. The level of the relationship between these variables could be significant as the board of directors' acts in an agency capacity, which could function as link between corporate management and the stakeholders. In such context, the theory could mitigate the agency costs arising from the nature of principal–agent relationship (Payne & Petrenko, 2019).

The relevance of the agency theory to this study is that it explains how stakeholders can efficiently organize exchanges with agents (boards of directors) to employ mechanisms, including governance attributes like level of board independence and level of board education to enhance corporate value (Jensen & Meckling, 1976). In this study, I attempted to expand the agency theory by examining the extent to which the corporate governance attributes of the level of board independence and level of board education predicts the financial performance of banks in South Sudan. In the findings of this study, I have shown that the level of board independence and level of board

education, jointly, were significant predictors of the financial performance of banks in South Sudan. The results indicate that banks' financial performance could be predicted at levels significantly above chance from the scores of corporate governance attributes of level of board independence and level of board education combined. As such, shareholders, regulators, and other stakeholders could rely on the agency theory as a consistent framework for ensuring effective corporate governance in organizations.

By examining the contribution of individual predictors, the regression results indicated that the level of board education was the strongest predictor of financial performance (ROA) in this study. The literature on corporate governance associates board members' knowledge and level of education with superior corporate performance (Gottesman & Moery, 2015). Thus, one can conclude that the knowledge that comes with individual board members has a considerable impact on corporate performance as it could provide an organization with a bundle of intellectual capital that enables it to perform its fiduciary duties. Stakeholders should search for capable managers who can increase the firm's value, and the educational background of board members could be an essential attribute to this end.

On the other hand, I found that the level of board independence was also predictive of the financial performance of banks in this study. Level of board independence is the level to which a board of an organization consists of members who do not directly have a material relationship with the organization, whether in the form of being a partner, shareholder or officer of the organization (Zhang & Gimeno, 2016). The results indicated that the level of board independence is a critical determinant of board

effectiveness in the South Sudanese banking industry. The literature traces the justifications for the independent directors back to the concept of the reputational capital of directors, developed in the seminal work by Fama and Jensen (1983). Independent directors contribute to corporate value through their reputation, visibility, and relationships. These findings are consistent with the work of Cook and Wang (2011), which showed that directors' performance relates more to their business skills rather than ease of access to insider information. Ciftci et al. (2019) also investigated the relationship between corporate governance and firm performance in Turkey, focusing on the role of independent boards, and found a positive relationship between corporate governance elements and performance.

Limitations of the Study

My role as a researcher was to reduce study limitations by ensuring the study's reliability and validity. Valid and credible research means that the study findings accurately portray the research data (Noble & Smith, 2015). As such, study reliability and validity help a researcher to validate study rigor. The primary limitation I anticipated for this study was the use of archival sources, which may impact the study findings. The expectation was that any discrepancy that may arise could potentially produce errors in the conclusions and the generalization of the study. Another anticipated limitation was the possible lack of comparability of the ROA figures collected from banks included in the study, due to the possible effect of differences in the accounting and financial reporting standards used by banks.

I addressed the expected limitations of the archival source by restricting data extraction to one source. Accordingly, the data used in this study were collected only from the Central Bank (Bank of South Sudan). I only used other sources to validate the data collected from the central bank sources. Following this rule, I found no serious issues during the data collection process. As such, no major analytical errors that could have impacted the study findings emerged. Likewise, no serious differences were found in the ROA figures produced by banks. All banks in South Sudan were found to use the same accounting standards. Accordingly, the outcomes of this study could be generalized.

Recommendations

The findings of this study showed a strong predictive relationship between corporate governance attributes and the financial performance of banks in South Sudan. These findings could help build more robust governance structures for the banking system in South Sudan. Shareholders and regulators could use these findings to build a stronger board of directors with majority independent members and who also enjoy adequate level of education. Banks that are considering restructuring their board or new bank that want to form a new board might consider the benefit of putting in place a board with a significant level of independence and ensure that board members have a higher level of education.

Generalizing these findings can potentially alter the traditional way of choosing board members on a trial-and-error basis or depending on whom one knows. As the board of directors is the direct link between the executive management and the shareholders or stakeholders, these findings could help banks in South Sudan better analyze the attributes

of board members and determine what attributes can make the board more effective. Such knowledge could benefit all stakeholders, including the shareholders, regulators, and members of society in general. Shareholders would benefit as they would own shares in a better-managed organization, which would increase the chances of the banks earning more profit, which in turn might lead to a higher dividend payout. Regulators could ensure that banks would run more effectively by a board that was better designed. This reality could ensure that banks were run in a prudent manner and in a way that reduces the risk of bank failure and financial system crises. The wider society could benefit as a more efficient and profitable banking sector can contribute to economic growth, creating jobs and improving government revenue, which can lead to better provision of services to the wider population.

By identifying the predictive relationship between the corporate governance attributes of level of board independence and board education and the financial performance of banks in South Sudan, the findings of this study add to existing empirical evidence for organizations' reliance on the agency theory as an explanation of the underlying theory of principal–agent relationship. Accordingly, this study contributes to the existing literature regarding the relationship between corporate governance attributes and corporate performance. The main objective of this study was to determine the extent to which there is a predictive relationship between the corporate governance attributes of level of board independence and board education and the financial performance of banks in South Sudan.

Although extensive literature supports the findings of this study, the support is not conclusive. A body of literature on the relationship between corporate governance attributes and firm performance is inconclusive (Ciftci et al., 2019). Whereas some studies found a predictive relationship between firm performance and the level of board independence (Ciftci et al. (2019), other researchers were skeptical about the effectiveness of the level of board independence due to the presence of other factors that affects board independence, such as CEO bargaining power and directors' diligence (Duchin et al., 2010).

In the same vein, some researchers have considered the level of education that comes with individual board members to have a considerable impact on corporate performance (Gottesman & Moery, 2015; Wang et al., 2017). Nevertheless, other studies on the level of board education produced opposite results and instead considered years of long experience of the board members to indicate superior performance (Fedaseyeu et al., 2017).

Inconsistencies in the literature on corporate governance outcomes call for further studies to improve understanding of the relationship to firm performance. This study is the first to focus on South Sudan by examining the relationship between corporate governance attributes of level of board independence and board education and the financial performance of banks in South Sudan. The study relied on the 2012 data on corporate governance attributes and data on the financial performance of banks in 2014. As these were early years following the introduction of the corporate governance code to the banking system, there is room to conduct further research on the subject. To this end,

a key recommendation for further research is to examine the relationship between corporate governance attributes and the financial performance of banks using data from recent years.

Furthermore, I delimited this study to only two corporate governance attributes. Therefore, I recommend that in the future researchers extend this study to test the predictive relationship of other corporate governance attributes to the financial performance of banks in South Sudan. Another possibility for further research is to extend this research to nonbanking financial institutions and to determine how corporate governance relates to their performance. Also, as the East African Region prepares for economic integration, there is an opportunity for researchers to carry out comparative studies on the relationship between corporate governance attributes and the performance of banks across the Region.

Implications for Positive Social Change

Positive social change is the process of transforming patterns of thought, behavior, social relationships, and institutions to generate outcomes that improve human and social conditions for the betterment of society (Stephan et al., 2016). Walden University strives to deliver research outcomes that lead to positive transformation at the local and broader community level. Studies have shown that corporate governance malpractices, including deficiencies in internal control systems and lack of adequate monitoring by the board of directors, were the major causes of corporate failures (Ciftci et al., 2019). Improving the board of directors' performance can therefore cause positive welfare effects on shareholders and broader society. This study produced results that may

generate favorable implications for the performance of banks in South Sudan. Improved performance of banks could increase sustainability and contribute to financial prosperity, which may bring about positive social change implications to shareholders, the local community, and the broader society in general.

Implications for Individual Shareholders and Local Communities

Lyon (2016) explained that well-managed organizations could benefit individual shareholders and local communities. The findings of this study can create positive social change at the level of individual shareholders and local communities, as the findings could improve the performance and the long-term sustainability of banks in South Sudan. In turn, sustainable and well-performing banks generate higher profits and dividends payouts, improving individual shareholders' income and improving the standard of living. At the local community level, sustainable banks can ensure higher and sustainable jobs for employees, thus improving families and local communities' financial positions, which could help reduce the level of poverty and result in a higher standard of living in the local community.

Implications for the Banking Industry

Naseem et al. (2017) argued that a more competent board could better exercise its fiduciary duties and strengthen governance. A board that can competently exercise its fiduciary duties may have the ability to mitigate risks, reduce fraud, and other malpractices within the industry. As the findings of this study show, there was a significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks

in South Sudan. These findings could help those in the banking industry better understand the significance of the relationship between the predictor variables and banks performance. Management and regulators could adopt performance's predictive corporate governance attributes as critical criteria for determining board composition. Such outcomes could bring about positive social change and transform the banking sector in South Sudan.

Implications for the Wider Community

At the broader community level, a board of directors that is capable of exercising fiduciary duties could complement the other corporate governance mechanisms. Shah and Napier (2016) explained that superior corporate performance is achievable when there is coordination between the various corporate governance mechanisms—the role of the audit and disclosure, the rights and responsibilities of shareholders, and the structure and responsibilities of the corporate boards. Such measures may include strategies to strengthen the audit and disclosure function's capacity and policies to promote shareholders activism within the South Sudanese banks. All these can contribute to better financial performance and more sustainability of banks. A more sustainable bank, in turn, can better perform banks' intermediatory role and contribute to sustainable economic growth, which in turn could contribute to employment opportunities, generate returns to shareholders, and revenues to the government through taxes. Besides these direct benefits, sustainable banks have a multiplier effect on social change in the sense that the financing that banks provide to the various sectors of the economy also results in additional benefits to society.

Conclusions

In this concluding chapter, I evaluated the findings and examined implications and recommendations for the study. The purpose of this quantitative nonexperimental study was to examine the predictive relationship between corporate governance attributes and the financial performance of banks in South Sudan. I adopted the agency theory as the main theoretical framework. The theory postulates that agents act in the best interest of shareholders. The board of directors acts in an agency capacity, as they serve as the link between executive management of a company and the shareholders. The theory implies the need to identify a competent board capable of running the organization in the best interest of stakeholders. Findings of this study indicated that the model was able to significantly predict the financial performance of banks from the corporate governance attributes of level of board independence and level of board education, with $F(2, 32) = 36.383$, $p < .05$. Based on these findings, I rejected the null hypothesis that there was no significant predictive relationship between the corporate governance attributes of level of board independence and level of board education and the financial performance of banks in South Sudan. Instead, the results show sufficient evidence that there was significant predictive relationship between the level of board independence and level of board education and the financial performance of banks in South Sudan. Thus, the composition of the board of directors has a direct impact on the performance of banks in South Sudan. Consequently, policy-makers could use these findings to guide the establishment of more competent boards to ensure the financial performance and sustainability of banks.

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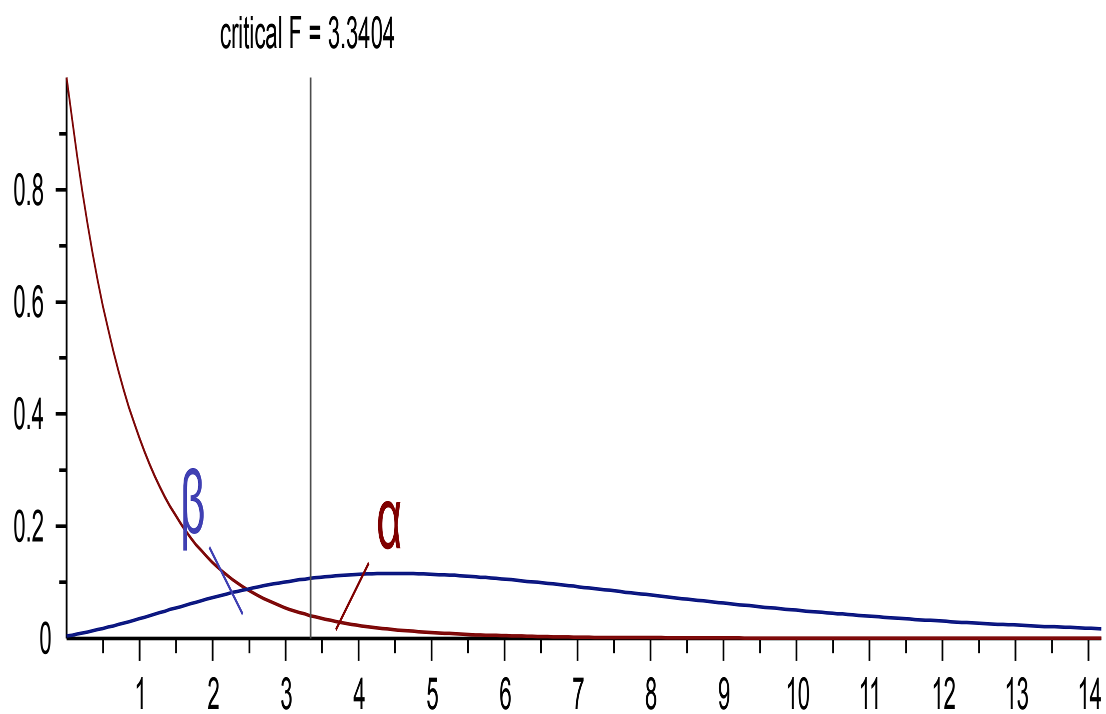
Appendix A: G*Power Central and Noncentral Distribution



Appendix B: G*Power Plot for a Range of Values