Asian Economic and Financial Review
ISSN(e): 2222-6737
ISSN(p): 2305-2147
DOI: 10.55493/5002.v12i4.4465
Vol. 12, No. 4, 227-243.

URL: www.aessweb.com

FIRM VALUE RESPONSE TO INTERNAL AND EXTERNAL CORPORATE GOVERNANCE IN THE NIGERIAN STOCK MARKET

Oluwatosin Mary Esan[1+]
Obiamaka Nwobu[2]
Ibukunoluwa T. Adeyanju[3]
Jesutofunmi O. Adeyemi[4]

[1,2,3,4]*Covenant University, Ota, Ogun State, Nigeria.*
[1]*Email: oluwatosin.esanpgs@stu.cu.edu.ng Tel: +2348034605570*
[2]*Email: obiamaka.nwobu@covenantuniversity.edu.ng Tel: +2349036035282*
[3]*Email: temiloluwadeyanju@gmail.com Tel: +2349038772527*
[4]*Email: adeyemi.jesutofunmi@lmu.edu.ng Tel: +2348135591660*

(+ Corresponding author)

Article History
Received: 12 October 2021
Revised: 14 March 2022
Accepted: 28 March 2022
Published: 8 April 2022

Keywords
Corporate governance index
Corporate governance quality
External corporate governance
Firm value
Internal corporate governance
Principal component analysis.

JEL Classification:
G34, G38, M14, M41.

ABSTRACT

The slow pace of firm valuation and the rising occurrences of fraud have been attributed in part to corporate governance. This research aims to educate the companies and their management who are capable of reversing the current pace to a much better pace. This study also aims to ascertain the firm value response to internal and external corporate governance using evidence from the Nigerian stock market, which covers the period from 2012 to 2019. To determine the response of firm value to the internal and external corporate governance mechanisms, two indexes were determined using the Principal Component Analysis (PCA), and data was sourced from the annual reports of the sampled firms listed on the Nigerian stock market. The variables used were firm value proxied by Tobin's Q, and the internal corporate governance index composed of board independence, board meeting, board size, and board education; and then the external corporate governance index was represented by corporate disclosures, audit type, timeliness of reporting, and corporate governance code. The data was analyzed through a series of tests including the descriptive statistics, PCA, correlation matrix, and panel data static estimators, amongst others. The findings obtained from the analysis show that internal corporate governance has a positive and significant influence on firm valuation and that external corporate governance has a negative and insignificant influence on firm valuation.

Contribution/Originality: The study contributes to the existing literature on corporate governance systems and firm value by developing an index to assess the internal and external corporate governance systems, respectively, and analyzing them together to measure the entire corporate governance quality.

1. INTRODUCTION

The value of a firm is mostly dependent on the internal and external factors that govern its operations (Schäuble, 2019). A company or sector will rise from the bottom to the middle and even to the top of the hierarchy at times. This has been attributed to the organization's thought and decision-making mechanisms, which have long contributed to this growth. It is, therefore, highly possible to infer two significant determinants of firm value, the first of which are the internal components that are under the control of the firm (Stender & Rojahn, 2020), and the second of which represents the external components that are outside the control of the firm. Having a higher firm value and performance should be a vital attribute of well-governed firms (Bhatt & Bhatt, 2017; Ficici & Aybar, 2012;

Schäuble, 2019; Sousa, Canêdo-Pinheiro, Cabral, & Sousa Ferreira, 2021; Stender & Rojahn, 2020). No agreement has been made regarding the consequence of corporate governance on firm performance despite the volume of empirical work. As a result, various views (or mechanisms) have expressed themselves on how corporate governance influences firm performance (Adetunji & Olaniran, 2009).

A large amount of literature on finance has provided proof of the connection between legal infrastructure, corporate governance standards, exploitation, and firm value and performance (Ficici & Aybar, 2012). This is continually supported by the belief that firm value can be increased with good corporate governance (Bauer, Guenster, & Otten, 2004). This definition of firm value refers to the number of benefits accrued by shareholders from the firm's shares. De Carvalho, Netto, and De Oliveira (2016), in explaining an organization's market value, posited that corporate governance is a necessity, thus establishing that a positive and significant relationship exists between the corporate governance index and firm value. Prior studies on corporate governance and firm value have concluded that higher firm valuation is a result of robust corporate governance (Brown & Caylor, 2006; Eloisa, 2016; Lemmon & Lins, 2005). Most of this literature deals with particular corporate governance aspects, such as the board and ownership structure. In contrast, others deal with the aggregated aspects in the form of corporate governance indices.

Studies in developed countries dominate early investigation on the influence of corporate governance on firm value (Bhatt & Bhatt, 2017; Briano-Turrent & Rodríguez-Ariza, 2016; Tariq, 2012; Warrad & Khaddam, 2020). These studies primarily use variables that measure governance quality by assuming a peripheral approach to corporate governance and protection of shareholder rights. However, the importance of corporate governance mechanisms lies beyond the internal shareholder orientation (Schäuble, 2019). When exploring the association between firm value and corporate governance, it is important to consider the stakeholder-oriented external governance provisions. Internal corporate governance provides businesses with opportunities to stand apart, and external corporate governance converges mechanisms across countries, such as best practice transfer, investor demand, or global synchronization of disclosure necessities (Yoshikawa & Rasheed, 2009).

Also, even though corporate governance measures include a wide range of board characteristics and ownership arrangements, previous research (Stender & Rojahn, 2020; Sutrisno, 2020; Tariq, 2012) has stressed the significance of combining corporate governance processes into a single corporate governance measure. This is because each governance mechanism in isolation fails to depict a comprehensive picture of overall corporate governance; however, the corporate governance index evaluates the entire system. Also, while the individual corporate governance mechanisms have a substantial impact when observed together, they have a more significant impact. It is therefore essential to have a better understanding of the internal and external corporate governance mechanisms that are being implemented and are affecting the firm either positively or negatively in Nigeria. In light of this, this paper seeks to study firm value response to internal and external corporate governance, as evidenced in the listed firms on the Nigerian stock market from 2012 to 2019. The structure of the paper is as follows: following the introduction in section 1, section 2 contains the review of literature, section 3 explains the methodology, section 4 comprises the findings and discussion, and section 5 contains the conclusion and recommendations.

2. LITERATURE REVIEW

Corporate governance relays the way firms are directed and controlled rather than the way they are being managed. It is the regulatory body's theoretical and ethical governance aimed at achieving the following governance outcomes: great performance, effective management, strong culture, and legitimacy (Institute of Directors Southern Africa, 2016). The contemporary report on corporate governance aimed to discuss and publish related concerns facing boards of directors that were of concern to business stakeholders. However, the number of involved parties and the definition of governance have increased substantially in recent years (Lai, Leoni, &

Stacchezzini, 2019; Shen, 2010). Wanyama, Burton, and Helliar (2013) stated that it is challenging to define corporate governance meaningfully without acknowledging a link between stakeholders and accountability.

The Nigerian stock market, commonly referred to as the Nigerian stock exchange (NSE), was established in 1960 as the Lagos Stock exchange and became the Nigeria Stock Exchange in 1977. It is the apex body on the Nigerian capital market, with branches recognized in some major commercial cities. The market had about 328 listings in 2020 with an overall market estimation of approximately ₦28.26 trillion. There has been an increase in the number of parameters used to capture the Nigerian stock exchange's performance summary to about seven. The Nigeria stock exchange (NSE) is at the heart of the capital market, as it allows ordinary and institutional investors to trade and liquidate their holdings (Nwobu, 2020). Like all stock exchanges, the NSE has a variety of markets, comprising a primary market for initial issues, a secondary market for existing securities, and calls for debt instruments and equities. The NSE delivers the necessary facilities for organizations and the government to generate money for development projects and business growth (via investors who own shares in the companies) for society's eventual financial and commercial benefit. Firms listed on the NSE cover a range of sectors from which a sample can be extracted to draw conclusions or make generalizations.

2.1. Internal Corporate Governance

Internal corporate governance refers to the collection of laws, guidelines, and controls that regulate individual activities within a company. A board of directors is a body of people who work together to help an organization set its strategic direction, oversee planning and policies, and ensure transparency. As a result, solid financial results and the establishment of an ethical community, efficient management mechanisms, and increased organizational integrity are the outcomes of successful corporate governance (Institute of Directors Southern Africa, 2016). The board of directors and its committees serve as watchdogs, guiding and consulting on organizational strategies, success and risk, as well as supplying companies with network ties and services (Endrikat, De Villiers, Guenther, & Guenther, 2021).

Internal corporate governance (ICG) represents the governance mechanisms that organizations have in place within the firm's purview and ensures full compliance with regulatory guidelines. One of these mechanisms is the size of the board of directors, which is favorably linked to corporate social responsibility (CSR) and indicates a wide variety of expertise to oversee management. It also suggests that businesses can benefit from the relationships with their board members (Endrikat et al., 2021).

2.2. External Corporate Governance

To ensure that competing firms comply with the universal principles of fairness, transparency, and accountability to protect shareholders, customers, employees, the environment and even rivals from unethical practices, structured legal and regulatory obligations are part of the external incentive system (Adegboye, Ojeka, & Adegboye, 2020). The entry, practices, and withdrawal of companies are effectively addressed by an outstanding legal and regulatory structure. Other external elements (transparency rules, accounting and auditing standards, labor legislation, environmental standards, industrial product standards, and listing criteria) are established by countrywide and global bodies on policies and procedures, but other qualitative law courses will contribute to over-regulation and stifle the entrepreneurial spirit.

To ensure that collective and individual activity within a group follows the standards required by society, external corporate governance refers to the collection of processes that regulate, monitor, guide, and influence human behavior (Schäuble, 2019). External and internal governance is growing and evolving with several intended or emerging processes. Without an internal control mechanism, group operations of any complexity will fail. Arguably, collective groups would struggle to fulfill the aspirations of society without a network of external governance. In a study on corporate governance issues by the Edinburgh Business School, it was assumed that

enhancing external control and performance reporting would generate and sustain the degree of trust in companies that are needed to allow financial markets to operate with ease. As a result, many of the changes to the laws regulating companies and financial markets that are part of the external structure for corporate governance seem to have centered on enhancing trust for decades by solving the classic problem of principal agents taught in economics. Both of which are in a bid to boost full compliance with corporate governance.

2.3. Theoretical Review

Some of the major theories guiding corporate governance across the globe include agency theory, institutional theory, stakeholder theory, stewardship theory, resource dependency theory, and many others. However, for this paper, our focus is on the agency theory and stakeholder theory as a guide in understanding corporate governance and its influence on firm value and performance.

Agency theory is a major theory of corporate governance that has been reported to mitigate agency costs in corporate organizations (Jensen, 1986). The fundamental premise of the agency theory is that people are intrinsically selfish, only acting in their own best interests. The principal (shareholder) goal of wealth maximization competes with the personal goals of the agent (manager), and this is the implication of the theory. It also suggests that the agents will seek to maximize their objective (utility) at the principal's expenses in an imperfect market. The agency theory proposed several solutions to mitigate the pursuit of personal goals at the expense of organizational goals. Some of them include separating the CEO's position from the Chairman's position, ensuring that acquirers dismiss incompetent managers by creating markets for hostile takeovers and corporate controls and incorporating the shareholders' interests with those of management by offering the managers a stake in the organization. The aim of ensuring that the interests of management and shareholders align is enhanced through the internal and external control mechanisms, which are constituents of corporate governance (Schäuble, 2019). According to the agency theory, active corporate governance mechanisms provide better alignment of executive director and investor interests, which enhances organizational effectiveness and efficiency. It also suggests that organizations with better financial performance are mostly associated with a more robust governance structure (Felício, Rodrigues, Grove, & Greiner, 2018).

The stakeholder theory is another measure through which organizations have been appraised to uphold a good governance structure as they make information available to all relevant stakeholders. According to the stakeholder theory, managers are held accountable to a much larger group of stakeholders, not just the owners. The stakeholder theory is concerned with those groups that are vital to the success and survival of the organization (Freeman, Wicks, & Parmar, 2004). They are usually grouped according to their interest, power, and concerns in an organization. A party's argument must be expressly related to the firm's activity or strategic goals to be counted as a stakeholder. Internal, external, and distal are the three types of stakeholders. Internal stakeholders include executives, senior personnel, and the company's board of directors, and include those within the firm whose presence influences or has influenced the firm's operations. External stakeholders are those who are not affiliated with the organization but have an influence on or are affected by its operations, including shareholders, suppliers, creditors, and the firm's environment. Competitors, investors, interest organizations, and government officials are among the distal stakeholders (Miles, 2012).

2.4. Review of Empirical Studies

Many scholars have examined the influence of corporate governance on developed and developing nations' firm values. Some have viewed it in terms of the performance of organizations; others have viewed it in terms of performance in the economy of the countries under study. To explore the impact of corporate governance and financial performance, several noteworthy pieces of literature have concentrated on Tobin's Q, ROE, and ROA as financial indicators. Li and Tang (2007) established that the primary requirement of decision making and execution

rests on the shoulders of the supervisor's committee, top management, the board of directors, and stakeholders. They indicated that adequate mechanisms of corporate governance enhance stock expansion ability, profitability, growth and development possibilities, operational effectiveness and efficiency, and financial adaptability of companies listed on the stock market. Al-ahdal, Alsamhi, Tabash, and Farhan (2020) examined the relationship between corporate governance and financial performance and focused on listed banks from India and the Gulf Cooperation Council (GCC). Banks' economic output is largely influenced by board and ownership structure and firm size; this is evidenced in a prior study (Hoque, Islam, & Azam, 2013).

Stender and Rojahn (2020) analyzed the various scopes of corporate governance quality and its influence on the evaluation of non-financial listed firms on the STOXX Europe 600 index between 2012 and 2017. They captured a more linear approach to corporate governance by recreating the highly cited governance score from prior literature and performing a principal component analysis to determine correspondences. This approach was seen as an alternative to the previous holistic approach that could produce unreliable estimates. Their conclusion revealed that corporate governance scores rely on two generic elements – internal and external governance quality. Internal (external) governance is negatively (positively) associated with the valuation of a firm when applying the instrumental variables (IV) regression estimation and fixed effects model to report for endogeneity. Their results ultimately implied that future examination of the association between firm value and governance demands the inclusion of proxies for internal and external corporate governance quality. In examining how financial institutions are affected by corporate governance in the US from 2002 to 2009, Zagorchev and Gao (2015) realized that the performance of the US financial institutions had improved and the unrestrained risk-taking behavior had reduced. The variables employed suggest income smoothing by increasing the reserves and provisions of asset losses, reducing loans not performing as expected, and improving firm value (Tobin's Q).

2.5. Instrumental Corporate Governance Variables and Firm Value

2.5.1. Board Size and Firm Value

The review of prior literature revealed that there is no simple criterion on the size of a company's board of directors. The size is majorly dependent on many factors. According to Shinozaki and Uchida (2011), firm characteristics, organizational complexity, monitoring costs, industry type, etc. are major determinants of board size. Due to the functioning and supervisory capacity of a firm's board, an appropriate number of directors should be fundamentally aligned with the firm structure (Gandía, 2008). Adelegan (2009) established that nine is the average board size of Nigerian listed firms, which is within the range endorsed by the Securities and Exchange Commission and Corporate Affairs Commission (2003). This is also consistent with the position of the ten-member board for Nigerian listed firms as stated by Sanda, Mikailu, and Garba (2005).

According to Jackling and Johl (2009), the resource dependency theory and the agency theory provide major sustenance for a suitable board size to offer capital resources to the firm, monitor agency costs and strengthen relationships with core vendors, clients, and major stakeholders. Mak and Kusnadi (2005) showed that board size and firm value are negatively related. One credible justification is that bigger boards result in ineffective coordination, fewer interactions between board members, and more flawed choices. Tariq (2012) found a strong and optimistic link between ROA and board scale, while ROE and Tobin's Q did not correlate. According to Romano, Ferretti, and Quirici (2012), the size of a company's board does not affect its organizational or financial results.

2.6. Board Independence and Firm Value

An independent member of the board is less likely to have disputes with supervisors, even though external directors represent additional costs to the firm (Romano et al., 2012). However, to better monitor management performance, the necessity of external (non-executive) directors cannot be overemphasized. Adams and Ferreira (2007) expressed theoretically that more independence lessens the board's information availability, reduces its

monitoring function, and hurts its advisory role. The value of independent board members is contingent on their proficiency, expertise, and experience. According to Adams (2012), external directors could be effective management monitors; however, they sometimes lack a thorough understanding of the inner workings of the companies on whose boards they serve. A negative association between board independence and firm value was reported by Khan, Tanveer, and Malik (2017).

2.7. Board Education and Firm Value

The fact that the quality of financial reporting is substantially encouraged by accounting specialists was established by Kusnadi, Leong, Suwardy, and Wang (2016) with evidence from firms in Singapore. These facts were later validated when they got similar results after due considerations of economic and accounting expertise on financial reporting; it was then accepted that a firm's financial reporting system is guided by accounting experts (Masud, Kaium, Bae, Manzanares, & Kim, 2019). The financial expertise of these board members helps them concentrate on a firm's profitability rather than its sustainability, which enhances maximization of the firm's profits.

2.8. Board Meeting and Firm Value

According to the Securities and Exchange Commission and Corporate Affairs Commission (2003), monitoring the management and executive of an organization as well as maintaining control over a firm is made possible with regular board meetings. Regular board meetings enhances the alignment of both the shareholders' and the director's interests and provides a medium for adequate feedback and efficient monitoring of management. Due to the shortage of time for external directors to exchange ideas, give advice and scrutinize management reports, the frequency of board meetings might not be able to bridge that gap. Performance was established by Chou, Chung, and Yin (2013) to be independent of regular board meetings.

2.9. Corporate Disclosures and Firm Value

Corporate accountability and openness is one area that corporate governance tackles. Businesses use corporate disclosures to convey the transparency of the business to different stakeholders, such as vendors, customers, society, and the government. This is a key method for transmitting financial and non-financial results to clients (Nwobu, 2017). The aim of corporate transparency, according to Leuz and Verrecchia (2000), is to minimize knowledge asymmetries between a firm and its owners, or prospective buyers and sellers of the firm's stock. Corporate reports are likely to be correlated to shareholders' assets, with higher shareholders' funds resulting in more corporate disclosures. Zhang, Chong, and Jia (2019) looked at the association between stock valuation and social and environmental disclosures made by businesses and posited that a positive association exists.

2.10. Audit Type and Firm Value

Direction and control of firms are the major proponents of corporate governance. One way to assure the investors and other stakeholders of corporate governance compliance is via corporate auditing, which comprises internal and external audits. To ensure that shareholders and other stakeholders have confidence in financial statements, it is critical to pick an independent expert to audit financial records, which is why external auditors play such a crucial role in corporate governance. According to the OECD (2015), external auditors are the "auditors in an entity who are not under the supervision of the organization and do not have to adhere to the organization's goals". Through the independent auditor's position, the shareholders monitor and control the management, enhancing transparency in a company. There are a variety of audit firms operating all over the world. However, there is a cartel of audit firms that dominates the worldwide audit market – The Big Four.

These four audit firms are largely known to ensure information symmetry and inform financial markets of firm prospects. In a recent survey, DeFond and Lennox (2011) discovered that "many small auditors, identified as those

with less than 100 customers, left the market after the Sarbanes–Oxley Act of 2002 was enacted. They believed that multi-nationalization is one of the major reasons why businesses employ big auditors. Ordering the services of international auditors (for example, a "Big Four" auditor) to audit their overseas branches is essential. Choosing a Big Four auditor could indicate that a company is extensive and has international operations. Firms that use a Big Four auditor may perform better than firms that don't since big firms appear to have a superior performance to smaller firms, and global firms are more likely to have a broader representation than domestic firms.

2.11. Code of Corporate Governance and Firm Value

The Securities and Exchange Commission (SEC) is responsible for firms whose shares are traded on the stock market. The SEC has the authority to impose codes and rules on certain businesses to encourage best practices in certain fields of business. The SEC's code of corporate governance (CGC) is one of the areas in which firms are encouraged to strengthen their reporting standards, thus increasing firm value. However, there would be no reason for companies to conform to the SEC's corporate governance codes and the Central Bank of Nigeria's sustainability monitoring guidance if regulators do not follow through with their oversight function.

A variety of corporate governance codes in Africa, for example, are redefining their orientation on stakeholders based on the need to develop the existing concept of transparency. According to Brennan and Solomon (2008), corporate governance laws have followed the agency theory perspective to reconcile disagreements between company owners and shareholders. This has improved as best practice in corporate governance has become more stakeholder-oriented. To gain the trust of customers, shareholders, and investors, the Code of Corporate Governance stresses openness and disclosure standards. A good reputation and a greater market valuation will appeal to outside investors who can provide capital and finance (Jakpar, Tinggi, Hui, Johari, & Myint, 2019).

3. METHODOLOGY

For this study, the sample size is all the firms listed on the Nigerian Stock Market, which is 160 as of January 2021. However, some corporate annual reports were not available for the period from 2012 to 2019. Hence, only companies that had complete data for the period under consideration were included in the sample. Table 1 categorically explains how the sample was determined, describing the sectors and the number of available and unavailable annual reports. Furthermore, this sample size accounts for 68.75% of the total number of listed companies, as recommended by Krejcie and Morgan (1970), who believe that a sample size of 5% of the population is sufficient for generalization.

Table 1. Determination of sample size

Sector	Available annual reports	Unavailable annual reports
Basic materials	5	5
Consumer goods	10	15
Consumer services	6	9
Financial services	15	42
Health Care	2	8
Industrials	5	19
Oil & Gas	4	8
Technology	3	4
Total	50	110

3.1. Model Specification

This study adopts static panel data for the analysis. Panel data has longitudinal and cross-sectional features, which observes firm values' response over the years. To test the formulated hypotheses, which assume the responsibility of internal and external corporate governance on firm value, the following econometric equation is built:

$$FV_{it} = f(CGQI_{it}, FICGI_{it}, FECGI_{it})$$

Where

FV = Firm value.

CGQ = Corporate governance quality index.

FICG = Firm's internal corporate governance index.

FECG = Firm's external corporate governance index.

Ɛ = Stochastic error term.

f = Functional notation.

*i re*presents the firms (*I* = 1…160).

t denotes the year (*t* = 2012…2019).

The stochastic depiction of this model is presented below:

$$FV_{it} = \beta_0 + \beta_1 CGQI_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 AGE_{it} + \varepsilon_{it}$$

$$FV_{it} = \delta_0 + \delta_1 FICGI_{it} + \delta_2 SIZE_{it} + \delta_3 LEV_{it} + \delta_4 AGE_{it} + \varepsilon_{it}$$

$$FV_{it} = \varphi_0 + \varphi_1 FECGI_{it} + \varphi_2 SIZE_{it} + \varphi_3 LEV_{it} + \varphi_4 AGE_{it} + \varepsilon_{it}$$

Where

$\beta_0 - \beta_4$ stand for the coefficients of the estimates.

$\delta_0 - \delta_4$ represent the coefficients of the estimates.

$\varphi_0 - \varphi_4$ represent the coefficients of the estimates.

3.2. Principal Component Analysis (PCA)

This study adopts the principal component analysis (PCA), correlation research design and panel data using static estimators to examine the sensitivity of internal and external corporate governance index on firm value in listed companies in Nigeria.

The PCA is meant to build a corporate governance index for these listed companies. This method transforms individual firm's available corporate governance mechanisms into an aggregate representing the corporate governance index, which evaluates the general corporate governance mechanisms of designated Nigerian firms. This approach is based on the reduction of data dimension by reducing highly linked data into unrelated condensed variables, commonly referred to as principal components.

This keeps the dataset's high variability (Larcker, Richardson, & Tuna, 2007). The initial principal components describe the highest dataset variability; however, the subsequent components show less variability when compared to the prior set. Table 2 describes how the independent and dependent variables are measured as well as their adaptive sources from prior studies.

Table 2. Measurement of variables.

Variable	Code	Measurement	Prior Studies
Firm Value			
Firm Value	Tobin's Q	The ratio of the market value of equity plus long-term debt to the total assets.	(Al-ahdal et al., 2020; Khan et al., 2017; Rossi, Nerino, & Capasso, 2015)
Internal Corporate Governance			
Board Size	BS	The total number of board members	(Briano-Turrent & Rodríguez-Ariza, 2016; Khan et al., 2017; Michelberger, 2016; Warrad & Khaddam, 2020)
Board Meeting	BM	The number of meetings held yearly	(Chou et al., 2013; Grove, Patelli, Victoravich, & Xu, 2011; Hoque et al., 2013)
Board Education	BE	The board members with financial expertise as evidenced in their certifications and degrees	(Kusnadi et al., 2016; Masud et al., 2019)
Board Independence	BI	The ratio of non-executive directors to total board members	(Briano-Turrent & Rodríguez-Ariza, 2016; Khan et al., 2017)
External Corporate Governance			
Audit Type	AT	Part of the "Big Four"	(DeFond & Lennox, 2011; Larcker et al., 2007)
Timeliness of Reporting	TR	The reporting timeline as regulated in the SEC filing calendar	(Aderin & Otakefe, 2015; Ceschinski, Freidank, & Handschumacher, 2020; De Villiers & Dimes, 2020)
Corporate Disclosures	CD	The number of disclosures made yearly	(De Villiers & Dimes, 2020; Zhang et al., 2019)
CG Codes	CGC	Compliance with the SEC code of conduct	(IFC, 2014; Michelberger, 2016)
Control Variable			
Firm Size	Size	Natural logarithm of total assets	(Khan et al., 2017; Michelberger, 2016; Warrad & Khaddam, 2020)
Incorporation Date	Age	Natural logarithm of incorporated years	(Adetunji & Olaniran, 2009; Bhatt & Bhatt, 2017; Zhang et al., 2019)
Leverage	Lev	The ratio of total debt to total assets	(Bhatt & Bhatt, 2017; Warrad & Khaddam, 2020)

The principal component analysis condenses four internal corporate governance characteristics into the internal corporate governance index. Following the studies of Briano-Turrent and Rodríguez-Ariza (2016), Khan et al. (2017), Michelberger (2016), and Warrad and Khaddam (2020), this research adopts the recognized corporate governance mechanisms that determine the internal corporate governance index for the selected firms. The internal governance mechanisms include board independence (BI), board education (BE), board meeting (BM), and board size (BS). Also, following the studies of Aderin and Otakefe (2015), De Villiers and Dimes (2020), Michelberger (2016), and Zhang et al. (2019), this research adopts the recognized corporate governance mechanisms to determine the external corporate governance index for the selected firms. These mechanisms include corporate disclosures (CD), audit type (AT), corporate governance codes (CGC), and timeliness of reporting (TR). The initial principal components are chosen to represent the existing variability in the dataset in line with the study of Adegboye et al. (2020).

The association among the internal corporate governance variables was used to determine the internal corporate governance index as seen in Panel A of Table 3. The low and moderate correlation coefficients among the variables indicate that the implemented mechanisms reflect various aspects of the internal system of corporate governance in the selected listed companies.

Panel B of Table 3 presents the principal component loads for the index. Like Adewuyi and Olowookere (2008) and Khan et al. (2017), the influence of board independence on the entire internal corporate governance system is

positive and indicates that non-executive directors had a positive impact on the internal corporate governance index during the period from 2012 to 2019. This implies that non-executive directors have access to more facts and expertise, which they can use to stimulate the other directors to form a systematic skepticism towards management. This reduces information asymmetry and maximizes the value of the firm. The presence of board members with financial expertise also had a positive impact on the internal corporate governance index during the same period, thus indicating the ability of the board's financial expertise to promote internal control quality (De Villiers & Dimes, 2020).

Table 3. Internal corporate governance index using principal component analysis.

	Independence	Education	Meetings	Board Size
Panel A: Correlation Matrix				
Independence	1			
Education	-0.222***	1		
Meetings	0.0124	0.489***	1	
Board Size	-0.131	0.705***	0.197**	1
Panel B: Principal Component Weight				
Index	0.4352	0.48722	0.4388	0.4939
Panel C: Descriptive Analysis				
	Mean	**Standard Deviation**	**Minimum**	**Maximum**
ICG Index	0	1.416	-2.892	6.447
Panel D: Validity of Principal Component Analysis				
Bartlett's test of sphericity (p-value)			0.000	
Kaiser–Meyer–Olkin			0.500	

Note: ** P < 0.05, *** P < 0.01.

According to the findings in Table 3, a positive influence of board meetings exists on the determined index, implying an effective contribution. The number of times the board meets is also strategic to affect corporate decisions and thus improve firm value. It is also essential to maintain efficient control of the firm and to monitor management (Adewuyi & Olowookere, 2008). As Michelberger (2016) and Warrad and Khaddam (2020) found, there is a positive impact of board size on total internal corporate governance frameworks, implying that a bigger board size allows the company to acquire specialist capabilities and resources to manage high-risk ventures (Adegboye et al., 2020).

The principal component analysis also necessitates the use of two additional statistical tests to validate the instrument – Bartlett's sphericity test and the Kaiser–Meyer–Olkin test (Adegboye et al., 2020). The correlation matrix is not factorable according to the null hypothesis of Bartlett's test. To ascertain the suitability of the data for factor analysis, 5% must be the maximum threshold for the p-value of Bartlett's test. The p-value of Bartlett's test in this study is 0.000, indicating that the null hypothesis of a non-factorable correlation matrix is not accepted. This indicates that principal component analysis is appropriate to separate the principal corporate governance indicator (CGI) among all CGIs presented. Moreover, Kaiser–Meyer–Olkin's "KMO" accepts a value between 0 and 1, with 0.50 being a suitable critical benchmark for sample appropriateness (Adegboye et al., 2020). It should be noted that the KMO value is 0.500, indicating adequate sampling. This conclusion indicates that one or some of the corporate governance indices are dominant and that the rest can be ignored. In other words, it is possible to identify the principal components (Ahmed & Stewart, 1981). As a result, the two tests show that employing PCA to determine the corporate governance index is valid in this research.

The association between the external corporate governance indices used to determine the external corporate governance index is shown in Panel A of Table 4. The low and moderate coefficients of correlation between the variables indicate that the implemented mechanisms reflect various aspects of the external system of corporate governance in the selected listed companies.

Panel B of Table 4 presents the principal component loads for the index, primarily categorized by all the external corporate governance indices as their complete loadings surpass 0.5. As De Villiers and Dimes (2020) and Zhang et al. (2019) found, the contribution of corporate disclosures to the entire external corporate governance system is positive and indicates that the presence of disclosures in the selected firms helps to reduce information asymmetry, which promotes the firm's attractiveness. This also exudes focus on the high-quality reporting process and well-implemented internal controls (De Villiers & Dimes, 2020).

Table 4. External corporate governance index using principal component analysis.

	Disclosures	Audit	Timeliness	CGC
Panel A: Correlation Matrix				
Disclosures	1			
Audit	0.176***	1		
Timeliness	0.263***	0.123*	1	
CGC	0.178***	0.335***	0.0739	1
Panel B: Principal Component Weight				
Index	0.6061	0.5818	0.5779	0.5698
Panel C: Descriptive Analysis				
	Mean	**Standard Deviation**	**Minimum**	**Maximum**
ECGIndex	0	1.257	-2.228	1.871
Panel D: Validity of Principal Component Analysis				
Bartlett's test of sphericity (p-value)			0.000	
Kaiser–Meyer–Olkin			0.5835	

Note: *P < 0.1, *** P < 0.01.

The audit type contributes positively to the entire external corporate governance system, as presented in Table 4. This indicates the importance of the big four in Nigerian listed firms' external corporate governance structures, as well as the fact that big audit practices deliver advanced quality audits compared to the smaller or medium-sized audit practices, implying enhanced financial reporting quality (Schäuble, 2019). Similarly, the external corporate governance index of the selected firms has a positive influence on timely reporting, implying that the regulatory filing schedule has an impact on the overall index. It was also discovered that the corporate governance code has a favorable impact on the index created, implying an effective contribution. This means that firms that follow a corporate governance code are more likely to have robust external control mechanisms and adhere to the rules.

The use of the two additional statistical test is necessitated by the principal component analysis in order to validate the instrument – Bartlett's sphericity and the Kaiser–Meyer–Olkin test (Adegboye et al., 2020). To ascertain the suitability of the data for factor analysis, 5% must be the maximum threshold for the p-value of Bartlett's test. The correlation matrix is not factorable according to the null hypothesis of Bartlett's test. The p-value of Bartlett's test in this study is 0.000, indicating that the null hypothesis of a non-factorable correlation matrix is not accepted. This finding indicates that principal component analysis is appropriate to separate the principal CGI among all CGIs presented. Moreover, Kaiser–Meyer–Olkin's "KMO" accepts a value between 0 and 1, with 0.50 being a suitable critical benchmark for sample appropriateness (Adegboye et al., 2020). The KMO value is 0.5835, indicating adequate sampling. This indicates that it is possible to identify some principal components (Ahmed & Stewart, 1981). That is one or some of the corporate governance indices are dominant and that the rest can be ignored. As a result, the two tests show that employing PCA to determine the corporate governance index is valid in this research.

From Table 5, the association between firm value and the internal corporate governance index (ICGI) is positive, and although the degree of relationship is very weak with a coefficient value of 0.0662, the degree is significant at a 5% level. This means the sampled firms' internal corporate governance moves in the same direction as the performance indicators of the firms. In other words, decreases in the internal corporate governance system precipitate a decrease in the performance indicators, while increases in the internal corporate governance system

stimulate increases in the performance indicators. Conversely, the external corporate governance index (ECGI) has a negative association with firm value. The ECGI presents a negatively correlated movement with firm value with a coefficient value of -0.0511. However, the degree of relationship is very weak and insignificant. The control variables also present varying correlations with firm value and these are exhibited below.

Table 5. Correlation matrix.

	Tobin's Q	ICGIndex	ECGIndex	Firmsize	Leverage	Firmage
TOBIN'S Q	1					
ICGINDEX	0.0662*	1				
ECGINDEX	-0.0511	0.179**	1			
FIRMSIZE	-0.141*	0.604***	0.135*	1		
LEVERAGE	0.0979	0.0983	-0.114	0.151*	1	
FIRMAGE	-0.0272	0.0190	0.239***	0.0677	0.306***	1

Note: *P < 0.05, ** P < 0.01, *** P < 0.001.

Firm size presents a negatively correlated movement with firm value (Tobin's Q) with a coefficient value of -0.141. Although the degree of the relationship is very weak, it is significant at the 5% level. This implies that the increased value of total assets of the sampled firms yields a lower level of firm value. In the same vein, a decreased value of total assets of the sampled firms results in a high level of firm value. Likewise, the association between firm age and firm value (Tobin's Q) is inversely correlated with a coefficient value of -0.0272, which implies a very weak but significant relationship with a significance of 5%. Remarkably, the level of association is significant, which implies that an increase in a firm's age reduces the firm's value.

However, leverage reveals a positive relationship with firm value. It correlates positively with firm value with a coefficient value of 0.0979, which signifies a weak relationship and is insignificant according to the level. This implies that a retrogressive movement of leverage increases the firm value in the sampled firms.

Based on the above, it is observed that ECGI, FIRMSIZE, and FIRMAGE have an inverse relationship with TOBIN'S Q, while ICGI and LEVERAGE have a direct positive association with TOBIN'S Q. The Pearson correlation matrix for the independent variables employed in the study is also presented in the table above. The table shows that the variables have a poor correlation, and as a result, the models used have no proof of significant multicollinearity (Nwobu, Iyoha, & Owolabi, 2018).

4. EMPIRICAL RESULTS

The Hausman test is used to select the right model between the fixed effects and the random effects models. It examines the extent to which the unique errors relate to the regressors when the null hypothesis is rejected (Torres-Reyna, 2007). In the Hausman test, the alternative hypothesis is accepted if the p-value is statistically significant. However, if it shows a statistically insignificant p-value, the null hypothesis is accepted, and then it is reasonable to use a random effects model. Table 6 presents the influence of corporate governance quality on firm value. The corporate governance quality is an accretion of the internal and external corporate governance indices. At Prob. = 0.997, the Hausman test confirms that the random effects model is for suitable for use in the investigation. Furthermore, it is critical to assess the overall model's initial degree of goodness of fit as well as the regressors' explanatory powers. According to Table 6, 7.4% of the explanatory variables expound the firm valuation (R-squared). The F-statistic's p-value at 1% of the significant threshold indicates that the regressors explanatory power is statistically significant, enhancing the model's dependability and rationality. The reports presented in Table 6 also show that the coefficient of the internal corporate governance index (ICG Index) remains positive and important at a 1% level. This infers that firms with superior internal corporate governance systems can significantly increase the level of firm performance recorded across their respective industries. Likewise, the coefficient of the external corporate governance index (ECG Index) remains negative and insignificant.

Table 6. Corporate governance quality and firm value.

Variable	(1)	(2)	(3)
	OLS	Fixed Effects	Random Effects
ICGIndex	0.966***	0.919***	0.966***
	(0.326)	(0.325)	(0.326)
ECGIndex	-0.0869	0.608	-0.0869
	(0.323)	(0.413)	(0.323)
ICGIndex* ECGIndex	-0.243	-0.214	-0.243
	(0.194)	(0.194)	(0.194)
FIRMSIZE	-2.033***	-1.995***	-2.033***
	(0.610)	(0.607)	(0.610)
LEVERAGE	2.287*	3.018**	2.287*
	(1.297)	(1.325)	(1.297)
FIRMAGE	-0.0105	-0.0147	-0.0105
	(0.0180)	(0.0180)	(0.0180)
Constant	22.57***	21.70***	22.57***
	(6.328)	(6.303)	(6.328)
Observations	220	220	220
R-squared	0.080	0.087	0.074
F-test	3.089	3.283	18.53
Prob > F	0.00639	0.00418	0.00503
Hausman Test	--	--	0.25
Prob.	--	--	0.997

Note: *** P < 0.01, ** P < 0.05, * P < 0.1.

This implies that there is no significant relationship between firms with better external corporate governance systems and the level of firm performance. The coefficient of corporate governance quality (being the ICGIndex* ECGIndex) is negative and insignificant, thus implying that firms with superior corporate governance quality can insignificantly condense firm performance.

5. CONCLUSION AND RECOMMENDATIONS

The study has illustrated that even though many governance mechanisms exist, not all of them are applicable or are being adhered to by firms. It also shows the various relations between the entire firm valuation and the seemingly small governance problem. From the empirical analysis, it is clear that a sound corporate governance structure can significantly enhance firm valuation, so effective corporate governance mechanisms help to avoid any form of non-compliance, which could skew probable firm valuation and performance.

This study has established the fact that internal corporate governance (independence of the board, board meeting, board size, and board education) and external corporate governance (corporate disclosures, audit type, reporting timeliness, and code of corporate governance) influence firm valuation (both positively and negatively) in Nigeria. The study also revealed that the magnitude and direction of firm value response to internal and external corporate governance varies according to the measures adopted by various works of literature. It ultimately revealed a positive significant influence of board independence, board meeting, board size, and board education on firm valuation, and it revealed both positive significant and negative insignificant influences of corporate disclosures, audit type, timeliness of reporting, and corporate governance code on firm valuation. Finally, it also revealed a negative and insignificant influence of corporate governance quality on firm valuation. This could be attributed to the exclusion by management of the vitality of compliance of some of these external corporate governance systems.

The importance of sound internal corporate governance is highlighted in this study as its influence was found to be significant and positive. The components of internal corporate governance allow us to recommend that firms should normalize having an independent board where the number of external constituents (non-executive directors) is higher than the number of internal constituents (executive directors). They should also ensure that there are

frequent board meetings where the members of the board are familiarized with the operations of the organization to enhance proper and consistent monitoring and control. Likewise, the board size should be dependent on the industry average to ensure that there is no under- or over-utilized capacity on the board; and finally, the financial prowess of the board members should be heightened to include professionals who can speak to the financial prowess of the organization, especially during their meetings, which would help eliminate any form of unnecessary fraudulent acts. All of this would help enhance the firm valuation in the long run.

Given that the external corporate governance index reported a negative influence on firm valuation, it is therefore of utmost importance that the compliance of firms should be revised as these acts of non-compliance over the years have done more harm than good and have equally made some of these firms unattractive to investors. The information disclosure in the form of corporate disclosures should not always be a weak form of efficiency. There should be access to all the relevant information of the organization to guide the stakeholders in their decision-making processes. The compliance level of the firm to the securities exchange commission regulatory calendar is also important in raising their firm value as not complying has indicated a negative firm valuation. So, until the timeliness of reporting is considered important by firms, there will be a negative though insignificant firm valuation, but nevertheless present as the users of this information lose confidence in the governance of the companies. Also, every firm, listed and unlisted, should have a corporate governance code that they abide by to help strengthen the firm's system of operations and internal controls. This code would serve as a voice at the top to encourage the employees to be more compliant and avoid misappropriation or fraud, which would also help enhance the firm's value. Finally, firms and organizations across the world should ensure that their corporate governance quality is top-notch as having it would increase their attractiveness to investors, accessibility to funds, global recognition, and maximize firm valuation.

Funding: This research is supported by Covenant University Centre for Research, Innovation and Discovery (Grant number: CUCRID/RC/08.04.22/FC).
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study.

REFERENCES

Adams, R. B. (2012). Governance and the financial crisis. *International Review of Finance*, *12*(1), 7-38.

Adams, R. B., & Ferreira, D. (2007). A theory of friendly boards. *The Journal of Finance*, *62*(1), 217-250.Available at: https://doi.org/10.1111/j.1540-6261.2007.01206.x.

Adegboye, A., Ojeka, S., & Adegboye, K. (2020). Corporate governance structure, bank externalities and sensitivity of non-performing loans in Nigeria. *Cogent Economics & Finance*, *8*(1), 1816611.Available at: https://doi.org/10.1080/23322039.2020.1816611.

Adelegan, O. J. (2009). Does corporate leadership matter ? Evidence from Nigeria. *African Economic Research Consortium*, *3*(2), 1–42.

Aderin, A., & Otakefe, J. (2015). International financial reporting standards and financial reporting quality in Nigeria. *Journal of Science and Technology (Ghana)*, *35*(3), 73-83.Available at: https://doi.org/10.4314/just.v35i3.7.

Adetunji, B. M., & Olaniran, O. (2009). The effects of internal and external mechanism on governance and performance of corporate firms in Nigeria. *Corporate Ownership & Control*, *7*(2), 330-344.Available at: https://doi.org/10.22495/cocv7i2c3p1.

Adewuyi, A. O., & Olowookere, A. E. (2008). Corporate governance and performance of Nigerian listed firms: Further evidence. *Corporate Ownership and Control*, *6*(2), 354-371.Available at: https://doi.org/10.22495/cocv6i2c3p3.

Ahmed, S., & Stewart, R. A. (1981). Factor analysis of the Machiavellian scale. *Social Behavior and Personality: An International Journal*, *9*(1), 113-115.Available at: https://doi.org/10.2224/sbp.1981.9.1.113.

Al-ahdal, W. M., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. (2020). The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation. *Research in International Business and Finance*, *51*, 101083.Available at: https://doi.org/10.1016/j.ribaf.2019.101083.

Bauer, R., Guenster, N., & Otten, R. (2004). Empirical evidence on corporate governance in Europe. The effect on stock returns, firm value, and performance. *SSRN Electronic Journal*, 1-24.Available at: https://doi.org/10.2139/ssrn.444543.

Bhatt, P. R., & Bhatt, R. R. (2017). Corporate governance and firm performance in Malaysia. *Corporate Governance*, *17*(5), 896–912.Available at: https://doi.org/10.1108/cg-03-2016-0054.

Brennan, N. M., & Solomon, J. (2008). Corporate governance, accountability and mechanisms of accountability: An overview. *Accounting, Auditing & Accountability Journal*, *21*(7), 885-906.Available at: https://doi.org/10.1108/09513570810907401.

Briano-Turrent, G. C., & Rodríguez-Ariza, L. (2016). Corporate governance ratings on listed companies: An institutional perspective in Latin America. *European Journal of Management and Business Economics*, *25*(2), 63-75.Available at: https://doi.org/10.1016/j.redeen.2016.01.001.

Brown, L. D., & Caylor, M. L. (2006). Corporate governance and firm valuation. *Journal of Accounting and Public Policy*, *25*(4), 409-434.

Ceschinski, W., Freidank, C. C., & Handschumacher, F. (2020). Which characteristics determine the quality of corporate governance reporting? Concepts, reporting practices, and empirical evidence from Germany. *Corporate Ownership and Control*, *17*(4), 279–291.Available at: https://doi.org/10.22495/cocv17i4siart6.

Chou, H.-I., Chung, H., & Yin, X. (2013). Attendance of board meetings and company performance: Evidence from Taiwan. *Journal of Banking & Finance*, *37*(11), 4157-4171.Available at: https://doi.org/10.1016/j.jbankfin.2013.07.028.

De Carvalho, A. G., Netto, H. G., & De Oliveira, S. J. (2016). Corporate governance in Brazil. *Corporate Governance, Responsibility, and Sustainability: Initiatives in Emerging Economies*, 56–77.

De Villiers, C., & Dimes, R. (2020). Determinants, mechanisms, and consequences of corporate governance reporting: A research framework. *Journal of Management and Governance*, 1-20.

DeFond, M. L., & Lennox, C. S. (2011). The effect of SOX on small auditor exits and audit quality. *Journal of Accounting and Economics*, *52*(1), 21-40.Available at: https://doi.org/10.1016/j.jacceco.2011.03.002.

Eloisa, P. T. (2016). *Quality of governance and firm performance: Evidence from Spain. Autonomous University of Barcelona - Dept. Business Economics*. Spain (Unpublished), 1-40.

Endrikat, J., De Villiers, C., Guenther, T. W., & Guenther, E. M. (2021). Board characteristics and corporate social responsibility: A meta-analytic investigation. *Business & Society*, *60*(8), 2099-2135.Available at: https://doi.org/10.1177/0007650320930638.

Felício, J. A., Rodrigues, R., Grove, H., & Greiner, A. (2018). The influence of corporate governance on bank risk during a financial crisis. *Economic Research*, *31*(1), 1078-1090.

Ficici, A., & Aybar, C. B. (2012). Corporate governance and firm value in emerging markets an empirical analysis of ADR issuing emerging market firms. *Emerging Markets Journal*, *2*(1), 38–51.Available at: https://doi.org/10.5195/emaj.2012.18.

Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and "the corporate objective revisited". *Organization Science*, *15*(3), 364-369.Available at: https://doi.org/10.1287/orsc.1040.0066.

Gandía, J. L. (2008). Determinants of internet-based corporate governance disclosure by Spanish listed companies. *Online Information Review*, *32*(6), 791–817.Available at: https://doi.org/10.1108/14684520810923944.

Grove, H., Patelli, L., Victoravich, L. M., & Xu, P. (2011). Corporate governance and performance in the wake of the financial crisis: Evidence from US commercial banks. *Corporate Governance: An International Review*, *19*(5), 418-436.Available at: https://doi.org/10.1111/j.1467-8683.2011.00882.x.

Hoque, M. Z., Islam, M. R., & Azam, M. N. (2013). Board committee meetings and firm financial performance: An investigation of Australian companies. *International Review of Finance*, *13*(4), 503-528.Available at: https://doi.org/10.1111/irfi.12009.

IFC. (2014). Corporate governance scorecards: Assessing and promoting the implementation of codes of corporate governance (pp. 1-98): International Finance Corporation.

Institute of Directors Southern Africa. (2016). Report on corporate governance for South Africa 2016. *King IV Report on Corporate Governance for South Africa*, *71*(1), 87–94.

Jackling, B., & Johl, S. (2009). Board structure and firm performance: Evidence from India's top companies. *Corporate Governance: An International Review*, *17*(4), 492-509.Available at: https://doi.org/10.1111/j.1467-8683.2009.00760.x.

Jakpar, S., Tinggi, M., Hui, T. K., Johari, A., & Myint, K. T. (2019). Analysis of corporate governance and firm performance: Evidence from Malaysian listed companies. *International Journal of Business and Social Science*, *10*(1), 118–133.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, *76*(2), 323-329.

Khan, A., Tanveer, T., & Malik, U. (2017). An empirical analysis of corporate governance and firm value: Evidence from KSE-100 index. *Accounting*, *3*(2), 119-130.Available at: https://doi.org/10.5267/j.ac.2016.7.003.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3), 607-610.Available at: https://doi.org/10.1177/001316447003000308.

Kusnadi, Y., Leong, K. S., Suwardy, T., & Wang, J. (2016). Audit committees and financial reporting quality in Singapore. *Journal of Business Ethics*, *139*(1), 197-214.Available at: https://doi.org/10.1007/s10551-015-2679-0.

Lai, A., Leoni, G., & Stacchezzini, R. (2019). Accounting and governance in diverse settings–an introduction. *Accounting History*, *24*(3), 325-337.Available at: https://doi.org/10.1177/1032373219862669.

Larcker, D. F., Richardson, S. A., & Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review*, *82*(4), 963-1008.Available at: https://doi.org/10.2308/accr.2007.82.4.963.

Lemmon, M. L., & Lins, K. V. (2005). Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis. *Journal of Finance*, *58*(4), 1445–1468.Available at: https://doi.org/10.1111/1540-6261.00573.

Leuz, C., & Verrecchia, R. E. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research*, *38*, 91-91.Available at: https://doi.org/10.2307/2672910.

Li, W., & Tang, Y. (2007). An evaluation of corporate governance evaluation, governance index (CGInk) and performance: Evidence from Chinese listed companies in 2003. *Frontiers of Business Research in China*, *1*(1), 1-18.Available at: https://doi.org/10.1007/s11782-007-0001-4.

Mak, Y. T., & Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal*, *13*(3), 301-318.Available at: https://doi.org/10.1016/j.pacfin.2004.09.002.

Masud, M., Kaium, A., Bae, S. M., Manzanares, J., & Kim, J. D. (2019). Board directors' expertise and corporate corruption disclosure: The moderating role of political connections. *Sustainability*, *11*(16), 4491.Available at: https://doi.org/10.3390/su11164491.

Michelberger, K. (2016). Corporate governance effects on firm performance: A literature review. *Regional Formation and Development Studies*, *20*(3), 84–95.Available at: https://doi.org/10.15181/rfds.v20i3.1346.

Miles, S. (2012). Stakeholder: Essentially contested or just confused? *Journal of Business Ethics*, *108*(3), 285-298.Available at: https://doi.org/10.1007/s10551-011-1090-8.

Nwobu, O. (2017). Gender gap: Enrolment and career choices of accounting students in Nigerian universities FAWE forum for African women educationalists FAWE research series. September.

Nwobu, O. (2020). Stock market development in Nigeria: Implications on economic growth and vision.

Nwobu, O. A., Iyoha, F. O., & Owolabi, A. (2018). Managerial perceptions of corporate sustainability reporting determinants in Nigeria. *Journal of Business and Retail Management Research*, *12*(2), 72-82.Available at: https://doi.org/10.24052/jbrmr/v12is02/mpocsrdin.

OECD. (2015). *OECD guidelines on corporate governance of state-owned enterprises* (2015 ed.). Paris: OECD Publishing.

Romano, G., Ferretti, P., & Quirici, M. C. (2012). Board diversity and investments in innovation: Empirical evidence from Italian context. *Journal of Management and Governance*, *17*(1), 1–27.

Rossi, M., Nerino, M., & Capasso, A. (2015). Corporate governance and financial performance of Italian listed firms. The results of an empirical research. *Corporate Ownership & Control*, *12*(2), 628-643.Available at: https://doi.org/10.22495/cocv12i2c6p6.

Sanda, A., Mikailu, A., & Garba, T. (2005). Corporate governance mechanisms and firms performance in Nigeria. *African Economic Research Consortium*, *1*(2), 1-22.

Schäuble, J. (2019). The impact of external and internal corporate governance mechanisms on agency costs. *Corporate Governance: The International Journal of Business in Society*, *19*(1), 1-22.Available at: https://doi.org/10.1108/cg-02-2018-0053.

Securities and Exchange Commission and Corporate Affairs Commission. (2003). Code of corporate governance in Nigeria: Securities and exchange commission and corporate affairs commission, Lagos. Retrieved from: https://sec.gov.ng/files/SEC%20Consolidated%20%28JUNE2013%29%20SIGNED%28WEBSITE%29%20%281%29.pdf.

Shen, W. (2010). Book review: Corporate governance: Principles, policies, and practices. *International Journal of Corporate Governance*, *2*(1), 87-96.Available at: https://doi.org/10.1504/ijcg.2010.035236.

Shinozaki, S., & Uchida, K. (2011). Private benefits and board size: International evidence. *Corporate Board: Role, Duties and Composition*, *7*(1 A), 109-124.Available at: https://doi.org/10.22495/cbv7i1c1art3.

Sousa, F. L. D., Canêdo-Pinheiro, M., Cabral, B. P., & Sousa Ferreira, G. E. D. (2021). Lean management practices' effects on Brazilian firms: A quantitative and qualitative analysis. *Journal of Contemporary Research in Business, Economics and Finance*, *3*(3), 84–108.Available at: https://doi.org/10.33094/26410265.2021.33.84.108.

Stender, P., & Rojahn, J. (2020). The influence of internal and external corporate governance on firm value: Evidence from STOXX® Europe 600 index members. *Corporate Ownership and Control*, *18*(1), 152–162.Available at: https://doi.org/10.22495/cocv18i1art12.

Sutrisno, S. (2020). Corporate governance, profitability, and firm value study on the Indonesian Sharia stock index. *TYPE (Journal of Islamic Economics and Business)*, *6*(2), 312-323.Available at: https://doi.org/10.20473/jebis.v6i2.23231.

Tariq, Y. B. (2012). Quality of corporate governance and financial performance: An empirical analysis. *SSRN Electronic Journal*, 1-75.Available at: https://doi.org/10.2139/ssrn.2083567.

Torres-Reyna, O. (2007). Panel data analysis fixed and random effects using stata (v. 4.2). Data & Statistical Services, Priceton University. Retrieved from: https://www.princeton.edu/~otorres/Panel101.pdf.

Wanyama, S., Burton, B., & Helliar, C. (2013). Stakeholders, accountability and the theory-practice gap in developing nations' corporate governance systems: Evidence from Uganda. *Corporate Governance: The International Journal of Business in Society*, *13*(1), 18-38.Available at: https://doi.org/10.1108/14720701311302396.

Warrad, L., & Khaddam, L. (2020). The effect of corporate governance characteristics on the performance of Jordanian banks. *Accounting*, *6*(2), 117-126.Available at: https://doi.org/10.5267/j.ac.2019.12.001.

Yoshikawa, T., & Rasheed, A. A. (2009). Convergence of corporate governance: Critical review and future directions. *Corporate Governance: An International Review*, *17*(3), 388-404.Available at: https://doi.org/10.1111/j.1467-8683.2009.00745.x.

Zagorchev, A., & Gao, L. (2015). Corporate governance and performance of financial institutions. *Journal of Economics and Business*, *82*(1), 17-41.Available at: https://doi.org/10.1016/j.jeconbus.2015.04.004.

Zhang, Y., Chong, G., & Jia, R. (2019). Fair value, corporate governance, social responsibility disclosure and banks' performance. *Review of Accounting and Finance*, *19*(1), 30-47.Available at: https://doi.org/10.1108/raf-01-2018-0016.