



AN EMPIRICAL STUDY OF THE INTERRELATIONSHIP BETWEEN STOCK MARKET PERFORMANCE AND CORPORATE GOVERNANCE PRACTICES IN SELECTED INDIAN PHARMACEUTICAL COMPANIES

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ABSTRACT

The significance of corporate governance (CG) as a subject of discussion grew in importance, particularly in India, which has grappled with a prolonged crisis since 1998. Various stakeholders asserted that the protracted nature of the crisis in India could be attributed to the notably weak corporate governance practices prevalent in the country. Both the government and investors began to pay substantial attention to the practice of corporate governance. Corporate governance is a method employed by company executives to enhance corporate responsibility in delivering long-term shareholder value while also considering the company's interests. This research endeavours to assess the implementation of effective corporate governance and its influence on the stock prices of pharmaceutical companies in India. The research employs a descriptive approach with a quantitative methodology. The study population encompasses six prominent pharmaceutical companies in India spanning from 2018-2019 till 2022-2023. Secondary data, including the financial statements of these companies, constituting the research data. The study's findings reveal that managerial ownership and independent commissioners exert an influence on stock prices, whereas institutional ownership does not demonstrate a significant impact.

KEYWORDS

corporate governance, pharmaceutical companies, stock prices, managerial ownership, institutional ownership, independent commissioners.

1. INTRODUCTION

Corporate governance (CG) has emerged as a prominent topic of discussion, particularly in India, which has grappled with a protracted crisis dating back to 1998. Many voices have asserted that the prolonged process of rectifying the crisis in India can be attributed to the notably deficient implementation of corporate governance within Indian companies. Both the government and investors have begun to place significant emphasis on the practice of corporate governance (Farida, 2019).

Corporate governance, as defined by Bhagat and Black (2002), is a process employed by company managers to enhance corporate accountability, ultimately delivering value to shareholders in the long term while also considering the interests of the company. Good corporate governance, in essence, serves as a set of regulations that govern the relationship between company management and shareholders, delineating their respective rights and responsibilities. The adoption of sound corporate governance practices has become a focal point for economists and business leaders in India, particularly in the wake of the financial crisis that swept across Asia during 2007-2009 (Farida et al., 2019; Hermawan & Gunardi, 2019; Setiawan et al., 2019).

Corporate governance stands as a pivotal endeavour aimed at mitigating the economic crisis that has impacted India. The role and expectations of foreign investors and creditors, concerning the adoption of corporate governance principles, play a substantial role in their investment decision-making processes (Villalobos et al., 2018; Ramirez et al., 2019; Ching, 2020, pp. 449-463; Esqueda & O'Connor, 2020; Greene et al., 2020). The implementation of corporate governance in India carries immense significance because these principles hold the potential to propel companies towards improved performance, thereby enabling Indian companies to not only avoid oppression but also to compete effectively on a global scale.

Corporate governance has become a focal point for the business community, both in developed and developing nations. It is widely accepted that effective governance practices can reduce a company's cost of capital and significantly influence its performance. The tenets of corporate governance contribute to bolstering investor confidence (Bhagat & Black, 2002). Nevertheless, the organization of corporate governance varies across countries, shaped by their socio-economic and cultural contexts. Developed nations typically feature firms with widely dispersed ownership, functioning within stable and mature financial systems, and operating under well-established regulatory frameworks. In contrast, developing countries like India often have firms with concentrated ownership structures and operate in less stable markets. Nonetheless, it is widely acknowledged that the mechanisms of good governance, whether in developed or developing markets, exert a considerable impact on firm performance (Dwivedi et al., 2005)

1.1. This research offers several noteworthy contributions

The study's findings shed light on the current challenges in India and underscore the positive impact of implementing good corporate governance on stock prices in the Indian context, with a specific focus on pharmaceutical companies. The results clearly demonstrate that the application of good corporate governance exerts an influence on the stock prices of pharmaceutical firms. Therefore, this research enriches our understanding of the interplay between good corporate governance and stock prices within the Indian pharmaceutical sector.

Moreover, the outcomes of our study extend the limited body of literature on stock market liquidity in India, providing fresh insights into the relationship between market liquidity and corporate governance mechanisms in the Indian setting. Additionally, this study's findings contribute to the ongoing discourse regarding the costs and benefits associated with governance reforms.

1.2. The subsequent sections of the paper are structured as follows:

Section 2 provides a comprehensive review of the literature, outlining the objectives and research questions of the study.

Section 3 offers an insight into the research methodology, data sources and the process of sample selection.

Section 4 presents the empirical results of the study.

Finally, in Section 5, the paper concludes with a summary of key remarks and findings.

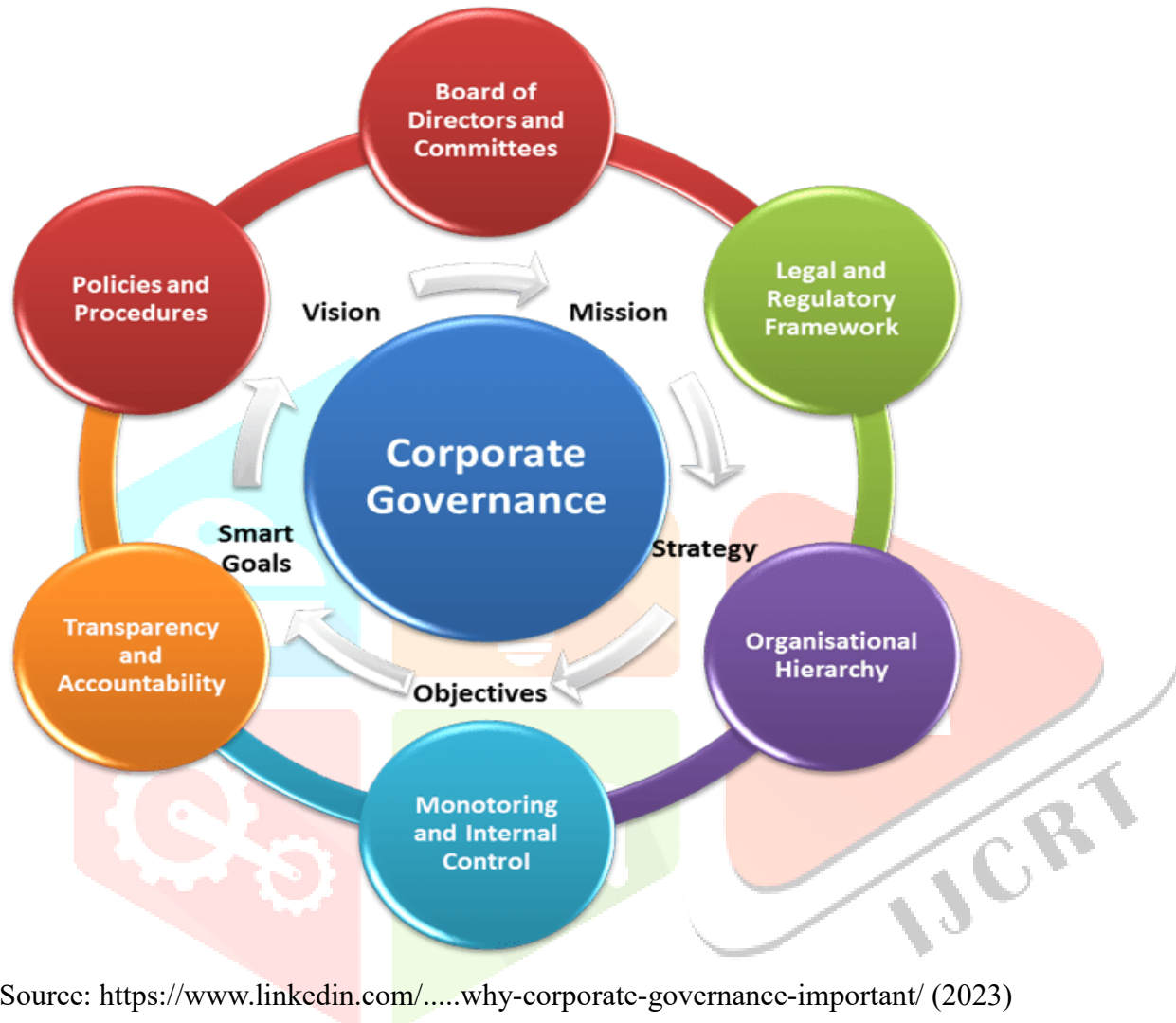
2. CORPORATE GOVERNANCE: A COMPREHENSIVE OVERVIEW

Corporate governance goes beyond the mere administration of a corporation; it encompasses a much broader scope, emphasizing the importance of fair, efficient, and transparent management with specific, well-defined objectives (Mishra & Mohanty, 2014). It represents a system for structuring, operating, and overseeing a company, all geared toward achieving long-term strategic goals. These objectives encompass the contentment of shareholders, creditors, employees, customers, and suppliers, as well as compliance with legal and regulatory requirements. Additionally, corporate governance extends to addressing environmental and local community needs. When practiced within a well-established framework, it paves the way for the establishment of a legal, commercial, and institutional structure, clearly defining the boundaries within which these functions are carried out (Fernando, A.C., 1997).

"Corporate governance is the framework through which companies are guided and overseen." The Cadbury Committee Report (1992). Adrian Cadbury presents a more comprehensive definition of corporate governance rooted in a stakeholder approach. According to this perspective, corporate governance is centred on maintaining a delicate equilibrium between economic and social objectives, as well as individual and communal objectives. The governance framework is established to promote the efficient utilization of resources and, in equal measure, to demand accountability for the responsible management of those resources.

The ultimate goal is to align, as closely as possible, the interests of individuals, corporations, and society at large. For corporations, the incentive is to achieve their corporate objectives and attract investment, while the state's incentive is to bolster their economies and discourage fraudulent activities and mismanagement (Cadbury, 2000).

FIGURE 1: CORPORATE GOVERNANCE FRAMEWORK



Source: <https://www.linkedin.com/.....why-corporate-governance-important/> (2023)

TABLE 1: CORPORATE GOVERNANCE TIMELINE

Summary	Explanation
The Cadbury Report, issued in the United Kingdom in 1995, had the primary aim of examining the adoption of corporate governance principles by large public companies.	Its particular focus was on the procedures related to financial reporting and the responsibilities of the accounting profession. Key issues under scrutiny included the functions of the board of directors, standards for financial reporting, the accountability of auditors, and the remuneration of directors.
The Greenbury Report, released in the United	It proposed the establishment of a remuneration committee in every public company with the responsibility of

<p>Kingdom in 1995, primarily addressed the issue of remuneration for both executive and non-executive board members.</p>	<p>determining remuneration packages for board members. Furthermore, the report put forth recommendations regarding the disclosure of remuneration details, the formulation of remuneration policies, service contracts, and compensation structures.</p>
<p>The Hampel Report, released in the United Kingdom in 1998, addressed four significant issues in corporate governance, providing practical guidelines for each:</p>	<p>a) The Role of Directors: The report delved into the responsibilities and functions of directors within a company. b) Directors' Compensation: It offered insights and recommendations regarding the remuneration of directors. c) The Role of Shareholders: The report discussed the role and involvement of shareholders in corporate governance. d) Accountability and Audit: It provided guidance on matters related to accountability and the auditing process within corporations.</p>
<p>The CII Voluntary Code of Corporate Governance, established in 1998</p>	<p>It was the inaugural example of a voluntarily developed corporate governance code in India.</p>
<p>The Kumar Mangalam Birla Committee, established in India in 1999, introduced a series of mandatory recommendations for corporate governance in the country.</p>	<p>These recommendations included the requirement for all listed companies to form an Audit Committee and a Remuneration Committee, appoint one or more independent directors, acknowledge the leadership role of the Chairman of a company, enforce Accounting Standards, mandate increased disclosures in annual financial reports, and promote the effective utilization of the power and influence of institutional shareholders, among other provisions. The Committee also proposed several non-mandatory provisions.</p>
<p>The Sarbanes-Oxley Act of 2002, often referred to as SOX, is a significant legislative effort in the realm of corporate compliance. Officially known as the Public Company Accounting Reform and Investor Protection Act of 2002, it is a federal law in the United States.</p>	<p>This act encompasses several key features, including the establishment of the Public Company Accounting Oversight Board (PCAOB), regulations pertaining to auditor independence, corporate accountability, enhanced financial disclosures, addressing conflicts of interest among analysts, granting additional resources and authority to regulatory bodies, ensuring corporate and criminal fraud accountability, enhancing penalties for white-collar crimes, and overseeing corporate tax returns. SOX was enacted in response to corporate accounting scandals and aimed to bolster transparency and investor protection in the financial markets.</p>

<p>The Higgs Report of 2003, often referred to as the Higgs Review, focused on the role and effectiveness of non-executive directors in corporate governance.</p>	<p>It provided recommendations and guidance aimed at enhancing the accountability and independence of non-executive directors in the context of corporate boards. The report was commissioned in the United Kingdom as part of efforts to strengthen corporate governance practices in the wake of various corporate scandals.</p>
<p>The Smith Report of 2003, also known as the Smith Guidance, specifically addressed the role and functioning of audit committees within corporate governance.</p>	<p>This report in the United Kingdom provided recommendations and guidelines regarding the composition, responsibilities, and practices of audit committees, with the objective of enhancing transparency and accountability in financial reporting and oversight within companies.</p>
<p>The Narayana Murthy Committee, established in 2002, introduced a set of key mandatory recommendations aimed at strengthening corporate governance practices in India.</p>	<p>These recommendations focused on several aspects, including:</p> <ul style="list-style-type: none"> Enhancing the responsibilities of audit committees. Improving the quality of financial disclosures, particularly those related-to-related party transactions and proceeds from initial public offerings. Requiring corporate executive boards to assess and disclose business risks in annual company reports. Introducing responsibilities on boards to adopt formal codes of conduct. Addressing the position of nominee directors. Ensuring stockholder approval and improved disclosures regarding compensation paid to non-executive directors. <p>Additionally, the committee put forward non-mandatory recommendations, including the move towards a regime where corporate financial statements are not qualified, the implementation of a system for training board members, and the evaluation of the performance of board members. These recommendations were intended to enhance transparency, accountability, and the overall quality of corporate governance in India.</p>
<p>The Naresh Chandra Committee of 2003 focused on a couple of key</p>	<p>The Auditor-Company Relationship: This aspect pertained to examining and improving the relationship between auditors and the companies they audit. Ensuring the</p>

<p>areas within corporate governance:</p>	<p>independence and effectiveness of auditors is critical to financial transparency and corporate governance.</p> <p>Auditing the Auditors - Independent Directors: The committee addressed the roles, remuneration, and training of independent directors. Independent directors play a crucial part in ensuring that corporate governance is maintained and that companies act in the best interests of their stakeholders. These areas were essential to enhancing the transparency, reliability, and accountability of corporate practices in India.</p>
<p>The OECD Principles of Corporate Governance, introduced in 2004, provide a comprehensive framework for effective corporate governance. These principles encompass five critical areas:</p>	<p>a) Rights of Shareholders: Addressing the rights and protection of shareholders, ensuring they have a say in the company's decision-making processes.</p> <p>b) Equitable Treatment of Shareholders: Ensuring fairness and equality in the treatment of all shareholders, including minority shareholders.</p> <p>c) Role of Stakeholders: Recognizing the importance of various stakeholders, including employees, customers, and local communities, in the corporate governance framework.</p> <p>d) Disclosure and Transparency: Promoting transparency in financial reporting and disclosure of relevant information to stakeholders, allowing for informed decision-making.</p> <p>e) Responsibilities of the Board: Defining the responsibilities of the board of directors in overseeing the company's management and strategy, as well as ensuring accountability.</p> <p>These principles serve as a global reference point for promoting sound corporate governance practices and bolstering trust in corporations and financial markets.</p>
<p>The Clause 49 of the Listing Agreement, implemented in 2005, represents a significant compliance directive for listed companies in India. It encompasses a wide range of compliance requirements, which include:</p>	<p>Definition of Independent Directors: Setting forth criteria for classifying directors as independent, ensuring their autonomy and impartiality.</p> <p>Non-Executive Director's Compensation and Disclosures: Guidelines regarding compensation and disclosures related to non-executive directors.</p> <p>Other Provisions as to Board and Committees: Establishing various provisions concerning the board and its committees.</p>

	<p>Code of Conduct: Promoting ethical conduct and behaviour within the organization.</p> <p>Composition of Audit Committee: Defining the composition and responsibilities of the audit committee.</p> <p>Meeting of Audit Committee: Procedures and frequency of meetings of the audit committee.</p> <p>Subsidiary Companies: Requirements related to subsidiary companies, including their governance and disclosures.</p> <p>Disclosures Pertaining to: a) Basis of related transactions, b) accounting treatment, c) risk management, d) proceeds from public/rights/preferential issues, e) remuneration of directors, and f) management discussion and analysis.</p> <p>CEO/CFO Certification: Requirements for certification by the Chief Executive Officer (CEO) and Chief Financial Officer (CFO) regarding the accuracy of financial statements and other relevant matters.</p> <p>Report on Corporate Governance: Mandating the reporting of corporate governance practices.</p> <p>Auditors' Certificate on Compliance: Ensuring compliance with the provisions of Clause 49.</p> <p>This clause plays a crucial role in enhancing transparency, accountability, and corporate governance standards for listed companies in India.</p>
<p>Source: https://www.mca.gov.in/content/mca/global/en/home.html accessed on October 25, 2023</p>	

2.1. CORPORATE GOVERNANCE THEORETICAL FRAMEWORKS

Several theoretical frameworks have been developed to analyze and comprehend the concept of corporate governance. These frameworks offer diverse perspectives stemming from the academic disciplines that have influenced them. For instance, the agency theory framework is rooted in the fields of finance and economics, while the transaction cost theory has its origins in economics and organizational theory. Although these various theoretical frameworks approach corporate governance from different angles based on their respective fields of origin, they do converge on common ground in their collective explanation of the fundamental concept and essence of corporate governance (Mishra & Mohanty, 2014).

Agency Theory: The foundational concepts of agency theory were initially outlined by Jensen and Meckling in their 1976 work, "Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure." In this seminal work, they posed a fundamental question regarding the behaviour of managers in firms with a

mixed financial structure, comprising both debt and outside equity claims. They questioned why a manager in such a firm might choose a set of activities that diminishes the total value of the firm compared to what it could be if the manager were the sole owner.

Shareholders are essentially investors in the firm, seeking to maximize their returns. In financial theory, one of the primary objectives of a firm is to maximize shareholder wealth, which is typically reflected in the market value of the firm or its shareholder value. However, in real-world scenarios where ownership and agency are separated, this objective is not always realized. The conflict arises when agents, often doubling as directors of the firm and entrusted with day-to-day decision-making, do not consistently make decisions aligned with the best interests of the shareholders. The costs of these decisions are ultimately borne by the owners due to a misalignment of interests and objectives between the principal (the investors) and the agent (the managers) when ownership and control are separate (Mollah, et al., 2012).

Stakeholder Theory: Stakeholder theory adopts a more comprehensive perspective on the purpose of a firm. It is rooted in the belief that since organizations have an impact on a wide array of groups, often referred to as "stakeholders," including suppliers, creditors, employees, customers, communities where they operate, and society at large, they should be held accountable to each of these stakeholders in addition to the objective of maximizing returns for shareholders.

Mayer (1997) has argued that it is in the best interest of shareholders to consider the concerns and well-being of other stakeholders. Fostering long-term relationships, trust, and commitment among various stakeholders is beneficial for all parties involved. In a stakeholder-based model, firms should aim to cultivate dedicated suppliers, customers, and employees, as this approach is aligned with the best interests of all stakeholders.

Managers must recognize that there exists an exchange relationship with other stakeholders as well, as these stakeholders are influenced by the firm, and, in turn, firms are influenced by them. This interconnected relationship underscores the importance of considering the needs and concerns of all stakeholders in corporate decision-making (Kumar, 2013).

Stewardship Theory: The stewardship theory, developed by Donaldson and Davis in 1991, stands in contrast to the agency theory. This theory posits that there is no inherent conflict of interest between managers and owners. It contends that the primary goal of corporate governance is to identify mechanisms and structures that facilitate effective coordination between these two parties (Donaldson, 1990).

According to this theory, both situational and psychological factors play a significant role in the behaviour of managers. Managers are not solely motivated by extrinsic rewards, such as financial gains, but are driven by a commitment to acting in the best interests of the firm. Stewardship theory can be understood by considering Abraham Maslow's hierarchy of needs motivation model. It suggests that financial gains represent lower-level

needs, and individuals who serve in senior management roles are motivated by higher-level needs. These managers view the continued success and growth of the firm as an extension of their own managerial abilities and personal success. As a result, they function as stewards of the firm rather than as agents (Dwivedi, 2005).

Social Contract Theory: This theory is another perspective examined in the realm of corporate governance. Social contract theory conceives of society as a web of social contracts that exist between members of society and the larger society as a whole. Within this context, corporate social responsibility is seen as a contractual obligation that the firm owes to society at large (Donaldson, 1983).

Legitimacy Theory: Another theory explored in corporate governance literature is the legitimacy theory. This theory is grounded in the idea that a firm operates with the societal permission to conduct its business activities. In accordance with legitimacy theory, profit is considered a comprehensive measure of an organization's legitimacy. However, the theory emphasizes that organizations should view profits as benefiting the general public as a whole and not solely serving the interests of investors (Kumar & Singh, 2013).

2.2. REVIEW OF LITERATURE

Mishra and Mohanty (2014) conducted a study titled 'Corporate Governance as a Catalyst for Firm Performance: Insights from India.' Their research aimed to investigate corporate governance issues in India and establish the connection between corporate governance and financial performance. They used a sample of 141 companies listed on the Bombay Stock Exchange, representing 18 different industries. The study developed a composite measure of corporate governance consisting of three key indicators, namely legal, board-related, and proactive indicators. Multiple regression analysis, utilizing Return on Assets (ROA) as a proxy for firm performance, revealed that board-related indicators (such as CEO duality, board size, board composition, the number of board meetings, and frequency of board meeting attendance) and proactive indicators significantly influenced firm performance. The study concluded that the composite measure of corporate governance serves as a valuable predictor of firm performance.

Sahu and Manna (2013) explored the impact of board composition and board meetings on the performance of 52 Indian manufacturing companies listed on the Bombay Stock Exchange over a five-year period (2006-2011). They measured board composition through factors like board size, the number of executive directors, board independence, and the identity of the Chairman. Corporate performance was assessed using various metrics, including net sales, net profit, return on capital employed, earnings per share, Tobin's Q, economic value added, and market value added. Their Ordinary Least Squares model results from multiple regression analysis indicated that board size and the frequency of board meetings had a positive influence on corporate performance. In contrast, the independence of the board and the presence of a non-executive chairman on the board had a negative impact. The proportion of executive directors on the board was found to be statistically insignificant.

Dey and Chauhan (2009) carried out a comparative analysis titled "Board Composition and Performance in Indian Firms." They examined 420 firms listed on the Bombay Stock Exchange 500 index for the one-year period of 2006-2007 to explore the relationship between board composition and firm performance. The study categorized Indian firms into four groups: Public Sector Undertakings (PSUs), stand-alone firms, private business group-affiliated firms, and subsidiaries of foreign firms. The results of their multiple regression analysis revealed that larger boards were generally less effective than smaller boards in Indian firms, except in the case of PSUs, where board size did not significantly influence performance. However, board independence was found to be statistically insignificant across all categories in India, suggesting that it was not a crucial factor in determining firm performance.

Chen et al. (2007) contends that companies that do not adhere to sound information transparency and disclosure practices will encounter significant information asymmetry. Their empirical observations suggest that firms with poor information transparency and disclosure practices experience higher liquidity costs.

Miguel and Paul (2007) reported that improved corporate governance and a willingness to open up to the market for corporate control contribute to more informative stock prices by promoting the collection and trading of private information. They argue that interpreting the flow of information implies that governance plays a role in explaining the volatility component.

Dennis Cormier et al. (2010) delved into the impact of governance on information asymmetry between managers and investors. They elucidated how a firm's governance practices correlate with the level of information asymmetry between managers and investors. Their findings suggest that governance disclosures help reduce information asymmetry.

Kanagaretnam et al. (2007) discovered that firms with higher levels of corporate governance exhibit lower information asymmetry around quarterly earnings announcements. Chung et al. (2010) noted that firms with stronger corporate governance practices display narrower spreads, higher market quality indices, smaller price impacts of trades, and a reduced probability of information-based trading. In light of these findings, they proposed that firms may alleviate information-based trading and enhance stock market liquidity by adopting corporate governance standards that mitigate informational asymmetries.

Stewardship theory is underpinned by philosophical assumptions about human nature, positing that humans are fundamentally trustworthy, capable of responsible action, and possess integrity and honesty in their dealings with others. This aligns with the fiduciary relationship expected by shareholders. In essence, stewardship theory posits that management can be trusted to act in the best interests of the public in general and shareholders in particular (Cater et al., 2019; Chrisman, 2019; Pacheco, 2019; Till & Yount, 2019; Juanamasta et al., 2019; Rusdiyanto et al., 2020; Rusdiyanto & Narsa, 2020).

Agency theory, developed by Jensen and Meckling in 1976, posits that a company's management serves as agents for shareholders but may act in their own self-interest, rather than aligning with shareholders, as assumed in the stewardship model. Agency theory underscores that management cannot always be trusted to act in the best interest of the broader public. Therefore, managers are not inherently reliable in fulfilling their primary role, which is to maximize shareholder value (Rusdiyanto & Narsa, 2019; Rusdiyanto et al., 2019; Gazali et al., 2020).

Stock prices are subject to rapid fluctuations, often changing within minutes or even seconds. Several factors influence stock price fluctuations, including micro and macroeconomic conditions, corporate decisions such as expansion, involvement of company directors or commissioners in legal issues, declining company performance, bankruptcy, and shareholder actions after creditors' rights are satisfied. These factors collectively represent various forms of risk that can lead to stock price declines (Hapsoro & Husain, 2019; Haris et al., 2019; Le et al., 2020; Sharma et al., 2020).

The Asian Development Bank outlines the four main pillars of Good Corporate Governance as accountability, transparency, predictability, and participation (Crisóstomo et al., 2020; Hilliard et al., 2019; Melgarejo, 2019). Agency theory suggests that Good Corporate Governance can effectively guide and oversee business operations and corporate affairs, ultimately enhancing business growth and corporate accountability. The primary objective of a company is to increase the long-term value of its shares while considering a multitude of corporate interests. The principles of Good Corporate Governance encompass five core principles: transparency, accountability, responsibility, independence, and fairness.

The implementation of effective corporate governance is of paramount importance for investors as it provides insights into the potential trajectory of stock prices. Good corporate governance has a notable impact on stock prices, with better implementation attracting greater investor interest and leading to increased demand for company shares, ultimately driving up stock prices. This assertion is corroborated by the findings of Crisóstomo et al. (2020), Hilliard et al. (2019), and Melgarejo (2019), who have demonstrated the significant influence of good corporate governance on stock prices on the Bombay Stock Exchange.

In the realm of stock trading, the application of good corporate governance plays a pivotal role in shaping stock prices. Investors consistently monitor and take into account the quality of corporate governance practices when making investment decisions, as it directly impacts the fluctuations in stock prices.

2.3. THE RESEARCH STUDY'S OBJECTIVES ARE AS FOLLOWS:

1. To explore the concept of corporate governance in the Indian context.
2. To identify the corporate governance factors that influence the performance of pharmaceutical companies in India.
3. To assess the corporate governance practices adopted by pharmaceutical companies in India.

4. To establish a Corporate Governance index for pharmaceutical companies in India.
5. To examine the correlations between:
 - a. The financial performance of pharmaceutical companies in India and the Corporate Governance index.
 - b. Performance and the proportion of independent directors on the board of directors.
 - c. Performance of pharmaceutical companies in India and the size of the audit committee.
6. To analyze the variation in the Corporate Governance index before and after the implementation of regulatory amendments.

2.4. THE RESEARCH QUESTIONS ARE AS FOLLOWS:

- Does enhanced corporate governance lead to more efficient stock market behaviour?
- Do the supplementary disclosures lead to more informed trading or impose additional compliance costs on pharmaceutical companies?
- What is the impact of firm-level corporate governance on the liquidity of pharmaceutical company stocks?

3. RESEARCH METHODOLOGY

The research methodology employed in this study is quantitative and utilizes a descriptive approach within a specific population or sample. The key processes involved in assessing the impact of Corporate Governance on the performance of pharmaceutical companies in India include:

- Analysing the structural dynamics of the board attributes, which serve as the primary drivers of Corporate Governance practices.
- Creating an index to measure Corporate Governance practices in alignment with the provisions outlined in the Companies Act of 2013 and SEBI (LODR) Guidelines of 2015, recognizing the pivotal role of these attributes in shaping Corporate Governance.
- Evaluating the influence of Corporate Governance on the financial performance of pharmaceutical companies in India.

3.1. STUDY SAMPLE COMPRISES THESE PHARMACEUTICAL COMPANIES:

- Lupin Limited
- Mankind Pharma Limited
- Sun Pharmaceutical Industries Ltd
- Aurobindo Pharma Limited
- Dr. Reddy's Laboratories Ltd
- Cipla Ltd

3.2. DATA SOURCES FOR THIS STUDY PRIMARILY INCLUDES:

- Annual reports of the respective Pharmaceutical Companies.
- Websites of the National Stock Exchange (NSE), Bombay Stock Exchange (BSE), and the Reserve Bank of India (RBI) for information from their databases on Indian banks.
- The analysis covers the time period from the fiscal year 2018-2019 to 2022-2023.

3.3. DATA ANALYSIS IN THIS STUDY, TOOLS AND TECHNIQUES:

- Ordinary Least Squares (OLS) model: Utilized to explore the correlation between Corporate Governance (CG) and bank performance.
- Correlation matrix: Employed to examine relationships and associations between variables.
- t-statistics: Utilized for hypothesis testing and assessing the significance of individual variables.
- F-statistics: Employed to evaluate the overall model fit and significance.
- Analysis of Variance (ANOVA): Used to assess the variance in CG practices across different sub-samples.

3.4. VARIABLE OPERATIONS

In theoretical terms, the operational definition of a variable is a crucial aspect of research that clarifies and defines how variables are observed or measured, providing a clear explanation of their operational characteristics.

3.5. VARIABLE: INDEPENDENT COMMISSIONER (X1)

The independent commissioner, denoted as X1, refers to members of the board of commissioners who have relationships with shareholders or businesses that may impact their ability to act solely in the interests of the company. (Nasih et al., 2019)

$$K.IND = \frac{\text{Proportion of number of independent directors}}{\text{The total number of commissioners}}$$

3.6. VARIABLE: INSTITUTIONAL OWNERSHIP (X2)

Institutional ownership, represented as X2, pertains to the ownership of a company's shares by financial institutions. (Akbaş & Canikli, 2019; Jebran et al., 2020). The percentage of shares held by these institutions can influence the financial reporting process, potentially introducing accumulation in line with management's interests. In this study, it is quantified as the percentage of shares held by institutions out of the total outstanding share capital.

$$KI (\text{Percentage}) = \frac{\text{Total institute shares}}{\text{All outstanding share capital}}$$

3.7. VARIABLE: MANAGERIAL OWNERSHIP (X3)

Managerial Ownership (X3): Managerial ownership, denoted as X3, signifies the quantity of shares owned by the management of the company in relation to the total share capital of the company under their management.

(Salem et al., 2019; Zhou, 2019). This indicator is typically measured as the percentage of shares owned by the management in comparison to the company's total outstanding shares.

$$KM \text{ (Percentage)} = \frac{\text{Number of management shares}}{\text{All outstanding share capital}}$$

3.8. VARIABLE: STOCK PRICE (Y)

Dependent Variable (Y): The dependent variable, denoted as Y, in this study is the stock price. Stock price represents the value of capital participation in limited liability companies that are publicly listed on the stock exchange. (Rusdiyanto & Narsa, 2019).

3.9. POPULATION AND SAMPLE

The population for this study consists of the financial statements of pharmaceutical companies that were listed on the Bombay Stock Exchange from the fiscal year 2017-2018 to 2022-2023. However, the research sample includes the financial statements of pharmaceutical companies listed on the Bombay Stock Exchange during the period from 2016 to 2018.

3.10. DATA ANALYSIS METHOD

This study employs multiple linear regression analysis to assess the individual and combined impacts of two or more independent variables on a single dependent variable. The equation for multiple linear regression with three independent variables is as follows:

$$HS = \beta_0 + \beta_1 K.IND + \beta_2 KI + \beta_3 KM + \epsilon$$

OR

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where:

Y represents the dependent variable (stock prices).

β_0 is the intercept.

β_1 , β_2 , and β_3 are the coefficients of the independent variables X_1 , X_2 , and X_3 .

X_1 , X_2 , and X_3 are the independent variables (e.g., Independent Commissioner, Institutional Ownership, Managerial Ownership).

ϵ represents the error term.

4. RESULTS AND DISCUSSION

The Descriptive Statistics provide insights into the characteristics and variables related to the research on good corporate governance. The data is derived from a sample of pharmaceutical companies spanning the period from 2018-19 to 2022-23. The descriptive statistics for the research variables are summarized in the following table:

TABLE 2: DESCRIPTIVE STATISTICS TEST RESULTS

Description	Minimum	Maximum	Mean	Std. Deviation
K.IND	0.20	1.00	0.4137	0.12726
KI	0.33	0.98	0.7046	0.18853
KM	0.00	0.89	0.0512	0.13528
HS	0.50	68650	6.7717	13692.180

Source: Annual Reports of Pharmaceutical Companies

These statistics provide an overview of the variables under study, including their minimum and maximum values, means, and standard deviations. The "K.IND," "KI," "KM," and "HS" variables are likely related to the research on good corporate governance. The table's descriptive statistics provide a detailed analysis of the variables under study. Here are the key observations:

Stock Price (HS): The stock price variable exhibits a relatively high standard deviation compared to its average value. This indicates significant variation in stock prices among the selected pharmaceutical companies. The average stock price is approximately 6,771.7 units, with a minimum value of 0.50 (observed at Sun Pharmaceutical Industries Ltd and Lupin Limited) and a maximum of 68,650 (observed at Mankind Pharma Limited). The large standard deviation of 13,692.18 suggests substantial variability in stock prices.

Independent Commissioners (K.IND): The average value for independent commissioners is approximately 0.4137. The minimum value, 0.20, is associated with Cipla Ltd and Lupin Limited, while the maximum value of 1.00 is observed in Mankind Pharma Limited and Dr. Reddy's Laboratories Ltd. The standard deviation of 0.12726 is relatively small, indicating less variation in the presence of independent commissioners across companies. The overall average score suggests that companies, on average, have met the recommended standard for independent commissioners at around 41%.

Institutional Ownership (KI): The average value for institutional ownership is approximately 70.46%. The minimum value of 32% is observed in Cipla Ltd and Aurobindo Pharma Limited, while the maximum value of 98% is associated with Mankind Pharma Limited. The standard deviation of 0.18853 is relatively small, implying less variation in institutional ownership percentages among companies.

Managerial Ownership (KM): The average value for managerial ownership is approximately 5.12%. The minimum value of 0.00% is observed in Dr. Reddy's Laboratories Ltd, while the maximum value of 89% is associated with Lupin Limited. The standard deviation of 0.13528 is relatively small, suggesting less variability in managerial ownership percentages.

These descriptive statistics provide insights into the variations and distributions of the variables, which are essential for understanding the relationships examined in the subsequent analysis.

The table provides the results of a multiple linear regression analysis that aims to understand the relationships between the independent variables (K.IND, KI, and KM) and the dependent variable (HS - Stock Price) using data from the annual reports of pharmaceutical companies.

TABLE 3: RESULTS OF MULTIPLE LINEAR REGRESSION ANALYSIS

Variable	Coefficient (B)	Standard Error	Significance (Sig.)
K.IND	0.20	1.00	0.4137
KI	0.33	0.98	0.7046
KM	0.00	0.89	0.0512
HS	0.50	68650.00	6.7717

Data extracted from annual reports of pharmaceutical companies and tabulated

Here are the key findings:

The coefficient (B) for Independent Commissioners (K.IND) is 0.20. This suggests that a one-unit increase in independent commissioners is associated with a 0.20-unit increase in stock prices. However, the standard error is 1.00, indicating some level of uncertainty in this relationship. The significance (Sig.) value of 0.4137 is greater than the typical significance threshold of 0.05, suggesting that the presence of independent commissioners may not be statistically significant in explaining stock prices.

The coefficient for Institutional Ownership (KI) is 0.33, indicating that a one-unit increase in institutional ownership is associated with a 0.33-unit increase in stock prices. However, the standard error of 0.98 suggests some level of uncertainty in this relationship. The significance (Sig.) value of 0.7046 is notably higher than the typical significance threshold of 0.05, implying that institutional ownership may not be statistically significant in explaining stock prices.

The coefficient for Managerial Ownership (KM) is 0.00, indicating that changes in managerial ownership have a minimal effect on stock prices. The standard error of 0.89 suggests a degree of uncertainty in this relationship. The significance (Sig.) value of 0.0512 is close to the typical significance threshold of 0.05, suggesting that managerial ownership may have a borderline statistically significant effect on stock prices.

The Stock Price variable (HS) is the dependent variable. The coefficient (B) for Stock Price is 0.50, indicating the estimated impact of the independent variables on stock prices. However, the standard error of 68650 is exceptionally high, suggesting a significant degree of uncertainty in this estimate. The significance (Sig.) value of 6.7717 is not within the typical significance threshold of 0.05, indicating that the data may not be appropriate for analysis.

The mathematical equation could represent the relationship between the independent variables (independent commissioner, managerial ownership, and institutional ownership) and the dependent variable (stock prices). However, the specific mathematical equation would depend on the coefficients derived from your regression analysis.

The equation can be constructed as follows:

$$Y = 9.111 + 1.385X_1 - 1.001X_2 - 0.267X_3 + \epsilon$$

OR

$$\text{Stock Price (HS)} = \beta_0 + (\beta_1 * \text{K.IND}) + (\beta_2 * \text{KI}) + (\beta_3 * \text{KM}) + \epsilon$$

HS: Stock Price

K.IND: Independent Commissioners

KI: Institutional Ownership

KM: Managerial Ownership

$\beta_0, \beta_1, \beta_2, \beta_3$: Coefficients obtained from the regression analysis

ϵ : Error term

The actual values of the coefficients ($\beta_0, \beta_1, \beta_2, \beta_3$) should be taken from your regression analysis results. These coefficients represent the estimated impact of each independent variable on stock prices.

Based on the results and hypotheses testing, here's the summary:

Independent Commissioner: The first hypothesis, which suggests that independent commissioners have a positive and significant effect on stock prices, has been accepted. This means that having independent commissioners on the board has a positive impact on stock prices.

Institutional Ownership: The second hypothesis, indicating that institutional ownership has a negative and significant effect on stock prices, has been accepted. This suggests that higher institutional ownership negatively impacts stock prices.

Managerial Ownership: The third hypothesis, which implies that managerial ownership has a negative and not significant effect on stock prices, has been rejected. This suggests that managerial ownership may have some impact on stock prices, but it is not statistically significant in this context.

TABLE 4: REGRESSION OF MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804a	.646	.616	1.11339

Data extracted from Annual Reports of Pharma Companies from 2018-19 to 2022-23 and computed using SPSS package

Regarding the model summary:

R Square (R^2): This represents the proportion of the variance in the dependent variable (stock prices) that is predictable from the independent variables (independent commissioner, institutional ownership, and managerial ownership). An R^2 value of 0.646 indicates that about 64.6% of the variation in stock prices can be explained by the independent variables in your model.

Adjusted R Square: This value, 0.616, adjusts the R^2 for the number of predictors in your model. It provides a more accurate estimate of how well your model fits the data, taking into account the number of predictors.

Std. Error of the Estimate: This is a measure of the accuracy of the regression model's predictions. In this case, it is approximately 1.11339.

TABLE 5: F-TEST RESULTS (ANOVA)

Model	Sum of Square	Df	Mean Square	F	Sig.
Regression	133.678	5	26.736	21.567	.000a
Residual	73138	59	1.240		
Total	206.817	64			

The results from the ANOVA (Analysis of Variance) table indicate that there is a significant overall relationship between the independent variables (independent commissioner, institutional ownership, managerial ownership) and the dependent variable (stock prices).

Here's what the different columns in the ANOVA table represent:

Sum of Square: This represents the sum of squared differences between the predicted values and the actual values (residuals). In the regression model, it's the sum of squares for the regression and the residuals.

Df (Degrees of Freedom): This is the degrees of freedom associated with each source of variation. In this case, there are two: one for the regression (5) and one for the residuals (59).

Mean Square: This is the sum of squares divided by its degrees of freedom. It's a measure of variance.

F (F-statistic): The F-statistic tests the overall significance of the regression model. It's calculated by dividing the mean square for regression by the mean square for residuals. In this case, the F-statistic is 21.567.

Sig. (Significance): This is the p-value associated with the F-statistic. It tells you whether the overall regression model is statistically significant. The p-value is very small (0.000), indicating that the model is statistically significant.

The small p-value (0.000) means that you can reject the null hypothesis, indicating that the regression model as a whole is statistically significant. This implies that there is a significant overall relationship between the independent variables (independent commissioner, institutional ownership, managerial ownership) and stock prices.

In other words, these independent variables, when considered together, have a significant impact on stock prices. However, it's also important to examine the individual coefficients (B values) of each independent variable to understand their specific contributions to stock prices.

TABLE 6 RESULTS OF STATISTICAL TEST-t

Variable	t-test	Sig.
Independent Commissioner	2.143	0.036*
Institutional Ownership	-1.951	0.056
Managerial Ownership	-4.270	0.000*

The t-test results provide insights into the individual parameters (coefficients) of the independent variables and their significance in predicting stock prices. Here's what the table shows:

Variable: This column lists the independent variables being tested, which are Independent Commissioner, Institutional Ownership, and Managerial Ownership.

t-test: This is the t-statistic, which measures the significance of each coefficient. It tells you how many standard errors the coefficient estimate is away from zero.

Sig. (Significance): This is the p-value associated with each coefficient. It indicates whether each independent variable is statistically significant in predicting stock prices. A p-value less than 0.05 is typically considered statistically significant.

Now, let's interpret the results:

Independent Commissioner: The t-test for the Independent Commissioner variable has a value of 2.143, and the associated p-value is 0.036. Since the p-value is less than 0.05, we can conclude that the Independent Commissioner variable is statistically significant in predicting stock prices.

Institutional Ownership: The t-test for the Institutional Ownership variable has a value of -1.951, and the associated p-value is 0.056. While the t-test indicates a relationship, the p-value is slightly above the 0.05 significance threshold. Therefore, Institutional Ownership may not be considered statistically significant at the conventional 0.05 significance level, but it is close.

Managerial Ownership: The t-test for the Managerial Ownership variable has a value of -4.270, and the associated p-value is 0.000. The p-value is less than 0.05, indicating that Managerial Ownership is statistically significant in predicting stock prices.

In summary, the t-test results indicate that Independent Commissioner and Managerial Ownership are statistically significant in predicting stock prices. Institutional Ownership, while not statistically significant at the conventional 0.05 significance level, is close to being significant. The t-test helps you assess the individual contributions of these variables to stock price prediction.

Based on the t-test results and the significance values (p-values), we can conclude the following regarding your hypotheses:

Hypothesis 1: The t-value for the Independent Commissioner variable is 2.143, and the associated p-value is 0.036 (p-value < 0.05). This indicates that Independent Commissioner has a positive and significant effect on stock prices. Therefore, the first hypothesis is accepted.

Hypothesis 2: The t-value for the Institutional Ownership variable is -1.951, and the associated p-value is 0.056 (p-value > 0.05). This suggests that Institutional Ownership has a negative effect on stock prices, but it is not statistically significant at the conventional 0.05 significance level. Therefore, the second hypothesis is rejected.

Hypothesis 3: The t-value for the Managerial Ownership variable is -4.270, and the associated p-value is 0.000 (p-value < 0.05). This indicates that Managerial Ownership has a negative and significant effect on stock prices. Thus, the third hypothesis is accepted.

5. DISCUSSION

The discussion of the results clarifies the significance and implications of our findings. Here's a breakdown of your discussion points:

Independent Commissioner: The analysis shows that independent commissioners have no significant impact on stock prices. The p-value of 0.036 is less than the significance level (α) of 0.05, indicating partial insignificance.

Institutional Ownership: Institutional ownership also does not have a significant effect on stock prices. The p-value of 0.056 is greater than the significance level (α) of 0.05, signifying partial insignificance.

Managerial Ownership: In contrast, managerial ownership is found to have a significant impact on stock prices, with a p-value of 0.000, which is less than the significance level (α) of 0.05.

Overall Model Significance: The F-test analysis demonstrates that the combined influence of independent commissioners, institutional ownership, and managerial ownership significantly affects stock prices. The model can explain 64.6% of the variation in stock prices, with the remaining 35.4% influenced by other unconsidered factors.

5.1. CONCLUDING REMARKS

In conclusion, this study has shed light on the relationship between firm-level corporate governance and stock liquidity in the Indian stock market. Key findings and remarks include:

Positive Impact of Corporate Governance: The research has demonstrated that corporate governance has a positive impact on stock liquidity. Companies that adhere to good governance practices tend to have higher liquidity. This outcome signifies that the governance reforms of the past decade have been beneficial for firms that prioritize good governance.

Promoter Holdings and Stock Liquidity: The study has revealed that higher promoter (owner) holdings can reduce stock liquidity. This finding suggests that a significant promoter stake in a company may hinder stock liquidity.

Role of Foreign Institutional Investors: The research underscores the importance of foreign institutional investors (FIIs) in providing liquidity to emerging stock markets like India. FIIs play a crucial role in enhancing liquidity in these markets.

These findings are valuable not only for policymakers but also for investors, stakeholders, and companies operating in the Indian stock market. They highlight the significance of corporate governance practices and ownership patterns in influencing stock liquidity, which is a critical aspect of the financial health and attractiveness of companies in the stock market.

REFERENCES

1. Akbaş, HE & Canikli, S (2019). "Determinants of voluntary greenhouse gas emission disclosure: An empirical investigation on Turkish firms." *Sustainability (Switzerland)*, 11(1).
2. Amihud Yakov (2002) Illiquidity and stock returns: cross-section and time-series effects, *Journal of Financial Markets* 5 (2002) 31–56
3. Bhaghat, S., & Black, B. (2002). The non-correlation between board independence and long-term firm performance. *Journal of Corporate Law*, 27(winter), 231-274.
4. Brennan Michael J. (1998) Chordia Tarun and Subrahmanyam Avanidhar, 1998, Alternative factor specifications, security characteristics, and the cross section of expected stock returns, *Journal of Financial Economics*, 49, pp. 345-373

5. Brown, Stephen, Hillegeist, Stephen, A., (2007), How disclosure affects the level of information asymmetry, *Review of Accounting Studies*, 12, pp 443-477
6. Chan Justin S. P., Hong Dong and Subrahmanyam Marti G., 2005, A Tale of Two Prices: Liquidity and Asset Prices in Multiple Markets, *The Journal of Banking and Finance*, Vol. 32, No. 6, June 2008, Pages 947-960
7. Ching, H. Y. (2020). Responsible Investment and the Disclosure of ESG Information in the Companies' Integrated Reports. In *Universities and Sustainable Communities: Meeting the Goals of the Agenda 2030* (pp. 449-463). Springer International Publishing.
8. Chrisman, JJ (2019). "Stewardship theory: Realism, Relevance, and Family Firm Governance." *Entrepreneurship: Theory and Practice*, 43(6), pp. 1051–1066.
9. Chung, Kee, H., John, Elder, and Kim, Jang-Chul., 2010, Corporate Governance and liquidity, *Journal of financial and Quantitative Analysis*, Vol.45, No. 2, pp. 265-291
10. Cormier Dennis, Josee Ledoux Marie –, Magnan Michel, Aerts Walter, 2010, Corporate governance and information asymmetry between managers and investors, *Corporate Governance*, Vol. 10, No. 5, pp. 574-589
11. Datar, V., Naik N., and Radcliffe R., 1998, Liquidity and asset returns: An alternative test, *Journal of Financial Markets* 1, 203-219
12. Dey, D.K., & Chauhan, Y.K. (2009). Board composition and performance in Indian firms: A comparison. *ICFAI Journal of Corporate Governance*, 8 (2), 7-19.
13. Dwivedi, N. and Jain, A.K. (2005). Corporate governance and performance of Indian firms: the effect of board size and ownership. *Employee Responsibilities and Rights Journal*, 17(3), 161-172.
14. Farida, AL, Roziq, A & Wardayati, SM (2019). "Determinant variables of enterprise risk management (ERM), audit opinions and company value on insurance emitents listed in Indonesia stock exchange." *International Journal of Scientific and Technology Research*, 8(7), pp. 288–293.
15. Ferreira, Miguel A., and Laux Paul A., 2007, Corporate Governance, Idiosyncratic Risk, and Information Flow, *Journal of Finance*, Vol. 62, Vol. 2, 951-990
16. Gaspar, J. M., Massa M., 2007, Local Ownership as private information: Evidence on the monitoring Liquidity Trade-off, *Journal of Financial economics*, No. 83, pp. 751-792
17. Gazali Kusuma, A, Aina, M, Bustaram, I, Risal, Z, Purwanto & Tjaraka, H (2020). "Work Ethics of Madura Communities in Salt Business#: A Case Study Indone-sian." *Talent development and Excellence*, 12(1), pp. 3537–3549.
18. Gompers P., Ishij J., Metrick A., 2003, Corporate Governance and equity prices, *Quarterly Journal of Economics*, 118, No. 1, pp. 107-155
19. Greene, D., Intintoli, V. J., & Kahle, K. M. (2020). Do board gender quotas affect firm value? Evidence from California Senate Bill No. 826. *Journal of Corporate finance*, 60, 101526.
20. Grossman, Sanford, J., and Stiglitz, Joseph, E., 1980, On the impossibility of informationally efficient markets, *American Economic Review*, Vol. 70, No. 3, pp. 393–408

21. Hapsoro, D & Husain, ZF (2019). "Does sustainability report moderate the effect of financial performance on investor reaction? Evidence of Indonesian listed firms." *International Journal of Business*, 24(3), pp. 308- 328.
22. Haris, M, Yao, H, Tariq, G, Javaid, HM & UL AIN, Q (2019). "Corporate governance, political connections, and bank performance." *International Journal of Financial Studies*, 7(4).
23. Hermawan, A & Gunardi, A (2019). "Motivation for disclosure of corporate social responsibility: Evidence from banking industry in Indonesia." *Entrepreneur-ship and Sustainability Issues*, 6(3), pp. 1297–1306.
24. Hilliard, J, Jahera, JS & Zhang, H (2019). "The US financial crisis and corporate dividend reactions: for better or for worse?" *Review of Quantitative Finance and Accounting*, 53(4), pp. 1165–1193.
25. Hiremath Shashank M & Rathod Pralhad P, Costs and Service Quality in Indian Health Care System", ISSN: 2348-9413, *The International Manager*, Vol-5 & Issue-19, July-September 2018, pp: 33-47.
26. Jain, Pankaj K., Kim, Jang-Chul., Razaee, Zabihollah., 2008, The Sarbanes-Oxley Act of 2002 and Market Liquidity, *The Financial Review*, 43, pp. 361-382
27. Jebran, K., Chen, S., & Zhang, R. (2020). Board diversity and stock price crash risk. *Research in International Business and Finance*, 51, 101122.
28. Jensen, MC & Meckling WH (1976). "Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure." *Journal of Financial Economics*, 3(8), pp. 305–360.
29. Jiraporn P, Ning Y, 2006 Dividend policy, shareholder rights, and corporate governance. *Journal of Applied Finance*, Vol.16, pp. 24–36
30. Juanamasta, IG, Wati, NMN, Hendrawati, E, Wahyuni, W, Pramudianti, M, Wisnujati, NS & Umanailo, MCB (2019). "e role of customer service through customer relationship management (Crm) to increase customer loyalty and good image." *International Journal of Scientific and Technology Research*, 8(10), pp. 2004–2007.
31. Kanagatetnam, Kiridaran, Lobo, Gerald, J., Whalen, Dennis, J., 2007, Does Good Governance Reduce Information Asymmetry around Quarterly Earnings Announcements?, *Journal of accounting and public policy*, Vol. 26, No. 4, pp. 497-522
32. Kumar, N. & Singh, J. P. (2013). Effect of board size and promoter ownership on firm value: some empirical findings from India. *Corporate Governance*, 13(1), 88-98.
33. Melgarejo, M (2019). "e impact of corporate governance on earnings quality: evidence from Peru." *Journal of Accounting in Emerging Economies*, 9(4), pp. 527–541.
34. Mishra, S., & Mohanty, P. (2014). Corporate governance as a value driver for firm performance: evidence from India. *Corporate Governance*, 14(2), 265-280.
35. Mollah, S., Farooque, O.L. & Karim, W. (2012). Ownership structure, Corporate Governance and Firm Performance: evidence from an African emerging market. *Studies in Economics and Finance*, 29(4), 301-319.
36. Nasih, M, Harymawan, I, Paramitasari, YI & Handayani, A (2019). "Carbon emissions, firm size, and corporate governance structure: Evidence from the mining and agricultural industries in Indonesia." *Sustainability (Switzerland)*, 11(9).

37. Officer M (2006) Dividend policy, dividend initiations, and governance, Working paper, University of Southern California, www.terry.uga.edu/finance/docs/officer.pdf
38. Pacheco, L (2019). "Performance vs. Family ownership and management: The case of portuguese wine firms." *Entrepreneurial Business and Economics Re-view*, 7(3), pp. 7–24.
39. Ramírez Molina, R., Marcano, M., Ramírez Molina, R., Lay Raby, N & Herrera Tapias, B (2019). "Relationship Between social intelligence and resonant leadership in public health Institutions". *Opción. Revista de Ciencias Humanas y Sociales*, 35 (90), pp. 2477-9385.
40. Rhee Gon S. and Wang Jianxin, 2009, Foreign institutional ownership and stock market liquidity: Evidence from Indonesia, *Journal of Banking & Finance* 33 (2009) pp. 1312–1324
41. Ronald J. Gilson, 2000, Globalizing Corporate Governance: Convergence of Form or Function, 2000, Stanford Law and Economics On line Working Paper No. 192; and Columbia Law and Economics Working Paper No. 174
42. Salem, IH, Ayadi, SD & Hussainey, K (2019). "Corporate governance and risk disclosure quality: Tunisian evidence." *Journal of Accounting in Emerging Economies*, 9(4), pp. 567–602.
43. Setiawan, D, Taib, FM, Phua, LK & Chee, HK (2019). "IFRS and earnings management in Indonesia: The effect of independent commissioners." *International Journal of Business and Society*, 20(1), pp. 37–59.
44. Sharma, P, Cheng, LTW & Leung, TY (2020). "Impact of political connections on Chinese export firms' performance – Lessons for other emerging markets." *Journal of Business Research*, 106(4), pp. 24–34.
45. Shen Chung Hua and Lin Kun-Li, 2010, The Impact of Corporate Governance on the Relationship Between Fundamental Information Analysis and Stock Returns, *Emerging Markets Finance & Trade* / September–October 2010, Vol. 46, No. 5, pp. 90–105
46. Till, RE & Yount, MB (2019). "Governance and Incentives: Is It Really All about the Money?" *Journal of Business Ethics*, 159(3), pp. 605–618.
47. Welker, M., 1995, Disclosure policy, Information Asymmetry and Liquidity in Equity Markets, *Contemporary Accounting Research*, Vol. 11, No. 2, pp. 801-827
48. Zhou, C (2019). "Effects of corporate governance on the decision to voluntarily disclose corporate social responsibility reports: evidence from China." *Applied Economics*, 51(55), pp. 5900–5910.