



The Role of Corporate Governance in Achieving Firm Value in Manufacturing Firms in Indonesia

Eka Handriani¹

¹Faculty of Economics and Business, Management Study Program, Darul Ulum Islamic Centre
Sudirman University, Ungaran – Semarang Regency, Central Java, Indonesia.

Corresponding Author, email: ekahandriani5@gmail.com

Abstract

This study explores the factors influencing firm value in the manufacturing industry in Indonesia, specifically focusing on dividends, investment opportunities, and leverage. The analysis is based on publicly available data from 178 manufacturing companies in Indonesia, spanning the years 2018 to 2023. The primary objective of this research is to identify the key determinants of firm value in Indonesia's manufacturing sector, grounded in capital structure theory, through the development of a theoretical model. The findings indicate that dividend policy, investment decisions, and leverage have a positive impact on firm value within Indonesia's manufacturing industry. This study provides empirical support for both the pecking order theory and agency theory.

Keywords: Dividends, Investment opportunity set, Pecking Order, Firm Value

JEL Classification : G32, G34, G53

1. Introduction

The Ministry of Industry has emphasized that the manufacturing sector will remain the principal driver of Indonesia's economic growth in 2024. Based on the Ministry's data, seven core manufacturing industries are projected to play a leading role in this progress: basic metals, food and beverages, transportation equipment, machinery and equipment, pharmaceuticals, chemicals, and electronics. These industries are also expected to secure significant investment in the coming year. The goals for industrial development include an 8.4% growth in the non-oil and gas processing industry in 2019, an increase in the sector's contribution to GDP to 19.4% in the same year, and the creation of 17.8 million jobs within the industrial sector. Data from the Central Statistics Agency (BPS) show that Indonesia's economy grew by 5.07% in 2018, with a GDP of IDR 13,588.8 trillion at current prices. Of this total, the manufacturing sector contributed IDR 2,739.4 trillion. The manufacturing industry is recognized as a central driver of national economic growth, underpinned by strong investor interest in its development. Additionally, the sector's growth has generated new employment opportunities, creating a multiplier effect that accelerates regional GDP growth across various areas.

The workforce absorption target for this sector is set at up to 600,000 individuals annually, with 63% of the workforce still concentrated on the island of Java. In addition, various industrial zones have developed manufacturing clusters aimed at creating new employment opportunities and generating a multiplier effect, thereby stimulating regional economic growth and promoting more equitable economic distribution. Indonesia's

Received: August 29, 2023; Accepted: November 22, 2023; Published: Desember 28, 2024

*Corresponding author, e-mail address

economic policies should prioritize fostering inclusive and high-quality development. The key goals are to reduce poverty and inequality while maximizing job creation. Currently, many industrial zones, particularly on Java Island, focus on expanding the manufacturing sector. For example, Jababeka has allocated 80 hectares for 80 factories in the Kendal region. Previously, Jababeka also developed an industrial area in Cikarang, West Java, specializing in electronics and automotive manufacturing. In Banten, the Modern Cikande Industrial Estate is expected to become a hub for manufacturing industries, including steel, chemicals, and food production. Additionally, global investors have contributed to the development of the Karawang New Industry City (KNIC), which will feature industrial clusters in sectors such as construction materials, logistics services, and fast-moving consumer goods (FMCG)/food production.

The industrial estate is strategically designed to promote industries, with a primary emphasis on manufacturing. Although some may continue to associate it with the property sector, its fundamental purpose is to support manufacturing activities. Industrial operations are mandatory within the estate, and all businesses must engage in such activities. Previously, a permit system governed these operations, but it is no longer required for manufacturing activities within the estate. Exceptions will be made for small-scale industries where processing of raw materials is not feasible within the estate, such as refineries, cement production, and similar sectors. However, manufacturing remains a core requirement for operations within the industrial estate. This policy reflects the government's commitment, both at the national and regional levels, to ensuring the success of industrial estates and fostering a conducive business environment within the country.

The manufacturing industry is typically linked to firms engaged in mass production for consumer sale, with the primary aim of generating profit. This objective reflects an effort to optimize the welfare of owners (shareholders) through investment choices, funding strategies, and dividend policies, all of which are reflected in stock prices within capital markets. From a financial management perspective, this goal is commonly understood as an attempt to maximize the firm's value. To achieve this, many shareholders delegate firm management to professionals, known as managers, who are tasked with overseeing operations. These managers, appointed by the shareholders, are expected to act in their interests by maximizing the firm's value and, by extension, the wealth of shareholders. Normatively, the objective of corporate financial management is to increase the firm's value, which is represented by its stock market price (Habib., 2023; Cheng, et al., 2024; Chen & Srinivasan., 2024). Enhancing the firm's value equates to maximizing shareholder wealth (Agoraki, et al., 2023). This goal is pursued through the strategic and precise implementation of financial management functions, as each financial decision has a ripple effect that influences the firm's value (Huang, et al., 2023; Tao-Schuchardt, et al., 2023). An optimal combination of the three key financial decisions investment, financing, and dividend policies serves to maximize the firm's value. These decisions are interconnected (Khalil, et al., 2024 ; Karim, et al., 2023). Corporate financial management entails making crucial decisions about investments, funding, and dividend policies within the firm.

The dividend payout policy has been extensively studied by numerous scholars (Boshnak, 2023; Zahid et al., 2023; Falavigna & Ippoliti., 2024; Khan, et al., 2024; Al-Hiyari, et al., 2024; Oduro., 2024; Bessler et al., 2023; Kumari & Pathak., 2024; Salvi, et al., 2024). Dividends are of critical importance to investors, as they are directly linked to the distribution of returns on their investments. For managers, establishing an effective

dividend policy is a key responsibility, as it significantly influences a firm's stock price and may also affect asset valuation, capital structure, mergers and acquisitions, and capital budgeting decisions (Feng & Wu., 2023). Several factors contribute to the design of dividend payout policies and their impact on firms, including profitability, risk, ownership structure, firm size, capital structure, and available investment opportunities.

Investment decisions are fundamental in determining a firm's value. As defined by Hasnawati (1998), investment decisions involve a combination of existing assets (assets in place) and future investment opportunities that generate a positive net present value. Several scholars, including Debeli, et al., (2023); Ghosh., (2023); Zhao, et al., (2023); Huang, et al., (2023); Adhikari, & Safaee Chalkasra., (2023); Kong, et al., (2023) have employed the Investment Opportunity Set (IOS) as a proxy for investment decisions, given that these decisions are not directly observable. Since IOS is a latent variable, it must be inferred from other measurable factors. The value of a firm is influenced by investment decisions at the moment they are announced (Habib & Mourad., 2024). Bui & Krajcsák., (2023) suggests that some companies have been investing and diversifying since their inception. While much of the research on corporate investment focuses on diversification strategies and the performance of large firms Baláž, et al., (2023) ; Agag, et al., (2023); Bouslah, et al., (2023), other studies highlight that smaller firms also favor diversification as a strategy (Huang et al., 2023; Ghardallou., 2023 ; Bissoondoyal-Bheenick, et al., 2023; Narula, et al.,2024). Corporate managers often possess more information about asset values and opportunities than investors, suggesting that they are more capable of identifying projects with positive NPVs. Consequently, investment decisions must consider the firm's capital structure to effectively drive profitability.

Determining capital structure policies requires a careful balance between risk and return. While increasing debt amplifies the volatility of cash flows or business risk, it also raises the potential for higher expected returns. The elevated risk associated with increased debt generally leads to a reduction in stock prices, whereas the anticipated higher returns from optimal debt usage can result in stock price appreciation. The optimal capital structure is one that strikes a balance between risk and return, aiming to maximize the stock price. The primary rationale for using debt in corporate financing lies in the tax deductibility of interest expenses, which lowers the effective cost of debt. However, when a firm's income is already partially shielded from taxes through mechanisms such as accelerated depreciation or loss carry forwards, the benefits of debt financing are reduced, as the tax shield becomes less valuable under a low progressive tax rate. Debt is highly sensitive to changes in a firm's value, which, in turn, is influenced by its capital structure (Maji, et al., 2023).

As debt levels increase, stock prices typically rise, but beyond a certain threshold, additional debt can diminish the firm's value, as the advantages of debt are offset by its associated costs. Therefore, managers must weigh both the benefits and the costs of various financing options when making decisions. Each source of capital has distinct financial implications and characteristics. Shareholders typically prefer the firm to adopt a certain level of debt to enhance its value. To meet these expectations, the behavior of managers and board members must be aligned, possibly through mechanisms such as equity participation in the firm's ownership.

Corporate governance refers to the monitoring function that oversees the governance of a firm. The corporate governance framework is an organizational structure designed to regulate and ensure the effective implementation and control of various governance principles. This structure must be designed to support the responsible and

controlled execution of organizational activities. A central component of this governance framework is control, which requires a clear distinction between the "decision-makers" and the "oversight entities" (decision control). From a theoretical standpoint, effective corporate governance practices can enhance a firm's value by improving financial performance and mitigating risks, such as those arising from board decisions influenced by personal interests. In general, corporate governance seeks to curb self-serving managerial behavior by establishing control mechanisms and tools that promote a balanced distribution of profits and wealth among stakeholders. This, in turn, enhances organizational efficiency and bolsters investor confidence. Shareholders, through their ownership, are often characterized by institutional ownership, which plays a significant role in shaping the policies and strategies a firm adopts in both the short and long term, thereby enabling more effective oversight of corporate governance processes.

This study has two main objectives. **first**, it seeks to analyze and assess the key factors influencing the value of manufacturing companies in Indonesia, grounded in the fundamental theory of capital structure through a proposed theoretical model encompassing conventional, structural, and dynamic approaches. **Second**, it aims to examine dividend policy, investment decisions, and capital structure from the perspective of agency theory, while testing whether the optimal selection of funding sources for manufacturing companies in Indonesia has been effectively determined.

2 . Literature Review

The factors that influence a firm's value have been extensively debated in both theoretical and empirical research. A central issue in this discourse is whether there is an optimal capital structure for a firm, or whether the level of debt affects its value. Pandey (2004) contends that capital structure decisions should be assessed based on their impact on the firm's value. He further argues that if such decisions can indeed influence a firm's value, the firm must adopt a capital structure that maximizes this value. As such, the primary objective of a firm should be the maximization of value through strategic capital structure decisions.

The determination of a financial structure involves deciding on the mix of funding sources a firm will utilize, particularly the extent of debt (leverage) to be used in financing its assets. Financial structure encompasses long-term debt, preferred stock, and shareholders' equity. When all funding for a firm's assets is derived from the owners in the form of common stock, the firm is not obligated to pay fixed interest on any debt. Interest represents a fixed financial cost that must be met regardless of the firm's profitability, adding to the overall operating costs. As such, a firm that uses debt is inherently riskier than one that does not, as it faces both business risk and financial risk. The pecking order theory, developed by Myers (1984), is particularly relevant in explaining this phenomenon. The theory suggests that companies prefer internal financing over external sources, opt for secure debt over risky debt, and only as a last resort issue common stock.

2.1. Pecking Order Theory

The Pecking Order Theory, introduced by Myers (1984), posits that firms do not target a specific debt-to-equity ratio; instead, they follow a hierarchy of financing sources. The core idea of this theory is the distinction between two types of capital: internal and external financing. According to the theory, profitable firms typically incur minimal debt, not because of a low target debt ratio, but because they require limited external funding.

Conversely, less profitable firms are more reliant on debt, primarily due to a lack of sufficient internal funds and the preference for debt as an external financing source. In this framework, the Pecking Order Theory establishes a ranking of financing sources, from the most preferred internal financing (retained earnings) to external sources (debt and equity). Myers (1984) argues that the choice of external financing is influenced by information asymmetry, as management holds more information than shareholders.

A study by Myers (1984), covering the period from 1973 to 1982, revealed that approximately 60% of capital expenditures were financed through internal cash flows, including funds for new investments, while the remaining 40% was sourced externally, with debt constituting the majority and equity issuance representing a minor portion. This study highlights the use of both internal and external capital, where most firms retain some internal funds as cash or short-term investments. Myers (1984) further explains that financing decisions are made based on a preference for lower-risk sources. The theory emphasizes internal financing as the preferred option, particularly when a firm's leverage is below the industry's optimal level. The Pecking Order Theory asserts that funding decisions are guided by a preference for the least risky sources, with the sequence being retained earnings, followed by debt, and finally equity issuance (Myers & Majluf, 1984).

2.2. Agency Theory

Agency theory, first introduced by Berle and Means (1933), explores the separation of ownership and control within a firm. This division underscores the importance of share ownership distribution, as control of the firm is delegated to managers rather than retained by the owners. This delegation creates a potential conflict between the owners (principals) and the managers (agents), commonly referred to as the agency problem. The principal-agent relationship is characterized by a contract in which the principal employs the agent to act in the principal's best interest.

Jensen and Meckling (1976) identified potential conflicts of interest among various stakeholders within a firm. These conflicts arise from the divergent objectives of each party, shaped by their distinct positions and interests within the firm (Jensen & Warner, 1988). Such conflicts, known as agency problems, occur when principals struggle to ensure that agents act in their best interest, particularly in maximizing their welfare. Efforts to mitigate these agency problems lead to the incurrence of agency costs, which are shared by both principals and agents. In this context, debt is a financial instrument highly sensitive to changes in the firm's value, which is influenced by its capital structure (Modigliani & Miller, 1958). While an increased proportion of debt can initially enhance stock prices, excessive debt beyond a certain threshold can reduce the firm's value, as the benefits of debt are outweighed by its associated costs.

Li, et al., (2024) notes that managers must carefully assess the benefits and costs associated with various financing sources when making funding decisions. Each financing source carries distinct financial characteristics and consequences. Owners generally prefer the issuance of debt up to a certain limit to increase the firm's value. To align the interests of management with those of the owners, mechanisms such as equity participation are crucial. Share ownership helps synchronize the goals of management with those of the firm's owners (Jensen & Meckling, 1976; Saha., 2024) Thus, balancing equity ownership (which influences equity holders' risk-shifting behavior) can encourage greater caution among insiders in managing the firm.

The concept of information asymmetry within agency theory further elucidates the relationship between managerial behavior, shareholders, and capital structure (Cheng, et

al., 2024; Onjewu, et al., 2023; Shukla, et al., 2023; Das, et al., 2024; Butt, et al., 2024). Information asymmetry, where one party possesses more information than another, restricts a firm's access to external funding, often prompting firms to favor internal financing over external options.

2.3. Dividend Policy and Firm Value

Dividend policy plays a critical role in determining a firm's value, as shareholders perceive dividends as an indicator of the company's ability to generate earnings. For investors, dividends provide a return that can be compared with other investment opportunities, often expressed as the dividend yield the ratio of dividend payment to share price. Some theories suggest that dividends do not affect a firm's value. Notably, Miller and Modigliani (1961) argued that, assuming a perfect market, rational behavior, and complete certainty, there is no connection between a firm's value and its dividend policy. In practice, however, informational asymmetry exists, with the selling party possessing more knowledge about the firm's condition than potential investors. This information gap elevates the importance of dividends as a signaling mechanism to external parties (Dasilas., 2024). A study by Bawuah., (2024) identified a trend of disappearing dividends, indicating a reduction in the informational content of dividend policies. This decrease is attributed to the growing influence of institutional investors, who have superior information compared to individual shareholders. As a result, dividend announcements increasingly reflect information already incorporated into stock prices, making dividend payment policies less informative and more costly. Pareek & Sahu., (2024) provides evidence indicating that the informational content of dividend payments has decreased over time, particularly when compared to the early 20th century. He argues that, in the early 20th century, managers had limited channels for conveying information about the firm, with financial reports being one of the few available means. In this context, dividend policy could function as a signal of the firm's future prospects. However, in the modern era, where managers typically use a variety of information technology platforms to communicate corporate information, the informational value of dividend payments has diminished.

This study focuses on manufacturing companies listed on the Indonesia Stock Exchange (IDX), which are part of emerging markets characterized by weak investor protection. In developing countries such as Indonesia, where corporate governance structures and mechanisms remain underdeveloped, shareholders often place a high value on dividend payments. Building on the literature review, the study's first hypothesis posits that dividends have a positive effect on firm value.

2.4. Investment Decisions and Their Impact on Firm Value

Investment decisions play a pivotal role in a firm's financial function. Fama (1978) argues that the value of a firm is entirely determined by its investment decisions. This assertion underscores the importance of investment choices, as a firm can only achieve its objective of maximizing shareholder wealth through these decisions. The aim of investment decisions is to generate high returns at an acceptable level of risk. By ensuring high returns while managing risk effectively, a firm can increase its value, thereby enhancing shareholder wealth.

The Investment Opportunity Set (IOS) is frequently linked to firm growth, as discussed by Zhao, et al., (2023); Yin & Song., (2023); Kirdina, et al., (2023); Adhikari,

et al., (2023). However, Abbott, et al., 2024 and McKeown, et al., (2024), offer a different interpretation, proposing that IOS refers to investment opportunities that generate a positive net present value (NPV), whereas growth is viewed as a firm's ability to augment shareholder value. Jeffers, et al., (2024), further elaborates that cash investments made for acquisitions may expand a firm's size without necessarily increasing its value.

Asyik, et al., (2024) research further supports the idea that investment decisions are the sole determinant of a firm's value. Wang, et al., (2024) defines investment decisions as a combination of assets currently held (assets in place) and future investments that generate a positive NPV. Numerous studies, including those by Kyaw, et al., (2024); Nam, et al., (2024); Tamasiga, et al., (2024); Khalil, et al., (2024); Mishra, et al., (2024); Tsang, et al., (2024); Sanseverino, et al.,(2024); and Caixe, et al., (2024), have explored this relationship. Consequently, based on the literature reviewed, the second hypothesis of this study posits that investment decisions have a positive impact on a firm's value.

2.5 The relationship between corporate governance structures and firm value

Corporate governance typically refers to a set of mechanisms designed to align the actions and decisions of managers with the interests of shareholders. In this study, institutional ownership is used as a proxy for corporate governance structure. Numerous studies have examined the impact of institutional ownership on firm value, including the work of Farooq, et al., (2024), which suggests that a sufficiently large proportion of institutional ownership can influence a firm's market value. The rationale behind this is that a higher proportion of shares held by institutional investors enhances the effectiveness of control mechanisms over management performance. This view is supported by empirical evidence from Ahmed & Anifowose., (2024), who found a significant positive relationship between substantial institutional ownership and firm value.

Butt, et al., (2024) are further corroborated by other researchers, including Areneke, et al., (2024), who used data from compact disclosure, CRSP, and Standard and Poor's Compustat (CST) for the years 1998 to 1999, and Dang & Nguyen., (2024), who analyzed firms with similar book-to-market ratios and sizes. Their research suggests that firms with higher institutional ownership tend to achieve higher returns. These findings support the notion that corporate governance serves as a control mechanism against managerial opportunism, with institutional ownership acting as a key proxy. Thus, the third hypothesis of this study is that institutional ownership positively affects firm value.

2.6. The Impact of Financing Decisions on Firm Value

The selection of funding sources is guided by two key theoretical frameworks: the static theory and the pecking order theory. The static theory suggests that funding decisions are driven by the pursuit of an optimal capital structure, which aims to balance the benefits of tax savings from debt financing with the potential costs of bankruptcy (Panda, et al., 2024; Chang, et al.,2024). This theory posits that there is a relationship between income variability or cash flow volatility and the use of debt, with the objective of achieving an equilibrium between equity and external capital. Debt levels will increase as long as the advantages of debt financing outweigh the associated risks. However, if the costs associated with debt exceed its benefits, increasing debt becomes suboptimal (Gao & Hoepner., 2024). Empirical evidence supporting this theory is provided by Song, et al., (2024) who studied the UK and Italy. His findings suggest that in the UK, with its well-developed financial market, firms tend to adjust toward their long-term target leverage

ratio, whereas in Italy, with a less efficient financial market, firms are more likely to prioritize equity issuance over achieving an optimal leverage ratio.

Modigliani and Miller (1958), in their static theory, posited that firms with high profitability are more likely to utilize debt as a financing strategy in order to capitalize on the tax shield benefits. Asymmetric information tends to signal positively for profitable firms. Morais et al., (2024). conducted research supporting this perspective, emphasizing the optimal balance between debt and equity, as outlined in capital structure theory, which serves as a theoretical framework for determining the most advantageous capital structure. A capital structure is considered optimal when it maximizes a firm's value at a given level of risk. In contrast, Tawfik & Elmaasrawy., (2024), argued that an increase in debt might motivate shareholders to engage in asset substitution (thus shifting risk) or to reduce investments (leading to underinvestment) in projects with a positive net present value (NPV). This dynamic could result in conflicts of interest between shareholders and creditors. Building on the literature reviewed, the fourth hypothesis in this study proposes that financing has a positive impact on the firm's value.

2.7. The Effect of Firm Size on Firm Value

The size of a firm is widely considered a key determinant of its value, with larger firms generally attracting more attention and scrutiny. As a result, firm size is often positively correlated with firm value (Cheng, et al., 2024). Firm size can be defined according to various metrics, such as total assets and market value of shares. Wang, et al., (2024) argue that total assets reflect a firm's wealth and serve as an important indicator of its size.

Firm size is typically measured by the total assets available to a firm for operational activities. A firm with a substantial asset base provides management with greater flexibility in utilizing these resources. From a managerial perspective, the ease with which a firm can be controlled can enhance its value (Ullah, et al., 2023). Firm size is often represented by total assets and sales volume (Abdullah, et al., 2023). Thus, the size of a firm, whether large or small, can be evaluated based on capital employed, total assets owned, or total sales generated.

The size of a firm is considered to significantly influence its value. As a firm's size increases, it becomes better positioned to access both internal and external sources of funding. Firm size is crucial in shaping a company's capital structure. Larger firms tend to have stronger financial positions that support their performance, although they also face greater agency problems. Firmansyah & Kartiko., (2024) suggests that as firm size increases, its value tends to rise. Based on the literature reviewed, the fifth hypothesis of this study posits that firm size has a positive impact on firm value.

2.8. The Mediating Role of Dividend Payout Ratio in the Relationship Between Corporate Governance Structure and Firm Value

Dividend policy pertains to decisions regarding the proportion of a firm's profits to be distributed to shareholders. This policy is critically important to firms, as dividend payments can influence the firm's valuation, while retained earnings serve as a vital source of internal financing for growth. For investors, dividends constitute a component of their returns, complementing capital gains. The dividend payout ratio serves as an intermediary variable in the relationship between corporate governance structures and firm value for several reasons. First, Miller and Modigliani (1961) introduced the irrelevance theory, positing that dividend policy does not affect a firm's value or its cost

of capital. According to their framework, the value of a firm is primarily determined by its investment in productive assets rather than by how profits are allocated between dividends and retained earnings. In contrast, Farooq, et al., (2024) argued that investors favor dividends over capital gains due to the lower risk associated with dividend distribution. Therefore, firms should adopt a high dividend payout ratio to provide substantial dividend yields, thereby maximizing stock prices.

Corporate governance encompasses the systems and processes implemented to regulate and manage companies, with the aim of enhancing corporate performance and accountability while ultimately striving to maximize shareholder value (Tayachi, et al., 2023). Rooted in agency theory, corporate governance structures are designed to ensure that investors receive returns on their investments. These mechanisms address how managers are incentivized to generate profits, prevent the misappropriation of funds, and avoid undertaking unprofitable projects that may jeopardize shareholder capital. Furthermore, they establish how investors exert control over managerial decision-making (Al-Hiyari, et al., 2024; Yilmaz, et al., 2024). Drawing on this body of literature, the sixth hypothesis of this study posits that the impact of corporate governance structure on firm value is mediated by dividend payments.

3. Research Methods

3.1. The type of research

This study employs an observational research design, utilizing data collected exclusively from the financial statements of companies listed on the Indonesia Stock Exchange. The nature of the data precludes the need for additional information beyond these financial statements.

3.2. The Population and Sample

The improving business climate has played a significant role in the development of Indonesia's capital market. Data from the Indonesian Capital Market Directory (ICMD), covering the period from 2018 to 2023, reveals that companies in the manufacturing sector were consistently ranked. This study employs a sample of 178 financial reports from firms.

3.3. The research method

This study utilizes path analysis to examine the effects of exogenous variables on endogenous variables. Path analysis, introduced by Sewall Wright (1934, cited in Bachrudin and Tobing, 2003), aims to elucidate both direct and indirect effects of a set of causal variables on a corresponding set of outcome variables. The application of path analysis requires several conditions to be met during data processing, which include the following: 1) the relationships between variables must be linear and additive; 2) residual variables should not exhibit correlation with one another; 3) the causal relationships between variables must be recursive, implying that the cause-effect relationships are unidirectional rather than reciprocal; and 4) the measurement level of all variables should be at least interval scale.

Hair et al. (1998) outline four key steps to conducting path analysis: 1) developing a theoretical model; 2) constructing a path diagram to represent causal relationships; 3) translating the path diagram into a set of structural equations and measurement model specifications; and 4) selecting the appropriate input matrix and estimation techniques for the model. From these steps, two regression equations can be derived.

1. Dividen payout (Y_1):
 $Y_1 = \beta_3 X_3 + e_1$ (1)

2. Firm value (tobinsq) (Y_2):
 $Y_2 = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 Y_1 + e_2$ (2)

3.4. Variable

Variable type of this study consist of exogenous variables: Devidend, good corporate governance, leverage, Firm Size, Invesment. Endogenous Variables: dividend and Firm Value.

Table 1
Operational Definition of Variables

Variables	Indicators	Measurement
Firm Value It is a measure of the total amount of wealth (total assets) owned by the firm.	Tobins'q	$\frac{(\text{Current Price} \times \text{Total Share}) + (\text{Total Liabilities})}{\text{Total Assets}}$
The dividend policy is a measure of the total amount of wealth (total assets) owned by the firm.	Dividend pay Out Ratio (DPR)	$\text{DPR} = \frac{\text{DPS}}{\text{EPS}}$ <p>DPR = Dividend Payout Ratio DPS = Dividend Per Share EPS = Earnings Per Share</p>
Good corporate governance A system designed to control and direct the operations of a firm.	Institusional Ownership (IO)	The percentage of shares owned by institutions out of the total outstanding shares.
Leverage Represents a measure (proportion) of the total debt used to finance the firm's entire investment.	Leverage (Lev)	$\text{Leverage} = \frac{\text{Total Debt}}{\text{Total Assets}}$
Investment A result of future investment choices aimed at obtaining profit from the firm's growth prospects.	Invesment Opportunity Set (IOS)	$R \ \& \ D = \left(\frac{R \ \& \ D \ \text{Expenditures}}{\text{Assets}} \right)$
Firm Size Refers to the measure of the total amount of assets owned by the firm.	Total Sales (TS)	Natural Logarithm of Total Asset

Source: [Handriani \(2019\)](#)

3.5. Test Results

The results of the feasibility testing of the research path model indicate the following information:

Table 1.
Goodness of Fit Path Testing

Goodness of Fit Indeks	Cut-off Value	Hasil	Model Evaluation
Chi – Square	14.067	8,845	Fit
Probability	≥ 0.05	0,487	Fit
CFI	≥ 0.90	0,96	Fit
CMIN/DF	< 3	1,42	Fit
NFI	≥ 0.90	0,92	Fit
GFI	≥ 0.90	0,95	Fit
AGFI	≥ 0.90	0,93	Fit
RMSEA	≤ 0.08	0.02	Fit

Source: Primary data processed, 2019.

The results demonstrate that all goodness-of-fit indices for the constructed model are satisfactory. This is evident from the values in the model results column, which meet the required thresholds outlined in the cutoff value column. The significance level (p-value) of 0.487 suggests that the null hypothesis—asserting no difference between the sample covariance matrix and the estimated population covariance matrix—cannot be rejected. Acceptance of the null hypothesis indicates that the model is acceptable. This conclusion is further substantiated by other goodness-of-fit indices, including CFI (0.96), CMIN/DF (1.42), NFI (0.92), GFI (0.95), AGFI (0.93), and RMSEA (0.02), which strongly support the model's validity.

3.6. Hypothesis Testing

The next step involves testing the proposed hypotheses, following calculations through path analysis that include the variables of dividend payout ratio (DPR), leverage, Investment Opportunity Set (IOS), size, and firm value (Tobin's Q). The results of these hypothesis tests are presented in Table 2, which shows the critical ratio (c.r.), probability, and standardized regression weight values. A critical ratio greater than 2.56 signifies a significant estimate at the 1% significance level (α), while a critical ratio greater than 1.96 indicates significance at the 5% significance level (α).

Table 2
The results of testing the Dividend Policy, Investment Decisions, Financing, and Firm Value in the Industrial Manufacturing Sector of Indonesia.

			Estimate	S.E.	C.R.	P
DPR	←-	Tobinsq	.130	.063	7.162	***
Tobinsq	←-	IOS	.166	.091	11.930	***
Tobinsq	←-	IO	.027	.072	8.513	.004
Tobinsq	←-	LEV	.047	.040	13.672	.002
Tobinsq	←-	TS	.234	.378	9.646	.006

3.7. Hypothesis Testing Results

To facilitate the conclusion of this study, a summary of the hypothesis testing results for all hypotheses is presented in the table below as follows:

Table 3
Summary of Hypothesis Testing Results

	Hypothesis	Prediction Indicator	Regression Coefficient	Description
H1 :	The dividend has a positive impact on the firm's value.	+	0,230	It has been empirically proven to have an effect
H2 :	The investment decision has a positive impact on the firm's value.	+	0,352	It has been empirically proven to have an effect
H3 :	Institutional ownership has a positive impact on firm value	+	0,434	It has been empirically proven to have an effect
H4 :	leverage has a positive influence on firm value.	+	0,521	It has been empirically proven to have an effect
H5 :	The size of the firm has a positive influence on the firm's value.	+	0,344	It has been empirically proven to have an effect

3.8. Path Analysis

The path analysis examines the relationships between various alternative paths of variables such as institutional ownership, investment opportunity set, dividends, size, and leverage toward firm value. The purpose of this analysis is to identify which path has the most significant impact on the final outcome of this study. The alternative paths under consideration consist of three options. The calculations based on standardized regression weights are presented below.

$$\begin{aligned}
 \text{IO} \rightarrow \text{DPR} \rightarrow \text{Tobinsq} &= (0,434)(0,230) = 0,09982 \\
 \text{TS} \rightarrow \text{DPR} \rightarrow \text{Tobinsq} &= (0,344)(0,230) = 0,07912 \\
 \text{IOS} \rightarrow \text{DPR} \rightarrow \text{Tobinsq} &= (0,352)(0,230) = 0,08096
 \end{aligned}$$

Based on the calculations of the alternative pathways above, the pathway of institutional ownership (IO) → dividend payout ratio (DPR) → firm value (Tobinsq) is the one with the highest value, making it the most influential among the other two pathways.

4. Discussion and Conclusion

This research seeks to investigate, analyze, and assess the critical determinants of firm value within Indonesian manufacturing companies, utilizing the fundamental theory of capital structure through a proposed theoretical framework that integrates conventional, structural, and dynamic perspectives. The empirical analysis, focusing on data related to dividend policy, investment decisions, financing, and firm value in the Indonesian manufacturing sector, substantiates the initial hypothesis, which posits that dividend policy exerts a positive influence on firm value. This is demonstrated by a notable loading coefficient of 0.722.

Furthermore, the study examines dividend policy, demonstrating that throughout the observation period, manufacturing firms in Indonesia aligned with agency theory. In the context of emerging markets, companies frequently encounter information asymmetry, wherein sellers possess more comprehensive insights into the firm's condition compared to prospective investors. Indonesian firms seem to perceive dividend payments as an indicator of strong internal performance. This conclusion aligns with the findings

of (Abdullah, et al., 2023; Khan & Qureshi., 2023; Chakraborty & Maruf., 2023 and Kapons, et al., 2023; Bai, et al., 2024).

This study investigates how investment decisions impact firm value within the framework of agency theory, as indicated by a significant loading value of 0.790. These findings align with previous research by (Cheng, et al., 2024; Salihi, et al., 2024; Narula, et al., 2023; Nam, et al., 2024). The presence of investment opportunities in projects with a positive net present value (NPV) influences the perceptions of managers, investors, and creditors regarding the firm's value. For investors assessing a firm's prospects, the availability of growth opportunities is a crucial determinant in shaping their expectations of potential returns.

The capital structure, from the perspective of agency theory, positively influences firm value, as indicated by a significant loading value of 0.632. This result aligns with previous studies by (Rehan, et al., 2023; Adeneye, et al., 2023; Dabi, et al., 2023; Anozie, et al., 2023; Niu, et al., 2023). An increase in debt usage raises agency costs due to the associated financial risks. An optimal capital structure is one that effectively balances the marginal benefits derived from debt with the marginal costs incurred from its use. Under the agency cost framework, achieving a favorable capital structure involves balancing the marginal agency costs of debt and equity (Jensen & Meckling, 1976; Ronoowah & Seetanah., 2023; Mansour, et al.,2023).

This study makes a significant contribution to the existing body of literature on corporate governance, a subject of widespread societal recognition. In general, a robust corporate governance framework, coupled with an efficient system for managing companies aimed at enhancing firm value, is essential for addressing the interests of various stakeholders, including the government and the broader operating environment of the firm. The analysis of the institutional ownership variable in this study reveals a positive effect on firm value, as evidenced by a loading value of 0.620. These findings align with the research of (Anozie, et al.,2023; Pathak & Chandani., 2023; Adeneye, et al., 2023 and Niu, et al.,2023). Conducted within an emerging market context characterized by asymmetric information, this study draws on agency theory, which suggests that agency problems arise when institutional ownership in a firm's shares is less than 100%. In such cases, managers may prioritize their personal interests over the goal of maximizing firm value in investment decisions. Additionally, management does not bear the full risk of incorrect decision-making, as this burden falls primarily on the shareholders. Another source of this conflict lies in the differing priorities of shareholders and managers: shareholders tend to focus on the systematic risk of the firm's stock, given their investments in diversified portfolios, while managers are more concerned with the overall risk facing the firm itself.

The analysis of the mediation variable in this study, specifically examining the impact of the dividend payout ratio on the relationship between corporate governance structure and firm value, is valid. The indirect effect between corporate governance structure and firm value, mediated by the dividend payout ratio, produced a p-value of 0.01891141, which is below the 0.05 threshold. This indicates that the dividend payout ratio plays a significant mediating role in the relationship between corporate governance structure and firm value. Thus, it can be concluded that the dividend payout ratio mediates this relationship. This finding empirically supports the notion that the positive influence of institutional ownership on dividend payments suggests that higher institutional

ownership enhances external control over the firm, motivating managers to increase dividend payouts. Furthermore, as dividend payouts rise, institutional investors are more inclined to increase their holdings to secure higher dividends in the future. High institutional ownership also empowers institutional investors to oversee and influence the dividend policies established by the firm's management.

This study empirically validates the hypothesis that firm size positively influences firm value, as evidenced by a loading factor of 0.724. This finding aligns with prior research (Ali & Johl, 2023; Ahmad et al., 2023; Islam et al., 2023; Ghardallou, 2023; Bhat et al., 2023). The analysis demonstrates that firm size, operationalized through total assets, exerts a positive effect on firm value. Conducted within the context of an emerging market, the study's results are consistent with the theoretical underpinnings of agency theory. This framework posits that effective alignment between managerial and shareholder interests incentivizes managers to prioritize shareholder welfare by distributing free cash flow directly to shareholders, limiting retained earnings, and exercising prudent financial management. In firms with substantial asset bases, managers are particularly motivated to generate cash flow, as it supports the firm's capacity to deliver returns. Consequently, larger returns from such firms elicit more favorable investor responses, thereby enhancing firm value.

Reference

- Abbott, L. J., Barr-Pulliam, D., Buslepp, W. L., & Parker, S. (2024). The real effects of internal audit function quality: Evidence from investment strategies. *Journal of Accounting, Auditing & Finance*, 39(2), 540-567.
- Abdullah, H., Isiksal, A. Z., & Rasul, R. (2023). Dividend policy and firm value: evidence of financial firms from Borsa Istanbul under the IFRS adoption. *Journal of financial reporting and accounting*, (ahead-of-print).
- Abdullah, H., Isiksal, A. Z., & Rasul, R. (2023). Dividend policy and firm value: evidence of financial firms from Borsa Istanbul under the IFRS adoption. *Journal of financial reporting and accounting*, (ahead-of-print).
- Adeneye, Y. B., Kammoun, I., & Ab Wahab, S. N. A. (2023). Capital structure and speed of adjustment: the impact of environmental, social and governance (ESG) performance. *Sustainability Accounting, Management and Policy Journal*, 14(5), 945-977.
- Adhikari, B., & Safaee Chalkasra, L. S. (2023). Mobilizing private sector investment for climate action: enhancing ambition and scaling up implementation. *Journal of Sustainable Finance & Investment*, 13(2), 1110-1127.
- Agag, G., Durrani, B. A., Shehawy, Y. M., Alharthi, M., Alamoudi, H., El-Halaby, S., ... & Abdelmoety, Z. H. (2023). Understanding the link between customer feedback metrics and firm performance. *Journal of Retailing and Consumer Services*, 73, 103301.
- Agoraki, M. E. K., Giaka, M., Konstantios, D., & Patsika, V. (2023). Firms' sustainability, financial performance, and regulatory dynamics: Evidence from European firms. *Journal of International Money and Finance*, 131, 102785.

- Ahmad, N., Mobarek, A., & Raid, M. (2023). Impact of global financial crisis on firm performance in UK: Moderating role of ESG, corporate governance and firm size. *Cogent Business & Management*, 10(1), 2167548.
- Ahmed, A., & Anifowose, M. (2024). Corruption, corporate governance, and sustainable development goals in Africa. *Corporate Governance: The International Journal of Business in Society*, 24(1), 119-138.
- Al-Hiyari, A., Kolsi, M. C., Lutfi, A., & Shakkour, A. S. (2024). Information asymmetry and dividend payout in an emerging market: Does corporate governance quality matter?. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100188.
- Al-Hiyari, A., Kolsi, M. C., Lutfi, A., & Shakkour, A. S. (2024). Information asymmetry and dividend payout in an emerging market: Does corporate governance quality matter?. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100188.
- Ali, K., & Johl, S. K. (2023). Impact of total quality management on industry 4.0 readiness and practices: does firm size matter?. *International Journal of Computer Integrated Manufacturing*, 36(4), 567-589.
- Niu, Y., Wang, S., Wen, W., & Li, S. (2023). Does digital transformation speed up dynamic capital structure adjustment? Evidence from China. *Pacific-Basin Finance Journal*, 79, 102016.
- Anozie, O. R., Muritala, T. A., Ininm, V. E., & Yisau, N. S. (2023). Impact of capital structure on financial performance of oil and gas firms in Nigeria. *Future Business Journal*, 9(1), 11.
- Areneke, G., Tunyi, A. A., & Nakpodia, F. (2024). Investigating the mediating role of national governance bundles and institutional ownership on the relationship between risk governance disclosure and market valuation: evidence from Sub-Saharan Africa. *Corporate Governance: The International Journal of Business in Society*.
- Asyik, N. F., Dewi, M. A., Respatia, W., Santoso, A., & Ilham, R. N. (2024). Good corporate governance or corporate social responsibility: which affects the firm value and performance?. *Cogent Social Sciences*, 10(1), 2378540.
- Bai, M., Qin, Y., & Bai, F. (2024). Dividend policy and firm liquidity under the tax imputation system in Australia. *International Journal of Managerial Finance*, 20(2), 281-303.
- Baláž, V., Jeck, T., & Balog, M. (2023). Firm performance over innovation cycle: evidence from a small European economy. *Journal of Innovation and Entrepreneurship*, 12(1), 40.
- Baptista Rui, K. . L. J. (2010). Diversification by Young , Small Firms, pp.1–37.
- Bawuah, I. (2024). The moderator role of corporate governance on capital structure-performance nexus: Evidence from Sub-Saharan Africa. *Cogent Business & Management*, 11(1), 2298030.
- Berle, A., & Gardiner, Means. (1932). *The Modern Corporation and Private property*. Mac-Millan, New York.
- Bessler, W., Gonenc, H., & Tinoco, M. H. (2023). Information asymmetry, agency costs, and payout policies: An international analysis of IFRS adoption and the global financial crisis. *Economic Systems*, 101129.
- Bessler, W., Gonenc, H., & Tinoco, M. H. (2023). Information asymmetry, agency costs, and payout policies: An international analysis of IFRS adoption and the global financial crisis. *Economic Systems*, 101129.

- Bhat, D. A., Chanda, U., & Bhat, A. K. (2023). Does firm size influence leverage? Evidence from India. *Global Business Review*, 24(1), 21-30.
- Bissoondoyal-Bheenick, E., Brooks, R., & Do, H. X. (2023). ESG and firm performance: The role of size and media channels. *Economic Modelling*, 121, 106203.
- Boshnak, H. A. (2023). The impact of board composition and ownership structure on dividend payout policy: evidence from Saudi Arabia. *International Journal of Emerging Markets*, 18(9), 3178-3200.
- Bouslah, K., Hmaittane, A., Kryzanowski, L., & M'Zali, B. (2023). CSR structures: Evidence, drivers, and firm value implications. *Journal of Business Ethics*, 185(1), 115-145.
- Bru, L. (2007). Diversification of Family Business Groups (FBG) and Board Control, pp.1–35.
- Bui, H., & Krajcsák, Z. (2023). The impacts of corporate governance on firms' performance: from theories and approaches to empirical findings. *Journal of Financial Regulation and Compliance*, 32(1), 18-46.
- Butt, A. A., Rizavi, S. S., Nazir, M. S., & Shahzad, A. (2024). Corporate derivatives use and firm value: conditional role of corporate governance. *South Asian Journal of Business Studies*, 13(2), 262-281.
- Caixe, D. F., Pavan, P. C. P., Maganini, N. D., & Sheng, H. H. (2024). Foreign institutional ownership and firm value: Evidence of “locust foreign capital” in Brazil. *Emerging Markets Finance and Trade*, 60(2), 310-327. Caixe, D. F., Pavan, P. C. P., Maganini, N. D., & Sheng, H. H. (2024). Foreign institutional ownership and firm value: Evidence of “locust foreign capital” in Brazil. *Emerging Markets Finance and Trade*, 60(2), 310-327.
- Chakraborty, B., & Maruf, M. Y. H. (2023). Are Liquidity, Dividend Policy, Leverage, And Profitability The Determinants Of Firm Value: Evidence From The Listed Firms?. *Copernican Journal of Finance & Accounting*, 12(1), 47-63.
- Chang, X., Chen, Y., Fu, K., & Yang, E. (2024). Institutional investor horizons, information environment, and firm financing decisions. *Journal of Contemporary Accounting & Economics*, 20(1), 100397.
- Chen, W., & Srinivasan, S. (2024). Going digital: Implications for firm value and performance. *Review of Accounting Studies*, 29(2), 1619-1665.
- Cheng, R., Kim, H., & Ryu, D. (2024). ESG performance and firm value in the Chinese market. *Investment Analysts Journal*, 53(1), 1-15.
- Cheng, R., Kim, H., & Ryu, D. (2024). ESG performance and firm value in the Chinese market. *Investment Analysts Journal*, 53(1), 1-15.
- Cheng, R., Kim, H., & Ryu, D. (2024). ESG performance and firm value in the Chinese market. *Investment Analysts Journal*, 53(1), 1-15.
- Dabi, R. S. K., Nugraha, Disman, & Sari, M. (2023). Capital structure, financial performance and sustainability of Microfinance Institutions (MFIs) in Ghana. *Cogent Economics & Finance*, 11(2), 2230013.
- Dang, V. C., & Nguyen, Q. K. (2024). Internal corporate governance and stock price crash risk: Evidence from Vietnam. *Journal of Sustainable Finance & Investment*, 14(1), 24-41.
- Dasilas, A. (2024). The nonlinear relationship between employee stock ownership plans and firm performance: Evidence from China. *Journal of Business Research*, 173, 114470.

- Debeli, D. K., Woldegiorgis, A. G., & Abate, M. T. (2023). Education and Investment Opportunities in the Textile Sector in Ethiopia—an Overview. *Quality education and international partnership for textile and fashion: Hidden Potentials of East Africa*, 139-156.
- Falavigna, G., & Ippoliti, R. (2024). SMEs and dividend payout policy in case of poor legal environment. *Journal of Small Business Management*, 62(3), 1498-1530.
- Falavigna, G., & Ippoliti, R. (2024). SMEs and dividend payout policy in case of poor legal environment. *Journal of Small Business Management*, 62(3), 1498-1530.
- Fama, E. F. (1978). The effects of a firm's investment and financing decisions on the welfare of its security holders. *The American Economic Review*, 272-284.
- Farooq, M., Al-Jabri, Q., Khan, M. T., Ali Ansari, M. A., & Tariq, R. B. (2024). The impact of corporate governance and firm-specific characteristics on dividend policy: an emerging market case. *Asia-Pacific journal of business administration*, 16(3), 504-529.
- Feng, Z., & Wu, Z. (2023). ESG disclosure, REIT debt financing and firm value. *The Journal of Real Estate Finance and Economics*, 67(3), 388-422.
- Firmansyah, A., & Kartiko, N. D. (2024). Exploring the association of green banking disclosure and corporate sustainable growth: the moderating role of firm size and firm age. *Cogent Business & Management*, 11(1), 2312967.
- Gao, Y., & Hoepner, A. G. (2024). Virtues of impact financing: Do financial institutions benefit from considering the environmental impact on financing decisions?. *Journal of Environmental Management*, 354, 120259.
- Ghardallou, W. (2023). The heterogeneous effect of leverage on firm performance: a quantile regression analysis. *International Journal of Islamic and Middle Eastern Finance and Management*, 16(1), 210-225.
- Ghosh, R. (2023). As investors sow, can they reap? Examining the moderating effect of investment opportunity on the relationship between financial literacy and investment decision. *Global Knowledge, Memory and Communication*.
- Giarratana, M. S. (2004). The birth of a new industry: entry by start-ups and the drivers of firm growth: the case of encryption software. *Research Policy*, 33(5), 787-806.
- Habib, A. M. (2023). Does real earnings management affect a firm's environmental, social, and governance (ESG), financial performance, and total value? A moderated mediation analysis. *Environment, Development and Sustainability*, 1-30.
- Habib, A. M., & Mourad, N. (2024). The influence of environmental, social, and governance (ESG) practices on US firms' performance: Evidence from the coronavirus crisis. *Journal of the Knowledge Economy*, 15(1), 2549-2570.
- Hasnawati, S. (2005). Impact investment opportunities set to the value of public companies in the Jakarta Stock Exchange. *Journal of Accounting and Auditing Indonesia*, 9(2).
- Heaney, R., Naughton, T., Truong, T., Davidson, S., Fry, T., & McKenzie, M. (2007). The link between performance and changes in the size and stability of a firm's officers and directors. *Journal of Multinational Financial Management*, 17(1), pp.16–29.
- Huang, Q., Fang, J., Xue, X., & Gao, H. (2023). Does digital innovation cause better ESG performance? an empirical test of a-listed firms in China. *Research in International Business and Finance*, 66, 102049.

- Huang, Q., Xu, C., Xue, X., & Zhu, H. (2023). Can digital innovation improve firm performance: Evidence from digital patents of Chinese listed firms. *International Review of Financial Analysis*, 89, 102810.
- Huang, Q., Xu, C., Xue, X., & Zhu, H. (2023). Can digital innovation improve firm performance: Evidence from digital patents of Chinese listed firms. *International Review of Financial Analysis*, 89, 102810.
- Huang, Z., Tao, Y., Luo, X., Ye, Y., & Lei, T. (2023). Regional digital finance and corporate investment efficiency in China. *Applied Economics*, 55(43), 5115-5134.
- Islam, M., Slof, J., & Albitar, K. (2023). The mediation effect of audit committee quality and internal audit function quality on the firm size–financial reporting quality nexus. *Journal of Applied Accounting Research*, 24(5), 839-858.
- Jeffers, J., Lyu, T., & Posenau, K. (2024). The risk and return of impact investing funds. *Journal of Financial Economics*, 161, 103928.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Jensen, M. C., & Warner, J. B. (1988). The distribution of power among corporate managers, shareholders, and directors. *Journal of Financial Economics*, 20, 3-24.
- Jogiyanto. (2000) *Portfolio Theory and Analysis Investasi*. Edisi 2nd. Yogyakarta: BPFK Kallapur, S., & Trombley, M. A. (2001). The investment opportunity set: determinants, consequences and measurement. *Managerial finance*, 27(3), 3-15.
- Kapons, M., Kelly, P., Stoumbos, R., & Zambrana, R. (2023). Dividends, trust, and firm value. *Review of Accounting Studies*, 28(3), 1354-1387.
- Karim, S., Naeem, M. A., & Ismail, R. B. (2023). Re-configuring ownership structure, board characteristics and firm value nexus in Malaysia: the role of board gender and ethnic diversity. *International Journal of Emerging Markets*, 18(12), 5727-5754.
- Khalil, M. A., Khalil, R., & Khalil, M. K. (2024). Environmental, social and governance (ESG)-augmented investments in innovation and firms' value: a fixed-effects panel regression of Asian economies. *China Finance Review International*, 14(1), 76-102.
- Khan, A., & Qureshi, M. A. (2023). Policy analysis to maximize the firm value: performing firm valuation using system dynamics. *Journal of Modelling in Management*, 18(5), 1291-1312.
- Khan, A., Yilmaz, M. K., & Aksoy, M. (2024). Does board demographic diversity affect the dividend payout policy in Turkey?. *EuroMed Journal of Business*, 19(2), 276-297.
- Khan, A., Yilmaz, M. K., & Aksoy, M. (2024). Does board demographic diversity affect the dividend payout policy in Turkey?. *EuroMed Journal of Business*, 19(2), 276-297.
- Kirdina, O., Kalinichenko, L., Pakulina, A., & Yanchenko, N. (2023, December). Investment and innovation policy of railway transport: Features of formation, implementation and evaluation of its efficiency. In *AIP Conference Proceedings* (Vol. 2490, No. 1). AIP Publishing.
- Kong, D., Ji, M., & Liu, L. (2023). Mandatory dividend policy and investment efficiency within state-owned business groups. *Pacific-Basin Finance Journal*, 77, 101910.
- Kumari, P., & Pathak, R. (2024). Does mandating disclosure on dividend payout policy benefit shareholder?. *Economics Letters*, 236, 111587.

- Kumari, P., & Pathak, R. (2024). Does mandating disclosure on dividend payout policy benefit shareholder?. *Economics Letters*, 236, 111587.
- Kyaw, K., Khatri, I., & Treepongkaruna, S. (2024). When R&D investment improves firm value: the role of board gender diversity. *Corporate Governance: The International Journal of Business in Society*.
- Liang, C.-J., Huang, T.-T., & Lin, W.-C. (2011). Does ownership structure affect firm value? Intellectual capital across industries perspective. *Journal of Intellectual Capital*, 12(4), pp.552–570.
- Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *The American Economic Review*, 46(2), 97-113.
- Madanoglu, M., Lee, K., & Castrogiovanni, G. J. (2011). Franchising and firm financial performance among U . S . restaurants. *Journal of Retailing*, 87, pp.406–408.
- Maji, S. G., & Lohia, P. (2023). Environmental, social and governance (ESG) performance and firm performance in India. *Society and Business Review*, 18(1), 175-194.
- Mansour, M., Hashim, H. A., Almaqtari, F. A., & Al-ahdal, W. M. (2023). A review of the influence of capital structure on the relationship between corporate governance and firm performance. *International Journal of Procurement Management*, 17(1), 79-105.
- McKeown, B., Coulton, J., Saydam, S., & Dempster, A. G. (2024). What is an appropriate investment hurdle rate for commercial space resource development projects?. *Space Policy*, 101630.
- McKeown, B., Coulton, J., Saydam, S., & Dempster, A. G. (2024). What is an appropriate investment hurdle rate for commercial space resource development projects?. *Space Policy*, 101630.
- Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. *Journal of Business*, 34, pp.411–433.
- Mishra, G., Patro, A., & Tiwari, A. K. (2024). Does climate governance moderate the relationship between ESG reporting and firm value? Empirical evidence from India. *International Review of Economics & Finance*, 91, 920-941.
- Modigliani, F. and M.H. Miller (1958), “The Cost of Capital, Corporation Finance and The Theory of Investment”, *American Economic Review*, Vol.48, No.13, pp.261-297.
- Modigliani, Franco, (1982) Debt, Dividend Policy, Taxes, Inflation and Market Valuation, *Journal of Finance*, (37), 255-73.
- Morais, F., Serrasqueiro, Z., & Ramalho, J. J. (2024). The zero-leverage phenomenon in European listed firms: A financing decision or an imposition of the financial market?. *BRQ Business Research Quarterly*, 27(3), 301-323.
- Myers, S. C. (1984). Finance theory and financial strategy. *Interfaces*, 14(1), 126-137.
- Myers, S. C. (Ed.). (1976). *Modern developments in financial management*. Praeger Publishers.
- Nam, H. J., Bilgin, M. H., & Ryu, D. (2024). Firm value, ownership structure, and strategic approaches to ESG activities. *Eurasian Business Review*, 14(1), 187-226.
- Nam, H. J., Bilgin, M. H., & Ryu, D. (2024). Firm value, ownership structure, and strategic approaches to ESG activities. *Eurasian Business Review*, 14(1), 187-226.
- Narula, R., Rao, P., & Rao, A. A. (2023). Impact of ESG on firm value: a conceptual review of the literature. *Journal of Social and Economic Development*, 25(Suppl 1), 162-179.

- Narula, R., Rao, P., Kumar, S., & Matta, R. (2024). ESG scores and firm performance-evidence from emerging market. *International Review of Economics & Finance*, 89, 1170-1184. Narula, R., Rao, P., Kumar, S., & Matta, R. (2024). ESG scores and firm performance-evidence from emerging market. *International Review of Economics & Finance*, 89, 1170-1184.
- Niu, Y., Wang, S., Wen, W., & Li, S. (2023). Does digital transformation speed up dynamic capital structure adjustment? Evidence from China. *Pacific-Basin Finance Journal*, 79, 102016.
- Oduro, R. (2024). Impact of recapitalisation and dividend payout policies on financial sustainability of rural and community banks in Ghana. *Future Business Journal*, 10(1), 11.
- Oduro, R. (2024). Impact of recapitalisation and dividend payout policies on financial sustainability of rural and community banks in Ghana. *Future Business Journal*, 10(1), 11.
- Panda, A. K., Nanda, S., Hegde, A., & Paital, R. R. (2024). Revisiting the drivers of firm value; An empirical investigation on manufacturing firms. *Business Perspectives and Research*, 12(3), 382-399.
- Pandey, I. M. (2004). Capital structure, profitability and market structure: Evidence from Malaysia. *The Asia Pacific Journal of Economics & Business*, 8(2), 78.
- Pareek, R., & Sahu, T. N. (2024). The nonlinear effect of executive compensation on corporate social responsibility performance. *Rajagiri Management Journal*, 18(1), 43-55.
- Pathak, M., & Chandani, A. (2023). The nexus between capital structure and firm-specific factors: evidence from Indian companies. *Journal of Economic and Administrative Sciences*, 39(2), 470-487.
- Rehan, R., Hadi, A. R. A., Hussain, H. I., & Hye, Q. M. A. (2023). Capital structure determinants across sectors: Comparison of observed evidences from the use of time series and panel data estimators. *Heliyon*.
- Ronoowah, R. K., & Seetanah, B. (2023). The moderating and mediating effects of corporate governance and capital structure on firm performance: empirical evidence from an emerging market. *Managerial Finance*, 49(9), 1377-1399.
- Salihi, A. A., Ibrahim, H., & Baharudin, D. M. (2024). Environmental governance as a driver of green innovation capacity and firm value creation. *Innovation and Green Development*, 3(2), 100110.
- Salvi, A., Nirino, N., Battisti, E., & Gianfrancesco, I. (2024). Payout policy and ESG: A European investigation. *Research in International Business and Finance*, 68, 102189.
- Salvi, A., Nirino, N., Battisti, E., & Gianfrancesco, I. (2024). Payout policy and ESG: A European investigation. *Research in International Business and Finance*, 68, 102189.
- Sanseverino, A., González-Ramírez, J., & Cwik, K. (2024). Do ESG progress disclosures influence investment decisions?. *International Journal of Disclosure and Governance*, 21(1), 107-126. Sanseverino, A., González-Ramírez, J., & Cwik, K. (2024). Do ESG progress disclosures influence investment decisions?. *International Journal of Disclosure and Governance*, 21(1), 107-126.
- Song, L., Chen, Y., Zhang, B., & Zhu, M. (2024). Inventory and financing decisions in cross-border e-commerce: The financing and information roles of a bonded warehouse. *Expert Systems with Applications*, 238, 121639.

- Tamasiga, P., Onyeaka, H., Bakwena, M., & Ouassou, E. H. (2024). Beyond compliance: evaluating the role of environmental, social and governance disclosures in enhancing firm value and performance. *SN Business & Economics*, 4(10), 118.
- Tao-Schuchardt, M., Riar, F. J., & Kammerlander, N. (2023). Family firm value in the acquisition context: a signaling theory perspective. *Entrepreneurship theory and practice*, 47(4), 1200-1232.
- Tawfik, O. I., & Elmaasrawy, H. E. (2024). Effect of Shariah compliance on financing decisions: empirical evidence from GCC. *Journal of Islamic Accounting and Business Research*, 15(1), 196-223.
- Tayachi, T., Hunjra, A. I., Jones, K., Mehmood, R., & Al-Faryan, M. A. S. (2023). How does ownership structure affect the financing and dividend decisions of firm?. *Journal of Financial Reporting and Accounting*, 21(3), 729-746.
- Tsang, A., Wang, K. T., Wu, Y., & Lee, J. (2024). Nonfinancial corporate social responsibility reporting and firm value: International evidence on the role of financial analysts. *European Accounting Review*, 33(2), 399-434.
- Ullah, S., Irfan, M., Kim, J. R., & Ullah, F. (2023). Capital expenditures, corporate hedging and firm value. *The Quarterly Review of Economics and Finance*, 87, 360-366.
- Walker, M. M. (2000). Corporate takeovers, strategic objectives, and acquiring-firm shareholder wealth. *Financial management*, 53-66.
- Wang, K., Yu, Y., Wang, X., & Zheng, H. (2024). Walk your reputation: The impact of corporate social responsibility decoupling on the hospitality and tourism firm value in the time of crisis. *Tourism Economics*, 30(6), 1580-1599.
- Wang, Q., Lau, R. Y. K., Xie, H., Liu, H., & Guo, X. (2024). Social Executives' emotions and firm value: An empirical study enhanced by cognitive analytics. *Journal of Business Research*, 175, 114575.
- Yilmaz, M. K., Aksoy, M., & Khan, A. (2024). Moderating role of corporate governance and ownership structure on the relationship of corporate sustainability performance and dividend policy. *Journal of Sustainable Finance & Investment*, 14(4), 988-1017.
- Yin, J., & Song, H. (2023). Does the perception of smart governance enhance commercial investments? Evidence from Beijing, Shanghai, Guangzhou, and Hangzhou. *Heliyon*, 9(8).
- Zahid, R. A., Taran, A., Khan, M. K., & Chersan, I. C. (2023). ESG, dividend payout policy and the moderating role of audit quality: Empirical evidence from Western Europe. *Borsa Istanbul Review*, 23(2), 350-367.
- Zahid, R. A., Taran, A., Khan, M. K., & Chersan, I. C. (2023). ESG, dividend payout policy and the moderating role of audit quality: Empirical evidence from Western Europe. *Borsa Istanbul Review*, 23(2), 350-367.
- Zhao, J., Huang, J., & Liu, F. (2023). Green credit policy and investment-cash flow sensitivity: evidence from a quasi-natural experiment. *Finance Research Letters*, 52, 103502.
- Zhao, J., Huang, J., & Liu, F. (2023). Green credit policy and investment-cash flow sensitivity: evidence from a quasi-natural experiment. *Finance Research Letters*, 52, 103502.