

INFORMATION ASYMMETRY, EARNINGS AGGRESSIVENESS AND COST OF EQUITY: THE MODERATING ROLE OF INVESTOR PROTECTION

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Abstrak

Background: The phenomenon of recent years shows an increase in the number of companies that go public. This condition indicates that more and more companies want to obtain funding through the capital market with the aim of attracting investors to invest their capital. Investors invest funds for the purpose of getting a return, while the company expects the cost of equity.

Objective: This study aims to examine the effect of information asymmetry and earnings aggressiveness on the cost of equity, and examine the moderating role of investor protection on the relationship between information asymmetry and earnings aggressiveness on the cost of equity.

Research Methods: The research sample is LQ-45 indexed companies on the Indonesia Stock Exchange for the period 2018-2022. 115 research data were analyzed using Partial Least Square (PLS) - Structural Equation Model (SEM).

Research Results: Shows that information asymmetry has a negative effect on the cost of equity while earnings aggressiveness has a positive effect on the cost of equity. Investor protection does not moderate the effect of information asymmetry on cost of equity, but weakens the relationship between earnings aggressiveness and cost of equity. Earnings aggressiveness practices are in line with the cost of equity, if balanced with good governance practices. Investor protection needs to be maintained so that the practice of earnings aggressiveness can be minimized so that the cost of equity can be reduced.

Originality/Novelty of Research: This research adds investor protection as a moderating variable for information asymmetry and earnings aggressiveness with cost of equity

Keywords: Cost of Equity, Earnings Aggressiveness, Information Asymmetry, Investor Protection

Introduction

In the era of globalization, the rapid development of the business world drives companies to expand their operations to sustain their existence and remain competitive in an increasingly intense market environment (Pangestika & Widiatmoko, 2021; Yolanda & Mulyani, 2019). Consequently, many companies across various sectors choose to go public by issuing shares. Going public, also known as an Initial Public Offering (IPO), represents a crucial step for companies to access public equity capital and reduce the costs associated with funding their operations and investments (Pandey & Pattanayak, 2021).

The Indonesia Stock Exchange, (2023) shows that there has been an increase in the number of companies going public. This condition indicates that more companies want to obtain funding through the capital market (Duong et al., 2022; Septiani & Taqwa, 2019). The company's efforts to go public can attract investors to invest their capital in the company (Das & Jena, 2016), so that the capital provided by investors can meet the company's needs (Hermawan et al., 2021). In investing their funds, investors have the aim of getting a return on the funds invested (Persakis & Iatridis, 2017). Meanwhile, from the company's point of view, the expected stock return is the cost of equity capital (Yu, 2023). Yolanda & Mulyani (2019) explain that the concept of cost of equity can be said to be the costs incurred by the company to fulfill the rights of investors in the form of a return on the investment that has been invested. The high and low rate of return by a company is an important consideration in investment decisions because it reflects how investors view risk (Alkebsee et al., 2023).

The phenomenon in Indonesia related to investment returns occurred at PT Indosterling Optima Investa (IOI). This case is a default for the Indosterling High Yield Promissory Notes (HYPN) product. This investment product promises returns of 9% to 12% annually. Since the case occurred, customers have only found out that HYPN does not have a license to raise funds from the OJK or Bank Indonesia (Financial Services Authority, 2021). In addition, there is the case of PT Asuransi Jiwasraya, which failed to manage its investment risk. PT Asuransi Jiwasraya has a JS Saving Plan insurance product that is linked to investment. However, in October 2018 the company defaulted because the company did not get the expected return on investment assets (Alijoyo, 2021).

The cost of equity is one of the main elements in financial capital (Sarang et al., 2022). Research related to the cost of equity can help companies listed on the IDX to make the right investment decisions so as to produce returns that can improve the welfare of stakeholders (Sunarto et al., 2016). Some investors are reluctant to invest their funds in companies that are very volatile (Bessler et al., 2023). The cost of equity capital is important in making investment and financial decisions for businesses, so it must be made as rational as possible (Saleh et al., 2022; Duong et al., 2022). The cost of equity capital is used by companies to choose financing methods and assess the efficiency of capital market financing (Jian et al., 2023). Research by Saleh et al. (2022) explained that the cost of equity can be used to ensure the availability of financial resources, estimate funding costs and their effect on company profits and risks. Therefore, reviews of the cost of equity need further research to find out what factors affect the high and low cost of equity of a company.

Cost of equity can be influenced by many factors that have been studied by several researchers. Some research on the determinants of cost of equity, namely (1) institutional and foreign ownership (Edison

Vain S et al. 2020; Muslim & Setiawan.2021), (2) earnings opacity (Malau et al. 2019; Zuhrotun & Sunaryo 2023), (3) Corporate Social Responsibility (Chen & Zhang 2021; Wang et al. 2021; Breuer et al. 2018; Yeh et al. 2021; Edison Vain S et al. 2020), (4) earnings quality (Le et al., 2021; Listionargo et al. 2022; Malau et al. 2019; Marpaung & Herawati 2020; Sunarto et al. 2016). (5) Risk committees (Al-Hadi et al. 2018) (5) information asymmetry (Muslim & Setiawa, 2021; K. Li, 2020; Edison Vain S et al., 2020; Irwansyah, Aliah (2022), Kiswanto & Fitriani 2019; Malau et al. 2019), (6) Earnings aggressiveness (Delita & Mulyani, 2018; Hermawan et al. 2021; Listionargo et al. 2022; Marpaung & Herawati 2020; Malau et al. 2019, Andriani & Afriyenti, 2019; Sunarto et al., 2016).

Accounting information has an important role in the capital market (Muslim & Setiawan, 2021). The company's annual report is a forum for shareholders to dig up information and find out the condition of the company run by management (Habib et al., 2019). Financial reports can be used by investors to measure the risk and return of investor funds provided to the company (Saleh et al., 2022). Non-disclosure of credible information can lead to information asymmetry problems (Bhatia & Kaur, 2023). Information asymmetry is the difference in information composition between public and private information (Muslim & Setiawan, 2021). The existence of information asymmetry makes investment more vulnerable to stock price fluctuations (Saleem et al., 2023). In addition, Sunaryo & Saripujiana (2018) explain that the existence of information asymmetry can increase the high level of risk that investors will face due to the amount of information that is hidden so that it can cause uncertainty in the return on investment results. Potential investors will lead to greater returns to compensate for increased company risk (Alkeebsee et al., 2023).

Previous research on the effect of information asymmetry on cost of equity provides inconsistent results. Several studies have found a positive effect between information asymmetry and cost of equity (Muslim & Setiawan, 2021; Kiswanto & Fitriani, 2019; Pratiwi, 2021; Edison Vain S et al. 2020; Irwansyah, Aliah, 2022; Malau et al. 2019). However, the results of research by K. Li (2020) and Sunaryo & Saripujiana (2018) found that information asymmetry has a negative effect on the cost of equity. Meanwhile, research by Widanengsih et al. (2019) and D. H. Putri & Rokhmania (2018) found that there is no influence between information asymmetry on the cost of equity. This study tries to re-examine the effect of the influence of information asymmetry on the cost of equity.

Earnings aggressiveness is a management action that tends to delay recognizing losses, whereas if earnings will accelerate their recognition, where conditions will have an impact on quality (Jennifer Altamuro et al., 2005). Earnings aggressiveness is one of the management actions to manipulate earnings by increasing the value of accrual components such as inventory and at the same time reducing costs, so that earnings become higher (Bedard & Johnstone, 2004).

Research on earnings aggressiveness shows inconsistent results. Research by Hermawan et al. (2021), Listionargo et al. (2022), Marpaung & Herawati (2020), Sunarto et al. (2016), Malau et al. (2019) and Andriani & Afriyenti (2019) found that earnings aggressiveness has a positive effect on the cost of equity. However, the results of Delita & Mulyani's research (2018) concluded that earnings aggressiveness has a negative effect on the cost of equity. Because there are different results in previous studies, this study tries to re-examine the relationship between earnings aggressiveness and cost of equity.

In investing their funds, investors expect a rate of return on investment (Habib et al., 2019). Earnings can be an important reference of the company's accounting information, as a result management will adjust the results to attract investors (Saleh et al., 2022). Research by Wang et al., (2022) explains that there is a need for investor protection to ensure that the information provided by the company is fulfilled, this condition will increase investor interest in investing. Meanwhile, research by Xu et al. (2023) states that investor protection is the effectiveness of law enforcement from financial regulators which is very important in protecting investor rights in the capital market. However, research by Nilasari (2011) explains that a large capital market is determined by the transaction value or market capitalization value and its ability to protect the interests of various parties, especially the interests of investors.

Investors must make rational investment decisions (Duong et al., 2022). Therefore, the existence of investor protection is considered to moderate the relationship between information asymmetry and earnings aggressiveness on the cost of equity. Effective investor protection can attract more external funding, especially equity (Huang et al., 2021) and reduce the risk premium demanded by investors, thereby affecting the company's cost of equity (K. C. W. Chen et al., 2009).

Based on the phenomena gap and research gap, this study examines the effect of information asymmetry and earnings aggressiveness on the cost of equity. This study also examines the moderating role of investor protection on the relationship between information asymmetry and earnings aggressiveness on the cost of equity. This study makes an important contribution by examining the moderating role of investor protection in the relationship between information asymmetry, earnings aggressiveness and cost of equity. This can help understand how investor protection mechanisms, such as institutional ownership or strict regulation, affect the impact of information asymmetry and earnings aggressiveness on firms' cost of equity. From a practical perspective, this study provides relevant policy implications for regulators and firms. If investor protection proves effective in reducing the negative impact of information asymmetry and earnings aggressiveness, then policies that support transparency, stricter supervision, and strengthening investor rights can be recommended to improve capital market efficiency and lower firms' cost of equity.

Literature Review

Agency Theory

The relationship between company managers and shareholders can be explained by agency theory. Agency theory states that managers (agents), especially managers of large publicly owned companies, may have different objectives from shareholders (principals) (Jensen & Meckling, 1976). The existence of differences in interests between managers and owners can result in poor management decisions (Saleh et al., 2022). Shareholders can believe that managers will make decisions to maximize shareholder wealth only if managers receive appropriate incentives and are supervised (Horne & Jr., 2001). Potential differences in interests between shareholders and managers lead to agency costs (Koh, 2003).

The existence of these agency problems creates a conflict of interest because management and shareholders have different goals (K. C. W. Chen et al., 2009). Company management certainly wants high compensation for its performance in managing the company so that it ignores the interests of shareholders (Kiswanto & Fitriani, 2019). There are two methods to align interests in agency problems, namely with incentive mechanisms and monitoring mechanisms (Ali et al., 2019).

Cost of Equity

Cost of equity capital is defined as the minimum rate of return of a company (Mondal & Ghosh, 2020). Cost of equity is an important part of the cost of capital (Ali et al., 2019). Cost of equity is the internal rate of return that the market applies to the company's future equity cash flows to determine the current market value of equity (Luong et al., 2021) and to assess whether a company's investment activities are feasible or not (Putri & Rokhmania, 2018). If a company's investment produces a rate of return greater than the cost of capital spent, the company's value will increase so that the investment is considered feasible, and vice versa if a company's investment produces a lower rate than the cost of capital, the investment is considered not feasible (Sartono, 1999).

The cost of capital is the rate of return expected by investors to attract funds for certain investments (Abu Afifa & Saadeh, 2023). One of the most important considerations in investment decisions is the cost of equity because it reflects how investors perceive risk, investors will demand greater returns to compensate for increased risk if there is fundamental activity at the company level that has high risk (Alkebsee et al., 2023). The cost of equity is considered the opportunity cost of a particular investment, which can be used to calculate investor expectations and market consensus expectations (Abu Afifa & Saadeh, 2023). The cost of equity capital is an important criterion for companies to choose financing methods and an important reference for assessing the efficiency of capital market financing (Jian et al., 2023).

Information Asymmetry

Information asymmetry is an imbalance of information obtained between one party and another (K. Li, 2020), which can increase the uncertainty of the results that will be received by investors in the future (Sunaryo & Saripujiana, 2018). In this case, it means that managers as company managers are considered to know more information than investors who are only owners of capital (Cuadrado-Ballesteros et al., 2016; Muslim & Setiawan, 2021). Information plays a very important role because the lack of credible information disclosure creates information asymmetry problems that affect the cost of equity funding (Bhatia & Kaur, 2023).

The difference in information owned by managers and shareholders can be divided into two types, namely adverse selection and moral hazard (Scott, 2015). Adverse selection is a type of information asymmetry that occurs when one or more parties have information advantages compared to other parties (Scott, 2015). The second type of information asymmetry is moral hazard, which is information asymmetry that occurs when one or more parties can observe the extent of actions taken in fulfilling the contract, but the other party does not, which means that this moral hazard can arise when one party cannot observe the actions of the other party in fulfilling the contract or agreement (Scott, 2015). Because of the information imbalance between company managers and investors, it creates obstacles to obtaining accurate measures of company valuation to outsiders (K. Li, 2020). Information asymmetry can be reduced by disclosing better company reports (Mondal & Ghosh, 2020).

Earnings Aggressiveness

Management as company managers automatically has wider access rights to internal information and company prospects. This condition makes companies have the freedom to make policies in disclosing earnings (Hermawan et al., 2021). The negative impact that occurs is the act of manipulating earnings or earnings aggressiveness. So earnings aggressiveness can be defined as management actions that have a tendency to accelerate the recognition of corporate profits which can have an impact on earnings informativeness (J. Altamuro et al., 2005). The existence of earnings aggressiveness by management causes current year earnings to be relatively higher than actual earnings (Hermawan et al., 2021).

Companies that carry out earnings aggressiveness can cause current year earnings to be relatively higher than real earnings so that it does not rule out the possibility that future profits will decrease (J. C. Bedard & Johnstone, 2004). Management policy in carrying out earnings aggressiveness will have an impact on the negative reaction that earnings cannot be used as a reference because the financial statements contain the uncertainty of the profits earned by the company (Hardiningsih et al., 2019).

Investor Protection

Shareholders or commonly referred to as investors are capital providers for companies (Pandey & Pattanayak, 2021). Every company has the main goal of maximizing shareholder welfare (Horne & Jr., 2001), so good corporate governance is needed to maximize shareholder welfare and to align management interests with shareholders (Shleifer & Vishny, 1997). Enforcement of financial regulations is a basic element of the institutional framework that deals with violations committed by companies (Xu et al., 2023). Securities market regulation and investor participation are important policy instruments to ensure strong investor protection and prevent conflicts (Eveline, 2017). A corporate governance framework should ensure that shareholder rights are protected and also facilitate shareholders to exercise these rights (Indonesian Institute of Accountants, 2015).

The effectiveness of law enforcement from financial regulators is crucial in protecting the rights of investors in the capital market (Xu et al., 2023). The main focus of corporate law is to regulate company managers so that carrying out company management activities does not cause company losses that can harm investors as shareholders (Wang et al., 2022).

Hypothesis Development

Research Model

The research model regarding the effect of information asymmetry and earnings aggressiveness on the cost of equity and the moderating role of investor protection relations is as follows:

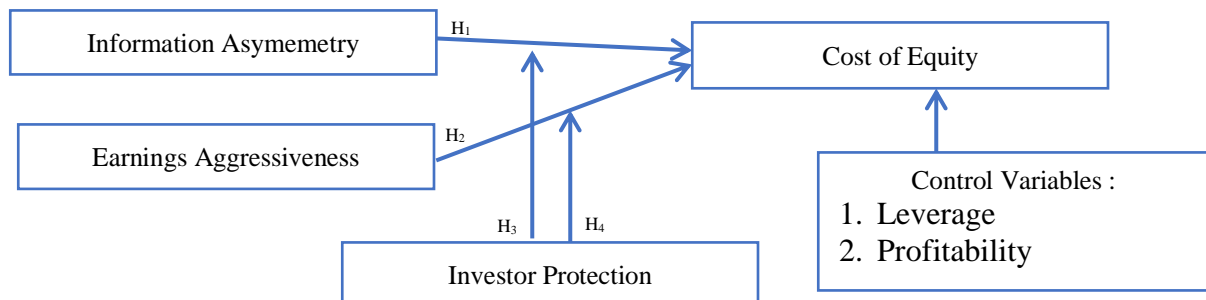


Figure 1. Research Model

Information Asymmetry and Cost of Equity

A company's information asymmetry can affect its cost of equity (Luong et al., 2021). Putri & Rokhmania's research (2018) explains that if the company has high information asymmetry, investors will assume that the company has a high risk and ultimately the cost of equity capital borne by the company

will be high. He et al. (2013) explain that companies with many information disclosure policies have a lower cost of equity. This is because investors who have information know more about the company's prospects than investors who do not have information (Pandey & Pattanayak, 2021).

More and better information in the capital market can reduce investor uncertainty about the size and determination of the company's future cash prospects, thereby reducing the cost of equity (Luong et al., 2021). Bhatia & Kaur (2023) reveal that in a low-information environment, investors cannot estimate the true return of a security or portfolio, which can increase the cost of equity. Therefore, the existence of information asymmetry in a company can increase the cost of equity capital (Bhatia & Kaur, 2023). In addition, research by Muslim & Setiawan (2021), Pratiwi (2021), Edison Vain S et al. (2020), Irwansyah, Aliah (2022), and Malau et al. (2019) also found that information asymmetry has a positive effect on the cost of equity. Based on this description, the hypothesis is formulated as follows:

H1 : Information asymmetry has a positive effect on the cost of equity.

Earning Aggressiveness and Cost of Equity

Khaddaf et al. (2014) explain in agency theory, accrual management motivation can be opportunistic or advantageous for management because they have free access to earnings reporting. Opportunistic management motivation through aggressive accounting policies results in a higher level of profit compared to actual income (Black et al., 2017; Wu et al., 2015). The impact of managerial opportunism reflected in earnings manipulation on the cost of capital and documented that managerial opportunism worsens the quality of earnings information thereby increasing corporate risk (Duong et al., 2022).

Companies that carry out earnings aggressiveness will cause the company's book value and earnings to be higher, but future earnings estimates will be lower and the cost of capital will increase (Sunarto et al., 2016). The existence of earnings aggressiveness can cause earnings reports to provide information gaps (Hermawan et al., 2021). The information gap that occurs between management and owners can increase the cost of equity (Listionargo et al., 2022).

Thus, it means that the higher the earnings aggressiveness carried out by management will increase the cost of equity of a company. This is in accordance with research conducted by Marpaung & Herawati (2020), Hermawan et al. (2021), Listionargo et al. (2022), Andriani & Afriyenti (2019), Sunarto et al. (2016), and Malau et al. (2019) which states that earnings aggressiveness has a positive effect on the cost of equity. Based on this description, the hypothesis is formulated as follows:

H2 : Earnings aggressiveness has a positive effect on the cost of equity.

Information Asymmetry, Investor Protection, and Cost of Equity

Agency conflicts occur due to information asymmetry among investors, thus creating friction in trading creating losses that lead to lower stock liquidity levels and higher return expectations (Leuz & Verrecchia, 2000).

Information asymmetry occurs due to differences in information received by one party to another, this causes investors to lose trust in the company, then investors will demand a high rate of return if they invest in companies with high information asymmetry (Cuadrado-Ballesteros et al., 2016 Eldomiaty et al., 2019). Sony & Bhaduri (2020) argue that the lack of appropriate institutional structures, family business ownership, weak legal frameworks, inadequate corporate governance norms, and lack of protection for investors exacerbate the problem of information asymmetry that occurs in companies. The existence of legal protection can minimize the information asymmetry of the company (Mougin, 2007). Reduced information asymmetry can lead to a reduction in the company's cost of equity (Bhatia & Kaur, 2023). The existence of investor protection reduces information asymmetry and investors obtain more accurate information for company valuation and the cost of equity can be reduced (K. Li, 2020).

Non-disclosure of credible information can lead to information asymmetry problems that affect the cost of equity funding (Bhatia & Kaur, 2023). In Indonesia, disclosure regulations are regulated in Bepepam LK regulation No.134/BL/2006 through this provision companies are required to submit company financial data (Kiswanto & Fitriani, 2019). This regulation was issued to minimize information asymmetry and provide convenience for investors (Muslim & Setiawan, 2021). With legal protection for investors, companies will disclose more information about the company to fulfill the rights of investors (Wang et al., 2022). The higher the level of information disclosed, it will reduce information asymmetry so that the cost of equity issued by the company will be lower (Bhatia & Kaur, 2023). More and better information in the capital market can reduce investor uncertainty about the size and determination of the company's prospects, thereby reducing the cost of equity (Luong et al., 2021).

The implementation of investor protection embodied in good corporate governance can mitigate agency problems and reduce agency costs to maximize shareholder wealth (Shleifer & Vishny, 1997). Disclosure affects investor confidence in their investment in the company, thereby reducing the expected rate of return and reducing the company's cost of equity (Abu Afifa & Saadeh, 2023). Based on this description, the hypothesis is formulated as follows:

H3 : Investor protection weakens the relationship between information asymmetry and cost of equity.

Earnings Aggressiveness, Investor Protection, and Cost of Equity

The emergence of agency problems can affect the quality of financial statements, because there is an incentive for certain parties to provide false earnings figures or hide information (Delita & Mulyani, 2018). One of the motivations for management to manage earnings on an accrual basis is to get incentives in the form of bonuses (Watts & Zimmerman, 1989). Opportunistic management will carry out earnings aggressiveness so that current earnings are relatively higher than actual, so that the possibility of future income will decrease (Hermawan et al., 2021). This can cause uncertainty about the benefits obtained by the company (Hardiningsih et al., 2019). This situation motivates shareholders to demand higher returns as compensation, causing the cost of equity borne by the company to be higher (Bhattacharya et al., 2003). However, the implementation of investor protection, which is realized in the form of good corporate governance, will be able to reduce agency conflicts so as to produce reports that are more transparent and in accordance with what actually happened (Hardiningsih et al., 2019). Good corporate governance can help align the interests of managers with company owners to increase the credibility of accounting information, one of which is information about the profit earned by the company (Garcia-Meca & Sanchez-Ballesta J.P., 2009). A better corporate reputation reflected by corporate governance mechanisms helps lower the cost of equity capital (Yu, 2023).

Aggressive financial reporting practices are more likely to occur in companies that manipulate reports by increasing profits and delaying expenses (J. Altamuro et al., 2005). Manipulated financial statements stem from the earnings aggressiveness policy carried out by management (Albretch et al., 2009). This claim is based on companies that conduct aggressive recording have a weaker corporate governance system (Kamarudin et al., 2012). The involvement of corporate governance may limit earnings management discretion and reduce managerial incentives to engage in earnings aggressiveness (Koh, 2003). Therefore, the implementation of good corporate governance can minimize the implementation of aggressive recording by management so as to reduce the cost of equity. Based on this description, the hypothesis is formulated as follows:

H4 : Investor protection weakens the relationship between earnings aggressiveness and cost of equity.

Research Methods

This research is causality research, where the influence of independent variables (X), namely information asymmetry and earnings aggressiveness on the dependent variable (Y), namely the cost of equity by using investor protection as a moderating variable (M). The object of research is the LQ-45 index companies

listed on the Indonesia Stock Exchange, because the characteristics of LQ-45 stocks can represent portfolio performance seen from two sides, namely return and risk (Edison Vain S et al., 2020).

Variable Operational Definition

Cost of equity

Cost of equity is the internal rate of return that the market sets on the company's future equity cash flows to determine the current market value of equity (Luong et al., 2021). The cost of equity in this study is measured using the Capital Asset Pricing Model (CAPM) approach (Mio et al., 2023).

$$COE_{it} = R_{ft} + \beta_{it}(R_{mt} - R_{ft})$$

Description:

COE_{it} : Cost of equity of company i period t

R_{ft} : Risk-free return period t proxied by the average SBI interest rate in one period

β_{it} : Beta (unsystematic risk) of company i period t

R_{mt} : LQ-45 stock market return period t

Information Asymmetry

Information asymmetry is an imbalance of information obtained between one party and another (K. Li, 2020). Information asymmetry is measured using bid-ask spread (Verdi, 2012). The bid-ask spread is the difference between the asking and bid prices.

$$SPREAD_{it} = \frac{(ask_{it} - bid_{it})}{\left(\frac{ask_{it} + bid_{it}}{2}\right)} \times 100\%$$

Description:

$SPREAD_{it}$: Bid-ask Spread of company i in period t

ask_{it} : highest asking price of company i shares in period t

bid_{it} : the lowest bid price of company i shares in period t

Earnings Aggressiveness

Earnings aggressiveness is an act of managing earnings, namely by delaying loss recognition and accelerating revenue recognition so that earnings reports are higher than actual (J. Altamuro et al., 2005). Earnings aggressiveness is measured by the formula (Sunarto et al., 2016).

$$EA = \frac{\Delta CA_t - \Delta CL_t - \Delta CASH_t + \Delta STD_t - DEPt + \Delta TP_t}{TA_{t-1}}$$

Description:

EA : Earnings Aggressiveness

ΔCA_t : Change in current assets period t

ΔCL_t	: Change in current liabilities (excluding STD) period t
$\Delta CASH_t$: Change in cash for period t
ΔSTD_t	: Change in long-term debt due in period t
DEP_t	: Depreciation and amortization expense in period t
ΔTP_t	: Change in tax payable in period t
TA_{t-1}	: Total assets of period t-1

Investor Protection

Investor protection is law enforcement to protect the interests of shareholders over the management of the company by management (Persakis & Iatridis, 2017). This study uses the ASEAN CG Scorecard to assess investor protection practices (Indonesian Institute of Accountants, 2015). ACGS level 1 measurement consists of 146 items and is divided into 5 sections. Each section has a different weight in relation to the total score of level 1 of 100 points.

The ACGS assessment uses dummy variables, each disclosed item will be given a value of 1, and 0 if not disclosed. Where the overall score of each section is summed up to get the total score of the final ACGS assessment of each company.

$$Score = \frac{\text{total points earned}}{\text{total questions}} \times \text{maximum score}$$

Control Variables

There are two control variables in this study, namely leverage and profitability. Leverage reflects the level of financial risk of the company. Leverage is measured using the DAR (Debt to Assets Ratio) ratio. Profitability is the ability of a company to generate a profit, Profitability is measured by ROA (Return on Assets).

Sample

The samples used in this study are LQ-45 indexed companies listed on the Indonesia Stock Exchange for the period 2018-2022. The type of data in the study is secondary data, using purposive sampling technique.

Analysis Technique

The analysis technique used in this research is descriptive statistical analysis and Partial Least Square (PLS) -Structural Equation Modeling (SEM) data analysis. This research model can be described by the following equation.

$$COE = \alpha + \beta_1 AI + \beta_2 EA + \beta_3 IP * AI + \beta_4 IP * EA + \beta_5 Lev + \beta_6 Prof + e$$

Description:

COE	: Cost of Equity
α	: Constant
β	: Coefficient
AI	: Asymmetry Information
EA	: Earnings Aggressiveness
IP	: <i>Investor Protection</i>
Lev	: Company Leverage
Prof	: Company Profitability

To test whether the hypothesis can be accepted or rejected, it can be seen from the test results and compare them with the significance level. In this study using a significance level of 0.05 (5% level).

Results and Discussion

Descriptive Statistics

Descriptive statistics of research variables consisting of cost of equity, information asymmetry, earnings aggressiveness, investor protection, leverage and profitability. The results of descriptive statistical analysis are as follows:

Table 1 Descriptive Statistical Analysis Results

No	Variable	N	Maximum	Minimum	Average	Standard Deviation
1	<i>Cost of Equity</i>	115	0,072	-0,174	-0,008	0,039
2	Information Asymmetry	115	1,439	0,069	0,537	0,249
3	Earnings Aggressiveness	115	1,339	-1,681	-0,032	0,222
4	Investor Protection	115	98,769	73,467	90,704	5,362
5	Leverage	115	0,890	0,112	0,514	0,234
6	Profitability	115	0,467	0,000	0,082	0,086

Based on table 2, the results of descriptive analysis on the cost of equity variable show a standard deviation value of 0.039, indicating that the data variation is relatively high because the value is above the average, namely -0.008. The information asymmetry variable standard deviation value of 0.249 indicates that the data variation is relatively low because it has a value below the average, namely 0.537. The variable earnings aggressiveness standard deviation value of 0.222 indicates that the data variation is relatively high because the value is above the average of -0.032. The investor protection variable shows a standard

deviation value of 5.362, indicating that the data variation is relatively low because it has a value below the average, namely 90.704. The leverage variable shows a standard deviation value of 0.234, indicating that the data variation is relatively low because the value is below the average, namely 0.514. Then for the profitability variable shows that the standard deviation value of 0.082 means that the data variation is relatively high because the value is above the average of 0.082.

Partial Least Square (PLS) – Structural Equation Modelling (SEM)

The results of the Partial Least Square (PLS) - Structural Equation Modeling (SEM) analysis using WarpPLS 8.0 software produced the following output.

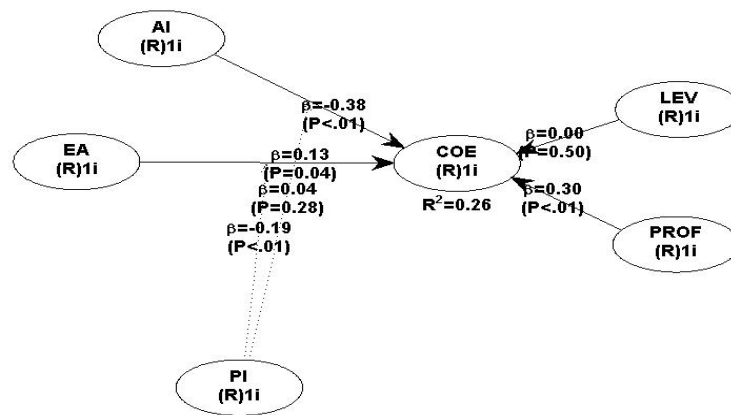


Figure 2 Research Model Output

Based on Figure 2, it shows that all variables used in this study are observed variables or variables that can be measured directly, therefore this study only evaluates the structural model (inner model).

The first step in evaluating the structural model is to see the goodness of fit. The test results concluded that this research model is fit. Then testing the explanatory indicators of the model produces the R-Square Coefficient output, Q-Squared Coefficient Value and F-Squared or effect size. The R-Squared result is 0.263 which indicates that 26.3% of the variation in the cost of equity variables, information asymmetry and earnings aggressiveness, investor protection, and control variables (leverage and profitability). While the remaining 73.7% is explained by other variables outside this research model. The Q-Squared result in this study of 0.329 shows good predictive validity because it has a value above 0. The effect size results in this study show that all the effect size values of the independent variable cost of equity variable are weak.

Hypothesis Testing

Hypothesis testing is done by looking at the results of the path coefficient and p-value of each variable can be seen in the following table.

Table 2 Summary of Path Coefficients and P-Values

NO	Variable	Path Coefficients	P-Values	Rule of Thumb	Conclusion
1	AI	-0,377	< 0,001	P < 0,05	Rejected
2	EA	0,126	0,042	P < 0,05	Accepted
3	PI*AI	0,047	0,257	P < 0,05	Rejected
4	PI*EA	-0,199	0,003	P < 0,05	Accepted

While the model equation is as follows:

$$COE = -0,377AI + 0,126EA + 0,047PI * AI - 0,199PI * EA + 0,023 Lev + 0,310Prof + e$$

Based on the results of testing hypothesis 1, it shows that the path coefficients of the information asymmetry variable are -0.377 and the p-value is significant with $P < 0.001$, which is < 0.05 . These results indicate that information asymmetry has a negative effect on the cost of equity so that H1 is rejected. Hypothesis 2 testing shows that the path coefficients of the earnings aggressiveness variable are 0.126 and the p-value is 0.042 which is < 0.05 . These results state that earnings aggressiveness has a positive effect on the cost of equity so that H2 is accepted. Hypothesis 3 shows that the path coefficients of the moderating effect of investor protection with information asymmetry are 0.047 with a p-value of $P = 0.257$ which is > 0.05 . The results show that investor protection cannot moderate the effect of information asymmetry on the cost of equity, so H3 is rejected. Then the results of testing hypothesis 4, show that the path coefficients of the moderating effect of investor protection with earnings aggressiveness are -0.199 and a significant p-value at $P = 0.003$ which is < 0.05 . From these results it can be concluded that investor protection weakens the relationship between earnings aggressiveness and cost of equity.

Discussion

Information asymmetry is an imbalance of information obtained between one party and another (K. Li, 2020). The test results show that information asymmetry has a negative effect on the cost of equity, meaning that high information asymmetry can reduce the cost of equity issued by the company.

The results of this study are different from the research of Kiswanto & Fitriani (2019), Muslim & Setiawan (2021), Pratiwi (2021), Edison Vain S et al. (2020), Irwansyah, Aliah (2022) and Malau et al. (2019), because the information asymmetry of LQ-45 indexed companies in 2018-2022 is relatively high,

some are even greater than one. Meanwhile, the company's cost of equity value tends to be low, which is negative. However, the results of this study are in line with research conducted by K. Li (2020) and Sunaryo & Saripujiana (2018) which found that information asymmetry has a negative effect on the cost of equity. This means that the higher the information asymmetry can reduce the cost of equity. Lambert et al. (2012) explain that increasing information asymmetry between investors can reduce the cost of equity because information asymmetry affects the willingness of informed traders to increase capital market liquidity.

The existence of information asymmetry makes the company high risk so that the cost of equity can increase. The results of this study reflect that investors are not principled on high risk high return but principled on The more intelligent effort you perform on your investment, the higher the return you should expect which means the more intelligent the effort made on your investment, the higher the return you should expect (Graham, 2003; Santoso & Deviyanti, 2022). The existence of information asymmetry can make investors conduct a thorough fundamental analysis of investment in the company. Through this approach, investors can have a greater opportunity to achieve maximum and consistent investment returns in the long term without having to expect a rate of return related to company risk.

Earnings aggressiveness has a positive effect on the cost of equity, meaning that the higher the earnings aggressiveness carried out by the company, the higher the cost of equity issued by the company. Altamuro et al. (2005) explain that with the treatment of earnings aggressiveness by the company, it will have an impact on earnings informativeness. Earnings informativeness is the amount of future earnings information or cash flow including the period of stock returns (Zarowin, 2002). Quality earnings information is needed to measure business success and failure in achieving company goals (Zuhrotun & Sunaryo, 2023). In other words, earnings aggressiveness is an earnings report that cannot provide a true picture of the company's profit (Hermawan et al., 2021). The quality of an earnings not only affects investors, but can also affect the company. If the company publishes low quality information, it can cause the higher cost of equity borne by the company (Andriani & Afriyenti, 2019).

The results of this study are in line with research conducted by Marpaung & Herawati (2020); Listionargo et al. (2022); Sunarto et al. (2016); Hermawan et al. (2021); Malau et al. (2019); and Andriani & Afriyenti (2019) who found that earnings aggressiveness has a positive effect on the cost of equity. These results state that the practice of earnings aggressiveness is in line with the cost of equity issued by the company. The higher the earnings aggressiveness, the greater the cost of equity incurred by the company.

These results are in line with agent theory which explains the delegation of authority by the principal to management (Jensen & Meckling, 1976). This theory shows the separation of company management from the owner (Ali et al., 2019), this separation creates a problem where management as

company managers have greater control over company information (Listionargo et al., 2022). This makes management have opportunistic motivation through aggressive accounting policies so as to produce a higher level of profit compared to actual income (Black et al., 2017; Wu et al., 2015). The impact of opportunistic motivation carried out by management in manipulating earnings can worsen the quality of earnings information thereby increasing company risk which causes the cost of equity to increase (Duong et al., 2022). Bhattacharya et al. (2003) explain that earnings aggressiveness will have an impact on increasing the cost of equity because blurred earnings information will result in higher information risk borne by the company. Therefore, investors will generally require a higher rate of return as compensation for the information risk borne (Andriani & Afriyenti, 2019). So it can be concluded that companies that tend to report aggressive earnings policies can make the market interpret high risk as increasing the cost of equity (Sunarto et al., 2016).

The existence of legal protection for investors will make companies disclose more information about the company to fulfill their rights (Wang et al., 2022). The results showed that investor protection does not moderate the relationship between asymmetric information and the cost of equity. This means that the better the investor protection practices carried out by the company have not been able to reduce the information asymmetry that occurs. Although investor protection aims to increase transparency and provide fairer access to information for investors, not all investors have the ability to understand existing information. Investor behavior depends on the information digested by each individual who may give different reactions despite having the same source of information, because each investor will receive and analyze the available information diversely (Puspitaningtyas, 2013). Therefore, the existence of investor protection may not necessarily reduce the existence of corporate information asymmetry.

Investor protection moderates the relationship between earnings aggressiveness and cost of equity. Where it can be interpreted that investor protection can reduce the relationship between earnings aggressiveness and cost of equity. The implementation of investor protection embodied in good corporate governance can limit earnings management policies and reduce managerial incentives to carry out aggressive earnings management (Koh, 2003). Therefore, the implementation of good corporate governance can minimize the implementation of aggressive recording by management so as to reduce the company's cost of equity.

Investor protection which is realized in the form of good corporate governance will be able to reduce agency conflicts so as to produce reports or earnings information that actually occurs (Hardiningsih et al., 2019). The implementation of corporate governance can reduce aggressive earnings recording practices so as to reduce the cost of equity.

Conclusion

Information asymmetry has a negative effect on the cost of equity. This means that the higher the information asymmetry that occurs, the lower the cost of equity incurred by the company. The existence of information asymmetry can affect the willingness of informed traders to increase capital market liquidity so that the cost of equity can be reduced (Askotamiya et al., 2018). Earnings aggressiveness has a positive effect on the cost of equity. Companies that tend to report aggressive earnings policies can increase the cost of equity incurred by the company. Companies that record aggressive earnings cannot provide a true picture of company profits. If the company publishes low quality information, it can cause the higher cost of equity borne by the company (Andriani & Afriyenti, 2019).

Investor protection cannot moderate the relationship between information asymmetry and cost of equity. This study found no evidence of the effect of investor protection in moderating the relationship between information asymmetry and cost of equity. However, investor protection can weaken the relationship between earnings aggressiveness and cost of equity. The moderating effect of investor protection reduces the positive effect of earnings aggressiveness on the company's cost of equity. With investor protection, the practice of earnings aggressiveness can be minimized so that the cost of equity issued by the company can be reduced.

This research has practical implications for the industry and financial services, where Cost of Equity has an important role in making investment and financial decisions. Investors have greater opportunities without having to expect high returns but with risk. If the company records aggressive earnings, it cannot provide a true picture of the company's profits. Investor protection needs to be enforced to minimize the practice of earnings aggressiveness, so that the cost of equity capital is reduced.

This study in its implementation has several limitations, including (1) This study only provides the results of the R-Squared value of 0.263, it is necessary to add variables that affect the cost of equity such as earnings management, earnings quality, ownership structure, market value of equity, and others. (2) The object in this study is only limited to LQ-45 indexed companies listed on the Indonesia Stock Exchange (IDX), so for future researchers it is necessary to expand the research object. (3) The observation period in this study is only in the 2018-2022 period or within 5 years. For future researchers, it is necessary to increase the time span of the observation period in order to obtain results that are more relevant to the times.

References

- Abu Afifa, M. M., & Saadeh, M. (2023). Does information asymmetry mediate the relationship between voluntary disclosure and cost of capital? Evidence from a developing economy. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-02-2023-0103>
- Al-Hadi, A., Hussain, S. M., Al-Yahyaee, K. H., & Al-Jabri, H. S. (2018). Risk Committees and Implied Cost of Equity Capital. *International Review of Finance*, 18(4), 689–703. <https://doi.org/10.1111/irfi.12147>
- Albretch, W. S., Albretch, C. C., Albretch, C. O., & Zimbelman, M. (2009). Fraud Examination. In *Mason, OH: South Western Cengage Learning*.
- Ali, S. T., Yang, Z., Sarwar, Z., & Ali, F. (2019). The impact of corporate governance on the cost of equity: Evidence from cement sector of Pakistan. *Asian Journal of Accounting Research*, 4(2), 293–314. <https://doi.org/10.1108/AJAR-08-2019-0062>
- Alijoyo, A. (2021). *PT Asuransi Jiwasraya - Kegagalan Pengelolaan Risiko Investasi*. IRMAPA - Indonesia Risk Management Professional Association.
- Aljughaiman, A. A., Albarrak, M., Cao, N. D., & Trinh, V. Q. (2022). Cost of equity, debt financing policy, and the role of female directors. *Cogent Economics and Finance*, 10(1). <https://doi.org/10.1080/23322039.2022.2109274>
- Alkebssee, R., Habib, A., & Li, J. (2023). Green innovation and the cost of equity: evidence from China. *China Accounting and Finance Review*, 25(3), 368–395. <https://doi.org/10.1108/cafr-06-2022-0075>
- Altamuro, J., Anne, L., & Joseph, W. (2005). The Effects of Accelerated Revenue Recognition on Earnings Management and Earnings Informativeness: Evidence from SEC Staff Accounting Bulletin No101. *The Accounting Review*, 80(2), 373–401.
- Altamuro, Jennifer, Beatty, A. L., & Weber, J. (2005). The Effects of Accelerated Revenue Recognition on Earnings Management and Earnings Informativeness: Evidence from SEC Staff Accounting. *The Accounting Review* (2005) 80 (2): 373–401., 80(2), 373–401. <https://doi.org/https://doi.org/10.2308/accr.2005.80.2.373>
- Andriani, L., & Afriyenti, M. (2019). Kualitas Akrua Memoderasi Earnings Opacity Terhadap Biaya Ekuitas. *Jurnal Eksplorasi Akuntansi*, 1(3), 1363–1375. <https://doi.org/10.24036/jea.v1i3.148>
- Asian Development Bank. (2021). *ASEAN Corporate Governance Scorecard Country Reports and Assesments 2019*. 6 ADB Avenue.
- Askotamiya, C., Hernawan, & Desyana, G. (2018). *Pengaruh Asimetri Informasi Akuntansi, Manajemen Laba, Kualitas Audit, Ukuran Perusahaan terhadap Cost of Equity Capital*. 1–17.
- Azizah, N. (2019). Analisis Capital Asset Pricing Model (CAPM) Sebagai Dasar Keputusan Investasi Saham Pada Perusahaan Food And Beverages Yang Terdaftar Di Bursa Efek Indonesia. *Equilibrium: Jurnal Ekonomi-Manajemen-Akuntansi*, 5(3), 282–301.
- Bedard, J. C., & Johnstone, K. M. (2004). Earnings Manipulation Risk, Corporate Governance Risk, and Auditor's Planning and Pricing Decisions. *The Accounting Review*, 79(2), 277–304.
- Bedard, Jean C., & Johnstone, K. M. (2004). Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *Accounting Review*, 79(2), 277–304. <https://doi.org/10.2308/accr.2004.79.2.277>
- Bedard, Jean C., & Johnstone, K. M. (2004). Corporate Manipulation Auditors ' Pricing. *The Accounting Review*, 79(2), 277–304.
- 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*, July, 101129. <https://doi.org/10.1016/j.ecosys.2023.101129>
- Bhatia, A., & Kaur, A. (2023). The influence of information asymmetry on the interaction between voluntary corporate disclosure and cost of equity: evidence from publicly traded Indian enterprises.

- International Journal of Law and Management*, 65. <https://doi.org/10.1108/IJLMA-05-2023-0120>
- Bhattacharya, U., H., D., & MW. (2003). The World Price of Earning Opacity. *The Accounting Review*, 78(3), 641–678.
- Black, E. L., Christensen, T. E., Kiosse, P. V., & Steffen, T. D. (2017). Has the regulation of non-GAAP disclosures influenced managers' use of aggressive earnings exclusions? *Journal of Accounting, Auditing and Finance*, 32(2), 209–240. <https://doi.org/10.1177/0148558X15599131>
- Botosan, C. A. (1997). Disclosure Level and the Cost of Equity Capital. *The Accounting Review*, 72(3), 323–349.
- Breuer, W., Müller, T., Rosenbach, D., & Salzmann, A. (2018). Corporate social responsibility, investor protection, and cost of equity: A cross-country comparison. *Journal of Banking and Finance*, 96, 34–55. <https://doi.org/10.1016/j.jbankfin.2018.07.018>
- Bursa Efek Indonesia. (2023). *IDX Yearly Statistics 2022*. IDX.
- Chandrarin, G. (2017). *Metode Riset Akuntansi Pendekatan Kuantitatif*. Salemba Empat.
- Chen, B., & Zhang, A. (2021). How does corporate social responsibility affect the cost of equity capital through operating risk? *Borsa Istanbul Review*, 21(2017), S38–S45. <https://doi.org/10.1016/j.bir.2021.01.005>
- Chen, K. C. W., Chen, Z., & Wei, K. C. J. (2009). Legal protection of investors, corporate governance, and the cost of equity capital. *Journal of Corporate Finance*, 15(3), 273–289. <https://doi.org/10.1016/j.jcorpfin.2009.01.001>
- Cuadrado-Ballesteros, B., Garcia-Sanchez, I. M., & Martinez Ferrero, J. (2016). How are corporate disclosures related to the cost of capital? The fundamental role of information asymmetry. *Management Decision*, 54(7), 1669–1701. <https://doi.org/10.1108/MD-10-2015-0454>
- Das, R. C., & Jena, S. K. (2016). Earnings Management and Equity Issue Firms: A Study in Indian Context. *Jindal Journal of Business Research*, 5(1), 64–85. <https://doi.org/10.1177/2278682116680926>
- Delita, I., & Mulyani, E. (2018). Pengaruh Earnings Aggresiveness Terhadap Cost of Equity Dengan Persistensi Laba Sebagai Variabel Moderating (Studi Empiris Pada Perusahaan Manufaktur yang Terdaftar di BEI Tahun 2014-2016). *Wahana Riset Akuntansi*, 6(1), 1193. <https://doi.org/10.24036/wra.v6i1.101941>
- Duong, H. K., Fasan, M., & Gotti, G. (2022). Living up to your codes? Corporate codes of ethics and the cost of equity capital. *Management Decision*, 60(13), 1–24. <https://doi.org/10.1108/MD-11-2020-1486>
- Edison Vain S, Afrizal, & Yudi. (2020). Pengaruh Corporate Social Responsibility, Kepemilikan Institusional dan Asimetri Informasi Terhadap Cost of Equity Capital Dengan Nilai Buku Ekuitas Sebagai Variabel Moderasi (Studi Pada Perusahaan Non Lembaga Keuangan Dalam Indeks Lq-45 Tahun 2015 - 201. *Jurnal Akuntansi & Keuangan Unja*, 5(2), 115–131. <https://doi.org/10.22437/jaku.v5i2.10262>
- Eldomiaty, T. I., Andrikopoulos, P., & Bishara, M. K. (2019). Financial decisions and growth of the firm under high and low levels of information asymmetry. In *Research in Finance* (Vol. 35). <https://doi.org/10.1108/S0196-382120190000035002>
- Eveline, F. (2017). Pengaruh Sap Berbasis Akrua, Sistem Informasi Akuntansi, Kualitas Sdm, Pengendalian Internal Dan Komitmen Organisasi Terhadap Kualitas Laporan Keuangan Di Badan Nasional Penanggulangan Bencana. *Media Riset Akuntansi, Auditing Dan Informasi*, 16(1), 1. <https://doi.org/10.25105/mraai.v16i1.2004>
- Fahmi, I. (2017). *Analisis Kinerja Keuangan*. Penerbit Alfabeta.
- Feng, Z. Y., Wang, Y. C., & Huang, H. W. (2017). Does IFRS adoption decrease the cost of equity of the global tourism firms? *Tourism Economics*, 23(8), 1615–1631. <https://doi.org/10.1177/1354816617715158>
- Firmansyah, A., & Febriyanto, A. S. (2018). The Effects of Tax Avoidance, Accrual Earnings Management,

- Real Earnings Management, and Capital Intensity on the Cost of Equity. *Jurnal Dinamika Akuntansi*, 10(1), 40–50. <https://doi.org/10.15294/jda.v10i1.12976>
- Fu, J., Ji, Y., & Jing, J. (2023). Rank and File Employee Satisfaction and the Implied Cost of Equity Capital. *Journal of Accounting, Auditing and Finance*, 38(1), 182–210. <https://doi.org/10.1177/0148558X20971942>
- Garcia-Meca, E., & Sanchez-Ballesta J.P. (2009). Corporate Governance and Earnings Management: A Meta-Analysis. *Corporate Governance: An International Review*, 17(5), 594–610.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS*. Badan Penerbit Universitas Diponegoro.
- Graham, B. (2003). *The Intelligent Investor: The Definitive Book on Value Investing*. HarperCollins Publishers.
- Grinyer, J. (1972). The Cost of Equity Capital. *Journal of Business Finance*, 4(4).
- Habib, A., Bhuiyan, M. B. U., & Sun, X. (Sean). (2019). Audit partner busyness and cost of equity capital. *International Journal of Auditing*, 23(1), 57–72. <https://doi.org/10.1111/ijau.12144>
- Hardiningsih, P., Hadi, T. P., & Ariani, N. (2019). *Determinant Earnings Persistence with Corporate Governance as Moderating Factors*. 86(Icobame 2018), 78–82. <https://doi.org/10.2991/icobame-18.2019.17>
- Harmono. (2009). *Manajemen Keuangan Berbasis Balanced Scorecard Pendekatan Teori, Kasus dan Riset Bisnis*. PT Bumi Aksara.
- He, W. P., Lepone, A., & Leung, H. (2013). Information asymmetry and the cost of equity capital. *International Review of Economics and Finance*, 27, 611–620. <https://doi.org/10.1016/j.iref.2013.03.001>
- Healy, P. M., & Wahlen, J. M. (1999). A Review of The Earnings Management Literature and Its Implications for Standard Setting. *Accounting Research*, 40(1), 365–383.
- Herianti, E., & Chairina, S. W. (2019). Does Transfer Pricing Improve the Tax Avoidance through Financial Reporting Aggressiveness? *KnE Social Sciences International Conference on Economics, Management, and Accounting, 2019*, 357–376. <https://doi.org/10.18502/kss.v3i26.5387>
- Hermawan, A., Sari, D. A. A., & Gunardi, A. (2021). Cost of Equity Analysis through the role of Earnings Aggressiveness and Profit Persistence: Evidence from Manufacturing Companies in Indonesia. *International Business and Accounting Research Journal*, 5(2), 167–178.
- Horne, J. C. Van, & Jr., J. M. W. (2001). *Fundamentals of Financial Management 13th Edition*. Prentice Hall International.
- Hossain, A. T., & Kryzanowski, L. (2021). Political Corruption and Cost of Equity. *Business and Society*, 60(8), 2060–2098. <https://doi.org/10.1177/0007650320928502>
- Huang, Y., Li, X., & Wei, K. C. J. (2021). Investor protection and resource allocation : International evidence ☆. *International Review of Economics and Finance*, 75(July 2019), 625–645. <https://doi.org/10.1016/j.iref.2021.04.017>
- Ikatan Akuntan Indonesia. (2015). *Etika Profesi dan Tata Kelola Korporat*. IAI.
- Ikhsan, A., Ispriyanti, D., & Rahmawati, R. (2014). Penggunaan Pendekatan Capital Asset Pricing Model Dan Metode Variance-Covariance Dalam Proses Manajemen Portofolio Saham (Studi Kasus: Saham-Saham Kelompok Jakarta Islamic Index). *Jurnal Gaussian*, 3(1), 21–30.
- Imperatore, C., & Trombetta, M. (2023). Earnings Management and Investor Protection During a Banking Crisis: The Role of the “Spare Tire” Effect. *Journal of Accounting, Auditing and Finance*. <https://doi.org/10.1177/0148558X231183759>
- Irwansyah, Aliah, R. (2022). Pengaruh manajemen laba, asimetri informasi, pengungkapan sukarela dan ukuran perusahaan terhadap biaya modal ekuitas pada perusahaan manufaktur yang *INOVASI: Jurnal Ekonomi, Keuangan Dan Manajemen*, 18(3), 701–709.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Cost and

- Ownership Structure. *Journal of Financial Economics*, 3, 305-360.
- Jian, J., Yang, F., Liu, M., & Liu, Y. (2023). Cost of Equity Capital and Annual Report Tone Manipulation. *Emerging Markets Finance and Trade*, 00(00), 1–22. <https://doi.org/10.1080/1540496X.2023.2226320>
- Kamarudin, K. A., Ismail, W. A. W., & Mustapha, W. A. H. W. (2012). Aggressive Financial Reporting and Corporate Fraud. *Procedia - Social and Behavioral Sciences*, 65(ICIBSoS), 638–643. <https://doi.org/10.1016/j.sbspro.2012.11.177>
- Khaddaf, M., . K. A. F., & . R. (2014). The Effect of Earnings Aggressiveness, Earnings Smoothing on Return of Stock. *Journal of Economics and Behavioral Studies*, 6(6), 509–523. <https://doi.org/10.22610/jebis.v6i6.512>
- Kiswanto, K., & Fitriani, N. (2019). The influence of earnings management and asymmetry information on the cost of equity capital moderated by disclosure level. *Jurnal Keuangan Dan Perbankan*, 23(1), 131–146. <https://doi.org/10.26905/jkdp.v23i1.1926>
- Koh, P. S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *British Accounting Review*, 35(2), 105–128. [https://doi.org/10.1016/S0890-8389\(03\)00014-3](https://doi.org/10.1016/S0890-8389(03)00014-3)
- Kurniawan, W. (2012). *Corporate Governance dalam Aspek Hukum Perusahaan*. Pustaka Utama Grafiti.
- Lahaya, I. A. (2017). Kualitas Laba Dan Pengungkapan Sukarela Dampaknya Terhadap Biaya Modal Ekuitas Melalui Asimetri Informasi. *Jurnal Keuangan Dan Perbankan*, 21(2), 188–199. <https://doi.org/10.26905/jkdp.v21i2.705>
- Lambert, R. A., Leuz, C., & Verrecchia, R. E. (2012). Information asymmetry, information precision, and the cost of capital. *Review of Finance*, 16(1), 1–29. <https://doi.org/10.1093/rof/rfr014>
- Latan, & Ghozali, I. (2016). *Partial Least Squares: Konsep, Metode, dan Aplikasi Menggunakan WarpPLS 5.0*. Badan Penerbit Universitas Diponegoro.
- Le, H. T. T., Tran, H. G., & Vo, X. V. (2021). Audit quality, accruals quality and the cost of equity in an emerging market: Evidence from Vietnam. *International Review of Financial Analysis*, 77(May), 101798. <https://doi.org/10.1016/j.irfa.2021.101798>
- Leuz, C., & Verrecchia, R. (2000). The Economic Cosequences of Increased Disclosure. *Journal of Accounting Research*, 69(3).
- Li, K. (2020). Does Information Asymmetry Impede Market Efficiency? Evidence from Analyst Coverage. *Journal of Banking and Finance*, 118(September), 105856. <https://doi.org/10.1016/j.jbankfin.2020.105856>
- Li, L. (2019). Is there a trade-off between accrual-based and real earnings management? Evidence from equity compensation and market pricing. *Finance Research Letters*, 28(April 2018), 191–197. <https://doi.org/10.1016/j.frl.2018.04.021>
- Listionargo, D., Uzliawati, L., & Ismawati, I. (2022). The Effect of Earnings Opacity on Cost of Equity With Earnings Persistence as Moderating Variable. *Journal of Applied Business, Taxation and Economics Research*, 1(5), 506–514. <https://doi.org/10.54408/jabter.v1i5.92>
- Luong, T. S., Qiu, B., & Wu, Y. (Ava). (2021). Does it pay to be socially connected with wall street brokerages? Evidence from cost of equity. *Journal of Corporate Finance*, 68(March), 101939. <https://doi.org/10.1016/j.jcorpfin.2021.101939>
- Malau, M., Murwaningsari, E., Mayangsari, S., & Aryati, T. (2019). Pengaruh Opasitas Laba, Asimetri Informasi, Dan Keinformatifan Laba Terhadap Biaya Ekuitas Di Perusahaan Manufaktur. *Jurnal Akuntansi Trisakti*, 6(1), 43–54. <https://doi.org/10.25105/jat.v6i1.4918>
- Marpaung, E. I., & Herawati, V. (2020). The Influence Of Earnings Aggresiveness And Smoothing On The Cost Of Equity. *South East Asia Journal Of Contemporary Business, Economics and Law*, 22(1), 114–119.
- Mio, C., Fasan, M., & Scarpa, F. (2023). Materiality investor perspectives on utilities' ESG performance.

- An empirical analysis of ESG factors and cost of equity. *Utilities Policy*, 82(January), 101555. <https://doi.org/10.1016/j.jup.2023.101555>
- Mondal, A., & Ghosh, C. (2020). Effect of intellectual capital disclosure on cost of equity capital: a study on Indian companies. *Asian Journal of Accounting Research*, 6(2), 165–179. <https://doi.org/10.1108/AJAR-08-2020-0069>
- Mougin, F. (2007). *Asymmetric information and legal investor protection*. 95, 253–258. <https://doi.org/10.1016/j.econlet.2006.10.020>
- Muslim, A. I., & Setiawan, D. (2021). Information asymmetry, ownership structure and cost of equity capital: The formation for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 1–17. <https://doi.org/10.3390/joitmc7010048>
- Nagata, K. (2013). Does earnings management lead to favorable IPO price formation or further underpricing? evidence from Japan. *Journal of Multinational Financial Management*, 23(4), 301–313. <https://doi.org/10.1016/j.mulfin.2013.05.002>
- Nasarudin, I., & Surya, I. (2004). *Aspek Hukum Pasar Modal Indonesia*. Prenada Media.
- Nguyen, P. (2020). Board gender diversity and cost of equity. *Applied Economics Letters*, 27(18), 1522–1526. <https://doi.org/10.1080/13504851.2019.1693693>
- Nilasari, R. P. (2011). Perlindungan Hukum terhadap Investor dalam Transaksi Jual Beli Efek melalui Internet. *Yuridika*, 26(3), 275–286. <https://doi.org/10.20473/ydk.v26i3.279>
- Okamoto, N. (2011). Collective intentionality and aggressive earnings management: Developing Norman Macintosh's arguments in the debate over principles- versus rules-based accounting standards. *Critical Perspectives on Accounting*, 22(2), 236–242. <https://doi.org/10.1016/j.cpa.2010.06.012>
- Otoritas Jasa Keuangan. (2021). *Hati-Hati Berinvestasi, Dulu Ada Kasus Gagal Bayar Triliunan Rupiah*. OJK.
- Pandey, A., & Pattanayak, J. K. (2021). Earnings Management and IPO Anomalies—Evidence from Indian Stock Market. *Business Perspectives and Research*, 10(1), 27–45. <https://doi.org/10.1177/2278533721994719>
- Pangestika, P. S., & Widiatmoko, J. (2021). Pengaruh Good Corporate Governance dan Intellectual Capital Disclosure Terhadap Cost Of Equity Capital (Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2017-2019). *Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi)*, 5(2), 1959–1980.
- Pangestuti, D. C., Muktiyanto, A., Geraldina, I., & Darmawan, D. (2022). Role of Profitability, Business Risk, and Intellectual Capital in Increasing Firm Value. *Journal of Indonesian Economy and Business*, 37(3), 311–338. <https://doi.org/10.22146/jieb.v37i3.3564>
- Persakis, A., & Iatridis, G. E. (2017). The joint effect of investor protection, IFRS and earnings quality on cost of capital: An international study. *Journal of International Financial Markets, Institutions and Money*, 46, 1–29. <https://doi.org/10.1016/j.intfin.2016.10.001>
- Pratiwi, N. I. O. (2021). The Effect of Information Assymetry and Business Diversification on Cost of Equity Capital. *JASa (Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi) Vol.*, 5(1), 104–112.
- Puspitaningtyas, Z. (2013). Perilaku Investor Dalam Pengambilan Keputusan di Pasar Modal. *Journal of Economics and Business UBS*.
- Putra, W. M. (2016). Perlindungan Investor Pasar Modal Dalam Perspektif Legal, Disclosure Dan Dividen Di Beberapa Negara. *Journal of Accounting and Investment*, 9(1), 66–79.
- Putri, D. H., & Rokhmania, N. (2018). The effect of intellectual capital disclosure, information asymmetry, and firm size on cost of equity capital with managerial ownership as a moderating variable. *The Indonesian Accounting Review*, 8(2), 163. <https://doi.org/10.14414/tiar.v8i2.1529>
- Rivera, L. N., & Naimah, Z. (2021). Moderasi Ukuran Perusahaan Pada Kualitas Audit dan Usia Perusahaan Terhadap Modal Ekuitas. *Jurnal Riset Akuntansi Dan Keuangan*, 9(2), 353–364. <https://doi.org/10.17509/jrak.v9i2.29256>

- Rjiba, H., Saadi, S., Boubaker, S., & Ding, X. (Sara). (2021). Annual report readability and the cost of equity capital. *Journal of Corporate Finance*, 67(January 2019), 101902. <https://doi.org/10.1016/j.jcorpfin.2021.101902>
- Sakhowi, A., & Mahirun. (2011). *Buku Ajar Manajemen Keuangan*.
- Saleem, S., Usman, M., & Akhtar, M. N. (2023). Does Private Information Always Hurt Retail Investors? The Impact of Private Information on Cost of Equity: Moderating Role of Investment Adjustment. *SAGE Open*, 13(4), 1–12. <https://doi.org/10.1177/21582440231205863>
- Saleh, I., Afifa, M. A., Al-Hawatmah, Z., & Albakkar, O. (2022). Earnings Management, Earnings Quality, Board Gender Diversity and Cost of Equity Capital: Evidence from an Emerging Market. *Global Business Review*. <https://doi.org/10.1177/09721509221133513>
- Santoso, F., & Deviyanti, D. R. (2022). Pengaruh Asimetri Informasi, Pengungkapan Modal Intelektual, dan Kualitas Audit Terhadap Biaya Modal Ekuitas pada Perusahaan Properti dan Real Estate yang Terdaftar di Bursa Efek Indonesia periode 2015-2019. *Jurnal Ilmu Akuntansi Mulawarman*, 7(1), 52–66.
- Sarang, A. A. A., Rind, A. A., Al-Faryan, M. A. S., & Saeed, A. (2022). Women on board and the cost of equity: the mediating role of information asymmetry. *Journal of Financial Reporting and Accounting*, 20. <https://doi.org/10.1108/JFRA-02-2022-0048>
- Sartono, R. A. (1999). *Manajemen Keuangan Edisi 3*. BPFE-Yogyakarta.
- Sarwono, J., & Narimawati, U. (2015). *Membuat Skripsi, Tesis dan Disertasi Partial Least Square SEM (PLS-SEM)*. Penerbit ANDI.
- Sassi, S., Saadi, S., Boubaker, S., & Chourou, L. (2019). External Governance and the Cost of Equity Financing. *Journal of Financial Research*, 42(4), 817–865. <https://doi.org/10.1111/jfir.12197>
- Scott, W. R. (2015). Financial accounting Theory 7th Edition. In *Pearson Canada*.
- Septiani, G., & Taqwa, S. (2019). Pengaruh Intellectual Capital Disclosure Dan Leverage Terhadap Cost Of Equity Capital. *Jurnal Eksplorasi Akuntansi*, 1(3), 1337–1353. <https://doi.org/10.24036/jea.v1i3.146>
- Shleifer, A., & Vishny, R. W. (1997). A Survey Corporate Governance. *The Journal of Finance*, 52(2), 737–783.
- Sholihin, M., & Ratmono, D. (2013). *Analisis SEMPLS dengan WarpPLS 3.0: Untuk Hubungan Nonlinier dalam Penelitian Sosial dan Bisnis*. Penerbit ANDI.
- Sinurat, R. N. I. M., Sinurat, M., & Sari, E. N. (2018). Pengaruh Earnings Aggressiveness Dan Income Smoothing Terhadap Firm Value Dengan Good Corporate Governance Sebagai Variabel Moderating Di Bursa Efek Indonesia. 19(2), 179–190.
- Siyoto, S., & Sodik, M. A. (2015). *Dasar Metodologi Penelitian*. Literasi Media Publishing.
- Sony, B., & Bhaduri, S. (2020). Information asymmetry and financing choice between debt, equity and dual issues by Indian firms. *International Review of Economics and Finance*, 72, 90–101. <https://doi.org/10.1016/j.iref.2020.11.001>
- Sony, B., & Bhaduri, S. (2022). Choice between rights issue and private placements of equity and the role of information asymmetry. *Managerial Finance*, 48(3), 409–428. <https://doi.org/10.1108/MF-01-2021-0023>
- Sunarto, H., Murwaningsari, E., & Mayangsari, JSekar. (2016). The Effect of Earnings Aggressiveness, Income Smoothing, Earnings Transparency on Cost of Equity with Earnings Informativeness As Moderating For Companies Listed on Indonesia Stock Exchange During The Period 2011-2013. *GSTF Journal on Business Review*, 4(4), 17–28. <https://doi.org/10.5176/2010-4804>
- Sunaryo, R. I., & Saripujiana, D. (2018). The Effects of Information Asymmetry, Earning Management, Voluntary Disclosure and Market Value of Equity on Cost of Equity Capital. *Journal of Economics, Business & Accountancy Ventura*, 21(1), 79–88. <https://doi.org/10.14414/jebav.v21i1.1117>
- Syahrir, Danial, Yulinda, E., & Yusuf, M. (2020). *Aplikasi Metode SEM-PLS*. Penerbit IPB Press.

- Tavinayati, & Qamariyanti, Y. (2009). *Hukum Pasar Modal di Indonesia*. Sinar Grafika.
- Ulum, A. S., Rohman, A., Harto, P., Ratmono, D., & Ghozali, I. (2019). The role of natural resources on moderating the relationship between fiscal decentralization and corruption: Evidence from Indonesia. *International Journal of Energy Economics and Policy*, 9(1), 67–75. <https://doi.org/10.32479/ijeep.7252>
- Utami, W. (2005). Pengaruh Manajemen Laba terhadap Biaya Modal Ekuitas (Studi pada Perusahaan Publik Sektor Manufaktur). *Simposium Nasional* 8, 100–116.
- Verdi, R. S. (2012). Discussion of “Financial reporting frequency, information asymmetry, and the cost of equity.” *Journal of Accounting and Economics*, 54(2–3), 150–153. <https://doi.org/10.1016/j.jacceco.2012.07.004>
- Wang, K. T., Kartika, F., Wang, W. W., & Luo, G. (2021). Corporate social responsibility, investor protection, and the cost of equity: Evidence from East Asia. *Emerging Markets Review*, 47(June 2021), 100801. <https://doi.org/10.1016/j.ememar.2021.100801>
- Wang, K. T., Liu, Y., & Wang, W. W. (2022). Government Control, Regulatory Enforcement Actions, and the Cost of Equity. *European Accounting Review*, 31(2), 449–493. <https://doi.org/10.1080/09638180.2020.1822196>
- Watts, L. R., & Zimmerman, L. J. (1989). Positive Accounting Theory: A Ten Year Perspective. *The Accounting Review*, 65, 131–156.
- Weston, J. F., & Copeland, T. E. (1996). *Manajemen Keuangan Edisi Kedelapan Jilid 2*. Penerbit Erlangga.
- Widanengsih, E., Yusuf, & Faisal, R. (2019). Pengaruh Asimetri Informasi dan Manajemen Laba Terhadap Cost of Equity Capital Pada Emiten Perbankan. *Jurnal Ilmiah Wahana Akuntansi*, 14(1), 1–14.
- Wu, X., Yang, Y., & Lu, Z. (2015). Are accounting estimate changes associated with an aggressive earnings effect? Empirical evidence. *China Journal of Accounting Studies*, 3(1), 1–23. <https://doi.org/10.1080/21697213.2015.1011823>
- Xu, J., Pan, Z., & Tian, G. (Gang). (2023). Does the threat of enforcement of financial regulations affect the cost of equity in weak institutional environments? *British Accounting Review*, 55(6), 101233. <https://doi.org/10.1016/j.bar.2023.101233>
- Yang, J., Cai, G., Zheng, G., & Gu, Q. (2022). Firm internationalization and cost of equity: Evidence from China. *China Journal of Accounting Research*, 15(2), 100237. <https://doi.org/10.1016/j.cjar.2022.100237>
- Yeh, C. C., Lin, F., Wang, T. S., & Wu, C. M. (2020). Does corporate social responsibility affect cost of capital in China? *Asia Pacific Management Review*, 25(1), 1–12. <https://doi.org/10.1016/j.apmrv.2019.04.001>
- Yolanda, N., & Mulyani, E. (2019). Pengaruh Kualitas Laba dan Pengungkapan Sukarela Terhadap Cost Of Equity Capital (Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2017). *JEA (Jurnal Eksplorasi Akuntansi)*, 1(3), 883–905.
- Yu, H. (2023). Cash flow risk and the implied cost of equity capital. *Applied Economics*, 00(00), 1–16. <https://doi.org/10.1080/00036846.2023.2257032>
- Zarowin, P. (2002). *Does Income Smoothing Make Stock Prices More Informative*. 1–40. https://doi.org/https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1281356
- Zheng, Z., Lin, Y., Yu, X., & Liu, X. (2021). Product market competition and the cost of equity capital. *Journal of Business Research*, 132(December 2019), 1–9. <https://doi.org/10.1016/j.jbusres.2021.04.013>
- Zuhrotun, & Sunaryo, K. (2023). Effect of Earnings Opacity on Cost of Equity. *Baltic Journal of Law & Politics*, 16(3), 389–398. <https://doi.org/10.2478/bjlp-2023-0000033>