

***Sustainable Premium of Sustainable Bonds:
Empirical Study of State-Owned Enterprises in Indonesia***
Darmia Dimu, Sung Suk Kim

From Emission to Offset: Reinventing Green Strategies for A Sustainable Education
Steven Novanolo Mendrofa, Resi Ariyasa Qadri

***Ukuran Perusahaan Sebagai Variabel Moderasi: Dampak Profitabilitas dan
Pertumbuhan Penjualan terhadap Agresivitas Pajak***
Reza Muhammad Rizqi, Arya Zulfikar Akbar, Fahlia Fahlia

***An Empirical Study on the Impact of Sustainability Reporting on
Financial Performance: Investment Efficiency as A Moderating
Variable in the Context of Financial Companies***
Jocelyn Larisa Jono Sia, Thia Margaretha Tarigan

***The Impact of Greenwashing on Firm Value During the
Period Before and During the Covid-19 Crisis in Indonesia***
Freshtriana Freshtriana, Sung Suk Kim

Simfoni Nilai Perusahaan dan Faktor-Faktor yang Mempengaruhinya
Angellica Eugenia, Prima Apriwenni

***Green Banking, Manajemen Risiko, dan Kepemilikan Asing:
Analisis Determinan Nilai Pasar Perbankan di Indonesia***
Ni Luh Gde Lydia Kusumadewi,
Hyasshinta Dyah Sweztika Lukitaning Paramitadewi, Synthia Madya Kusumawati

Determinan Nilai Perusahaan Di Bursa Efek Indonesia
Ilham Fajar Eko Saputro, Nurhadi Kamaluddin

Perkembangan Penelitian Kualitas Audit di Indonesia
Widya Septi Faradilla, Doddy Setiawan

***The Role of Audit Rotation, Audit Committee Oversight,
Audit Capacity Stress, and Audit Tenure in Determining Audit Quality***
Sabrina Sabrina, Kurniawati Kurniawat

***The Effect of Fiscal Competence, Tax Socialization and
Tax Justice on Taxpayer Compliance***
Andreas Bambang Daryatno, Linda Santioso

JURNAL ILMU AKUNTANSI

ULTIMA Accounting

ISSN 2085-4595

Volume 17, Nomor 1, Juni 2025

Jurnal Ilmu Akuntansi ULTIMA Accounting adalah Jurnal Ilmu Akuntansi yang diterbitkan oleh Program Studi Akuntansi Fakultas Bisnis Universitas Multimedia Nusantara mulai bulan Desember 2009. Terbit secara berkala dua kali dalam setahun yaitu setiap bulan Juni dan Desember. Jurnal Ilmu Akuntansi ULTIMA Accounting diharapkan menjadi wadah publikasi hasil riset akuntansi dengan kualitas yang dalam, bermutu, dan berbobot. Tujuan penerbitan Jurnal Ilmu Akuntansi ULTIMA Accounting adalah untuk mempublikasikan hasil riset, telaah ilmiah, analisis dan pemikiran akuntansi, keuangan, dan perpajakan yang relevan dengan pengembangan profesi dan praktik akuntansi di Indonesia. Jurnal Ilmu Akuntansi ULTIMA Accounting ditujukan bagi para akademisi, praktisi, regulator, peneliti, mahasiswa, dan pihak lainnya yang tertarik dengan pengembangan profesi dan praktik akuntansi di Indonesia.

Pelindung:

Dr. Ir. Andrey Andoko, M.Sc (Rektor Universitas Multimedia Nusantara)

Penanggung Jawab:

Prof. Dr. Florentina Kurniasari, S.Sos., M.B.M (Dekan Fakultas Bisnis)

Pengarah:

- Prof. Dr. Friska Natalia, S.Kom., M.T. (Wakil Rektor Bidang Akademik & Internasionalisasi)
- Dr. Ika Yanuarti, S.E., M.S.F (Wakil Rektor Bidang Kemahasiswaan, Employability & Kewirausahaan)
- Prof. Dr. Florentina Kurniasari, S.Sos., M.B.M (Wakil Rektor Bidang Penelitian, Inovasi & Keberlanjutan)

Pemimpin Umum:

Jansen Wiratama, S.Kom., M.Kom (Manajer Publikasi)

Editor in Chief:

Nosica Rizkalla, S.E., MSc, C.B.O

Dewan Redaksi:

Prof. Dr. Florentina Kurniasari T., S.Sos., MBA (Universitas Multimedia Nusantara)

Dr. Meiryani., SE., Ak., MM., M.Ak., CA (Binus University)

Dr. Felizia Arni Rudiawarni, SE., M.Ak., CFP (Universitas Surabaya)

Stefanus Ariyanto, SE, M.Ak., CPSAK., CA (Universitas Multimedia Nusantara)

Dr. Rina Yuliastuty Asmara SE, MM, Ak, CA, CSRS (Universitas Mercubuana)

Assoc Prof. Dr. Sharina Tajul Urus (Universiti Teknologi Mara)

Ang Swat Lin Lindawati, S.E., M.Com (Hons)., Ph.D., CSRS. (Binus University)

Dr. Rindu Rika Gamayuni, S.E., M.Si (Universitas Lampung)

Dr. Sudrajat, SE., M.Acc., Akt., CA (Universitas Lampung)

Dr. Fajar Gustiawaty Dewi, S.E., M.Si., Akt (Universitas Lampung)

Dr. Henny Medyawati, S.Kom,MM (Universitas Gunadarma)

Tata Letak:

Hendrik Wijaya

Mitra Bestari:

Dr. Amirul Afif Muhamat (Universiti Teknologi Mara)
Dr. Muhammad Shahid Khan (Suan Sunandha Rajabhat University Thailand)
Panggha Tri Wicaksono, S.E., M.Sc. (Universitas Indonesia)
Toto Rusmanto, MComm, Ph.D (Universitas Bina Nusantara)
Dedik Nur Triyanto, SE., M.Acc., CPA. (Telkom University)
Prof. Dr. Intiyas Utami, SE.,M.Si, Ak, CA, CMA QIA, CFrA (Universitas Kristen Satya Wacana)
Dr. Memed Sueb, CSP., CPA., CA., BKP., Ak. (Universitas Padjajaran)
Arfah Habib Saragih, S.E., M.S.Ak., CA., Asean CPA. (Universitas Indonesia)
Dr.Harnovinsah,Ak.,M.Si.,CA.,CIPSAS.,CMA.,CSRA (Universitas Mercubuana)
Dr. Etikah Karyani, Ak., CA., CMA. (Indonesia Banking School)
Dr. Mulyono, SE., MM., RFA. (Universitas Bina Nusantara)
Dr Antonius Siahaan, SE, Ak, MM, CA (Swiss German University)
Arief Rahman, SE., M.Com., Ph.D (Universitas Islam Indonesia)
Ayu Chairina Laksmi, SE., M. AppCom., M.Res., Ph.D., Ak, CA, CPA (Aust.) (Universitas Islam Indonesia)
Karina Harjanto, S.E., MSc (Universitas Multimedia Nusantara)
Prof. Dr. Drs. Antonius Herusetya, Ak., CA., M.M (Universitas Pelita Harapan)
Dr. Ernie Hendrawaty, SE, MSi (Universitas Lampung)
Dr. Fitra Dharma, S.E., M.Si. (Universitas Lampung)
Dr. Nadiah Abd Hamid (Universiti Teknologi Mara)
Hendro Susanto, S.E., M.M. (Universitas Ciputra)
Dr Dewi Anggraini Ak ME (Universitas Dian Nusantara)
Dr. Vina Christina Nugroho, S.E., M.M. - UPH (Universitas Pelita Harapan)
Ika Yanuarti, S.E., M.S.F. (Universitas Multimedia Nusantara)
Amir Hidayatullah, S.E., M.Sc (Universitas Ahmad Dahlan)
Triyani Budyastuti, SE, M.Ak (Universitas Mercu Buana)
Kristin Rosalina, PhD, Ak., CA (Universitas Brawijaya)
Dr. Resi Ariyasa Qadri, S.E., M.Ak (PKN STAN)

Alamat Redaksi:

Universitas Multimedia Nusantara
Scientia Garden, Jl. Boulevard Gading Serpong, Tangerang
Telp. (+6221) 5422 0808 | Fax. (+6221) 5422 0800
Email. ultimaaccounting@umn.ac.id

DAFTAR ISI

SUSTAINABLE PREMIUM OF SUSTAINABLE BONDS: EMPIRICAL STUDY OF STATE OWNED ENTERPRISES IN INDONESIA Anisa Darmia Dimu, Sung Suk Kim	1-14
FROM EMISSION TO OFFSET: REINVENTING GREEN STRATEGIES FOR A SUSTAINABLE EDUCATION Steven Novanolo Mendrofa, Resi Ariyasa Qadri	15-38
UKURAN PERUSAHAAN SEBAGAI VARIABEL MODERASI: DAMPAK PROFITABILITAS DAN PERTUMBUHAN PENJUALAN TERHADAP AGRESIVITAS PAJAK Reza Muhammad Rizqi, Arya Zulfikar Akbar, Fahlia Fahlia	39-57
AN EMPIRICAL STUDY ON THE IMPACT OF SUSTAINABILITY REPORTING ON FINANCIAL PERFORMANCE: INVESTMENT EFFICIENCY AS A MODERATING VARIABLE IN THE CONTEXT OF FINANCIAL COMPANIES Jocelyn Larisa Jono Sia, Thia Margaretha Tarigan	58-69
THE IMPACT OF GREENWASHING ON FIRM VALUE DURING THE PERIOD BEFORE AND DURING THE COVID-19 CRISIS IN INDONESIA Freshtriana Freshtriana, Sung Suk Kim	70-79
SIMFONI NILAI PERUSAHAAN DAN FAKTOR-FAKTOR YANG MEMPENGARUHINYA Angellica Eugenia, Prima Apriwenni	80-96
GREEN BANKING, MANAJEMEN RISIKO, DAN KEPEMILIKAN ASING: ANALISIS DETERMINAN NILAI PASAR PERBANKAN DI INDONESIA Ni Luh Gde Lydia Kusumadewi, Hyasshinta Dyah Sweztika Lukitaning Paramitadewi, Synthia Madya Kusumawati	97-116

JURNAL ILMU AKUNTANSI

ULTIMA Accounting

DETERMINAN NILAI PERUSAHAAN DI BURSA EFEK INDONESIA

Ilham Fajar Eko Saputro, Nurhadi Kamaluddin

117-126

PERKEMBANGAN PENELITIAN KUALITAS AUDIT DI INDONESIA

Widya Septi Faradilla, Doddy Setiawan

127-157

THE ROLE OF AUDIT ROTATION, AUDIT COMMITTEE
OVERSIGHT, AUDIT CAPACITY STRESS, AND AUDIT TENURE IN
DETERMINING AUDIT QUALITY

Sabrina Sabrina, Kurniawati Kurniawati

158-172

THE EFFECT OF FISCAL COMPETENCE, TAX SOCIALIZATION AND
TAX JUSTICE ON TAXPAYER COMPLIANCE

Andreas Bambang Daryatno, Linda Santioso

173-189

UMN

SUSTAINABLE PREMIUM OF SUSTAINABLE BONDS: EMPIRICAL STUDY OF STATE OWNED ENTERPRISES IN INDONESIA

Darmia Dimu^{1*}

Faculty of Economy and Business, Pelita Harapan University, Indonesia
darmia.dimu@gmail.com; 01619230031@student.uph.edu)

Kim Sung Suk²

Faculty of Economy and Business, Pelita Harapan University, Indonesia
sungsuk.kim@uph.edu

(*Corresponding Author)

Received on 2 February 2025

Accepted on 26 May 2025

Abstract— This study investigates the sustainable premium of bonds issued by State-Owned Enterprises (SOEs) in Indonesia and examines the determinants influencing the yields of these sustainable bonds. Sustainable premium is the price difference of sustainable bonds and conventional bonds that are proxied by yield to maturity (YTM). A sustainable premium benefits issuers by reducing funding costs and building social capital. This study uses data panel regression for data analysis that taken from bonds that are listed on IDX in 2020-2023. The data consist of 1.018 bonds then sorted based on the type of bond (sustainable bonds and non-sustainable bonds) and the issuing company. It is found that the yield to maturity of sustainable bonds tends to be higher than conventional bonds. This means that based on the data there was no sustainable premium on SOE's sustainable bonds in Indonesia. Meanwhile, the ESG risk score, status of SOEs, Return on Assets and Debt to Asset Ratio do not have a significant effect on the yield to maturity of SOEs' sustainable bonds. Rating, modified duration, GDP and inflation have significant effects to yield to maturity of SOEs' sustainable bonds.

Keywords: Sustainable Premium; Sustainable Bonds; State Owned Enterprises; Yield to Maturity; ESG

1. INTRODUCTION

1.1 Background

Sustainable bonds issued by companies have become a key financial instrument to address environmental and social challenges. The global issuance of sustainable bonds has grown rapidly due to increasing awareness of climate and sustainability issues. These bonds finance projects that positively impact environmental, social, and governance (ESG) factors, aligning corporate financing with broader sustainability goals (Park, 2009). Stakeholders, including investors and governments, are increasingly prioritizing sustainable values, leading to a surge in demand for sustainable financial instruments.

While the U.S. and European markets pioneered sustainable bonds, Asian markets though growing remain relatively small in scale (UNDP, 2024). In ASEAN, the green bond market has shown significant expansion potential. Indonesia has also witnessed a rising demand for green bonds, driven by its commitment to sustainable finance and the United

Nations' Sustainable Development Goals (SDGs) (Asian Development Bank, 2022) . The government has actively promoted sustainable finance initiatives, such as launching Indonesia's first SDG-linked bond in September 2021 (PwC Indonesia - ESG Team, 2023) . Investor priorities have shifted toward ESG metrics, influencing corporate risk management in the transition to a low-carbon economy (Lhutfi et al., 2024).

Sustainable bonds play a vital role in directing capital towards renewable energy, pollution reduction, and sustainable infrastructure (Asian Development Bank, 2022a). They enhance the credibility of issuers by aligning with ESG principles. The environmental aspect covers issues like energy consumption, pollution, climate change, and biodiversity, while the social aspect focuses on labor rights, human rights, stakeholder relations, and diversity policies. Governance includes board quality, executive compensation, transparency, and regulatory compliance. These factors contribute to investor confidence in sustainable bond investments (Ditlev-Simonsen, 2022).

Sustainable bonds are categorized into green bonds that focus on environmental projects, social bonds that target the social impact, and sustainability bonds which integrate environmental and social objectives with corporate governance (Climate Bond Initiatives, 2021). By allowing companies to finance sustainability initiatives through debt instruments, these bonds support long-term commitments to environmental and social responsibility. Investors prefer them as they align financial returns with sustainability objectives, contributing to global ESG standards (Flammer, 2020).

In Indonesia, sustainable finance is still in its early stages but is gaining momentum. As an emerging economy with abundant natural resources, Indonesia faces unique opportunities and challenges in integrating sustainability into its financial markets. The government and state-owned enterprises (SOEs) are increasingly aware of the importance of issuing sustainable bonds to balance financial performance and sustainability goals. Indonesia has made significant progress in green and sustainability-linked bond issuance to support infrastructure and energy projects that reduce carbon emissions and promote sustainable development (Asian Development Bank, 2022a).

Sustainable premium of sustainable bonds is the price difference between sustainable bonds and conventional bonds (Zerbib et al., 2018). It is an extra price that the investor is willing to pay in order to contribute to sustainable finance that in the long term will align with the goal of ESG's values. This sustainable premium of sustainable bonds is proxied by Yield to Maturity of the bonds. Yield to Maturity (YTM) is a crucial factor in determining bond pricing and attractiveness. YTM represents the expected return for investors holding a bond until maturity and is influenced by factors such as market price, face value, coupon rate, and maturity period (Mishkin & Eakins, 2018). Higher-risk bonds generally have higher YTMs to compensate investors for taking on additional risk, whereas lower-risk bonds, such as those issued by governments or large corporations, tend to have lower YTMs due to their stability. YTM serves as a key measure of bond risk perception in financial markets (Mishkin & Eakins, 2018).

Investors in sustainable bonds face unique risks, including underperformance of sustainability projects, regulatory changes, and market volatility due to shifting consumer and regulatory preferences (Löffler Kristin, 2022). The rising demand for sustainable investments can lead to lower YTMs for these bonds, as investors accept lower returns in exchange for social and environmental benefits. This phenomenon, known as "Greenium," reflects investors' willingness to pay a premium for green bonds (Ahmadi & Feldhütter, 2023). ASEAN+3 countries have experienced Greenium benefits, reducing financing costs and enhancing issuer reputation of the green bonds (Asian Development Bank, 2022). However,

research on sustainable premium for corporate sustainable bonds in Indonesia remains limited.

The Indonesian government has introduced policies to encourage sustainable bond issuance, and both State Owned Enterprises and private companies have responded with increased green and sustainability bond offerings. Indonesia was among the first Southeast Asian countries to issue green sukuk for renewable energy and sustainable infrastructure projects (Asian Development Bank, 2022b). While the corporate sustainable bond market is growing, it remains relatively small compared to more developed markets.

The previous studies on green and sustainable bonds premium shows various results. Sustainable bonds that studied by Ahmadi & Feldhütter (2023) shows negative sustainable premium as well as the green bonds that studied Zerbib et al. (2018) show negative greenium. In addition, the report by Asian Development Bank (2022) shows that green bonds that ASEAN+3 countries (Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam, China, Japan, Republic of Korea) benefitted from greenium. However, studied by Grishunin et al. (2023) shows that the green bonds in some European countries that observed did not have negative premium

Understanding the sustainable premium of sustainable bonds will be beneficial for bond issuers by optimizing their bond offerings to attract investors (Ahmadi & Feldhütter, 2023). On the other hand, investors will benefit from better insight into the risk-return tradeoff associated with sustainable bonds. Nevertheless, research on sustainable premium for corporate sustainable bonds in Indonesia remains limited, specifically SOEs. As agent of development of sustainable finance, SOEs expected to have greater influence in promoting the sustainable finance in Indonesian business. This research aimed to explore the sustainable premium of sustainable bonds that focuses on SOEs, YTM dynamics, ESG ratings in promoting sustainable finance in Indonesia. This research also contributes to increasing the attractiveness of sustainable corporate bonds, especially for state-owned enterprises, thereby facilitating greater investment in sustainability-related projects.

1.2 Literature Review and Hypothesis

1.2.1 Sustainable Finance and ESG theories

The trend towards sustainability in corporate finance has prompted a number of studies on sustainable finance. Sustainable finance is the finance's management that takes ESG considerations into account when making investment decisions in the financial sector (Ozili, 2022). Environmental, social and governance (ESG) factors influence a company's financial instruments so that a number of decisions regarding the company's financial management are based on sustainability principles (Ditlev-Simonsen, 2022). Key theories shaping ESG discourse include Signaling Theory, Stakeholder Theory, Modern Portfolio Theory, and Behavioral Finance Theory. These frameworks guide investors and corporations in assessing ESG's role in financial decision-making and bond pricing (Ditlev-Simonsen, 2022).

a. Signaling Theory and ESG Ratings

Investor commitment to ESG is reflected in sustainability-driven investment strategies. ESG ratings act as signals for investors, indicating a company's commitment to sustainability and social responsibility. Research suggests that firms with higher ESG ratings tend to have stronger cash flows, lower ex-ante risks, and better workplace conditions (Mendiratta et al., 2021). Consequently, companies with higher ESG ratings can attract more investors and enjoy lower financing costs (Baker et al., 2018). Moreover, sustainable bonds with second-party opinions command

higher pricing levels (Dorfleitner et al., 2022), and the price gap between sustainable and conventional bonds, known as the greenium, reflects investors' willingness to pay for lower risk (Ahmadi & Feldhütter, 2023; Windmar & Fischer, 2023).

b. Stakeholder Theory and ESG Investments

Stakeholder Theory emphasizes that a company's success depends on its interactions with key stakeholders, such as customers, employees, bondholders, and communities (Parmar et al., 2010). Companies demonstrating strong ESG commitments can build stakeholder trust, particularly in reducing environmental impact and carbon emissions (Kumar, 2023). Firms with poor ESG practices face higher regulatory penalties and environmental liabilities, increasing financial risks (Mendiratta et al., 2021).

c. Modern Portfolio and Behavioral Finance Theories

Modern Portfolio Theory (MPT) assumes rational investors and efficient markets, whereas Behavioral Finance Theory recognizes investor biases (Dorfleitner et al., 2022). The price gap between sustainable and conventional bonds is influenced by investor preferences for sustainability, sometimes resulting in higher bond prices and lower returns. This behavior aligns with the concept of emotional investing, where investors accept lower returns for non-financial benefits (Kahneman & Tversky, 1979; Wang Juan Wu, 2022).

1.2.2 Sustainable Premium and Yield to Maturity of Sustainable Bonds

Sustainable bonds fund projects aligned with ESG values, attracting investors willing to accept lower yields due to their social and environmental impact (Asian Development Bank, 2022; Löffler Kristin, 2022). Sustainable bonds should link their fund projects with the ESG values that will determine the bond's yield, although conventional bonds are not required to do so. This difference between the price of sustainable bonds and the price of conventional bonds is called the sustainable premium (Ahmadi & Feldhütter, 2023; Zerbib et al., 2018).

Yield to Maturity (YTM) of the bonds reflects bond price because they have an inverse connection, with higher bond prices resulting in lower yields and vice versa. YTM represents the expected return if a bond is held until maturity. It depends on reinvestment risk, interest rate risk, and market conditions (Mishkin & Eakins, 2018; Purba, 2020).

The sustainable premium, or the yield difference between sustainable and conventional bonds, has been observed in European and U.S. markets (Ahmadi & Feldhütter, 2023; Zerbib et al., 2018) but is absent in China (D. Wang & Li, 2020). In ASEAN, the sustainable premium was positive before COVID-19 and fluctuated during the pandemic (Oktavio & Riyanti, 2021). So, this study assumes **Hypothesis I** : Sustainable bonds have a lower YTM (negative sustainable premium) compared to conventional bonds.

1.2.3 ESG Impact on Yield to Maturity and Sustainable Premium of Sustainable Bonds

Investor demand for ESG-aligned investments has led to lower YTM for sustainable bonds. Companies with high ESG ratings enjoy lower spreads and borrowing costs due to reduced long-term risks (Windmar & Fischer, 2023). Several studies have shown that ESG ratings can have a positive impact on the pricing of sustainable bonds, especially in the context of green bonds (Dorfleitner et al., 2022). This is due to the assumption that companies with higher ESG scores have a good reputation which are considered to bear lower long-term risks, therefore they can raise capital at a lower cost (Windmar & Fischer, 2023).

Green Premium emerges as investors accept lower returns for environmentally responsible investments (Ahmadi & Feldhütter, 2023). This is also applied to sustainable

bonds where the investors are willing to accept lower yield for the sustainable purposes. Companies demonstrating strong ESG performance benefit from lower capital costs, making sustainability a strategic advantage (Roggi et al., 2024). ESG score risk reflects the magnitude of risks that have not been managed by a company related to environmental, social and governance issues (Von Münchhausen et al., 2024). The greater the score of ESG risk, the greater the risk that has not been managed by companies that eventually make it into the lower ESG ratings. **Hypothesis II** then develop to see the positive relationship between yield to maturity, sustainability and ESG score: higher ESG score risk has an influence on the higher YTM of sustainable bonds.

1.2.4 Sustainable Premium, Yield to Maturity and State Owned Enterprises

State-Owned Enterprises (SOEs) generally face lower credit risks, benefiting from government support. As a result, sustainable bonds issued by SOEs attract higher investor confidence and lower yields (Q. Wang et al., 2019). Investors perceive SOEs as more stable, particularly in emerging markets, where government backing ensures reliability. This higher investor demand results in lower YTM for SOE-issued sustainable bonds (Ge et al., 2020). It means that the sustainable premium should be enjoyed by the SOEs sustainable bonds.

Private companies, lacking government backing, are often considered riskier, leading to higher YTMs for their bonds. Higher credit risks and industry volatility contribute to increased borrowing costs for private firms (Q. Wang et al., 2019). Studies show that the cost of bond issuance is higher for private companies than for SOEs in China due to differences in market perceptions and government intervention (Ge et al., 2020).

SOEs play a crucial role in financing sustainable projects, such as infrastructure and public services, leading to lower YTMs due to their perceived stability (Q. Wang et al., 2019). Investors often favor SOE-issued sustainable bonds due to their alignment with public-sector priorities, increasing their attractiveness (Olschewski et al., 2023). Considering these factors, **Hypothesis III** suggests that SOE-issued sustainable bonds have lower YTMs than those issued by private firms.

2. RESEARCH METHODOLOGY

2.1 Data

This study's data originates from the Indonesia Stock Exchange (IDX), which has data on both sustainable bonds and conventional bonds issued by Indonesian corporations. The bond data is then sorted through dummy variables, so that the data used in the analysis is sustainable bonds issued by SOEs.

The bond data also includes bond characteristics such as issue term, price, yield, duration, and bond rating. Capital IQ provides data on ROE and asset liability ratios. The Indonesia Stock Exchange also provides data on ESG. Meanwhile, the Indonesian Statistics Agency provides inflation and GDP figures. The data collected is from the last four years, specifically 2020-2023.

2.2 Empirical Model and Variable Description

The empirical model of the research as follows :

$$Y_{it} = C + \beta_1 Sustainable_{it} + \beta_2 ESG_{it} + \beta_3 SOE_{it} + \beta_4 Leverage_{it} + \beta_5 ROE_{it} + \beta_6 Rating_{it} + \beta_7 Issue Term_{it} + \beta_8 Modified Duration_{it} + \beta_9 GDP_{it} + \beta_{10} Inflation_{it} + \varepsilon_{it}$$

Table 1. Variable Explanation

Variable Name	Variable Description																																										
Y_{it}	Yield to Maturity of both sustainable bonds and conventional bonds																																										
C	Intercept term																																										
$\beta_1Sustainable_{it}$	Dummy variable for the type of bond, namely 1 for sustainable bonds and 0 for conventional bonds.																																										
B_2ESG_{it}	The ESG risk value rating published by BEI in collaboration with Morningstar Sustainabilitycs. ESG risks are grouped into 5 categories, namely:<table><tr><th>Risk Score</th><th>Category</th><th>Description</th></tr><tr><td>0-10</td><td>Negligible</td><td>Considered ESG risks that can ignored</td></tr><tr><td>10-20</td><td>Low</td><td>Considered low ESG risk</td></tr><tr><td>20-30</td><td>Medium</td><td>Considered moderate ESG risk</td></tr><tr><td>30-40</td><td>High</td><td>Considered high ESG risk</td></tr><tr><td>>40</td><td>Severe</td><td>Considered severe ESG risks</td></tr></table>	Risk Score	Category	Description	0-10	Negligible	Considered ESG risks that can ignored	10-20	Low	Considered low ESG risk	20-30	Medium	Considered moderate ESG risk	30-40	High	Considered high ESG risk	>40	Severe	Considered severe ESG risks																								
Risk Score	Category	Description																																									
0-10	Negligible	Considered ESG risks that can ignored																																									
10-20	Low	Considered low ESG risk																																									
20-30	Medium	Considered moderate ESG risk																																									
30-40	High	Considered high ESG risk																																									
>40	Severe	Considered severe ESG risks																																									
β_3SOE_{it}	Dummy variable for SOEs, namely 1 for SOEs and 0 for private companies.																																										
$B_4Leverage_{it}$	The ratio of total company debt to company assets.																																										
β_5ROE_{it}	Return non Equity.																																										
$\beta_6Rating_{it}$	Bond rating issued by the Indonesian Securities Rating Agency (Pefindo). The rating from Pefindo then converted as follows:<table><tr><th>Ranking</th><th>Convert</th><th>Ranking</th><th>Convert</th><th>Ranking</th><th>Convert</th></tr><tr><td>idAAA</td><td>17</td><td>idA -</td><td>11</td><td>idB +</td><td>5</td></tr><tr><td>idAA +</td><td>16</td><td>idBBB +</td><td>10</td><td>idB</td><td>4</td></tr><tr><td>idAA</td><td>15</td><td>idBBB</td><td>9</td><td>idB -</td><td>3</td></tr><tr><td>idAA -</td><td>14</td><td>idBBB -</td><td>8</td><td>idCCC</td><td>2</td></tr><tr><td>idA +</td><td>13</td><td>idBB +</td><td>7</td><td>idSD</td><td>1</td></tr><tr><td>idA</td><td>12</td><td>idBB -</td><td>6</td><td>idD</td><td>0</td></tr></table>	Ranking	Convert	Ranking	Convert	Ranking	Convert	idAAA	17	idA -	11	idB +	5	idAA +	16	idBBB +	10	idB	4	idAA	15	idBBB	9	idB -	3	idAA -	14	idBBB -	8	idCCC	2	idA +	13	idBB +	7	idSD	1	idA	12	idBB -	6	idD	0
Ranking	Convert	Ranking	Convert	Ranking	Convert																																						
idAAA	17	idA -	11	idB +	5																																						
idAA +	16	idBBB +	10	idB	4																																						
idAA	15	idBBB	9	idB -	3																																						
idAA -	14	idBBB -	8	idCCC	2																																						
idA +	13	idBB +	7	idSD	1																																						
idA	12	idBB -	6	idD	0																																						
$B_7IssueTerm_{it}$	The term of the bond until the bond matures.																																										
$B_8Modified\ Duration_{it}$	Changes in bond value due to changes in bond interest.																																										
β_9GDP_{it}	Gross Domestik Products.																																										
$\beta_9Inflation_{it}$	Inflation Rate																																										

2.3 Data Analysis Technique

The technique for data analysis in this research using data panel regression analysis due to its capacity to integrate data time series and cross section data using Stata application. This method is also used in accordance with the characteristics of the dataset and the research objectives.

The panel regression model is a fixed effect model because the objective of the study is variation in bond yields, and the Hausman Test was used to determine the technique. However, because in this study there are time invariant variables (variables that do not change over time), namely Sustainable and SOEs, the Hausman Taylor Model is used. The Hausman Taylor model has similarities with the fixed effect model because it can control the heterogeneity of unobserved variables. Yet, the Hausman Talor model has the flexibility to handle time invariant variables that cannot be handled by the fixed effect model (Greene, 2012).

The Hausman Taylor model divides dependent variables into endogenous (time variant and time invariant) and exogenous (time variant and time invariant) variables using the 2SLS approach. The model residuals (error terms) cannot be derived in a normal method, making goodness-of-fit measurements like R^2 useless (Greene, 2012). The Sustainable bonds, ESG risk score and SOEs are the focus of this study which then categorized as endogenous. This

categorization is done to reduce the association between these variables and error terms or unobserved components.

3. RESULT AND DISCUSSION

3.1 Descriptive Analysis

The following are the results of descriptive statistics from the data of sustainable bonds issued by the SOEs in Indonesia that listed in IDX during 2020-2023.

Table 2. Descriptive Analysis Results

Variable	N	Average	Std. Deviation	Min	Max
Yield	210	7.0747	1.5634	2.7229	12.7276
Sustainable	210	0.8723	0.3338	0	1
SOEs	210	0.4057	0.4911	0	1
ESG	210	24.9803	4.9690	11.45	42.06
Issue Term	210	4.9558	2.8676	1	30
ModDuration	210	4.2722	1.6564	0.9358	10.9365
Rating	210	14.9320	2.4450	8	17
ROE	210	6.8742	16.1934	-77.7807	66.3028
Lev	210	1.5854	1.7683	0.1386	9.7393
Inflation	210	2.9175	1.5368	1.68	5.51
GDP	210	2.9975	2.9892	-2.07	5.31

The table shows that the Yield to Maturity Bond value has an average of 7.0747 with a standard deviation of 1.5634 and a minimum value of 2.7229 and a maximum value of 12.7276. The minimum YTM value is the 2020 YTM of bonds issued by PT. Pegadaian Persero. This low YTM is the impact of the Covid-19 pandemic which has reduced the YTM of almost all bonds, both bonds issued by the state, namely FR 0031, which also touched 2.88 (Mulyono, 2023; Zhou et al., 2022) and by companies. The downward YTM trend during the Covid-19 pandemic shows improvement in the post-Covid-19 pandemic period.

The Sustainable value which is a variable dummy of sustainable bonds has an average value of 0.8723 with a standard deviation of 0.3338 and a minimum value of 0 and a maximum of 1. For the Type value which is also a variable dummy from BUMN companies, the average value is 0.4057 with a standard deviation of 0.4911 and a minimum value of 0 and a maximum of 1.

The ESG variable has an average of 24.9803 with a standard deviation of 4.9690 and a minimum value of 11.45 and a maximum of 42.06. The higher the ESG value, the greater the company's ESG risk, which means that the company has not applied a number of ESG risk management measures.

Issue term bonds have an average of 4.9558 with a standard deviation of 2.8676 and a minimum value of 1 and a maximum of 30. The higher the issue term value, the longer the bond exists.

Modified Duration bonds have an average of 4.2722 with a standard deviation of 1.6564 and a minimum value of 0.9358 and a maximum value of 10.9365. If the greater the modified duration value, the more sensitive the bond price is to changes in interest rates so that it is more risky. Conversely, bonds with low modified duration are less sensitive to changes in interest rates, so bond prices are more stable.

The bond rating has an average of 14.9320 with a standard deviation of 2.4450 and a minimum value of 8 and a maximum of 17. The higher the bond rating, the more reliable the bond issuing company because it has a low risk of default.

ROE of bond issuing companies has an average value of 6.8742 with a standard deviation of 16.1934 and a minimum value of -77.7807 and a maximum value of 66.3028. While the Leverage of bond issuing companies has an average of 1.5854 with a standard deviation of 1.7683 and a minimum value of 0.1386 and a maximum value of 9.7393.

The inflation rate has an average of 2.9175 with a standard deviation of 1.5368 and a minimum value of 1.68 and a maximum value of 5.51. Another important note is on the macroeconomic variable namely the GDP that has an average of 2.9975 with a standard deviation of 2.9892 and a minimum value of -2.07 and a maximum value of 5.31. Although Indonesia's average GDP is around 5%, because the data collection period is 2020-2023 which includes the Covid-19 pandemic period, there is a minus GDP value.

3.2 Panel Data Regression Tests

Panel data regression tests that are conducted to determine the best model to be carried out are the Chow Test, Hausman Test and Lagrange Multiplier test.

Table 3. Chow Test

Test	Statistic	Probability
F Test	34.00	0.0000

The Chow test is conducted to determine whether the common effect model or fixed effect model used in this study. From the table above, the significance of the Chow test is 0.0000, which means that the fixed effect is the best model.

The Hausman test is conducted to determine whether the fixed effect or random effect model is the best model.

Table 4. Hausman Test

Test	Chi-Square Statistic	Probability
Cross Section Random	21.45	0.0032

From the Hausman test results above, it can be seen that the significance value of the Hausman test is 0.0032, which is less than 0.05, which means that the fixed effect model is the best. Based on the results of the Chow test and the Hausman test, the results show the same result, which is that the fixed effect model is the best model, so the Lagrange multiplier test is not conducted.

3.3 Empirical Result

Table 5. Hypothesis Test Results

Variabel	Coefficient	T-Stat	Prob
Sustainable	12.78662***	2.78	0.005
ESG	-.0440358	-1.14	0.253
SOEs	-.8797366	-0.64	0.522
Rating	-.5240023***	-5.58	0.000
ModDuration	.5696592**	2.19	0.028
Issue Term	-.0046777	-0.04	0.971
Leverage	.0025394	0.05	0.960

Variabel	Coefficient	T-Stat	Prob
ROE	.0233374*	1.85	0.064
GDP	-.2405383***	-10.10	0.000
Inflasi	.092395***	3.10	0.002

*Standard errors are in parentheses : *** $p < .01$, ** $p < .05$, * $p < .1$*

Based on the results of testing the influence of several independent and control variables on the dependent variable—while accounting for variance, time invariance factors, and endogeneity factors¹—it was found that Hypothesis I, which states that sustainable bonds have a lower YTM (negative sustainable premium) compared to conventional bonds, is rejected. The results of the hypothesis test indicate that the sustainable bond variable has a coefficient of 12.78662, with a p-value of 0.005. This signifies a positive and significant relationship between sustainable bonds and YTM, implying a positive sustainable premium.

Sustainable bonds have a higher YTM compared to conventional bonds, meaning they do not exhibit a negative sustainable premium. A similar finding was reported by Grishunin et al. (2023), who observed that most green bonds in the European region between 2007 and 2021 did not have a negative greenium. Although this finding contrasted with the previous study that negative sustainable premium as well as negative greenium (Ahmadi and Feldhutter, 2023; Zerbib, 2018, ADB 2022), it should be also noted the investors' perception regarding projects funded by the sustainable bonds. The presence of a high YTM or positive sustainable premium for sustainable bonds may be attributed to investors' perceptions that projects funded by sustainable bonds carry higher risks due to the substantial costs required for funding. Additionally, the study's timeframe—during the COVID-19 period (2020–2022) and post-COVID-19 (2023)—was marked by economic uncertainty, including negative GDP growth in 2020 and rising inflation after the pandemic (O'Hara & Zhou, 2021; Tran & Uzmanoglu, 2023; Zhou et al., 2022). However, when examining the year-over-year movement of sustainable bond YTMs, a downward trend is observed, suggesting a decline in risk as the economy stabilizes post-pandemic.

Moreover, the excess supply of sustainable bonds may have contributed to their high YTM. Data from the Indonesia Stock Exchange (IDX) from 2020 to 2023 indicate that 1,018 bonds were issued by listed companies, of which 888 were sustainable bonds and only 130 were conventional bonds. This could lead to higher YTM, as an increase in bond supply, ceteris paribus, drives down bond prices and raises yields (Fabozzi et al., 2007). It is reasonable to assume that, during this period, corporate demand for funding surged due to the economic challenges posed by the COVID-19 pandemic. Furthermore, issuing sustainable bonds can enhance corporate reputation, improve regulatory standing, and align with corporate social responsibility (CSR) initiatives (Otoritas Jasa Keuangan RI, 2016).

The hypothesis II, which posits that ESG risk affects the YTM of sustainable bonds, is also rejected, as the p-value (0.253) exceeds the 0.05 significance threshold. This indicates that, while sustainable bonds may enhance an issuer's reputation, ESG risk scores are not yet a critical consideration for investors. This is understandable, given that the ESG risk ratings

¹ Variance refers to how much the dependent variable (Yield) changes or spreads out based on the independent variables in the model it can be understood through the magnitude of coefficients and standard errors. Time invariance refers to variables or factors that do not change over time, meaning their values are constant across different time periods. Endogeneity refers to correlation between multiple explanatory variables and unobserved individual effects in the model.

were only introduced by the IDX in 2020 (Indonesia Stock Exchange, 2021), and therefore, neither issuers nor investors have fully integrated them into their decision-making processes.

Although previous research suggests that ESG values provide additional insights into the risk and performance of bond-issuing companies (Giese et al., 2019; Li et al., 2024; Mendiratta et al., 2021). Indonesian investors appear to lack awareness of this aspect a predominant focus on short-term profits may obscure their ability to recognize sustainable investment opportunities. However, companies that adhere to ESG principles tend to be more resilient to long-term risks, such as climate change, social instability, and regulatory changes. Additionally, ESG investments can bolster corporate reputation and attract investors who prioritize sustainability (Ditlev-Simonsen, 2022).

Interestingly, although ESG risk does not significantly impact YTM, the relationship is negative, suggesting that higher ESG risk correlates with lower YTM. This implies that lower ESG risk has a positive effect on high YTM. Over time, sustainable companies tend to demonstrate better financial performance, as they are more adept at managing risk and capitalizing on emerging business opportunities associated with a shift toward a more sustainable economy (Kumar, 2023).

The hypothesis III, which asserts that state-owned enterprises (SOEs) issuing sustainable bonds have lower YTM than private companies, is also rejected, as the p-value (0.522) exceeds 0.05. This suggests that the type of company does not significantly influence bond YTM. While SOEs are generally perceived as lower-risk entities due to government backing (Q. Wang et al., 2019), investors appear to view their risk level as comparable to that of private companies. Although some SOEs perform well, many still struggle with corporate governance, operational inefficiencies, and financial pressures (Asian Development Bank, 2022a; Wibowo et al., 2024).

Certain variables, including bond ratings, modified duration, GDP, and inflation, have a significant impact on YTM. Bond ratings exhibit a negative relationship with YTM, with a coefficient of -0.5240023 and a p-value of 0.000. This aligns with expectations, as higher-rated bonds carry lower risk, leading to lower yields and higher bond prices. A high bond rating serves as a positive signal to investors, encouraging them to accept lower yields (Sabrina, 2019).

Modified duration has a positive and significant effect on YTM, with a coefficient of 0.5696592 and a p-value of 0.028. This suggests that sustainable bonds with higher modified duration tend to have higher YTM. This can be attributed to the fact that bonds with longer duration exhibit greater price sensitivity to interest rate fluctuations. Consequently, investors demand higher YTM as compensation for this increased risk (Fabozzi et al., 2007). Meanwhile, the bond issuance term does not significantly affect YTM, as it does not influence yield unless market prices and interest rates fluctuate.

Return on equity (ROE) has a positive and significant effect on YTM, with a coefficient of 0.0233374 and a p-value of 0.064. However, given that the p-value slightly exceeds the 0.05 threshold, this relationship is not particularly strong. Similarly, leverage, with a coefficient of -0.0091 and a p-value of 0.849, does not exhibit a significant relationship with YTM. ROE serves as an indicator of corporate profitability, while the debt-to-asset ratio reflects the extent to which a company relies on debt to finance operations. However, neither ROE nor leverage should be considered in isolation when assessing a company's financial health; investors should evaluate multiple indicators before making bond investment decisions.

Regarding macroeconomic factors, GDP and inflation both have significant effects on YTM. GDP has a negative and significant relationship with YTM, indicating that higher GDP

correlates with lower YTM, as stronger economic conditions enhance investor confidence (Greenwood & Vayanos, 2008). Conversely, inflation has a positive and significant effect on YTM, as rising inflation erodes the real value of bond coupon payments, prompting investors to demand higher YTM as compensation. GDP and interest rates are closely linked to inflation; when GDP increases and inflation remains under control, interest rates can be kept low, ultimately exerting downward pressure on YTM.

4. CONCLUSION

Based on the result of this research, it is then concluded that :

1. Sustainable bonds that issued by SOEs in Indonesia during 2020-2023 do not have a lower YTM compared to conventional bonds, meaning there is no sustainable premium associated with them. Instead, sustainable bonds tend to have a higher YTM, indicating that investors perceive them as carrying higher risks. The perception of higher risk may stem from the high costs associated with sustainable projects, economic uncertainties during the COVID-19 period, and an oversupply of sustainable bonds in the market, which affects bond pricing and yields.
2. Despite their potential to enhance a company's positive reputation, sustainable bonds still face skepticism from investors. While the type of sustainable bond significantly impacts YTM by increasing the yields, the ESG risk value itself does not have a significant effect. This suggests that, although ESG considerations may contribute to corporate image and long-term resilience, investors in Indonesia have not yet prioritized ESG risk factors when evaluating bonds. Instead, factors such as credit ratings, bond duration, GDP, and inflation play a more critical role in determining bond yields.
3. State-owned enterprises (SOEs) issuing sustainable bonds do not have a lower YTM compared to private companies, as investor perceptions of risk remain similar for both. Although SOEs are often viewed as safer due to government backing, many still face corporate governance challenges and financial pressures, making them no less risky than private issuers.
4. Given the high YTM of sustainable bonds, the managerial implication of this study suggests that issuers must carefully consider the implications for funding costs, as higher yields can lead to lower bond prices and reduced investor attractiveness. In order to increase investor interest, companies should improve communication about ESG risks and the implementation of sustainable projects, reinforcing the long-term value of sustainable bonds in addressing environmental and social challenges.

5. LIMITATION

This study has main limitation is the time period used in this study, namely from 2020 to 2023. During this period, the Covid-19 pandemic occurred which had a significant impact on the business world because the existing risks increased, while macroeconomic conditions also worsened. It is hoped that further research can increase the observation period so that it can provide a clearer picture of sustainable bonds and ESG risks

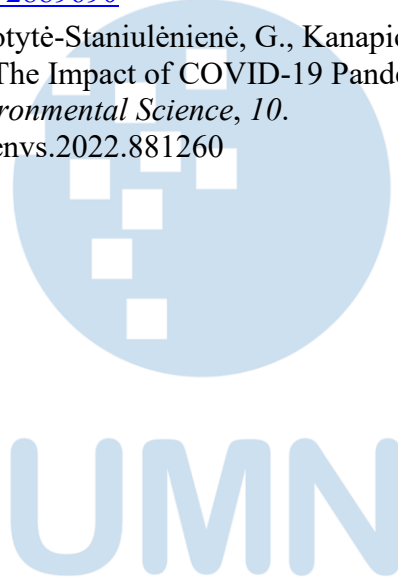
6. REFERENCES

- Asian Development Bank. (2022). Recent Developments in ASEAN+3 Sustainable Bond Markets. *Asia Bond Monitor*.
- Ahmadi, A., & Feldhütter, P. (2023). The Pricing Of Sustainability-Linked Bonds An Empirical Investigation. *Master Thesis Copenhagen Business School*.

- Asian Development Bank. (2022a). Green Bond Market Survey For Indonesia Insights On The Perspectives Of Institutional Investors And Underwriters Green Bond Market Survey for Indonesia. *ADB Publication*. www.adb.org
- Asian Development Bank. (2022b). Unlocking The Economic And Social Value Of Indonesia's State-Owned Enterprises. *ADB Publication*.
- Baker, M., Bergstresser, D., Serafeim, G., Wurgler, J., Library, B., & Hall, M. (2018). Financing the Response to Climate Change: The Pricing and Ownership of U.S. Green Bond. *National Bureau of Economic Research, NBER Working Paper No. 25194*. <https://ssrn.com/abstract=3274420>
- Climate Bond Initiatives. (2021). ASEAN Sustainable Finance State of the Market 2021. *Climate Bond Initiatives*.
- Ditlev-Simonsen, C. D. (2022). A Guide to Sustainable Corporate Responsibility From Theory to Action. *Palgrave Macmillan*.
- Dorffleitner, G., Utz, S., & Zhang, R. (2022). The pricing of green bonds: external reviews and the shades of green. *Review of Managerial Science*, 16(3), 797–834. <https://doi.org/10.1007/s11846-021-00458-9>
- Fabozzi, F. J., Anson, M. J. P., Kenneth, E., Dunn, B., Lynch, J. H., Malvey, J., Pitts, M., Ramamurthy, S., Sella, R. M., & Steward, C. B. (2007). Fixed Income Analysis. *CFAI Nstitute Investment Series*.
- Flammer, C. (2020). Corporate Green Bonds. *Journal of Financial Economics (JFE)*, IV. <https://ssrn.com/abstract=3125518>
- Ge, Y., Liu, Y., Qiao, Z., & Shen, Z. (2020). State ownership and the cost of debt: Evidence from corporate bond issuances in China. *Research in International Business and Finance*, 52. <https://doi.org/10.1016/j.ribaf.2019.101164>
- Giese, G., Lee, L.-E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance. *The Journal of Portfolio Management*, 45(5).
- Greene, W. H. . (2012). *Econometric analysis*. Prentice Hall.
- Greenwood, R., & Vayanos, D. (2008). *Bond Supply and Excess Bond Returns*. <https://doi.org/https://doi.org/10.1093/rfs/hht133>
- Grishunin, S., Bukreeva, A., Suloeva, S., & Burova, E. (2023). Analysis of Yields and Their Determinants in the European Corporate Green Bond Market. *Risks*, 11(1). <https://doi.org/10.3390/risks11010014>
- Indonesia Stock Exchange. (2021). Laporan Keberlanjutan 2020 : Raih Masa Depan Berkelanjutan Melalui Transformasi Digital. *Indonesia Stock Exchange*.
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis Of Decision Under Risk. *Econometrica*, Volume 47.
- Kumar, S. (2023). A Review ESG Performance As A Measure Of Stakeholders Theory. In *Academy of Marketing Studies Journal* (Vol. 27, Issue S3).
- Lhutfi, I., Ludigdo, U., Rusydi, M. K., & Baridwan, Z. (2024). Investment and sustainability: CSR, SDGs and the ESG Score in Indonesia. *Cogent Business and Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2328311>
- Li, Y., Guo, X., Huang, W., & Ma, X. (2024). ESG rating and short selling in the corporate bond market. *Finance Research Letters*, 61. <https://doi.org/10.1016/j.frl.2024.104998>

- Löffler Kristin. (2022). The Pricing of Green Bonds at Issuance Is There Underpricing or a “Greenium”? *Master Thesis Business Administration Jonkoping University*.
- Mendiratta, R., Varsani, H. D., & Giese, G. (2021). Special Issue on Climate: Part 2 How ESG Affected Corporate Credit Risk and Performance. *The Journal of Impact and ESG Investing, Special Issue on Climate: Part 2*.
- Mishkin, F. S., & Eakins, S. G. (2018). Financial Markets and Institutions. *The Pearson Series in Finance Corporate Finance, Ninth Edition*. www.myfinancelab.com
- Mulyono, M. (2023). The Challenging Time for Indonesia Government Bond During Covid-19 Pandemic. *Binus Business Review*, 14(2), 185–192. <https://doi.org/10.21512/bbr.v14i2.8821>
- Oktavio, L., & Riyanti, R. S. (2021). Determinants of Green Bond Premium in the ASEAN Market Amidst the COVID-19 Pandemic. *Jurnal Keuangan Dan Perbankan*, 25(4), 734–753. <https://doi.org/10.26905/jkdp.v25i4.6356>
- Olschewski, S., Jakob, L., & Schmidt, U. (2023). Investor Preferences for Positive Social Externalities and State-Owned Enterprises’ Facilitated Access to Capital. *Journal of Economic Psychology*, 94. <https://doi.org/10.1016/j.joep.2022.102575>
- Otoritas Jasa Keuangan RI. (2016). Pengembangan Green Bonds di Indonesia. In *Bidang Pengawasan Sektor Pasar Modal Otoritas Jasa Keuangan*.
- Ozili, P. K. (2022). Theories of Sustainable Finance. *Managing Global Transition, SSRN*. <https://ssrn.com/abstract=4055371>
- Park, S. (2009). Green Bonds and Beyond: Debt Financing as a Sustainability Driver. *Cambridge Handbook of Corporate Law, Corporate Governance and Sustainability (Cambridge University Press, 2019, Chapter 42)*. <https://ssrn.com/abstract=3383561>
- Parmar, Bidhan. L., Freeman, E. R., & Harrison, J. S. (2010). Stakeholder Theory: The State of the Art. *Management Faculty Publication*, 99. <https://scholarship.richmond.edu/management-faculty-publications>
- Purba, A. V. (2020). Fixed Income Risk & Portfolio Management. *Dirjen Perbendaharaan Negara Kementerian Keuangan RI*.
- PwC Indonesia - ESG Team. (2023). ESG in Indonesia: Access to Finance 2023. *ESG and Access to Finance*.
- Roggi, O., Bellardini, L., & Conticelli, S. (2024). The effects of ESG performance and sustainability disclosure on GSS 1 bonds’ yields and spreads: A global analysis. *SSRN*. <https://ssrn.com/abstract=4891243>
- Sabrina, S. (2019). Analysis Of The Effect Of Corporate Governance On Yield To Maturity Through Bond Rating In Indonesian Financial Institution. *Advances in Economics, Business and Management Research*, 100.
- UNDP. (2024). Asia In Focus: ESG Investing And The Business And Human Rights Agenda. *UNDP Report : Asia In Focus*.
- Von Münchhausen, S., Volk, C., Pop, O., Vosburg, K., Barr, C., & Garz, H. (2024). ESG Risk Ratings: Methodology Abstract Version 3.1. *Sustainalytics Morningstar*.
- Wang, D., & Li, P. (2020). The Benefits of Issuing Green bonds: Evidence From China Green bonds Market. *SSRN*. [https://doi.org/Wang,DongandLi,Ping,TheBenefitsofIssuingGreenBonds:EvidenceFromChinaGreenBondsMarket\(September30,2020\).AvailableatSSRN:https://ssrn.com/abstract=3710646orhttp://dx.doi.org/10.2139/ssrn.3710646](https://doi.org/Wang,DongandLi,Ping,TheBenefitsofIssuingGreenBonds:EvidenceFromChinaGreenBondsMarket(September30,2020).AvailableatSSRN:https://ssrn.com/abstract=3710646orhttp://dx.doi.org/10.2139/ssrn.3710646)

- Wang Juan Wu, L. (2022). Investor ESG Tastes and Asset Pricing: Evidence from the Primary Bond Market. *SSRN Electronic Journal*.
- Wang, Q., Zhou, Y., Luo, L., & Ji, J. (2019). Research on the factors affecting the risk premium of China's green bond issuance. *Sustainability (Switzerland)*, 11(22). <https://doi.org/10.3390/su11226394>
- Wibowo, F. A., Satria, A., Gaol, S. L., & Indrawan, D. (2024). Financial Risk, Debt, and Efficiency in Indonesia's Construction Industry: A Comparative Study of SOEs and Private Companies. *Journal of Risk and Financial Management*, 17(7). <https://doi.org/10.3390/jrfm17070303>
- Windmar, C., & Fischer, T. (2023). ESG Performance and Corporate Bond Spreads. *Lund University School of Economic and Management*.
- Zerbib, O. D., Albrecher, H., Boulier, J.-F., Boubal, M., Cochran, I., Driessen, J., Filipovic, D., Francq, C., Gouriéroux, C., Guéant, O., Kazi-Tani, N., Nicol, M., Petey, J., Pieri, X., Rezgui, B., Robert, C., & Shishlov, I. (2018). Is There a Green Bond Premium? The yield differential between green and conventional bonds. *SSRN*. <https://ssrn.com/abstract=2889690>
- Zhou, Y., Teresienė, D., Keliuotytė-Staniulėnienė, G., Kanapickienė, R., Dong, R. K., & Kaab Omeir, A. (2022). The Impact of COVID-19 Pandemic on Government Bond Yields. *Frontiers in Environmental Science*, 10. <https://doi.org/10.3389/fenvs.2022.881260>



FROM EMISSION TO OFFSET: REINVENTING GREEN STRATEGIES FOR A SUSTAINABLE EDUCATION

Steven Novanolo Mendrofa¹

Politeknik Keuangan Negara STAN, Indonesia
steven_4112230007@pknstan.ac.id

Resi Ariyasa Qadri^{2*}

Politeknik Keuangan Negara STAN, Indonesia
resi.ariyasa@pknstan.ac.id

(*Corresponding Author)

Received on 27 April 2025

Accepted on 26 May 2025

Abstract - This study seeks to estimate carbon emissions generated from electricity consumption and waste disposal activities in student dormitories, assess the carbon sequestration required through reforestation efforts, and examine the role of asset management in supporting the implementation of an eco-office framework. Data were collected through institutional documentation concerning electricity-consuming assets and field observations related to waste management practices. A descriptive quantitative approach was employed to analyze the emission data. The findings indicate that total annual carbon emissions amounted to 394.124 tons of CO₂, with electricity consumption accounting for 98.85% of this total. To offset these emissions, an estimated 40 to 77 trees would need to be planted annually, contingent on the species selected. Asset management was identified as a key component in enhancing energy efficiency, promoting circular waste management systems, and informing reforestation initiatives. These results highlight the urgency for integrated, evidence-based sustainability strategies in higher education institutions, particularly those that incorporate energy monitoring, carbon offset mechanisms, and environmentally responsible asset governance.

Keywords: Carbon; Emission; Offset; Green Strategy; Sustainability.

1. INTRODUCTION

1.1 Introduction

Global warming is one of the main issues facing the world today, characterized by an increase in the average temperature on the earth's surface due to the accumulation of greenhouse gases in the atmosphere (Nirmala et al., 2023; Zien & Kirschstein, 2023). The accumulation of these gases, such as carbon dioxide (CO₂), methane (CH₄), and nitrogen oxides (NO_x), contributes to climate change by increasing extreme temperatures, melting ice at the poles, and increasing the frequency of natural disasters (Adjei Kwakwa, 2023; Kwakwa et al., 2023; Sun & Chen, 2023). Human activities, such as motor vehicle emissions (Guo et al., 2024; Lei et al., 2024), fossil-based power plants (Barbera et al., 2022), and forest fires (Abdul-Kadir et al., 2022), are the main causes of the increase in greenhouse gas levels in the atmosphere. This phenomenon not only has an impact on the global environment but also has direct consequences for local ecosystems, including increased air pollution in various cities

(Bainy et al., 2021; Y. Zhang et al., 2022), such as South Tangerang, where the research object, one of the most prestigious vocational schools in Indonesia, is located.

As an educational institution with a large number of students, activities at the research object, the State Public Finance College, also contribute to carbon emissions through daily mobility, electricity consumption, and waste production. With the existence of a student dormitory since 2021, activities on campus have increased, which contributes to high electricity usage and increased solid waste production. This factor triggers negative externalities in the form of an increased carbon footprint which can impact the health of the surrounding environment (Hacopian Dolatabadi et al., 2023; Paniagua & Rayamajhee, 2024; Somerville & Wetzel, 2022). The use of fossil-based energy in campus operations and student consumption patterns in dormitories are challenges for environmental sustainability, which, if not properly managed, can further exacerbate the impact of climate change at the local level (Edo et al., 2024; Huang et al., 2022; Singh & Singh, 2022).

Previous research shows that most research on carbon emissions in academia focuses on lecture activities, such as the use of electronic devices in the classroom and the mobilization of student vehicles (Aji et al., 2024; Ismail, 2020; M. Rahayuningsih et al., 2021). However, there has been no research specifically examining the impact of carbon emissions produced by dormitory life, especially at the State Public Finance College, which combines academic activities and student life in one environment. In addition, previous research has focused more on the resulting carbon emissions, without considering the aspect of carbon sequestration as a factor in mitigating environmental impacts (Khalil et al., 2022; Kjerstadius et al., 2017; Ma et al., 2022). Thus, there are still gaps in the literature that need to be filled through research that integrates the calculation of emissions and carbon sequestration needs in a more comprehensive study.

This study offers novelty in three main aspects. From a theoretical perspective, this study develops an understanding of the relationship between carbon emissions and carbon sequestration in the higher education environment, which has so far focused more on the industrial and urban sectors (X. Li et al., 2015; Silaydin-Aydin & Çukur, 2012; X. Zhang & Zhang, 2023). In terms of method, this study adopts a quantitative approach by calculating the carbon emission estimates from dormitory activities and comparing them with the carbon absorption capacity of green spaces available on campus (Baldocchi & Penuelas, 2019; He et al., 2022; Mallick et al., 2024). Empirically, this study is the first in the context of the State Public Finance College to examine how carbon emissions from student activities can be offset by green space management strategies and eco-green campuses. (Ali et al., 2022; Murphy, 2024; Natarajan et al., 2022)

Using the constructivism paradigm, in reference to Qadri and Jauhari (2020), this study aims to construct and explain the extent to which dormitory activities at the State Public Finance College contribute to carbon emissions and the need for carbon sequestration to offset their impact. This study uses a non-inferential quantitative method with a carbon estimation approach that includes the use of electricity and solid waste disposal in the college dormitory (Amaral et al., 2023; Gherheş et al., 2024; Washington-Ottombre, 2024). In practical terms, the results of this study are expected to provide input for the management of campus assets in implementing the eco-office and green building concepts, as well as to serve as a basis for policy-making in reducing the environmental impact of academic activities and student life in dormitories (Paredes-Canencio et al., 2024; Xue et al., 2024).

1.2 Literature Review

The Resource-Based View (RBV) theory is one of the main approaches in strategic management, emphasizing the importance of internal resources in creating sustainable competitive advantage. Penrose (2009) first introduced this concept, which was later reinforced by Barney (1991) through a model that explains that valuable, rare, difficult to imitate, and non-replaceable (VRIN) resources are the main factors in creating competitive advantage. Mahoney and Pandian (1992) developed this theory by dividing RBV analysis into three main perspectives, namely strategic management, economic organization, and industry. In the context of environmental sustainability, the concept of carbon offsetting can be seen as a strategic resource that improves the company's image in the eyes of stakeholders and supports compliance with environmental regulations (Peteraf & Barney, 2003).

The asset management theory is an important aspect in organizational management, especially in educational institutions such as the State Public Finance College. Assets can be movable or immovable goods that must be managed optimally to provide maximum benefits for the organization (Pambudi et al., 2017). Asset management involves various stages, such as inventory, legal audit, assessment, optimization, and asset supervision and control (Aryani-Soemitro & Suprayitno, 2018). The concept of life cycle asset management is a relevant approach in maintaining the value of assets throughout their life cycle, so that the efficiency and effectiveness of assets can continue to increase (Siregar, 2004). In this context, the college can implement a sustainability-based asset management strategy by utilizing green spaces as part of the carbon emission reduction initiative.

The *Evidence-Based Policy* approach is increasingly being applied in policy formulation, including in the aspects of the environment and energy efficiency (Handoyo, 2009). Evidence-based policy utilizes empirical data obtained from academic research and studies to ensure that decisions are more objective and effective (Budi & Fauzela, 2020). In its application, this approach involves various sources of evidence, such as scientific research results, actual data, and input from experts and stakeholders (Hernawan et al., 2022). With increasing attention to environmental issues, policies oriented towards carbon emission reduction and energy efficiency are a priority for many institutions, including higher education institutions such as the State Public Finance College, which has begun to implement the concepts of *green building* and *eco-office* in accordance with applicable regulations (Hafez et al., 2023). Carbon emissions are one of the main factors contributing to global warming, with the main sources coming from transportation activities, electricity consumption, and waste management (Naderipour et al., 2021). In the context of a campus, sources of carbon emissions include the use of electronic devices, lighting, air conditioning, and student and staff vehicles (Y. Li et al., 2024). Waste management is also a challenge in reducing carbon emissions, especially those from the disposal and incineration of domestic waste (Yang et al., 2018). Therefore, an approach that combines emission reduction strategies with increasing carbon sequestration through green spaces is becoming an increasingly applied solution, in line with stricter environmental policies in various sectors (United Nations, 2022).

In an effort to support environmental sustainability, the concept of *Benefit Transfer* is one approach that can be used to assess the impact of environmental policies based on previous research results (Boutwell & Westra, 2013). This method allows policymakers to apply research results from other locations with similar characteristics to estimate the benefits of an environmental policy or initiative (Latham, 2001). By using this approach, carbon management and energy efficiency strategies can be more measurable in their implementation. In addition, the theory of environmental sustainability, which includes the anthropocentric, biocentric, and ecocentric perspectives, provides a basis for understanding

the relationship between humans and the environment, as well as how ecological balance can be maintained through evidence-based policies.

This study is structured based on the background, theory, and results of previous research by developing a relevant research framework and scheme. Since the implementation of the dormitory system at the State Public Finance College in 2021, the activities of dormitory residents have increased, which has contributed to the increase in carbon emissions. Dormitory residents follow a set academic and non-academic schedule, with regulations on the number and type of devices that are allowed to be brought for study purposes or personal use. Electricity consumption in the dormitory, both for educational needs and daily activities, generates additional carbon emissions outside of teaching and learning hours. In addition, the production of waste from food and plastic waste is another factor that contributes to the carbon footprint of the dormitory environment. In this study, we estimate the carbon emissions resulting from the use of electricity and dormitory waste by utilizing an online carbon emissions calculator. In addition, this study also analyzes the potential for carbon sequestration on campus through green open spaces, especially tree vegetation, to identify the balance between the resulting emissions and the available carbon sequestration capacity. The results of this study are expected to provide strategic recommendations in the management of dormitory assets and sustainability policies that support the mitigation of carbon emissions at the college.

2. RESEARCH METHODOLOGY

Research conducted by Scvotland (2012) explains that research is described as an in-depth approach to understanding various phenomena, influenced by the paradigm chosen by the researcher. Research is considered good if it produces strong evidence, offers credible and accountable explanations, and allows the results to be used in different situations (external validity). The research paradigm consists of four main components: ontology, epistemology, methodology, and method (Qadri, 2019b, 2019a, 2020). Ontology relates to an understanding of reality, while epistemology discusses how knowledge is obtained (Hidayat & Qadri, 2020; Qadri, 2024; Qadri & Murwaningsari, 2023). Methodology is the strategy or plan underlying the selection of a particular method, while method refers to the techniques used to collect and analyze data (Ananta & Qadri, 2024; Daulay & Qadri, 2024; Pratiwi & Qadri, 2024).

The constructivism research paradigm emphasizes that knowledge is not found as an absolute truth, but is constructed through social interaction and individuals' subjective perceptions of the world (Maharani & Qadri, 2024; Qadri & Jawak, 2024; Rahmithasari & Qadri, 2024). In the context of our research, the constructivism paradigm allows researchers to understand more deeply the environmental impacts resulting from the activities of dormitory users, especially in the context of electricity consumption and dormitory waste disposal (Anjani, Fitrijanti, et al., 2024; Anjani, Qadri, et al., 2024; Wardhani et al., 2022). Through the constructivist paradigm, this study can explore how experts interpret and respond to the concept of *carbon offset*, both individually and collectively, which can then influence how to conduct carbon assessments from the perspective of energy consumption and waste disposal. In addition, the constructivist approach allows for flexibility in data analysis, which is important in understanding the complexity of dormitory residents' behavior regarding electricity and waste use. In this study, the constructivism paradigm provides room for researchers to interpret data not only from a quantitative point of view, but also from the personal narratives of experts regarding environmental impacts. In-depth interviews are used to obtain subjective and contextual data, which will then help researchers identify the perspectives and values that underlie the thinking of experts regarding the practice of carbon

assessment in terms of electricity consumption and waste disposal. Thus, the constructivism paradigm will help researchers to explore further how the actions of dormitory residents can contribute to reducing their carbon footprint in terms of electricity consumption and waste disposal, while opening up new horizons regarding the challenges of implementing *carbon offset* strategies that are in line with their needs.

We conducted this research using the case study method. Research with a case study approach has the main objective of producing a comprehensive and in-depth analysis of a specific case. The case studied can be a program, event, activity, process, or individual that has clear time and place limitations. In the process, this research involves detailed data collection with structured procedures, carried out within a specific predetermined time frame. Focusing on a single case with a specific setting allows researchers to gain a more in-depth understanding of the unique aspects of that context. In addition, the case study approach allows researchers to uncover the complexity of phenomena that cannot be explained by other methods. Through a combination of various data collection methods, such as in-depth interviews, direct observation, and document analysis, case study research provides a broader and more holistic insight. This integrated approach helps researchers identify relationships and dynamics that may be hidden, so that the understanding of the phenomenon under study becomes richer and more comprehensive.

The type of data used in this study is primary data, which consists of data collected directly from the field (calculations and inventories). Then the secondary data method, which consists of literature research and data from relevant and used agencies. This study also uses descriptive quantitative methods, which is a type of quantitative research designed to formulate research problems in order to explore or describe the social situation under study in a comprehensive, broad, and in-depth manner. Quantitative research methods such as descriptive ones aim to systematically outline the facts or characteristics of a particular population or field in a factual and accurate manner. This study uses primary data that will be taken directly in the field, such as the number and documentation of assets that use electricity and the quantity of waste disposal at the college dormitory. This study also uses secondary data from the college management, including: (1) list of assets that use electricity in each flat/dormitory building (air conditioning, lights, and washing machines); (2) electricity usage data in each flat/dormitory building; and (3) data on the number of active students in the dormitory.

In its implementation, we conducted research with several limitations. The calculation of the carbon emissions of the dormitory will be limited to the available data provided and also the estimated use of devices by each student in the dormitory according to the limitations of luggage entering the dormitory. Then, for waste management, it will be taken from the collection of waste disposal in the dormitory within a certain period of time. The amount will be adjusted or weighed, depending on the waste management carried out in the dormitory building. Carbon emissions are calculated using the emissions calculator provided by the Ministry of Environment and Forestry (KLHK) via <https://jejakkarbon.id/> and WRI Indonesia via <https://nol-emisi.id/>. In this study, we will not test the tools used, because the testing domain is under the authority of the ministry itself. The use of these two *online* emission calculators is based on the completeness of the carbon emission variables to be calculated. The calculation results from the two calculators will be combined and adjusted to the author's limitations and assumptions.

The researchers' decision to utilize online carbon emission calculators, specifically those provided by the Ministry of Environment and Forestry (KLHK) and WRI Indonesia, was grounded in both practical and methodological considerations. These tools offer

government-endorsed credibility and are widely recognized for their standardized approaches to estimating emissions based on electricity consumption and waste generation. Their accessibility and comprehensive input parameters made them particularly suitable for quantifying emissions in a dormitory setting, where data on electrical appliances and waste production could be readily matched to the calculator's requirements. Furthermore, by using established tools, the researchers ensured consistency and replicability of results while avoiding the need for independent validation, as the calculators themselves are considered authoritative by the institutions that developed them.

However, the use of these calculators is not without limitations. The tools operate on fixed assumptions and general emission factors, which may not reflect specific regional energy profiles or the unique conditions of the research site. For example, they do not account for variations in appliance brand, capacity, or efficiency, nor do they adjust for fluctuations in usage patterns such as holidays or reduced occupancy. Input options are limited to predefined categories, offering little room for customization or the inclusion of nuanced variables such as behavioral practices or energy-saving measures already in place. Additionally, the calculators assume uniform and continuous use of devices, which may oversimplify real-world dormitory operations. As such, while these tools provide a credible baseline for estimating carbon emissions, their inherent constraints must be acknowledged in interpreting the study's findings and formulating policy recommendations.

The Directorate General of Climate Change Control (DJPP) is a work unit of the Ministry of Environment and Forestry that deals with climate change, especially in the implementation of mitigation, adaptation, reduction of greenhouse gas emissions, reduction and elimination of ozone-depleting substances, resource mobilization, greenhouse gas inventory, monitoring, reporting and verification of climate change mitigation actions as well as control of forest and land fires. The establishment of the DJPP brings new hope for the implementation of well-managed climate change control activities in support of development goals in the environment and forestry sectors. The development of the Carbon Footprint Calculator 2.0 is the result of cooperation between the Government of Indonesia and the Federal Government of Germany. The following *online* emission calculator requires data in the form of the quantity of equipment used (for calculating emissions generated by electricity) in units of pieces and time and data in the form of quantity in units of kilograms for the calculation of waste disposal.

Established in 2014 under the name of the World Resources Institute Foundation, WRI Indonesia is an independent organization that focuses on research to achieve a balance between environmental protection, economic development, and improving the quality of human life. By promoting transparent and data-based research results, WRI Indonesia is committed to supporting policies that are scientific and relevant. In addition, the organization forges strategic partnerships with the government, business sector, and community to promote sustainable solutions that can provide widespread benefits. As part of the World Resources Institute (WRI) global network, WRI Indonesia targets various environmental and development challenges in Indonesia, such as climate change, land management, renewable energy, and sustainable urban development. With an evidence-based, technological, and data-driven approach, WRI Indonesia strives to protect the environment while meeting the needs of present and future generations. Its main mission is to create prosperity in harmony with environmental preservation and its carrying capacity for future generations. As a form of service to realize its vision and mission, WRI Indonesia has developed an application that is available for free on the *website* and can be downloaded on mobile devices to calculate daily carbon emissions in a practical way. The calculation on this page requires data in the form of

a research period, the number of users, the number of devices that use electricity in units of pieces, and also the estimated usage of devices in units of time per hour. The calculation results will be adjusted to the author's limitations and assumptions.

This research has several limitations and assumptions in the process of its implementation, so that the calculation results are close to and in accordance with the actual situation. Some of the limitations and assumptions in this study include: (1) data collection based on data provided by the college (according to the attached official memorandum) and data directly in the field with the help of active dormitory students on behalf of Rick Purba and Debora Sihotang as senior dormitory assistant; (2) data on the number of state property using electricity is calculated directly from the documentation that has been taken, adjusted to the actual circumstances (counted for attached goods/equipment); (3) data on the amount of waste disposal is collected by sampling for a week, looking at the different waste trends per day. The amount/mass of waste is multiplied according to the number of trash bags per day for all flats/dormitory buildings; (4) the use of electronic devices by college dormitory students is assumed to be one laptop and one *mobile phone* in accordance with the dormitory's luggage regulations, with the ability to recharge once a day. The calculations in this study assume the number of active days and holidays based on the academic calendar. We separates two types of academic holidays, which are divided into short and long holidays. For short holidays, the amount of electricity usage is adjusted to the number of students who remain based on information obtained from the dormitory management. Long holidays are considered as time when the dormitory building is not in use; (5) the calculation for carbon emissions based on appliances that use electricity and waste disposal is done with the features available in the *online* carbon emissions calculator, with the unit of calculation without considering the label/brand, capacity, and age of the goods; and (6) the result of the carbon emission calculation will be multiplied by the level of availability (vacancy) based on the schedule on the academic calendar and other assumptions.

In this study, we used a descriptive quantitative method. Descriptive quantitative research is a method used to understand a phenomenon by describing characteristics, patterns, or trends based on numerical data. This approach does not involve variable manipulation, but rather focuses on the systematic collection of information through surveys, observations, or secondary data analysis. The research results are then analyzed using descriptive statistics such as average, median, mode, and frequency distribution to identify trends that appear in the data. This method is often used in various fields, such as economics, health, and social sciences, to provide an empirical description that can be the basis for further research. Due to its exploratory nature, this approach helps in understanding situations or phenomena without drawing causal conclusions between the variables under study. More than just describing data, descriptive quantitative research plays an important role in designing evidence-based policies, business strategies, or social interventions. For example, in the health sector, this method can be used to map disease patterns in a population, thus providing a basis for planning prevention programs. In the economic field, this research can reveal trends in community consumption based on certain demographic categories. By providing an accurate overview, this approach enables researchers and policymakers to formulate more targeted measures based on measurable findings. Although it does not test causal relationships, descriptive quantitative research remains an essential tool in understanding phenomena broadly and systematically.

Data analysis starts from preparing a list of the use of electronic devices available and used by the dormitory building. We made a request for data on state-owned goods that use electricity and also data on waste disposal. In addition to making requests for data, We also conducted direct observations to obtain primary data documentation in the field. After

obtaining the primary data, We curated and reduced the data for presentation in writing. The data on state property and the amount of waste disposal were selected and recalculated based on the limitations and assumptions set in conducting this research. The calculation of estimated carbon emissions in this study was based on the data on the number of state property that had been calculated and collected, then input into the carbon emission calculator that we had selected according to the calculation needs. The calculation was divided based on the type of device with time provisions according to the regulations in the dormitory. The process of charging student electronic devices was calculated based on the number of students in the dormitory, with the number of charges being once per day. Carbon sequestration needs are calculated based on the data on sequestration capacity obtained in previous studies. The amount of carbon sequestration capacity is adjusted per type of plant/tree. The estimated amount of carbon emissions is then divided by the carbon sequestration capacity per type of tree, to obtain the estimated number of trees needed in the college environment.

3. RESULT AND DISCUSSION

Based on the results of direct observation and documentation obtained, this study records a recapitulation of the number of State Property (short) that uses electricity in six dormitory buildings. The components observed are limited to the main equipment commonly used by dormitory residents, namely air conditioners (AC), 5–10 watt and 10–15 watt light bulbs, washing machines, and water dispensers. The data was obtained from a combination of field observations and the assistance of active students residing in each flat. This approach provides a fairly detailed picture of the profile of electricity consumption in student residential environments. In Dormitory Flat 1, there were 27 air conditioners, 264 10-15 watt light bulbs, 12 washing machines, and 1 water machine. Flat 2 also has a considerable electricity consumption with 45 air conditioners, 124 5–10 watt light bulbs, 7 washing machines, and 1 water machine. Flat 3 is equipped with 49 air conditioners, 105 5–10 watt light bulbs, 10 washing machines, and 1 water machine. These three flats show the trend of using air conditioners as devices with high power consumption that are widely used, as well as main lighting supplied by energy-saving lamps.

Furthermore, Flat 4 is recorded as the flat with the most air conditioners, namely 56 units, accompanied by 202 5–10 watt lamps, 14 washing machines, and 1 water machine. Flat 5 has different characteristics, with 30 air conditioners and lighting supported by 305 10–15 watt lamps—the most for the lamp category—as well as 9 washing machines and 1 water machine. Meanwhile, Flat 6 recorded the use of 33 air conditioners, 310 10–15 watt lamps, 8 washing machines, and 1 water machine. The existence of these facilities shows that all flats have considerable energy needs to support the daily operations of their residents. Overall, the total accumulation of electrical devices in the six flats consists of 240 air conditioners, 1,324 light units (combined 5–10 watts and 10–15 watts), 60 washing machines, and 6 water machines. The data in **Table 1** reflects the high intensity of electrical energy use in supporting the comfort, cleanliness, and daily activities of students in the college dormitory. This finding also serves as the basis for calculating the estimated carbon emissions resulting from the operation of these buildings.

Table 1. Total Number of State-Owned Properties Using Electricity

No.	Type	Quantity
1.	Air Conditioner in Men Flats	240
2.	Air Conditioner in Women Flats	431
3.	Lamps (5-10 watt)	879
4.	Lamps (10-15 watt)	60
5.	Washing Machines	6

6. Water Machines

240

Source: Research Analysis 2024

Table 2. Average Quantity of Waste Disposal for Male and Female Dormitories

No.	Days	Quantity (kg)	
		Male	Female
1.	Monday	3,6	4,7
2.	Tuesday	4,6	6,5
3.	Wednesday	5	6,1
4.	Thursday	5	6,1
5.	Friday	6,2	8
6.	Saturday	5	4
7.	Saturday	5	4
Average		4,9	5,6

Source: Research Analysis 2024

The data on the number of active students in the dormitory in the 2024/2025 academic year shows that there are 860 students divided into six dormitory buildings in the college environment. In this study, we assumes that students use personal electricity based on the number of gadgets they bring and use during lectures. One of the basic assumptions about the number of gadgets brought by dormitory students refers to one of the rules of dormitory life. In 2023, the college dormitory manager issued Announcement Number Peng-107/Pkn/2023 concerning the Provisions for Entering the Dormitory for State Public Finance College Students of the 2023/2024 Academic Year which contains a list of luggage that students are allowed to bring into the dormitory. Based on the information obtained through active dormitory students who were informants in this research, the regulations for luggage were only distributed in the form of a regular *file* and not as regulations, but with the same contents and list of luggage.

The regulation states that college dormitory students are required to bring *mobile phones* and laptops as a means of supporting the teaching and learning process while at the college. Based on this regulation, we assumes that each of the 860 dormitory students bring one *mobile phone* and one laptop with them while living in the dormitory, and charge them at least once a day for each device. Based on this assumption, the calculation of the personal electricity usage of dormitory students is calculated at two devices per person, with a charging frequency of once a day, for a number of active days of teaching and learning at the college.

Jejak Karbon. Beranda Kalkulator Panduan Sign In  English

Do you know how much electricity is consumed in kWh units?

☐ Yes, I know

☒ No, I don't know

Province

Banten

Use complete spelling. ex: Jawa Barat not jabar

Number of 5-10 Watt Lamps (Unit)	Estimated Usage (kWh/month)	Number of AC 1/2 PK (Unit)	Estimated Usage (kWh/month)
431	1034.40		0.00
Number of 10-15 Watt Lamps (Unit)	Estimated Usage (kWh/month)	Number of AC 3/4 PK (Unit)	Estimated Usage (kWh/month)
879	3164.40		0.00
Number of 15-20 Watt Lamps (Unit)	Estimated Usage (kWh/month)	Number of AC 1 PK (Unit)	Estimated Usage (kWh/month)
	0.00	240	46080.00

Jejak Karbon. Beranda Kalkulator Panduan Sign In English

Number of Refrigerators (Units)	Estimated Usage (kWh/month)
	0.00
Number of Televisions (Units)	Estimated Usage (kWh/month)
	0.00
Number of Water Pumps (Units)	Estimated Usage (kWh/month)
6	351.00
Number of Washing Machines (Units)	Estimated Usage (kWh/month)
60	675.00
Electricity usage in a month (kWh)	
51304.80	
Emissions from electricity use in a month (tCO ₂)	
41.044	

Figure 1. Calculation of Estimated Carbon Emissions of BMN During Activity

Source: <https://jejakkarbon.id/>

In this study, we calculated the estimated carbon emissions from waste in the dormitory buildings. In practice, college's waste has no organized recording, separation, or processing. We used a sampling method by recording the mass of waste disposal in the men's and women's dormitories, in different time spans and days, in order to see the trend of waste mass in the dormitories, which was then used as the basis for calculating carbon emissions later. We conducted observations based on documentation carried out by active dormitory students to obtain the quantity. Based on the results of the average of the following sample data, we used it as the basis for calculating the estimated carbon emissions from waste disposal per apartment building. It was found that for each female apartment, the average waste disposal was 5.6 kg per week, and for male apartments, it was 4.9 kg per week (see **Table 2**). The estimated carbon emissions in this study are calculated based on the number of state-owned properties that use electricity and the duration of their use during the teaching and learning activities period.

Jejak Karbon. Beranda Kalkulator Panduan Sign In English



Emission from waste

Do you know how many pounds of rubbish you throw away?

☒ Yes I know

☐ No, I don't know

The amount of waste produced

Waste Type: Household waste (mixed)

Amount of waste (kg): 1303.4

The large emissions produced

Emissions generated from waste (tCO₂): 0.582

Jejak Karbon. Beranda Kalkulator Panduan Sign In English



Emission from waste

Do you know how many pounds of rubbish you throw away?

☒ Yes I know

☐ No, I don't know

The amount of waste produced

Waste Type: Household waste (mixed)

Amount of waste (kg): 1489.6

The large emissions produced

Emissions generated from waste (tCO₂): 0.665

Figure 2. Calculation of Estimated Carbon Emissions from Dormitory Waste

Referring to the Announcement of the Director of the State Public Finance College Number PENG-89/PKN/2024 regarding the academic calendar for 2024/2025, the active teaching and learning process lasts for 38 weeks in an academic year. The calculation data begins with recording the number of BMN components that use electricity, such as air conditioners, lights, washing machines, and water machines, which are then entered into an online emissions calculator: <https://jejakkarbon.id/>, as you can see in **Figure 1**, and **Figure 2**. Because the calculator's results are based on a monthly basis, the total value of carbon emissions per month is 41.004 tons of CO₂ multiplied by the duration of 9.5 months of lecture period or "*Kegiatan Belajar Mengajar*" (KBM), resulting in an estimated annual carbon emission of 389.538 tons of CO₂. In addition to electricity consumption, waste disposal from the dormitories is also taken into account in the carbon emission estimate. With an average waste production of 4.9 kg/day for the men's dormitory and 5.6 kg/day for the women's dormitory, the total accumulated waste during the KBM period reached 1,303.4 kg and 1,489.6 kg respectively. The results of the calculation using the emission calculator show that waste from the men's dormitory contributed 0.582 tons of CO₂, while the women's dormitory produced 0.665 tons of CO₂ during the KBM period.

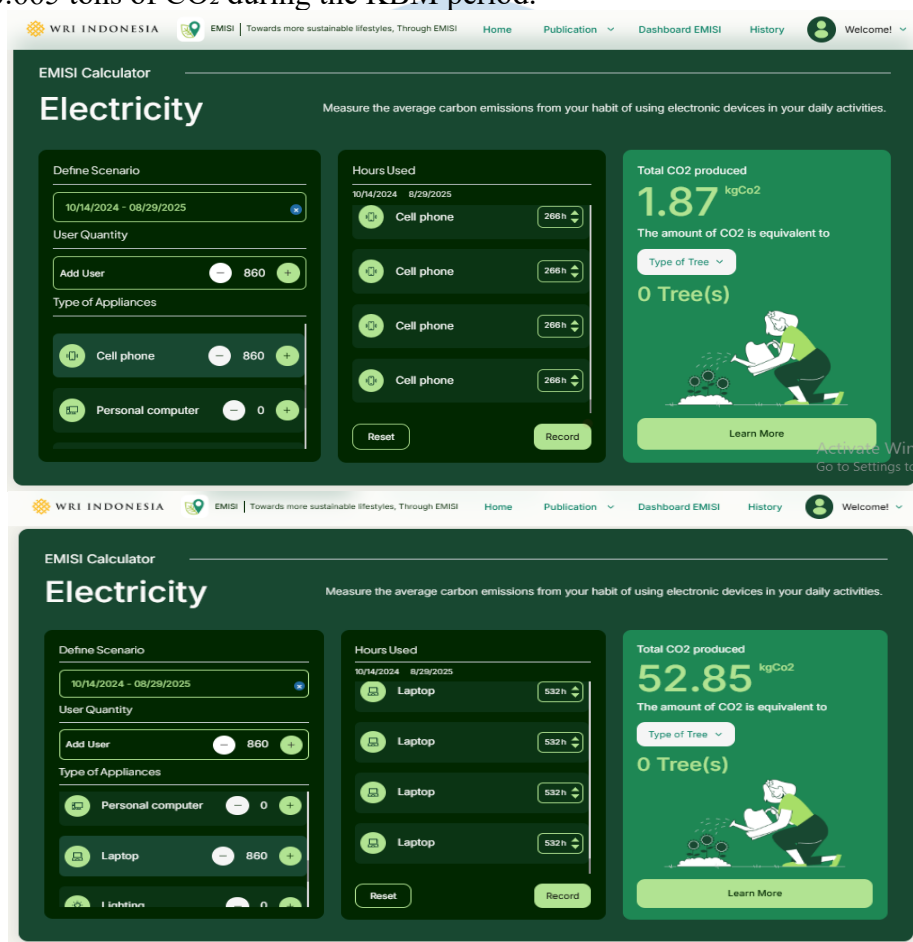


Figure 3. Estimated Calculation of Carbon Emissions from Active Personal Electricity Use

Source: <https://nol-emisi.id/>

In addition to electricity consumption from BMN, this study also takes into account the carbon emissions resulting from the personal use of electricity by dormitory students, especially the charging of electronic devices such as cell phones and laptops. Based on the

dormitory's baggage regulations, each student is assumed to have one cell phone and one laptop with a charging frequency of once a day each. The time for charging cell phones is assumed to be 1 hour per day, while laptops are charged for 2 hours per day. With reference to the duration of teaching and learning activities for 38 weeks, the total charging time in one academic year reaches 266 hours for cell phones and 532 hours for laptops. The results of the calculation using the emission calculator show that cell phone charging produces emissions of 1.87 kg of CO₂, while laptop charging produces 52.85 kg of CO₂ in one academic year (see **Figure 3**). Overall, electricity consumption from BMN, waste, and personal use by students contribute significantly to the total carbon emissions generated in the college dormitory environment during the active period of teaching and learning.

In addition to the active period of KBM, this study also takes into account the carbon emissions generated during the student vacation period, as highlighted in **Table 3**. Based on the same academic calendar, there are several vacation periods that are categorized into two types, namely short and long vacations. Short vacations last for 4 weeks during some major holidays, such as Christmas and Eid, during which some students stay in the dormitories. To calculate the estimated carbon emissions during this holiday period, the study used the same approach as in the calculation when classes were in session, adjusting for the number of residents remaining in the dormitories and lower electricity consumption compared to the active period. The results show that during the holidays, BMNs that use electricity in the dormitories generate an estimated carbon emission of 3,286 tons of CO₂ (see **Figure 4**).

In addition to electricity consumption from BMN, the study also calculated the carbon emissions from the personal electricity use of students who stayed in dormitories during the holidays. Based on the data on the number of students living there, the calculation shows that the use of electricity to charge cell phones and laptops by 88 students results in an estimated carbon emission of 5.76 kg of CO₂ during a short vacation period (see **Figure 6**). In addition, the waste disposal of the residents who stay in the dormitory also contributes to carbon emissions. Taking into account the average daily waste production and the number of students who stay in the dormitory, the calculations show that the dormitory's waste during the holiday period results in an estimated carbon emission of 66 kg of CO₂ (see **Figure 5**). Thus, even though energy consumption and waste production are reduced during the holiday period compared to the active teaching and learning period, there is still a contribution to carbon emissions that needs to be managed to support environmental sustainability at PKN STAN.

Table 3. Number of BMNs in Dormitories During Holidays

No.	Type	Quantity
1.	Air Conditioner in Men Flats	10
2.	Air Conditioner in Women Flats	8
3.	Lamp (5-10 watt)	24
4.	Lamp (10-15 watt)	120
5.	Washing Machines	4
6.	Water Machines	2

Source: Research Analysis 2024

Jejak Karbon. Beranda Kalkulator Panduan Sign In English

Province
Banten

Use complete spelling, ex: Jawa Barat not jabar

Number of 5-10 Watt Lamps (Unit) 24	Estimated Usage (kWh/month) 57.60	Number of AC 1/2 PK (Unit) 0.00	Estimated Usage (kWh/month) 0.00
Number of 10-15 Watt Lamps (Unit) 120	Estimated Usage (kWh/month) 432.00	Number of AC 3/4 PK (Unit) 0.00	Estimated Usage (kWh/month) 0.00
Number of 15-20 Watt Lamps (Unit) 0.00	Estimated Usage (kWh/month) 0.00	Number of AC 1 PK (Unit) 18	Estimated Usage (kWh/month) 345.6.00
Number of Fans (Units) 0.00	Estimated Usage (kWh/month) 0.00	Estimated Usage (kWh/month) 0.00	
Number of Refrigerators (Units) 0.00	Estimated Usage (kWh/month) 0.00	Estimated Usage (kWh/month) 0.00	
Number of Televisions (Units) 0.00	Estimated Usage (kWh/month) 0.00	Estimated Usage (kWh/month) 0.00	
Number of Water Pumps (Units) 2	Estimated Usage (kWh/month) 117.00	Estimated Usage (kWh/month) 0.00	

Activate v
Go to Setting

Jejak Karbon. Beranda Kalkulator Panduan Sign In English

Number of Refrigerators (Units) 0.00	Estimated Usage (kWh/month) 0.00
Number of Televisions (Units) 0.00	Estimated Usage (kWh/month) 0.00
Number of Water Pumps (Units) 2	Estimated Usage (kWh/month) 117.00
Number of Washing Machines (Units) 4	Estimated Usage (kWh/month) 45.00

Electricity usage in a month (kWh)
4107.60

Emissions from electricity use in a month (tCO2)
3.286

Figure 4. Calculation of BMN Carbon Emission Estimates During Holidays

Source: <https://jejakkarbon.id/>

Jejak Karbon. Beranda Kalkulator Panduan Sign In English

Do you know how many pounds of rubbish you throw away?

☒ Yes I know
☐ No, I don't know

The amount of waste produced

Waste Type
Household waste (mixed)

Amount of waste (kg)
147

The large emissions produced

Emissions generated from waste (tCO2)
0.066

Figure 5. Calculation of Estimated Carbon Emissions from Waste During Holidays

Source: <https://jejakkarbon.id/>

X

WRI INDONESIA EMISI | Towards more sustainable lifestyles, Through EMISI Home Publication Dashboard EMISI History Welcome

EMISI Calculator

Electricity Measure the average carbon emissions from your habit of using electronic devices in your daily activities.

Define Scenario
10/14/2024 - 08/29/2025
User Quantity
Add User 88
Type of Appliances
Cell phone 88
Personal computer 0
Laptop 88

Hours Used
10/14/2024 - 8/29/2025
Laptop 58 h
Laptop 58 h
Laptop 58 h
Laptop 58 h
Reset Record

Total CO2 produced
5.76 kgCo2
The amount of CO2 is equivalent to
Type of Tree
0 Tree(s)
Learn More

Figure 6. Calculation of Estimated Carbon Emissions from Waste During Holidays

Source: <https://nol-emisi.id/>

Table 4. Total Estimated Dormitories Carbon Emissions

No.	Type of Carbon Emission Estimate	Quantity (tonCO ₂)
1.	Electricity Use During Active Period	389,592
2.	Waste Disposal During Active Period	1,247
3.	Electricity Use During Holidays	3,291
4.	Waste Disposal During Holidays	0,066
	Total	394,124

Source: Research Analysis 2024

The results of carbon emission estimates show that the main source of emissions comes from electricity consumption during the active operational period, with a contribution of 389.592 tons of CO₂ or around 98.85% of the total emissions produced. This shows that the use of electrical energy is a dominant factor in the production of carbon emissions in the dormitory environment. In addition, waste disposal during the active period also contributes to carbon emissions, although the amount is relatively small, at 1,247 tons of CO₂. During the non-operational or holiday period, there was a significant decrease in electricity consumption, with total emissions of 3,291 tons of CO₂. Meanwhile, waste disposal during the holiday period was recorded as the lowest source of emissions, at 0.066 tons of CO₂. Overall, the total carbon emissions generated from all activities in the dormitory reached 394.124 tons of CO₂ per year as listed in **Table 4**.

After obtaining the estimated carbon emissions from electricity consumption and waste production, the calculation of carbon sequestration needs was carried out by referring to the absorption capacity of trees based on previous research. The number of trees needed to offset the total carbon emissions of the dormitory is calculated by dividing the total emissions produced by the carbon absorption capacity per tree per year. Based on research by Darlina et al. (2023), several tree species in Indonesia have different levels of carbon absorption. For example, Ornamental Walnut 1 (*Canarium sp*) has the ability to absorb 5.107 tons of CO₂ per year, so it takes around 77 trees to offset the carbon emissions of the dormitory. Other species such as Angsana (*Pterocarpus indicus*) are capable of absorbing 7.117 tons of CO₂ per year, so the number of trees needed to absorb carbon emissions is 55 trees. Meanwhile, the Sea Cedar (*Casuarina equisetifolia*) has the highest carbon absorption rate, which is 9,859 tons of CO₂ per year, so only 40 trees are needed to offset the carbon emissions produced by the dormitory. Based on these calculations, the Sea Cedar is the most effective tree species in absorbing carbon, because fewer trees are needed compared to other species. However, in the implementation of a greening program for carbon emission mitigation, in addition to considering carbon absorption capacity, other factors such as adaptability to the environment, available land area, and tree growth rate must also be taken into account. A combination of species with high carbon absorption rates and species with good environmental resilience can be an optimal strategy to support long-term environmental sustainability. Therefore, the selection of vegetation types must be done strategically so that the effectiveness of carbon mitigation can be maximized according to the conditions of the ecosystem on campus.

The calculation of carbon sequestration needs in this study was carried out by considering the criteria of trees that had been studied previously. According to research conducted by Susila and Apriliani (2021), carbon reserves in vegetation are strongly influenced by the volume and specific gravity of trees. Tree biomass is a major factor in carbon storage, where the higher the specific gravity of the wood, the greater its capacity to absorb and store carbon. Conversely, even if an area has a large amount of vegetation, the total biomass produced will not be significant if the dominant species have a low specific gravity. Thus, the effectiveness of carbon storage depends not only on the number of trees

planted, but also on the characteristics of the biomass and the species used in the reforestation program. Over time, the carbon absorption capacity of each tree will increase as the vegetation itself grows. Changes in tree dimensions, such as trunk diameter, tree height, and biomass, will contribute to an increase in annual carbon sequestration capacity. This means that the number of trees needed to offset carbon emissions can decrease as the planted trees grow. With the dynamics of vegetation growth, the carbon mitigation strategy implemented needs to consider the life cycle of trees and environmental factors that can affect the effectiveness of carbon sequestration in the long term.

Energy use at the college dormitory, especially electricity consumption and waste production, is a major contributor to carbon emissions. To mitigate the environmental impact, it is necessary to implement a strategy based on the concepts of *green building* and energy efficiency as explained in the research by Hafez et al. (2023). The implementation of this approach not only aims to reduce energy consumption, but also supports environmental sustainability and optimization of dormitory building asset management. With more efficient energy management and a structured reduction of carbon emissions, it is hoped that the dormitory environment can become more environmentally friendly and support the sustainability policies implemented at PKN STAN.

Optimizing electricity consumption in the dormitory can be done through the application of *smart energy management* technology, which enables more efficient energy management. One method that can be applied is the installation of automatic sensors in the lighting and air conditioning systems, so that electrical devices only operate when needed and do not turn on continuously. In addition, the use of smart meters can help monitor electricity consumption in real-time, so that power management can be done more accurately. Another approach is the implementation of a *demand response* system, which allows electricity consumption to be adjusted based on actual needs, thus preventing excessive power usage. In addition to power management technology, energy efficiency can also be improved through the use of energy-saving devices, such as replacing conventional lamps with low-power LEDs, utilizing inverter-technology air conditioners, and collectively scheduling the use of washing machines to reduce electricity consumption without compromising the comfort of residents. In addition, the use of renewable energy can be a solution in reducing dependence on fossil-based energy sources. One of the steps that can be taken is the installation of solar panels on the roof of the building and the implementation of a hybrid energy system (*hybrid renewable energy system*), which combines various environmentally friendly energy sources to increase the efficiency and sustainability of electricity use in the dormitory environment.

In addition to electricity consumption, waste production is also a significant source of carbon emissions. To overcome this, waste management in dormitories can be optimized through the application of the *circular economy* concept, which focuses on waste reduction, reuse, and recycling. One strategy that can be applied is a waste sorting system into organic and inorganic categories to increase efficiency in the waste treatment process. The plastic and paper waste produced can be recycled by collaborating with waste banks or waste processing industries, while organic waste can be composted to support greening around the dormitory. In addition to recycling efforts, a plastic waste reduction strategy can also be implemented through policies on the use of *reusable* drinking bottles and food containers, supported by the provision of drinking water dispensers on each floor to reduce dependence on single-use plastic bottled water. To improve the efficiency of waste management, *waste-to-energy* systems such as biodigesters can be applied to convert organic waste into biogas, which can be used as an alternative energy source. In addition, the use of environmentally friendly *incinerators* can also be a solution in processing waste that is difficult to decompose without

causing a significant increase in carbon emissions. With the implementation of this strategy, waste management in the dormitory environment can be carried out more sustainably, thereby reducing pollution and supporting carbon emission mitigation efforts more effectively.

Tree planting is one of the main strategies in offsetting carbon emissions resulting from electricity consumption and waste production in dormitories. As explained by Yang et al. (2018), urban carbon emissions generally come from waste disposal methods such as *landfilling* and *incineration*, as well as electricity consumption in waste management. To reduce this impact, carbon sequestration efforts through reforestation are an essential step. Based on the results of carbon sequestration needs calculations, the number of trees needed to offset carbon emissions of 394,124 tons of CO₂ per year has been calculated based on the carbon sequestration capacity of various tree species. Based on research by Darlina et al. (2023), the tree species with the highest carbon sequestration rate is the Sea Cypress (*Casuarina equisetifolia*), with a sequestration capacity of 9,859 tons of CO₂ per tree per year, so that around 40 trees are needed to balance the carbon emissions of the dormitory. Meanwhile, Angsana (*Pterocarpus indicus*) has a carbon absorption rate of 7,117 tons of CO₂ per tree per year, with a requirement of 55 trees. Ornamental Canarium (*Canarium sp*), which has a lower carbon absorption rate of 5,107 tons of CO₂ per tree per year, requires a greater number of trees, namely 77 trees.

In implementing a tree planting strategy, in addition to considering carbon absorption capacity, the aspects of cost and sustainability are also important factors. Based on planting cost calculations, some tree species have higher seedling prices than other species. For example, Sea Fir seedlings cost IDR 15,000 per tree, while Angsana only costs IDR 9,000 per tree, making it a more economical alternative with a consistently high level of carbon sequestration. On the other hand, Ornamental Walnut has the most expensive seedling price, which is IDR 50,000 per tree, so the total cost required is greater than other species. Therefore, the optimal tree planting strategy is to choose species that have a high carbon absorption capacity at a more efficient cost. In addition to economic aspects, the selection of tree species must also consider environmental conditions and adaptation to the local climate. Sea Fir is more suitable for areas with sandy soil, while Angsana and Ornamental Walnut are more optimal in soil with higher humidity levels. If the available land area is limited, choosing species with high carbon absorption capacity such as the Sea Fir can be a more effective solution because fewer trees are needed. Combining several tree species with high carbon absorption capacity can be a more effective approach than using only one type of tree with high costs.

In addition, research by Susila and Apriliani (2021) shows that the carbon absorption capacity of trees will increase along with the growth and development of vegetation biomass. Factors such as trunk diameter, tree height, and wood density play a role in increasing the effectiveness of carbon storage. Therefore, a sustainable carbon mitigation strategy must consider the dynamics of long-term vegetation growth. By choosing species that have an optimal balance between carbon sequestration capacity, planting costs, and environmental adaptation, the greening program at the college can run more effectively and support significant efforts to reduce carbon emissions. After determining the type of tree and the amount needed to absorb carbon based on previous calculations, the next step is to determine the optimal tree planting scheme. To achieve efficiency in carbon emission offsets, this study uses the Markowitz Model approach which is commonly applied in investment portfolio management. This model introduces the concept of diversification to reduce total risk without compromising the expected rate of return. In the context of tree planting, this model is applied to determine the optimal combination of different types of trees based on their carbon

absorption capacity. With this approach, it is hoped that tree planting can be carried out more efficiently to offset the carbon emissions generated by activities at the college dormitory.

The optimal calculation is done by *linear programming* method using the *Solver* tool in Microsoft Excel. In the Markowitz model, *Expected Return*, which usually refers to the rate of return on investment, is equated with the carbon absorption capacity of each type of tree, because both have the same function in providing long-term benefits. Meanwhile, the risk in this model is interpreted as the total estimated carbon emissions which are considered as negative externalities. This calculation is made in the form of a table that includes the type of tree, total carbon uptake, total carbon emissions, and net carbon uptake. In the *Solver* application, the *Net Emissions Uptake* column is targeted to be zero to ensure that the number of trees planted can fully offset the resulting carbon emissions. The variable that can be changed is the number of trees without additional constraints, using the GRG Non-Linear method in the *Solver*.

Based on the optimization results, the optimal number of trees that can be planted in the college environment consists of 20 Angsana trees, 15 Ornamental Walnut trees, and 19 Sea Cypress trees. With this number, tree planting can be done efficiently according to the preferences of the relevant parties and environmental conditions. This calculation also allows for adjustments to the number of trees based on budget and necessary carbon sequestration needs. With this optimal scheme, the calculation of planting costs can be calculated based on the cheapest seedling prices available on the market. The total cost required to plant trees according to the optimal amount is IDR 1,215,000, which consists of IDR 750,000 for Ornamental Walnut, IDR 180,000 for Angsana, and IDR 285,000 for Sea Cypress. This figure may change depending on the actual price of the seedlings at the time of implementation and additional costs that may arise during the planting process.

In addition to the initial cost of purchasing seedlings, the tree planting strategy also considers maintenance costs throughout the tree's life cycle. These costs include watering, fertilizing, pruning, pest control, labor, and replacing trees that are not growing well. The estimated total annual cost for the maintenance of 54 planted trees is IDR 5,670,000, with a seed capital cost of IDR 1,215,000. To obtain a more comprehensive picture of long-term costs, a *present value* analysis was conducted on all costs incurred over a 15-year tree growth period. This calculation uses a *Social Discount Rate* (SDR) of 5%, as used by the Global Green Growth Institute in the Extended Cost-Benefit Analysis (eCBA) (Roesad et al., 2016). The results of the *present value* calculation show that the total cost of planting and maintaining trees for 15 years is IDR 75,579,291. This amount includes all cost components from seedling purchase to long-term tree maintenance, which will be a long-term investment in supporting environmental sustainability at PKN STAN. This calculation is a simulation that can be adjusted to the actual costs during the implementation of the greening program, so that it can be used as a basis for designing a more efficient and sustainable carbon offset strategy.

4. CONCLUSION, SUGGESTION, LIMITATION

This study aims to identify the main factors that contribute to carbon emissions in the college dormitory environment and propose mitigation strategies that focus on greening and energy efficiency. The results show that electricity consumption and waste are the main sources of carbon emissions. During the active period, electricity use generated emissions of 389.592 tons of CO₂, while during the holidays this figure decreased to 3.291 tons of CO₂. On the other hand, waste contributed 1.247 tons of CO₂ during the active period and 0.066 tons of CO₂ during the holidays. Overall, total annual carbon emissions reach 394,124 tons of CO₂, so an effective mitigation strategy is needed to balance the environmental impact caused. Based

on the analysis of the carbon absorption capacity of various tree species, the number of trees needed to absorb annual carbon emissions depends on the type of tree chosen. If using Sea Cypress (*Casuarina equisetifolia*), about 40 trees are needed, while Angsana (*Pterocarpus indicus*) requires 55 trees, and Ornamental Canarium (*Canarium sp*) requires 77 trees. To achieve higher efficiency, the Markowitz Model approach is used to determine the optimal number of trees to be planted, namely 20 Angsana trees, 15 Ornamental Walnut trees, and 19 Sea Cypress trees. This combination was chosen based on high carbon absorption capacity and more economical seedling cost considerations, so that this greening strategy can run sustainably with more efficient costs.

In addition to reforestation, carbon emission mitigation strategies can also be implemented through more systematic energy efficiency and waste management. Optimization of electricity consumption can be achieved by implementing smart energy management, such as installing automatic sensors, smart meters, and using energy-saving devices to reduce power waste. Meanwhile, the concept of a circular economy in waste management can be applied through waste sorting, composting, and the use of biodigesters to convert organic waste into biogas as an alternative energy. The tree planting program remains a strategic step in balancing carbon emissions, with the selection of species that have high carbon absorption and are suitable for the surrounding environment. With the implementation of this strategy, it is hoped that the college dormitory can reduce the environmental impact caused and support the achievement of sustainability in energy and waste management.

Based on the results of the research and conclusions, the researchers made the following suggestions: (1) energy savings and efficiency, as well as waste management in the context of reducing emissions from college dormitory activities, can begin with routine evaluation and data collection of assets in each building and sorting of waste based on processing categories to facilitate the implementation of strategies and; (2) optimization of energy use in the college dormitories. Considering that electricity consumption is the main source of carbon emissions, further research can focus on strategies to optimize energy use in the dormitory environment. Studies can include the application of *smart energy management* technology, analysis of the effectiveness of using energy-saving devices such as LED lights and *inverter* air conditioners, as well as electricity consumption management policies based on student activity patterns; (3) application of the *Eco-Office* Concept in the college dormitory. Asset management has an important role in supporting the *eco-office* concept on campus. Future research can focus on the implementation of a broader *eco-office* strategy, including energy efficiency, sustainable waste management, and green policies in campus operations; and (4) campus greening through the mechanism of planting trees on campus and dormitory areas as a tangible form of emission reduction by increasing carbon absorption through plants.

The calculation of the estimated carbon emissions of the college dormitory was carried out by observing the use of state property that uses electricity and also waste disposal, due to the limitations of the data held. The estimation calculation is limited to electricity and waste as variables with several assumptions because these data are the most possible to be quantified. The strategy in energy efficiency and also tree planting is limited to the number of trees needed without data on plant distribution due to the unavailability of land data that is ready for reforestation, and it is possible to do so in further research.

5. REFERENCES

- Abdul-Kadir, E., Rosa, S. L., Syukur, A., Othman, M., & Daud, H. (2022). Forest fire spreading and carbon concentration identification in tropical region Indonesia.

- Alexandria Engineering Journal*, 61(2), 1551–1561.
<https://doi.org/10.1016/j.aej.2021.06.064>
- Adjei Kwakwa, P. (2023). Sectoral growth and carbon dioxide emission in Africa: can renewable energy mitigate the effect? *Research in Globalization*, 6.
<https://doi.org/10.1016/j.resglo.2023.100130>
- Aji, A. K., Azizi, A. R., Putri, H. B., Pratama, H. P., Permadana, I., Sari, M. P. K., & Solikin, A. (2024). Pengabdian Kepada Masyarakat Lewat Penanaman Pohon Untuk Carbon Offset Dalam Rangka Mitigasi Perubahan Iklim. *Prosiding Penelitian Dan Pengabdian Karya Cendekia*, 2, 6–12.
- Ali, S., Khan, S. M., Siddiq, Z., Ahmad, Z., Ahmad, K. S., Abdullah, A., Hashem, A., Al-Arjani, A.-B. F., & Abd_Allah, E. F. (2022). Carbon sequestration potential of reserve forests present in the protected Margalla Hills National Park. *Journal of King Saud University - Science*, 34(4), 101978. <https://doi.org/10.1016/j.jksus.2022.101978>
- Amaral, A. R., Rodrigues, E., Gaspar, A. R., & Gomes, Á. (2023). How organizational constraints undermine sustainability actions in a university's campuses: A case study. *Journal of Cleaner Production*, 411, 137270.
<https://doi.org/10.1016/j.jclepro.2023.137270>
- Ananta, I. D., & Qadri, R. A. (2024). Improving The Domestic Product Use Policy For Ministerial Procurement In Indonesia. *Journal of Law, Administration, and Social Science*, 4(1), 130–149. <https://doi.org/10.54957/jolas.v4i1.735>
- Anjani, Y., Fitrijanti, T., & Qadri, R. A. (2024). Analysis of Hospital Efficiency and Implications for Financial Performance. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, 12(3). <https://doi.org/10.37676/ekombis.v12i3.5658>
- Anjani, Y., Qadri, R. A., & Fitrijanti, T. (2024). Measuring Hospital Efficiency During Covid-19 Pandemic In Indonesia. *JRAK*, 16(1), 119–132.
<https://doi.org/10.23969/jrak.v16i1.12449>
- Aryani Soemitro, R. A., & Suprayitno, H. (2018). Pemikiran Awal tentang Konsep Dasar Manajemen Aset Fasilitas. *Jurnal Manajemen Aset Infrastruktur & Fasilitas*, 2(0).
<https://doi.org/10.12962/j26151847.v2i0.4225>
- Bainy, B. K., Paschoal, I. A., Avila, A. M. H. de, & Santos, H. O. dos. (2021). Air quality assessment in Southeast Brazil during COVID-19 pandemic and lockdown: report of increased air pollution. *Cadernos de Saúde Pública*, 37(9).
<https://doi.org/10.1590/0102-311x00242320>
- Baldocchi, D., & Penuelas, J. (2019). The physics and ecology of mining carbon dioxide from the atmosphere by ecosystems. *Global Change Biology*, 25(4), 1191–1197.
<https://doi.org/10.1111/gcb.14559>
- Barbera, E., Mio, A., Massi Pavan, A., Bertucco, A., & Fermeglia, M. (2022). Fuelling power plants by natural gas: An analysis of energy efficiency, economical aspects and environmental footprint based on detailed process simulation of the whole carbon capture and storage system. *Energy Conversion and Management*, 252, 115072.
<https://doi.org/10.1016/j.enconman.2021.115072>
- Boutwell, J., & Westra, J. (2013). Benefit Transfer: A Review of Methodologies and Challenges. *Resources*, 2(4), 517–527. <https://doi.org/10.3390/resources2040517>
- Budi, A. A., & Fauzela, D. S. (2020). “Perancangan Produk Legislasi Berbasis Soft System Methodology,” dalam: *Prosiding Seminar Nasional Bagian II Pusat Penelitian*

Sekretariat Jenderal dan Badan Keahlian DPR RI Kebijakan Berbasis Bukti (Evidencebased Policy) untuk Legislasi DPR RI dan Daya Saing Bangsa.

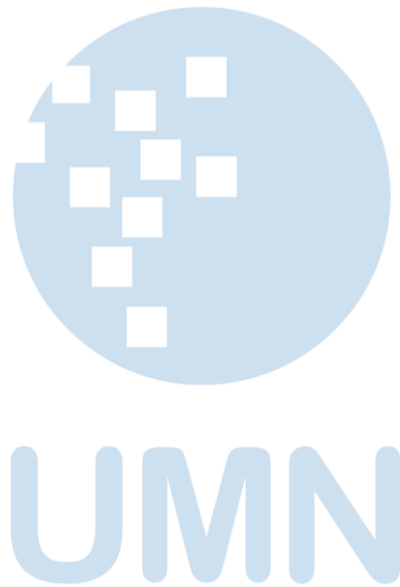
- Daulay, A. A., & Qadri, R. A. (2024). State-Owned Or State-Owed? Evaluating Indonesia's Divestment Returns From Pt Vale Indonesia Tbk. *JOURNAL OF APPLIED MANAGERIAL ACCOUNTING*, 8(2), 320–336.
<https://doi.org/10.30871/jama.v8i2.8491>
- Edo, G. I., Itoje-akpokiniovo, L. O., Obasohan, P., Ikpekor, V. O., Samuel, P. O., Jikah, A. N., Nosu, L. C., Ekokotu, H. A., Ugbune, U., Oghroro, E. E. A., Emakpor, O. L., Ainyanbhor, I. E., Mohammed, W. A.-S., Akpogheli, P. O., Owheru, J. O., & Agbo, J. J. (2024). Impact of environmental pollution from human activities on water, air quality and climate change. *Ecological Frontiers*, 44(5), 874–889.
<https://doi.org/10.1016/j.ecofro.2024.02.014>
- Gherheș, V., Dragomir, G.-M., Cernicova-Buca, M., & Palea, A. (2024). Enhancing Sustainability in University Campuses: A Study on Solid Waste Generation and Disposal Practices among Students in Politehnica University Timisoara, Romania. *Sustainability*, 16(16), 6866. <https://doi.org/10.3390/su16166866>
- Guo, M., Ning, M., Sun, S., Xu, C., Zhang, G., Zhang, L., Zhang, R., Zheng, J., Chen, C., Jia, Z., Liu, Y., & Bo, Y. (2024). Estimation and Analysis of Air Pollutant Emissions from On-Road Vehicles in Changzhou, China. *Atmosphere*, 15(2), 192.
<https://doi.org/10.3390/atmos15020192>
- Hacopian Dolatabadi, S., Latify, M. A., Karshenas, H., & Sharifi, A. (2023). Achieving economic efficiency in the electricity markets through internalizing negative externalities. *IET Generation, Transmission & Distribution*, 17(10), 2401–2418.
<https://doi.org/10.1049/gtd2.12816>
- Hafez, F. S., Sa'di, B., Safa-Gamal, M., Taufiq-Yap, Y. H., Alrifay, M., Seyedmahmoudian, M., Stojcevski, A., Horan, B., & Mekhilef, S. (2023). Energy Efficiency in Sustainable Buildings: A Systematic Review with Taxonomy, Challenges, Motivations, Methodological Aspects, Recommendations, and Pathways for Future Research. *Energy Strategy Reviews*, 45, 101013. <https://doi.org/10.1016/j.esr.2022.101013>
- Handoyo, S. (2009). *Analisis Kebijakan Inovasi Bagi Pengembangan Bioteknologi di Indonesia*. (Jakarta: LIPI Press.).
- He, M., Piao, S., Huntingford, C., Xu, H., Wang, X., Bastos, A., Cui, J., & Gasser, T. (2022). Amplified warming from physiological responses to carbon dioxide reduces the potential of vegetation for climate change mitigation. *Communications Earth & Environment*, 3(1), 160. <https://doi.org/10.1038/s43247-022-00489-4>
- Hernawan, D., Seran, G. G., Purnamasari, I., Purnomo, A. M., & Apriliani, A. (2022). Perspektif Kebijakan Berbasis Bukti Terhadap Implementasi Kebijakan Merdeka Belajar Kampus Merdeka. *Jurnal GOVERNANSI*, 8(1).
- Hidayat, R. T., & Qadri, R. A. (2020). Penyediaan Barang Milik Negara Berbasis Biaya Kepemilikan Total. *Jurnal Reformasi Administrasi: Jurnal Ilmiah Untuk Mewujudkan Masyarakat Madani*, 7(2), 88–95. <https://doi.org/10.31334/reformasi.v7i2.1058.g568>
- Huang, Y., Liu, Z., Liang, R., Jiang, Y., & Ding, X. (2022). Externality Assessment of Health Damage Caused by PM from PPV of China based on IPA. *IOP Conference Series: Earth and Environmental Science*, 1044(1), 012008.
<https://doi.org/10.1088/1755-1315/1044/1/012008>

- Ismail, A. (2020). Potensi Penurunan Emisi Gas Rumah Kaca (GRK) Dalam Kegiatan Belajar di Rumah Secara On-line: Analisis Jejak Karbon (Carbon Footprint Analysis). *Jukung; Jurnal Teknik Lingkungan*, 6(2).
- Khalil, L., Abbas, S., Hussain, K., Zaman, K., Iswan, Salamun, H., Hassan, Z. Bin, & Anser, M. K. (2022). Sanitation, water, energy use, and traffic volume affect environmental quality: Go-for-green developmental policies. *PLOS ONE*, 17(8), e0271017. <https://doi.org/10.1371/journal.pone.0271017>
- Kjerstadius, H., Bernstad Saraiva, A., Spångberg, J., & Davidsson, Å. (2017). Carbon footprint of urban source separation for nutrient recovery. *Journal of Environmental Management*, 197, 250–257. <https://doi.org/10.1016/j.jenvman.2017.03.094>
- Kwakwa, P. A., Adjei-Mantey, K., & Adusah-Poku, F. (2023). The effect of transport services and ICTs on carbon dioxide emissions in South Africa. *Environmental Science and Pollution Research*, 30(4). <https://doi.org/10.1007/s11356-022-22863-7>
- Latham, G. (2001). The Reciprocal Transfer of Learning from Journals to Practice. *Applied Psychology*, 50(2), 201–211. <https://doi.org/10.1111/1464-0597.00054>
- Lei, J., Yang, C., Fu, Q., Chao, Y., Dai, J., & Yuan, Q. (2024). An approach of localizing MOVES to estimate emission factors of trucks. *International Journal of Transportation Science and Technology*, 13, 229–242. <https://doi.org/10.1016/j.ijtst.2023.02.002>
- Li, X., Tan, H., & Rackes, A. (2015). Carbon footprint analysis of student behavior for a sustainable university campus in China. *Journal of Cleaner Production*, 106, 97–108. <https://doi.org/10.1016/j.jclepro.2014.11.084>
- Li, Y., Yang, X., Du, E., Liu, Y., Zhang, S., Yang, C., Zhang, N., & Liu, C. (2024). A review on carbon emission accounting approaches for the electricity power industry. *Applied Energy*, 359, 122681. <https://doi.org/10.1016/j.apenergy.2024.122681>
- M. Rahayuningsih, L. Handayani, M. Abdullah, Solichin, & M.S. Arifin. (2021). Kajian Jejak Karbon (Carbon Footprint) di FMIPA Universitas Negeri Semarang. *Indonesian Journal of Conservation*, 10(1), 48–52.
- Ma, X., Zhang, T., Shen, X., Zhai, Y., & Hong, J. (2022). Environmental footprint assessment of China's ceramic tile production from energy-carbon-water nexus insight. *Journal of Cleaner Production*, 337, 130606. <https://doi.org/10.1016/j.jclepro.2022.130606>
- Maharani, Y. P., & Qadri, R. A. (2024). Predicting Retail Investors' Intention To Invest In Sovereign Sukuk: Theory of Planned Behavior. *EL DINAR: Jurnal Keuangan Dan Perbankan Syariah*, 12(1), 132–157. <https://doi.org/10.18860/ed.v12i1.25529>
- Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal*, 13(5), 363–380. <https://doi.org/10.1002/smj.4250130505>
- Mallick, K., Verfaillie, J., Wang, T., Ortiz, A. A., Szutu, D., Yi, K., Kang, Y., Shortt, R., Hu, T., Sulis, M., Szantoi, Z., Boulet, G., Fisher, J. B., & Baldocchi, D. (2024). Net fluxes of broadband shortwave and photosynthetically active radiation complement NDVI and near infrared reflectance of vegetation to explain gross photosynthesis variability across ecosystems and climate. *Remote Sensing of Environment*, 307, 114123. <https://doi.org/10.1016/j.rse.2024.114123>
- Murphy, D. J. (2024). Carbon Sequestration by Tropical Trees and Crops: A Case Study of Oil Palm. *Agriculture*, 14(7), 1133. <https://doi.org/10.3390/agriculture14071133>

- Naderipour, A., Abdul-Malek, Z., Arshad, R. N., Kamyab, H., Chelliapan, S., Ashokkumar, V., & Tavalaei, J. (2021). Assessment of carbon footprint from transportation, electricity, water, and waste generation: towards utilisation of renewable energy sources. *Clean Technologies and Environmental Policy*, 23(1), 183–201. <https://doi.org/10.1007/s10098-020-02017-4>
- Natarajan, H. P., Arunachalam, B., Muthuswamy, S., Suthandhirajan, R., Ganesan, S., Satheedan, A., & Vellan, M. (2022). *Potential of Plantation Trees for Biomass and Carbon Sequestration in Foothills of Jakanari Forest, Coimbatore, Western Tamil Nadu, India*. <https://doi.org/10.21203/rs.3.rs-1847315/v1>
- Nirmala, T. V., Harikumar, S., George, A., & Reddy, A. D. (2023). Green House Gas Emissions and Mitigation Strategies for Sustainable Dairy Farming. *Journal of Experimental Agriculture International*, 45(11). <https://doi.org/10.9734/jeai/2023/v45i112239>
- Pambudi, G. S., Sriyanto, S., & Arvianto, A. (2017). Rancang Bangun Sistem Informasi Manajemen Aset Berbasis Web Untuk Optimalisasi Penelusuran Aset di Teknik Industri UNDIP. *J@ti Undip : Jurnal Teknik Industri*, 11(3), 187. <https://doi.org/10.14710/jati.11.3.187-196>
- Paniagua, P., & Rayamajhee, V. (2024). On the nature and structure of externalities. *Public Choice*, 201(3–4), 387–408. <https://doi.org/10.1007/s11127-023-01098-1>
- Paredes-Canencio, K. N., Lasso, A., Castrillon, R., Vidal-Medina, J. R., & Quispe, E. C. (2024). Carbon footprint of higher education institutions. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-024-04596-4>
- Peteraf, M. A., & Barney, J. B. (2003). Unraveling the resource-based tangle. *Managerial and Decision Economics*, 24(4), 309–323. <https://doi.org/10.1002/mde.1126>
- Pratiwi, T. A., & Qadri, R. A. (2024). Untangling the Conundrum of the Panel of Consultants' Utilization in Indonesia. *Policy & Governance Review*, 8(1), 75. <https://doi.org/10.30589/pgr.v8i1.869>
- Qadri, R. A. (2019a). Dinamika Institusional dalam Implementasi Standar Akuntansi Entitas Nirlaba pada Masjid. *Substansi*, 3(2), 167–188.
- Qadri, R. A. (2019b). Menakar model pembelian langsung rumah negara di indonesia. *JURNAL PKN (Jurnal Pajak Dan Keuangan Negara)*, 1(1), 1–20.
- Qadri, R. A. (2020). Studi Dramaturgi: Analisis Pengadaan Belanja Modal Konstruksi di Kementerian Keuangan. *Jurnal Akuntansi Dan Bisnis Krisnadwipayana*, 7(1). <https://doi.org/10.35137/jabk.v7i1.373>
- Qadri, R. A. (2024). “Hamka-Ccounting”: Defining The Philosophy Of Hamka’S Political Economy Of Accounting. *Bina Ekonomi*, 28(1), 59–78. <https://doi.org/10.26593/be.v28i1.7800.59-78>
- Qadri, R. A., & Jauhari, R. (2020). Desain Kerangka Konseptual Balanced Score Card pada Lembaga Riset Pemerintah. *Jurnal Pajak Dan Keuangan Negara*, 2, No.1, 19–37. <http://www.aeaweb.org/jel/guide/jel.php>
- Qadri, R. A., & Jawak, M. N. (2024). Recovery or Illusion? Assessing Corporate Performance and Investor Views in the Aftermath of Crisis. *Journal of Applied Accounting and Taxation*, 9(2), 65–74. <https://doi.org/10.30871/jaat.v9i2.7327>
- Qadri, R. A., & Murwaningsari, E. (2023). Internal and External Determinants of Bank Syariah Indonesia Capital Gain during the Pandemic. *Journal of Governance Risk*

- Management Compliance and Sustainability*, 3(2), 65–79.
<https://doi.org/10.31098/jgrcs.v3i2.1875>
- Rahmithasari, W. M., & Qadri, R. A. (2024). Do ESG-Related Governance Disclosures Improve Firm'S Financial Performance In Indonesia? *Bina Ekonomi*, 28(1), 79–95.
<https://doi.org/10.26593/be.v28i1.7798.79-95>
- Scotland, J. (2012). Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms. *English Language Teaching*, 5(9).
<https://doi.org/10.5539/elt.v5n9p9>
- Silaydin Aydin, M. B., & Çukur, D. (2012). Maintaining the carbon–oxygen balance in residential areas: A method proposal for land use planning. *Urban Forestry & Urban Greening*, 11(1), 87–94. <https://doi.org/10.1016/j.ufug.2011.09.008>
- Singh, A., & Singh, K. K. (2022). An Overview of the Environmental and Health Consequences of Air Pollution. *Iranian Journal of Energy and Environment*, 13(3), 231–237. <https://doi.org/10.5829/IJEE.2022.13.03.03>
- Siregar, D. D. (2004). *Manajemen Aset Strategi Penataan Konsep Pembangunan Berkelanjutan Secara Nasional dalam Konteks Kepala Daerah Sebagai CEO'S pada Era Globalisasi dan Otonomi Daerah*. . PT Gramedia Pustaka Utama.
- Somerville, T., & Wetzel, J. (2022). Environmental hazards: The microgeography of land-use negative externalities. *Real Estate Economics*, 50(2), 468–497.
<https://doi.org/10.1111/1540-6229.12352>
- Sun, J., & Chen, J. (2023). Digital Economy, Energy Structure Transformation, and Regional Carbon Dioxide Emissions. *Sustainability (Switzerland)*, 15(11).
<https://doi.org/10.3390/su15118557>
- Susila, R., & Apriliani, R. N. (2021). Pendugaan Cadangan Karbon di Taman Hutan Raya Inten Dewata. *Wanamukti: Jurnal Penelitian Kehutanan*, 22(2), 94.
<https://doi.org/10.35138/wanamukti.v22i2.333>
- United Nations. (2022, March 18). *Causes and Effects of Climate Change*.
<https://www.un.org/en/climatechange/science/causes-effects-climate-change>.
- Wardhani, F. K., Qadri, R. A., & Inas, A. Y. (2022). The Historiography of Accounting: Diponegoro [Lease & Tax] Accountability. *Jurnalku*, 2(4), 422–449.
<https://doi.org/10.54957/jurnalku.v2i4.291>
- Washington-Ottombre, C. (2024). Campus sustainability, organizational learning and sustainability reporting: an empirical analysis. *International Journal of Sustainability in Higher Education*, 25(8), 1626–1645. <https://doi.org/10.1108/IJSHE-12-2022-0396>
- Xue, L., Xu, H., Zhang, Z., & Li, N. (2024). Quantifying the Impact of Carbon Reduction Interventions and Incentive Mechanisms in Campus Buildings: A Case Study from a Chinese University. *Buildings*, 14(5), 1262. <https://doi.org/10.3390/buildings14051262>
- Yang, D., Xu, L., Gao, X., Guo, Q., & Huang, N. (2018). Inventories and reduction scenarios of urban waste-related greenhouse gas emissions for management potential. *Science of The Total Environment*, 626, 727–736. <https://doi.org/10.1016/j.scitotenv.2018.01.110>
- Zhang, X., & Zhang, D. (2023). Urban carbon emission scenario prediction and multi-objective land use optimization strategy under carbon emission constraints. *Journal of Cleaner Production*, 430, 139684. <https://doi.org/10.1016/j.jclepro.2023.139684>

- Zhang, Y., Zhao, B., Jiang, Y., Xing, J., Sahu, S. K., Zheng, H., Ding, D., Cao, S., Han, L., Yan, C., Duan, X., Hu, J., Wang, S., & Hao, J. (2022). Non-negligible contributions to human health from increased household air pollution exposure during the COVID-19 lockdown in China. *Environment International*, 158, 106918.
<https://doi.org/10.1016/j.envint.2021.106918>
- Zien, M., & Kirschstein, T. (2023). A rolling horizon approach for shunting operations – An emission oriented simulation study. *Cleaner Logistics and Supply Chain*, 6.
<https://doi.org/10.1016/j.clscn.2023.100093>



UKURAN PERUSAHAAN SEBAGAI VARIABEL MODERASI: DAMPAK PROFITABILITAS DAN PERTUMBUHAN PENJUALAN TERHADAP AGRESIVITAS PAJAK

Reza Muhammad Rizqi^{1*}

Fakultas Ekonomi dan Bisnis, Universitas Teknologi Sumbawa, Indonesia
reza.muhammad.rizqi@uts.ac.id

Arya Zulfikar Akbar²

Fakultas Ekonomi dan Bisnis, Universitas Teknologi Sumbawa, Indonesia
arya.zulfikar.akbar@uts.ac.id

Fahlia³

Fakultas Ekonomi dan Bisnis, Universitas Teknologi Sumbawa, Indonesia
fahlia@uts.ac.id

(*Corresponding Author)

Diterima 21 Mei 2025

Disetujui 16 Juni 2025

Abstract - This study analyzes the impact of profitability and sales growth on tax aggressiveness, using company size as a moderating variable. The primary issue addressed is the tax aggressiveness practiced by consumer goods companies listed on the Indonesia Stock Exchange (IDX). The drive to maximize profitability in a competitive environment and the perception of high tax rates are the main reasons these companies exploit legal loopholes in complex tax regulations to minimize their tax burden. The study underscores the significant role of firm size, especially for tax authorities assessing aggressive tax strategies. Findings indicate that regulators should closely monitor larger firms, which are more likely to engage in tax avoidance despite strong profitability and sales growth. This quantitative research employs an explanatory method to examine causal relationships between variables. The sample includes consumer goods companies listed on the IDX from 2021 to 2023. Using purposive sampling, 174 data points were collected from 58 companies over three years. Multiple regression analysis was conducted using EViews 12. Results show that profitability and sales growth positively and significantly influence tax aggressiveness. Furthermore, company size enhances the positive effect of both profitability and sales growth on tax aggressiveness. All four research hypotheses are supported, offering insights into tax behavior in Indonesia's consumer goods sector.

Keywords: Tax Aggressiveness; Sales Growth; Profitability; Company Size; Tax Regulation.

1. PENDAHULUAN

1.1 Latar Belakang

Agresivitas pajak yang dilakukan oleh perusahaan-perusahaan di sektor industri barang konsumsi yang terdaftar di Bursa Efek Indonesia (BEI) telah menjadi salah satu topik yang menarik perhatian banyak pihak dalam beberapa tahun terakhir. Fenomena ini mencerminkan

adanya upaya dari perusahaan untuk meminimalkan beban pajak mereka melalui berbagai strategi yang, meskipun tidak selalu melanggar hukum, kerap kali dianggap sebagai bentuk penghindaran pajak yang agresif (Dinar dkk., 2020). Di Indonesia, industri barang konsumsi merupakan salah satu sektor terbesar dan paling signifikan dalam perekonomian nasional. Perusahaan-perusahaan dalam sektor ini, yang mencakup berbagai macam produk dari makanan, minuman, hingga barang kebutuhan sehari-hari, memiliki pengaruh besar dalam dinamika ekonomi negara. Salah satu faktor utama yang mendorong agresivitas pajak di sektor ini adalah tekanan untuk meningkatkan profitabilitas di tengah ketatnya persaingan pasar. Menurut Herlinda dan Rahmawati (2021), banyak perusahaan merasa terbebani dengan tingginya tarif pajak yang diterapkan pemerintah, terutama pajak penghasilan badan yang masih berada di level yang cukup tinggi dibandingkan dengan beberapa negara tetangga di Asia Tenggara. Oleh karena itu, perusahaan cenderung mencari celah-celah dalam peraturan perpajakan yang memungkinkan mereka untuk mengurangi beban pajak. Beberapa strategi yang sering digunakan meliputi transfer pricing, pengalihan laba ke yurisdiksi pajak rendah, hingga memanfaatkan insentif atau pengecualian pajak tertentu yang ditawarkan pemerintah untuk sektor-sektor tertentu.

Fenomena ini juga tidak terlepas dari kompleksitas peraturan perpajakan di Indonesia yang terkadang dianggap kurang jelas dan rentan terhadap penafsiran yang berbeda-beda. Menurut Mustofa dkk. (2021), banyak perusahaan menggunakan celah hukum yang ada untuk menyusun laporan keuangan dan pajak dengan cara yang dapat mengurangi kewajiban pajak mereka secara legal, meskipun tindakan tersebut mungkin menimbulkan kerugian bagi penerimaan negara. Tidak jarang perusahaan-perusahaan di sektor barang konsumsi juga memanfaatkan konsultan pajak untuk merancang skema yang memungkinkan mereka membayar pajak lebih rendah dari yang seharusnya. Beberapa kasus agresivitas pajak di sektor ini telah mencuat ke publik dan menjadi sorotan pemerintah serta otoritas perpajakan. Misalnya, beberapa perusahaan besar di sektor barang konsumsi dilaporkan telah mengalihkan sebagian besar keuntungan mereka ke anak perusahaan di luar negeri yang terletak di negara-negara dengan tarif pajak yang lebih rendah, sehingga meminimalkan beban pajak mereka di Indonesia. Praktik semacam ini jelas berpotensi merugikan negara, karena pendapatan pajak yang seharusnya dapat digunakan untuk pembangunan nasional justru mengalir ke luar negeri. Menurut Rahayu dan Kartika (2021), adanya kebijakan insentif pajak dari pemerintah yang bertujuan untuk mendorong pertumbuhan investasi dan produksi dalam negeri juga kadang-kadang disalahgunakan oleh perusahaan untuk menurunkan beban pajak secara tidak proporsional. Insentif yang diberikan untuk mendukung investasi jangka panjang sering kali dimanfaatkan oleh perusahaan-perusahaan untuk kepentingan jangka pendek guna meningkatkan margin keuntungan.

Menurut Supratiningsih dan Nuridah (2022), pemerintah Indonesia melalui Direktorat Jenderal Pajak (DJP) semakin gencar melakukan upaya pengawasan dan penindakan terhadap perusahaan yang terlibat dalam praktik penghindaran pajak yang agresif. Penguatan regulasi dan penerapan sistem perpajakan berbasis digital yang lebih transparan diharapkan mampu menekan praktik-praktik agresivitas pajak yang merugikan negara. Namun, di sisi lain, perusahaan juga terus mencari cara untuk memaksimalkan efisiensi pajak mereka, sehingga menciptakan dinamika yang kompleks antara kepentingan bisnis dan kewajiban perpajakan (Puspita dan Putra (2021). Dalam jangka panjang, tantangan utama yang dihadapi adalah bagaimana menciptakan keseimbangan antara penerimaan negara yang optimal dari sektor pajak dan iklim usaha yang kondusif bagi perusahaan untuk berkembang. Penerapan regulasi perpajakan yang lebih jelas dan tegas, serta peningkatan kesadaran perusahaan akan

pentingnya kontribusi mereka terhadap pembangunan negara melalui pajak, menjadi kunci untuk mengurangi agresivitas pajak di sektor industri barang konsumsi di Indonesia.

Menurut Afrina dkk. (2022), agresivitas perusahaan berbanding lurus dengan jumlah uang yang dihasilkannya. Bisnis yang lebih menguntungkan biasanya memiliki insentif yang lebih besar untuk mengurangi jumlah pajak yang harus mereka bayar. Secara umum, jumlah pajak yang harus dibayarkan sebanding dengan jumlah keuntungan yang dihasilkan. Oleh karena itu, karena alasan ini, perusahaan sering mencari cara untuk mengurangi kewajiban pajak mereka dengan menggunakan berbagai strategi pajak yang agresif. Misalnya, mereka dapat memindahkan pendapatan mereka ke yurisdiksi berbeda yang memiliki tarif pajak lebih rendah atau mereka dapat mengklaim berbagai pengurangan pajak yang tidak normal (Sholekah dan Oktaviani, 2022). Namun, penting untuk dicatat bahwa tidak semua bisnis yang menguntungkan akan bersikap proaktif terkait pajak. Sejumlah aspek lain, termasuk persepsi risiko, etika perusahaan, dan dampaknya terhadap reputasi, juga memainkan peran penting. Perusahaan dengan reputasi yang baik dapat menahan diri untuk tidak menggunakan metode pajak yang agresif karena khawatir hal itu dapat berdampak buruk pada citra mereka di mata masyarakat umum dan regulator pemerintah.

Berdasarkan penelitian yang dilakukan oleh Utomo dan Fitria (2021), ditemukan bahwa perusahaan dengan manajer yang memiliki insentif ekuitas cenderung lebih agresif dalam perencanaan pajak. Selain itu, penelitian dari Stiawan dan Sanulika (2010) mengungkapkan bahwa keputusan untuk mengadopsi strategi pajak agresif dipengaruhi oleh manajemen laba guna mencapai target laba tertentu. Lebih lanjut, penelitian menunjukkan bahwa perusahaan dengan profitabilitas tinggi yang menggunakan strategi pajak agresif dapat meningkatkan nilai pemegang saham dalam jangka pendek. Namun, dalam jangka panjang, strategi ini dapat menyebabkan masalah hukum dan kewajiban pajak tambahan jika terdeteksi oleh otoritas pajak. Dengan demikian, hubungan antara profitabilitas dan agresivitas pajak perusahaan sangat kompleks dan dipengaruhi oleh sejumlah faktor. Keputusan untuk menerapkan strategi pajak agresif harus dipertimbangkan secara cermat, mengingat risiko dan potensi manfaat yang ada. Di satu sisi, ada keuntungan finansial yang bisa diperoleh, tetapi di sisi lain, ada risiko signifikan yang bisa merugikan perusahaan di masa depan.

Agresivitas pajak perusahaan sering kali dipengaruhi oleh pertumbuhan penjualan, selain profitabilitas. Ketika penjualan meningkat, perusahaan cenderung mencatat keuntungan yang lebih besar, yang pada gilirannya meningkatkan beban pajak. Untuk mengelola beban ini, perusahaan dapat menerapkan strategi penghindaran pajak, yang berpotensi meningkatkan agresivitas pajak mereka. Sudibyo (2022) mendukung pandangan ini, menyatakan bahwa pertumbuhan penjualan yang signifikan memotivasi perusahaan untuk terlibat dalam penghindaran pajak demi mempertahankan laba bersih yang lebih tinggi. Secara manajerial, para eksekutif bertanggung jawab untuk memaksimalkan keuntungan, dan peningkatan penjualan mendorong mereka untuk mengurangi biaya, termasuk pajak. Tiyanto dan Achyani (2022) juga menekankan bahwa pertumbuhan penjualan yang cepat dapat mendorong agresivitas pajak karena tekanan untuk terus meningkatkan laba bagi pemegang saham. Meskipun agresivitas pajak dapat memberikan manfaat jangka pendek berupa penghematan pajak dan peningkatan arus kas, ada risiko pengawasan ketat dan sanksi dari otoritas pajak dalam jangka panjang.

Lebih lanjut, perusahaan dengan pertumbuhan penjualan yang kuat umumnya memiliki sumber daya yang lebih besar untuk menginvestasikan dalam keahlian pajak dan memanfaatkan skema penghindaran pajak yang kompleks (Mulyaningsih dkk., 2023). Sumber daya ini memungkinkan mereka untuk mengeksplorasi celah atau ketidakpastian dalam regulasi perpajakan guna meminimalkan kewajiban pajak. Sebaliknya, Afrianti dan Uzliawati

(2022) berpendapat bahwa perusahaan dengan penjualan stagnan atau menurun cenderung kurang agresif dalam penghindaran pajak, karena fokus utama mereka adalah menjaga likuiditas dan kelangsungan operasional. Dengan demikian, pertumbuhan penjualan berpotensi mendorong agresivitas pajak, terutama saat perusahaan berupaya memaksimalkan keuntungan pasca-pajak melalui berbagai strategi. Namun, penting untuk mempertimbangkan risiko hukum dan reputasi yang melekat pada praktik ini.

Ukuran perusahaan juga menjadi faktor krusial yang memengaruhi tingkat agresivitas pajak (Yanti dan Hartono, 2019). Perusahaan besar, dengan sumber daya dan fleksibilitas yang lebih besar dibandingkan perusahaan kecil, cenderung lebih agresif dalam strategi penghindaran pajak. Pranata dkk. (2021) menemukan bahwa perusahaan besar memiliki akses ke sumber daya finansial dan manusia yang lebih luas, seperti departemen pajak internal atau konsultan eksternal, memungkinkan mereka menggunakan skema pajak yang lebih kompleks. Selain itu, Rahayu dan Suryarini (2021) menyoroti bahwa perusahaan besar seringkali memiliki pengaruh lebih besar terhadap kebijakan pemerintah, memungkinkan mereka memanfaatkan celah regulasi. Sebaliknya, perusahaan kecil lebih rentan terhadap pengawasan pajak yang ketat karena keterbatasan sumber daya dan kapasitas manajemen pajak yang lebih sederhana.

Praktik agresivitas pajak merupakan fenomena kompleks yang terus menjadi fokus dalam literatur akuntansi dan keuangan, dengan kinerja perusahaan sebagai pendorong utama (Suryatna dkk., 2023). Berbagai penelitian secara konsisten menunjukkan profitabilitas sebagai insentif signifikan bagi perusahaan untuk perencanaan pajak agresif. Di samping itu, pertumbuhan penjualan yang tinggi juga diidentifikasi sebagai anteseden penting, karena perusahaan berupaya meminimalkan beban pajak masa depan seiring proyeksi peningkatan pendapatan. Yosephin dan Gunawan (2023) mengemukakan bahwa kekuatan hubungan antara indikator kinerja ini dengan agresivitas pajak seringkali tidak seragam, mengindikasikan peran faktor kontingensi lainnya. Dalam konteks ini, ukuran perusahaan menjadi salah satu faktor kontekstual paling krusial, karena skalanya secara fundamental menentukan kapabilitas dan peluang perusahaan dalam mengelola kewajiban perpajakan.

Merespons inkonsistensi tersebut, literatur terkini telah menggeser peran ukuran perusahaan dari sekadar variabel kontrol menjadi variabel moderasi yang dapat memperkuat atau memperlemah hubungan. Penelitian oleh Ginting (2022) dan Khamisan dan Astuti (2023) secara spesifik menemukan bahwa ukuran perusahaan memperkuat pengaruh positif pertumbuhan penjualan terhadap penghindaran pajak. Serupa, studi oleh Utomo dan Fitria (2021) memberikan bukti empiris bahwa ukuran perusahaan secara signifikan memoderasi pengaruh profitabilitas terhadap agresivitas pajak. Logikanya adalah bahwa perusahaan besar memiliki keunggulan sumber daya, akses keahlian pajak canggih, dan struktur operasional yang lebih kompleks untuk mengeksekusi strategi pajak agresif secara efektif. Oleh karena itu, penelitian ini penting dilakukan untuk menguji secara simultan bagaimana ukuran perusahaan sebagai variabel moderasi berinteraksi dengan profitabilitas dan pertumbuhan penjualan dalam memengaruhi agresivitas pajak, memberikan pemahaman yang lebih holistik dan mendalam.

Berdasarkan penelitian Aditya dkk. (2023), ukuran perusahaan yang lebih besar dapat menjadi pedang bermata dua dalam konteks agresivitas pajak. Meskipun mampu melakukan penghindaran pajak lebih efektif, mereka juga menghadapi risiko pengawasan yang lebih besar dari otoritas pajak. Perusahaan besar umumnya menjadi sasaran utama audit karena dampak ekonomi yang signifikan. Darma (2020) berargumen bahwa pengaruh ekonomi perusahaan besar membuat mereka lebih mungkin menarik perhatian otoritas pajak jika strategi penghindaran pajak mereka terlalu mencolok, meningkatkan risiko reputasi dan

sanksi hukum. Selain itu, hubungan antara ukuran perusahaan dan agresivitas pajak juga dipengaruhi oleh motivasi untuk mempertahankan reputasi (Rizqi & Pratiwi, 2024). Perusahaan besar seringkali memiliki kepentingan untuk menjaga citra publik, sehingga mungkin lebih berhati-hati dalam menerapkan strategi agresivitas pajak yang ekstrem. Bintara (2020) menemukan bahwa perusahaan besar sering menghadapi trade-off antara memaksimalkan penghindaran pajak dan menjaga reputasi publik. Meskipun sumber daya melimpah, mereka harus berhati-hati karena pengawasan yang lebih ketat dan dampak reputasi yang lebih besar.

Penelitian ini memfokuskan pada analisis interaksi antara profitabilitas dan pertumbuhan penjualan terhadap agresivitas pajak, dengan ukuran perusahaan sebagai variabel moderasi. Pendekatan ini menawarkan perspektif komprehensif dibandingkan studi sebelumnya yang hanya menguji hubungan langsung. Kontribusi teoretis diperkuat oleh pemilihan konteks spesifik: perusahaan industri barang konsumsi di Bursa Efek Indonesia (BEI) selama periode pemulihan ekonomi 2021-2023. Dengan mengkaji dinamika perpajakan dalam kondisi pasar yang unik, studi ini tidak hanya mengisi celah penelitian tetapi juga menyajikan bukti empiris bagaimana faktor kontingensi seperti skala operasi dapat mengubah dampak indikator kinerja keuangan terhadap keputusan strategis perpajakan, memberikan pemahaman bernuansa tentang perilaku pajak perusahaan. Secara praktis, hasil penelitian ini memberikan implikasi berharga. Bagi otoritas pajak, temuan ini dapat menjadi dasar pengembangan profil risiko Wajib Pajak yang lebih akurat, dengan pengawasan difokuskan pada perusahaan besar yang mencatat profitabilitas atau pertumbuhan penjualan tinggi. Bagi manajemen perusahaan dan dewan direksi, hasil ini berfungsi sebagai landasan evaluasi strategis untuk menyeimbangkan optimalisasi pajak dengan potensi risiko reputasi dan sengketa. Sementara itu, bagi investor dan analis, pemahaman efek moderasi ini membantu penilaian tata kelola perusahaan (*good corporate governance*) dan risiko investasi lebih mendalam, karena tingkat agresivitas pajak yang tinggi dapat menjadi indikator pengambilan risiko yang lebih luas dalam perusahaan.

1.2 Tinjauan Literatur dan Pengembangan Hipotesis

Berdasarkan pada latar belakang dan tujuan penelitian yang telah dijelaskan oleh peneliti sebelumnya, maka pengembangan hipotesis dalam penelitian ini adalah sebagai berikut:

Ketika perusahaan mencatatkan profitabilitas tinggi, manajer cenderung terdorong untuk menerapkan strategi agresif dalam pengelolaan pajak dengan tujuan memaksimalkan laba setelah pajak. Strategi ini dapat mencakup penghindaran pajak yang sah, seperti pemindahan laba, pengoptimalan struktur modal, dan pemanfaatan insentif pajak. Dalam konteks ini, profitabilitas yang tinggi memberi perusahaan keleluasaan untuk mengambil langkah-langkah agresif dalam pengelolaan pajak tanpa terlalu khawatir terhadap dampak negatif yang mungkin muncul (Dinar et al., 2020). Hubungan antara profitabilitas dan agresivitas pajak dapat dijelaskan melalui teori agensi, yang menggambarkan interaksi antara pemilik (prinsipal) dan manajer (agen). Menurut Jensen dan Meckling (1976), profitabilitas mengacu pada keuntungan yang diperoleh perusahaan, sedangkan agresivitas pajak merupakan strategi yang digunakan untuk mengurangi kewajiban pajak secara legal. Penelitian oleh Herlinda dan Rahmawati (2021) menunjukkan bahwa perusahaan yang lebih menguntungkan cenderung terlibat dalam agresivitas pajak, karena dorongan untuk mempertahankan tingkat pengembalian modal yang tinggi. Selain itu, Supratiningsih dan Nurida (2022) menemukan bahwa semakin besar profitabilitas, semakin besar pula motivasi perusahaan untuk mencari celah dalam peraturan pajak demi meminimalkan kewajibannya. Di sektor barang

konsumsi, di mana persaingan sangat ketat dan margin keuntungan sering kali rendah, perusahaan dengan profitabilitas tinggi memiliki insentif lebih besar untuk mengurangi beban pajak melalui strategi penghindaran pajak. Oleh karena itu, hipotesis ini menyatakan bahwa profitabilitas secara signifikan mendorong agresivitas pajak, karena perusahaan cenderung berusaha mempertahankan keunggulan kompetitifnya dengan memaksimalkan laba setelah pajak.

H1: Profitabilitas berpengaruh signifikan terhadap agresivitas pajak.

Berdasarkan pada agensi teori oleh Jensen & Meckling (1976) manajer sering kali terdorong untuk memaksimalkan keuntungan pemegang saham, termasuk dengan mengurangi beban pajak melalui penghindaran pajak. Pertumbuhan penjualan yang tinggi umumnya diikuti oleh peningkatan laba, yang kemudian memperbesar beban pajak perusahaan. Untuk mengurangi beban ini, manajemen dapat menggunakan strategi penghindaran pajak yang lebih agresif. Penelitian yang dilakukan oleh Afrianti dan Uzliawati. (2022) menemukan bahwa pertumbuhan penjualan yang pesat dapat menciptakan tekanan bagi perusahaan untuk mempertahankan margin keuntungan bersih yang tinggi setelah pajak. Oleh karena itu, perusahaan yang mengalami peningkatan penjualan secara signifikan cenderung terlibat dalam praktik agresivitas pajak untuk mengurangi pengeluaran pajak dan meningkatkan laba bersih. Selain itu, Sudibyo (2022) menegaskan bahwa semakin besar pertumbuhan penjualan, semakin besar pula dorongan bagi perusahaan untuk mencari cara meminimalkan kewajiban pajak, terutama di sektor dengan persaingan ketat seperti industri barang konsumsi. Perusahaan dengan pertumbuhan yang cepat juga memiliki lebih banyak sumber daya untuk melakukan perencanaan pajak secara lebih kompleks. Oleh karena itu, hipotesis ini menyatakan bahwa pertumbuhan penjualan secara signifikan mendorong agresivitas pajak karena perusahaan cenderung memanfaatkan setiap peluang yang ada untuk meminimalkan kewajiban pajaknya.

H2: Pertumbuhan penjualan berpengaruh signifikan terhadap agresivitas pajak.

Teori agensi menyatakan bahwa perusahaan yang lebih besar, dengan struktur manajemen yang lebih kompleks, sering kali memiliki insentif untuk memaksimalkan keuntungan pemegang saham dengan cara mengurangi kewajiban pajak melalui strategi penghindaran pajak yang lebih agresif (Jensen & Meckling, 1976). Penelitian terdahulu menunjukkan bahwa perusahaan besar cenderung lebih mampu memanfaatkan peluang pajak yang tersedia karena akses mereka terhadap konsultan pajak yang lebih berpengalaman, teknologi canggih, serta departemen pajak internal yang kuat. Berdasarkan pada penelitian Darma (2020), menyatakan bahwa ukuran perusahaan mempengaruhi kapasitas perusahaan untuk menggunakan strategi penghindaran pajak yang kompleks. Perusahaan besar yang lebih menguntungkan cenderung memiliki lebih banyak sumber daya untuk mengurangi kewajiban pajak mereka dibandingkan perusahaan kecil. Menurut Ratnawati dkk. (2019), ukuran perusahaan dapat memperkuat hubungan antara profitabilitas dan agresivitas pajak, dimana perusahaan besar yang memiliki profitabilitas tinggi mungkin lebih terdorong untuk memanfaatkan strategi penghindaran pajak karena mereka memiliki lebih banyak insentif untuk mengurangi beban pajak guna mempertahankan keuntungan bersih yang tinggi. Pranata dkk. (2021) menekankan bahwa perusahaan besar lebih cenderung terlibat dalam agresivitas pajak karena mereka memiliki skala ekonomi dan sumber daya yang cukup untuk menghadapi risiko hukum dan pengawasan dari otoritas pajak. Dengan demikian, ukuran perusahaan dapat memperkuat pengaruh profitabilitas terhadap agresivitas pajak, karena perusahaan besar

memiliki kapasitas yang lebih besar untuk merancang strategi penghindaran pajak yang lebih efektif dan efisien.

H3: Ukuran perusahaan mampu memoderasi pengaruh antara profitabilitas terhadap agresivitas pajak.

Menurut penelitian Mulyaningsih dkk. (2023), perusahaan besar cenderung lebih agresif dalam penghindaran pajak karena mereka memiliki kapasitas untuk menyusun skema yang lebih kompleks guna mengurangi kewajiban pajak, dimana pertumbuhan penjualan perusahaan yang lebih besar memiliki skala ekonomi yang memungkinkan mereka memanfaatkan setiap peluang untuk meminimalkan pajak. Ketika pertumbuhan penjualan meningkat, perusahaan besar sering kali memiliki insentif lebih kuat untuk mempertahankan keuntungan bersih mereka, sehingga meningkatkan agresivitas pajak melalui berbagai strategi seperti transfer pricing, alokasi laba ke yurisdiksi pajak rendah, atau memanfaatkan insentif pajak tertentu yang ditawarkan pemerintah. Penelitian yang dilakukan oleh Tiyanto dan Achyani (2022) juga menunjukkan bahwa perusahaan besar lebih mungkin melakukan perencanaan pajak yang agresif ketika mereka mengalami pertumbuhan penjualan yang signifikan. Hal ini karena ukuran perusahaan yang besar memberikan fleksibilitas lebih dalam hal pengaturan keuangan dan pajak. Perusahaan kecil, sebaliknya, mungkin tidak memiliki sumber daya yang sama untuk memanfaatkan pertumbuhan penjualan secara maksimal dalam konteks penghindaran pajak. Selain itu, perusahaan besar lebih mungkin memiliki jaringan internasional atau afiliasi global yang memudahkan mereka untuk mengalihkan laba ke yurisdiksi dengan pajak lebih rendah. Sholekah dan Oktaviani (2022) menemukan bahwa ukuran perusahaan memperkuat hubungan antara pertumbuhan penjualan dan agresivitas pajak karena skala ekonomi dan daya tawar yang lebih besar memungkinkan mereka untuk memanfaatkan celah pajak yang lebih banyak. Oleh karena itu, ukuran perusahaan bertindak sebagai variabel moderasi yang memperkuat pengaruh pertumbuhan penjualan terhadap agresivitas pajak, terutama di sektor barang konsumsi yang sangat kompetitif.

H4: Ukuran perusahaan mampu memoderasi pengaruh antara pertumbuhan penjualan terhadap agresivitas pajak.

2. METODOLOGI PENELITIAN

Penelitian ini menggunakan penelitian kuantitatif dengan pendekatan eksplanatori untuk menjelaskan hubungan sebab-akibat dari variabel-variabel. Penelitian berfokus pada variabel dependen yang dipengaruhi oleh variabel independen (Sugiyono, 2020). Dalam penelitian ini, variabel dependen yang diteliti adalah agresivitas pajak, yang merepresentasikan upaya perusahaan untuk meminimalkan beban pajak mereka secara legal. Penghindaran pajak dapat dilakukan melalui strategi perencanaan pajak yang memanfaatkan celah hukum pajak yang ada, sehingga perusahaan dapat membayar pajak lebih rendah dari yang seharusnya. Salah satu indikator yang umum digunakan untuk mengukur agresivitas pajak adalah Tarif Pajak Efektif atau *Effective Tax Rate* (ETR). ETR merupakan perhitungan rasio antara beban pajak yang sebenarnya dibayar oleh perusahaan dengan laba sebelum pajak. Menurut penelitian Chen et al. (2010), nilai ETR yang lebih rendah menunjukkan tingkat agresivitas pajak yang lebih tinggi, karena perusahaan berusaha untuk membayar pajak lebih sedikit daripada yang diharapkan berdasarkan tarif pajak nominal. Dengan demikian, ETR menjadi alat yang relevan untuk mengevaluasi seberapa efektif perusahaan dalam mengurangi beban pajak mereka. Pada penelitian ini ETR menjadi variabel dependen dengan diberi lambang (Y), dengan pengukuran sebagai berikut (Asiah et al., 2022).

$$ETR = \frac{\text{Beban Pajak Penghasilan}}{\text{Laba Sebelum Pajak Penghasilan}}$$

Variabel independen adalah variabel yang mempengaruhi atau yang menjadi sebab timbulnya variabel dependen Sugiyono (2020). Variabel independen dalam penelitian ini terdiri dari profitabilitas dan pertumbuhan penjualan. Berikut ini adalah penjelasan mengenai variabel independen dalam penelitian ini:

Profitabilitas adalah kemampuan perusahaan menghasilkan laba dari operasionalnya, menunjukkan efisiensi dan efektivitas manajemen dalam menggunakan aset. Menurut Gitman dan Zutter (2012), profitabilitas sering diukur dengan rasio-rasio keuangan seperti Return on Assets (ROA) yang menggambarkan seberapa baik perusahaan memanfaatkan aset untuk menghasilkan keuntungan perusahaannya. Indikator ini penting untuk menilai kinerja keuangan suatu perusahaan dan menarik minat investor.

$$ROA = \frac{\text{Laba Bersih Setelah Pajak}}{\text{Total Aset}}$$

Pertumbuhan penjualan mengacu pada pertambahan penjualan dari satu periode ke periode berikutnya. Pertumbuhan penjualan mengacu pada kenaikan volume penjualan dari satu periode ke periode berikutnya (Yustrianthe dan Fatniasih, 2020). Ismawati dan Lutfillah (2019) menyatakan bahwa pertumbuhan penjualan mengindikasikan keberhasilan investasi yang dilakukan sebelumnya dan berfungsi sebagai prediktor untuk pertumbuhan penjualan di masa depan. Peningkatan penjualan akan meningkatkan kapasitas operasional perusahaan, sehingga menyebabkan peningkatan laba. Peningkatan laba mengakibatkan peningkatan kewajiban pajak, sehingga mendorong perusahaan untuk mencari cara untuk meminimalkan kewajiban pajaknya (Aditya et al., 2023).

$$\text{Pertumbuhan Penjualan (SG)} = \frac{\text{Penjualan } n - \text{Penjualan } n-1}{\text{Penjualan } n-1}$$

Ukuran perusahaan memoderasi penelitian ini. Statistik ini mengelompokkan organisasi berdasarkan ukuran, yang mengindikasikan aktivitas operasional dan pendapatan. Total aset biasanya menentukan ukuran perusahaan. Penelitian ini mengukur ukuran perusahaan dengan menggunakan logaritma natural (Ln) dari total aset (Yahya & Cahyana, 2020).

$$\text{Ukuran Perusahaan (SZ)} = \text{Ln (Total Aset)}$$

Populasi penelitian ini terdiri dari perusahaan-perusahaan di sektor produk industri konsumsi di Indonesia yang terdaftar di BEI dari tahun 2021 hingga 2023. Penelitian ini menetapkan kriteria sampel sebagai berikut:

Tabel 1. Kriteria Perusahaan

No	Keterangan	Total Perusahaan
1	Perusahaan manufaktur di sektor barang konsumsi yang tercatat di BEI selama periode penelitian 2021-2023	73
2	Perusahaan manufaktur di sektor barang konsumsi yang tidak menyajikan laporan keuangan selama periode penelitian 2021-2023.	(5)
3	Perusahaan manufaktur di sektor barang konsumsi yang mengalami kerugian sebelum pajak selama periode penelitian 2021-2023.	(6)

No	Keterangan	Total Perusahaan
4	Perusahaan manufaktur di sektor barang konsumsi yang menggunakan dollar	(4)
Total Jumlah Sampel		58
Jumlah sampel data yang dianalisis (58 Perusahaan x 3 Tahun)		174

Sumber: Data diolah, 2025

Metode analisis dalam penelitian ini menggunakan regresi data panel. Pemilihan model meliputi common effect, fixed effect, dan random effect melalui uji Chow, uji Hausman, dan uji Lagrange Multiplier. Uji hipotesis dilakukan dengan uji parsial dan uji kelayakan model, serta uji koefisien determinasi dan *Moderate Analysis Regression* (MRA) dengan menggunakan perangkat lunak EViews 12. MRA memungkinkan peneliti untuk menguji hipotesis bahwa ukuran perusahaan tidak hanya memiliki pengaruh langsung terhadap agresivitas pajak, tetapi juga memoderasi, yaitu memperkuat atau memperlemah, dampak profitabilitas dan pertumbuhan penjualan terhadap agresivitas pajak. Ini berarti MRA dapat mengungkapkan interaksi kompleks. Menurut Yu dan Li (2024), MRA memberikan pemahaman yang lebih bernuansa dan mendalam tentang mekanisme di balik agresivitas pajak perusahaan, melampaui analisis regresi berganda biasa yang hanya mengukur efek langsung tanpa mempertimbangkan kondisi atau variabel kontekstual yang mengubah hubungan tersebut.

3. HASIL DAN DISKUSI

3.1. Data Statistik Deskriptif

Hasil dari statistik deskriptif yang dihasilkan oleh Eviews 12 adalah sebagai berikut:

Tabel 2. Hasil Uji Statistik Deskriptif

	Profitabilitas (ROA)	Pertumbuhan Penjualan (SG)	Ukuran Perusahaan (SZ) (Milyar)	Agresivitas Pajak (ETR)
Mean	0.200745	0.187243	9.723512	0.872641
Maximum	0.781031	2.726331	97.623224	2.726419
Minimum	0.032972	0.629731	1.782320	0.091751
Std. Dev	0.127726	0.176242	16.82614	0.072656
Observation	174	174	174	174

Sumber: Data diolah, 2025

Berdasarkan pada hasil analisis statistik deskriptif pada tabel 2 di atas, diperoleh hasil sebagai berikut:

1. Rata-rata nilai ETR adalah 0,872641 dan nilai standar deviasi pembayaran pajak perusahaan adalah 0,072656. PT Mayora Indah Tbk (MYOR) memiliki nilai ETR terendah, yaitu 0,091751, sedangkan PT Indofood Sukses Makmur Tbk (INDF) memiliki nilai ETR tertinggi, yaitu 2,726419.
2. Profitabilitas (ROA), yang merupakan proksi dari profitabilitas, mengindikasikan tingkat rata-rata kemampuan perusahaan dalam menciptakan laba dari pemanfaatan asetnya. Rata-rata ROA adalah 0,200745 dengan standar deviasi sebesar 0,127726. PT Diamond Food Indonesia Tbk (DMND) memiliki nilai ROA terendah, yaitu 0,032972, sedangkan PT Ultrajaya Milk Industry Co. Tbk (ULTJ) memiliki nilai ROA tertinggi, yaitu 0,781031.
3. Pertumbuhan penjualan mencerminkan kinerja periode investasi sebelumnya dan dapat digunakan sebagai prediksi untuk periode investasi selanjutnya. Standar

deviasi dari pertumbuhan penjualan adalah 0.176242, dengan nilai rata-rata pertumbuhan sebesar 0,187243. PT Siantar Top Tbk (STTP) memiliki nilai pertumbuhan penjualan terendah, yaitu 0,629731, sedangkan PT Sentra Food Indonesia Tbk (FOOD) memiliki nilai pertumbuhan penjualan tertinggi, yaitu 2,726331.

- Ukuran perusahaan diukur dengan logaritma natural (Ln) dari total aset. Ukuran perusahaan berkisar antara nilai minimum sebesar 1,782320 pada PT Sekar Bumi Tbk (SKBM) hingga nilai maksimum sebesar 97,623224 pada Gudang Garam Tbk. Nilai rata-rata ukuran perusahaan adalah 9,723512 dengan standar deviasi sebesar 16,82614.

3.2. Uji Asumsi Klasik

Pada penelitian ini, menggunakan proses Uji Asumsi Klasik yang meliputi Uji Normalitas, Uji Multikolinearitas, Uji Autokorelasi dan Uji Heteroskedastisitas, dikarenakan penggunaan Data Panel, seperti yang dijelaskan oleh Caraka, 2019. Adapun hasil Uji Asumsi Klasik dalam penelitian ini ditunjukkan pada Tabel 3 berikut:

Tabel 3. Hasil Uji Asumsi Klasik

Uji Asumsi Klasik	Hasil	Keterangan
Normalitas	Probability: 0.3512	Data terdistribusi normal (p-value > 0.05)
Multikolinearitas	Semua nilai korelasi < 0.9	Tidak ada gejala multikolinearitas antara variabel independen
Heteroskedastisitas	Probability > 0.05 untuk semua variabel	Data bebas dari gejala heteroskedastisitas
Autokorelasi	Durbin-Watson stat: 1.541292	Tidak terjadi autokorelasi (nilai DW berada di antara dl dan 3-du)

Sumber: Data diolah, 2025

Dari hasil uji asumsi klasik pada tabel 3 di atas di peroleh bahwa nilai probability 0,3512 lebih besar dari 0.05, hal ini menunjukkan bahwa data berdistribusi normal. Kemudian, pada tabel 3 di atas juga, menunjukkan bahwa nilai korelasi antar variabel independen semuanya berada di bawah 0,9 sehingga dapat disimpulkan bahwa tidak ada gejala multikolinearitas. Kemudian, untuk hasil uji heteroskedastisitas, masing-masing variabel memiliki nilai probabilitas > 0.05. Hasil uji tersebut membuktikan bahwa data pada penelitian ini telah terbebas dari gejala heteroskedastisitas.

Setelah melakukan pengujian multikolinearitas dan heteroskedastisitas, pada penelitian ini melakukan pengujian autokorelasi dengan statistik Durbin-Watson dengan perangkat lunak Eviews 12, dan diperoleh hasil nilai statistik Durbin-Watson sebesar 1.541292 berada di antara $DU > D < 3-DU$ sehingga dapat disimpulkan bahwa tidak terjadi autokorelasi dalam penelitian ini.

3.3. Uji Regresi Data Panel

Selama pengujian model, penelitian kami berujung pada model Common Effect. Hasil ini diperoleh dari penerapan uji Chow untuk membedakan antara model common effect dan fixed effect (Caraka, 2019). Uji Chow menunjukkan bahwa model yang dipilih adalah model common effect. Selain itu, kami mengevaluasi model common effect terhadap model random effect melalui uji *Lagrange Multiplier* (LM), dan hasil yang diperoleh mengindikasikan bahwa model common effect adalah model yang paling sesuai.

Tabel 4. Hasil Uji Regresi

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	0.474618	0.018926	6.825912	0.0000
ROA	0.827612	0.074136	3.827161	0.0030
SG	0.129441	0.045109	3.762513	0.0050

Sumber: Data diolah, 2025

Berdasarkan pada Tabel 4 di atas, persamaan regresi yang diperoleh dalam penelitian ini adalah sebagai berikut:

$$Y = 0.474618 + 0.827612ROA + 0.129441SG$$

Persamaan regresi di atas dapat dijelaskan seperti:

1. Y= Agresivitas Pajak (ETR)
2. Nilai Unstandardized Coefficients sebesar 0,474618 menunjukkan bahwa jika tidak ada kenaikan nilai ROA dan SG (bernilai = 0), maka nilai ETR akan tetap sebesar 0,474618.
3. Nilai Koefisien regresi profitabilitas (ROA) sebesar 0.827612, hal ini berarti jika nilai ROA mengalami kenaikan 1 satuan, maka agresivitas pajak perusahaan akan mengalami kenaikan sebesar 0.827612.
4. Nilai Koefisien regresi pertumbuhan penjualan (SG) sebesar 0.129441, hal ini berarti jika nilai SG mengalami kenaikan 1 satuan, maka agresivitas pajak perusahaan akan mengalami kenaikan sebesar 0.129441.

3.4. Uji Koefisien Determinasi (Adjusted R Square)

Tabel 5. Hasil Uji R-Square

Model	R Square	Adjusted R Square	Std. Error of the Estimate
1	.576213	.471823	.82746

Sumber: Data diolah, 2025

Berdasarkan Tabel 5, nilai Adjusted R-Square yang berhasil diperoleh adalah 0.471823 atau 47.1823%. Ini berarti, 47.1823% dari perubahan dalam variabel dependen dapat dijelaskan oleh variabel independen. Sementara itu, 52.8177% sisanya dipengaruhi oleh faktor lain di luar variabel independen. Nilai koefisien korelasi (R) sebesar 0.576213 mengindikasikan bahwa variabel independen dan dependen memiliki hubungan yang cukup kuat, yaitu sebesar 57.6213%.

3.5. Uji F-Statistik (Model Feasibility Test)

Tabel 6. Hasil Uji f-Square

Statistik Uji	Nilai	Signifikansi (p-value)
F-Statistik	2.813493	0.031754

Sumber: Data diolah, 2025

Berdasarkan data hasil analisis pada Tabel 6 di atas, nilai F-statistik yang tercatat adalah 2.813493 dengan nilai signifikansi 0.031754. Dengan demikian, dapat disimpulkan bahwa profitabilitas (ROA) dan pertumbuhan penjualan (SG) memiliki pengaruh secara simultan terhadap agresivitas pajak (ETR).

3.6. Uji T-Statistik (Model Feasibility Test)

Uji Hipotesis yang dilakukan dalam penelitian ini terdiri dari 2 (dua) struktur model regresi, pada persamaan struktur model 1 untuk menguji pengaruh ROA dan SG terhadap ETR, sedangkan persamaan struktur model 2 untuk menguji variabel moderasi.

Tabel 7. Uji T-Statistik (Pengaruh ROA dan SG terhadap ETR)

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	0.474618	0.018926	6.825912	0.0000
ROA	0.827612	0.074136	3.827161	0.0030
SG	0.129441	0.045109	3.762513	0.0050

Sumber: Data diolah, 2025

Berdasarkan hasil analisis uji T pada tabel 7 di atas, maka dalam penelitian ini dapat dijelaskan bahwa:

1. Nilai t-statistik untuk profitabilitas (ROA) adalah 3,827161 dan nilai signifikansinya sebesar $0,0030 < 0,05$, maka hal ini membuktikan bahwa profitabilitas (ROA) berpengaruh positif dan signifikan terhadap agresivitas pajak (ETR) pada perusahaan industri barang konsumsi yang terdaftar di BEI pada tahun 2021-2023, sehingga dapat disimpulkan bahwa hipotesis pertama (H1) di terima dan H01 ditolak. Hal ini berarti, Ketika Return on Assets (ROA) meningkat, hal ini menunjukkan bahwa perusahaan semakin efisien dalam memanfaatkan asetnya untuk menghasilkan keuntungan, sehingga *Effective Tax Rate* (ETR) juga cenderung meningkat, yaitu perusahaan tersebut menerapkan strategi pengelolaan pajak yang lebih agresif. Hasil penelitian ini mendukung teori agensi (Jensen and Meckling, 1976), yang menjelaskan bahwa manajemen perusahaan, yang bertindak sebagai agen, berkewajiban untuk memaksimalkan laba bagi pemegang saham. Dengan profitabilitas yang tinggi, manajer memiliki insentif lebih besar untuk terlibat dalam perencanaan pajak agresif guna menurunkan beban pajak dan meningkatkan laba bersih. Hasil penelitian ini sejalan dengan penelitian Herlinda dan Rahmawati (2021) dan Yosephin dan Gunawan (2023) yang menjelaskan bahwa perusahaan dengan profitabilitas yang tinggi lebih mungkin terlibat dalam perencanaan pajak agresif untuk menurunkan beban pajak mereka, dimana perusahaan yang menghasilkan laba besar akan menghadapi kewajiban pajak yang juga besar. Oleh karena itu, mereka memiliki motivasi lebih kuat untuk mencari cara-cara legal atau semi-legal untuk mengurangi pajak yang harus dibayar. Strategi ini memungkinkan perusahaan mempertahankan lebih banyak dari keuntungannya. Selain itu penelitian yang dilakukan oleh Supratningsih dan Nurida (2022) menunjukkan bahwa semakin besar profitabilitas, semakin besar pula dorongan perusahaan untuk mencari celah dalam peraturan pajak demi meminimalkan kewajiban pajaknya. Dengan adanya situasi yang semakin menguntungkan, perusahaan cenderung lebih aktif dalam menemukan cara untuk mengurangi beban pajak, sehingga mereka akan memanfaatkan insentif pajak, pengurangan, atau bahkan strategi pelaporan yang lebih cerdas.
2. Nilai t-statistik untuk pertumbuhan penjualan (SG) adalah 3,762513 dan nilai signifikansinya sebesar $0,0050 < 0,05$, maka hal ini membuktikan bahwa pertumbuhan penjualan (SG) berpengaruh positif dan signifikan terhadap agresivitas pajak (ETR) pada perusahaan industri barang konsumsi yang terdaftar di BEI pada tahun 2021-2023, sehingga dapat disimpulkan bahwa hipotesis kedua (H2) diterima dan H02 ditolak. Hal ini berarti, ketika penjualan perusahaan meningkat, perusahaan akan

cenderung lebih agresif dalam mencari cara untuk mengurangi beban pajak mereka. Pertumbuhan penjualan yang besar mendorong perusahaan untuk lebih aktif dan agresif dalam mengelola kewajiban pajak mereka, hal ini dilakukan untuk menjaga profitabilitas tetap tinggi. Hasil penelitian ini mendukung teori agensi (Jensen and Meckling, 1976) yang menjelaskan bahwa perusahaan dengan pertumbuhan penjualan yang tinggi sering kali mengalami peningkatan sumber daya keuangan. Pertumbuhan penjualan mencerminkan peningkatan pendapatan yang menghasilkan keuntungan lebih besar. Dengan keuntungan yang meningkat, perusahaan memiliki lebih banyak sumber daya yang dapat diinvestasikan untuk kegiatan perencanaan pajak yang lebih agresif. Hasil penelitian ini sejalan dengan penelitian yang dilakukan oleh Afrianti dan Uzliawati (2022) dan Suryatna dkk. (2023), menemukan bahwa pertumbuhan penjualan yang pesat dapat menciptakan tekanan bagi perusahaan untuk mempertahankan margin keuntungan bersih yang tinggi setelah pajak. Oleh karena itu, perusahaan yang mengalami peningkatan penjualan secara signifikan cenderung terlibat dalam praktik agresivitas pajak untuk mengurangi pengeluaran pajak dan meningkatkan laba bersih. Selain itu, Sudibyo (2022) menegaskan bahwa semakin besar pertumbuhan penjualan, semakin besar pula dorongan bagi perusahaan untuk mencari cara meminimalkan kewajiban pajak, terutama di sektor dengan persaingan ketat seperti industri barang konsumsi. Perusahaan dengan pertumbuhan yang cepat juga memiliki lebih banyak sumber daya untuk melakukan perencanaan pajak secara lebih kompleks, hal ini terutama terjadi karena perusahaan berusaha mempertahankan margin keuntungan dalam menghadapi peningkatan pendapatan.

3.8. Uji Moderasi MRA

Uji Moderasi MRA adalah metode yang digunakan untuk memahami apakah pengaruh variabel independen terhadap variabel dependen berubah dengan adanya variabel lain, yang disebut variabel moderasi. Dalam MRA, interaksi antara variabel independen dan variabel moderasi dianalisis untuk melihat apakah pengaruh tersebut signifikan. Ini berguna untuk menilai kompleksitas hubungan antar variabel dalam penelitian, untuk lebih jelasnya dapat dilihat pada tabel 8 di bawah ini:

Tabel 8. Uji Moderasi (Pengaruh ROA dan SG terhadap ETR dimoderasi SZ)

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	4.522812	7.328273	3.927926	0.0052
ROA	1.123891	2.119372	3.322134	0.0065
SG	1.952283	1.387261	5.432882	0.0002
SZ	0.928631	0.720937	5.531836	0.0002
ROA*SZ (M1)	0.711923	0.520983	3.338219	0.0060
SG*SZ (M2)	0.691344	0.308182	3.284921	0.0077

Sumber: Data diolah, 2025

Berdasarkan pada hasil analisis yang disajikan pada Tabel 6 di atas, maka diperoleh penjelasan sebagai berikut:

1. Hasil uji moderasi yang telah dilakukan untuk M1 (ROA*SZ) menunjukkan bahwa moderasi M1 memiliki nilai t-statistik sebesar 3.338219 dan nilai Sig. $0.0061 < 0.05$ yang berarti bahwa ukuran perusahaan (SZ) mampu memoderasi hubungan antara profitabilitas (ROA) dengan agresivitas pajak (ETR) pada perusahaan

industri barang konsumsi yang terdaftar di BEI pada tahun 2021-2023, sehingga dapat disimpulkan bahwa hipotesis ketiga (H3) diterima. Hal ini berarti bahwa ukuran perusahaan mampu memperkuat pengaruh positif hubungan antara profitabilitas dengan agresivitas pajak. Jenis moderasi ini termasuk kedalam moderasi semu atau quasi-moderasi, dimana variabel profitabilitas berpengaruh signifikan dan variabel ukuran perusahaan juga signifikan. Perusahaan dengan ukuran besar biasanya memiliki sumber daya yang lebih banyak seperti akses ke konsultan pajak, ahli keuangan, dan infrastruktur hukum yang memungkinkan mereka untuk melakukan perencanaan pajak yang lebih kompleks. Dengan demikian, perusahaan besar yang sangat menguntungkan cenderung memiliki kemampuan lebih besar untuk mengurangi ETR mereka melalui strategi pajak agresif. Hasil penelitian ini mendukung agensi teori (Jensen and Meckling, 1976) yang menjelaskan bahwa manajer di perusahaan besar lebih cenderung mengambil risiko yang terkait dengan strategi penghindaran pajak yang agresif untuk memuaskan ekspektasi pemegang saham. Sebaliknya, perusahaan kecil dengan basis pemegang saham yang lebih terbatas mungkin tidak menghadapi tekanan yang sama untuk mengoptimalkan penghindaran pajak. Hasil penelitian ini sejalan dengan penelitian yang dilakukan oleh Maulida dkk. (2023), dimana ukuran perusahaan memperkuat hubungan antara profitabilitas dan agresivitas pajak. Perusahaan yang sangat profitabel secara alami memiliki insentif kuat untuk meminimalkan beban pajaknya, dan ketika insentif ini ada pada perusahaan besar, mereka memiliki akses superior terhadap konsultan pajak ahli, kemampuan untuk merancang skema tax planning internasional yang kompleks, serta kekuatan finansial untuk menghadapi potensi sengketa pajak. Dengan demikian, ukuran perusahaan menjadi katalis yang mengubah dorongan untuk menekan pajak (akibat profitabilitas tinggi) menjadi tindakan agresivitas pajak yang lebih nyata dan terukur, karena mereka memiliki sarana dan keahlian untuk melakukannya. Selain itu, Sejalan dengan temuan Yosephine dan Gunawan (2023), ukuran perusahaan teridentifikasi sebagai variabel yang memoderasi secara positif hubungan antara profitabilitas dan agresivitas pajak. Hal ini dijelaskan oleh adanya motivasi yang lebih besar pada perusahaan berskala besar dengan tingkat profitabilitas tinggi untuk mengimplementasikan strategi penghindaran pajak, yang didorong oleh insentif untuk menekan kewajiban perpajakan demi mempertahankan laba bersih yang optimal. Pranata dkk. (2021) menegaskan bahwa perusahaan besar lebih rentan terlibat dalam praktik agresivitas pajak, berkat skala ekonomi dan sumber daya yang memadai untuk menghadapi risiko hukum serta pengawasan dari otoritas pajak. Oleh karena itu, ukuran perusahaan dapat memperkuat dampak profitabilitas terhadap agresivitas pajak, karena perusahaan besar memiliki kemampuan lebih untuk merancang strategi penghindaran pajak yang lebih efektif dan efisien.

2. Hasil uji moderasi yang telah dilakukan untuk M2 (SG*SZ), menunjukkan bahwa moderasi M2 memiliki nilai t-statistik sebesar 3,284921 dan nilai Sig. 0.0077 < 0.05 yang berarti ukuran perusahaan mampu memoderasi hubungan antara pertumbuhan penjualan (SG) dengan agresivitas pajak (ETR) pada perusahaan industri barang konsumsi yang terdaftar di BEI pada tahun 2021-2023, sehingga dapat disimpulkan bahwa hipotesis keempat (H4) diterima. Hal ini berarti bahwa ukuran perusahaan mampu memperkuat pengaruh positif hubungan antara pertumbuhan penjualan dengan agresivitas pajak. Jenis moderasi ini termasuk kedalam moderasi semu atau quasi-moderasi, dimana variabel pertumbuhan

penjualan berpengaruh signifikan dan variabel ukuran perusahaan juga signifikan. Perusahaan besar, terutama yang mengalami pertumbuhan penjualan, sering kali memiliki tim keuangan yang lebih besar dan akses ke konsultan pajak yang berpengalaman. Dengan demikian, mereka dapat mengembangkan dan menerapkan strategi penghindaran pajak yang lebih canggih dan efektif. Sumber daya yang cukup ini memberikan mereka kemampuan untuk mengeksplorasi berbagai opsi perpajakan yang mungkin tidak dapat diakses oleh perusahaan kecil. Dengan penjualan yang terus meningkat, ada urgensi dari perusahaan besar untuk memaksimalkan keuntungan. Salah satu caranya adalah dengan meminimalkan beban pajak. Dengan meningkatkan agresivitas pajak, perusahaan bisa menghemat biaya besar, yang kemudian bisa diinvestasikan kembali untuk memperkuat pertumbuhan atau membayar dividen kepada pemegang saham. Penelitian ini mendukung teori agensi yang menyatakan bahwa perusahaan besar, dengan struktur manajemen yang kompleks, sering kali memiliki insentif untuk memaksimalkan keuntungan pemegang saham melalui penghindaran pajak yang lebih agresif. Penelitian ini sejalan dengan temuan Khamisan dan Astuti (2023) yang menyatakan bahwa ukuran perusahaan mampu memperkuat hubungan positif antara pertumbuhan penjualan dengan agresivitas pajak. Perusahaan besar memiliki kemampuan dan peluang yang lebih baik untuk mengubah potensi keuntungan dari pertumbuhan penjualan menjadi tindakan penghindaran pajak yang efektif. Pertumbuhan penjualan yang signifikan sering kali menunjukkan adanya laba yang tinggi di masa depan, sehingga memberikan dorongan bagi perusahaan untuk merencanakan pajak secara agresif. Perusahaan besar dapat memaksimalkan insentif ini berkat sumber daya finansial yang melimpah, akses ke konsultan pajak yang ahli, serta struktur operasional yang kompleks dan berskala lintas yurisdiksi, yang memberikan lebih banyak peluang untuk optimasi pajak. Selain itu, penelitian Asianingrum dan Nursyirwan (2024) menemukan bahwa ukuran perusahaan memiliki dampak signifikan terhadap kemampuan perusahaan dalam menerapkan strategi penghindaran pajak yang lebih rumit. Perusahaan besar dengan profitabilitas tinggi cenderung memiliki lebih banyak sumber daya untuk mengurangi beban pajak dibandingkan perusahaan kecil. Hal ini juga didukung oleh penelitian Ginting (2022), yang menunjukkan bahwa ukuran perusahaan memperkuat hubungan antara profitabilitas dan agresivitas pajak. Perusahaan besar yang memiliki laba tinggi lebih termotivasi untuk menggunakan strategi penghindaran pajak karena insentifnya lebih besar untuk menjaga tingkat keuntungan bersih yang optimal. Dengan demikian, perusahaan besar tidak hanya memiliki kapasitas untuk mengurangi pajak, tetapi juga memiliki motivasi yang lebih kuat untuk melakukannya, yang berdampak pada keputusan strategis jangka panjang mereka.

4. KESIMPULAN

Berdasarkan hasil analisis, penelitian ini menyimpulkan bahwa profitabilitas (ROA) dan pertumbuhan penjualan (SG) secara parsial berpengaruh positif dan signifikan terhadap agresivitas pajak (ETR) pada perusahaan industri barang konsumsi di BEI periode. Peningkatan efisiensi dalam memanfaatkan aset untuk menghasilkan keuntungan (ROA) mendorong perusahaan menerapkan strategi pengelolaan pajak yang lebih agresif, yang mendukung teori agensi dan sejalan dengan penelitian Herlinda dan Rahmawati, Yosephin dan Gunawan (2023), serta Supratiningsih dan Nurida (2022). Demikian pula, pertumbuhan

penjualan yang besar memotivasi perusahaan untuk lebih aktif dan agresif dalam mengelola kewajiban pajak demi menjaga profitabilitas tinggi, konsisten dengan teori agensi dan temuan Afrianti dan Uzliawati (2022), Suryatna dkk. (2023), serta Sudibyo (2022). Lebih lanjut, ukuran perusahaan (SZ) terbukti mampu memoderasi hubungan antara profitabilitas (ROA) dan pertumbuhan penjualan (SG) terhadap agresivitas pajak (ETR) secara positif. Ini menunjukkan bahwa ukuran perusahaan memperkuat pengaruh positif profitabilitas dan pertumbuhan penjualan terhadap agresivitas pajak. Temuan ini mengindikasikan jenis moderasi semu (quasi-moderasi).

Perusahaan besar, dengan sumber daya melimpah seperti akses ke konsultan pajak dan ahli keuangan, memiliki kemampuan lebih besar untuk merancang dan menerapkan strategi pajak yang kompleks, sehingga dorongan dari profitabilitas tinggi atau pertumbuhan penjualan yang pesat dapat diwujudkan menjadi tindakan agresivitas pajak yang lebih nyata. Hasil ini konsisten dengan teori agensi, di mana manajer di perusahaan besar lebih cenderung mengambil risiko penghindaran pajak untuk memenuhi ekspektasi pemegang saham. Penelitian ini sejalan dengan Maulida dkk. (2023), Yosephine dan Gunawan (2023), Pranata dkk. (2022), Khamisan dan Astuti (2023), Asianingrum dan Nursyirwan (2024), serta Ginting (2022), yang juga menemukan bahwa ukuran perusahaan memperkuat hubungan antara profitabilitas/pertumbuhan penjualan dengan agresivitas pajak. Untuk penelitian selanjutnya, disarankan untuk memperluas cakupan sampel ke sektor industri lain selain barang konsumsi untuk melihat konsistensi temuan. Selain itu, penambahan variabel moderasi lain seperti tata kelola perusahaan atau kualitas audit dapat memberikan pemahaman yang lebih komprehensif mengenai faktor-faktor yang memengaruhi agresivitas pajak. Pertimbangan penggunaan metode pengukuran agresivitas pajak yang berbeda juga dapat dilakukan untuk menguji robustnya hasil.

5. KETERBATASAN PENELITIAN

Keterbatasan dalam penelitian ini adalah penelitian ini hanya berfokus pada data keuangan yang dipublikasikan, sehingga tidak semua informasi internal perusahaan mungkin tercermin, seperti strategi manajemen pajak yang spesifik atau pengaruh eksternal lainnya. Kemudian Penelitian ini hanya berfokus pada profitabilitas, pertumbuhan penjualan, dan ukuran perusahaan, sedangkan faktor lain seperti leverage, struktur kepemilikan, atau regulasi pajak di setiap negara juga berperan penting dalam mempengaruhi agresivitas pajak tetapi tidak dibahas secara mendalam. Oleh karena itu disarankan bagi penelitian selanjutnya untuk mengintegrasikan faktor-faktor eksternal seperti perubahan regulasi pajak di berbagai negara dan kondisi ekonomi global bisa sangat bermanfaat. Ini akan membantu dalam memahami konteks yang lebih luas dan implikasinya terhadap agresivitas pajak. Kemudian, selain berfokus pada profitabilitas, pertumbuhan penjualan, dan ukuran perusahaan, perlu juga untuk memasukkan variabel lain. Seperti, leverage, struktur kepemilikan, dan regulasi pajak. Faktor-faktor ini dapat mempengaruhi agresivitas pajak dan memberikan wawasan lebih dalam.

6. ACKNOWLEDGMENT

Penelitian ini diinisiasi oleh ketiga Penulis dan Bersifat Mandiri.

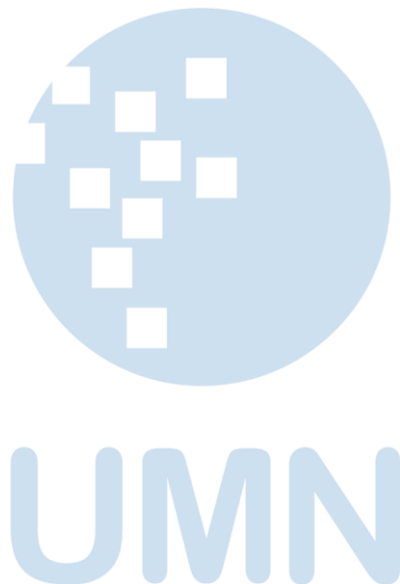
7. DAFTAR REFERENSI

Aditya, M., Elwisam, E., & Digidowiseiso, K. (2023). The Influence of Profitability, Liquidity, Capital Intensity, Solvency and Company Size on Tax Aggressiveness in Mining Sector Companies Listed on the Indonesian Stock Exchange for the 2015–2019 Period. *Jurnal Syntax Admiration*, 4(2), 406-423.

- Afrianti, F., & Uzliawat, L. (2022). The Effect Of Leverage, Capital Intensity, And Sales Growth On Tax Avoidance With Independent Commissioners As Moderating Variables (Empirical Study On Manufacturing Companies Listed On The Indonesia Stock Exchange In 2017-2020). *International Journal of Science, Technology & Management*, 3(2), 337-348.
- Afrina, I., Abbas, D. S., Hidayat, I., & Mubbarok, A. Z. (2022). Pengaruh Profitabilitas, Komisaris Independen, Capital Intensity dan Leverage Terhadap Agresivitas Pajak. *Akuntansi*, 1(4), 71-91.
- Asiah, N., Widati, S., Nurjanah, R., & Yahya, A. (2022). Effect of Tax Avoidance, Sales Growth, and Asset Structure on Capital Structure. *Jurnal Manajemen Kewirausahaan*, 19(02), 123–134.
- Asianingrum, D. F., & Nursyirwan, V. I. (2024). Pengaruh Capital Intensity terhadap Agresivitas Pajak dengan Ukuran Perusahaan sebagai Variabel Moderasi. *Jurnal Akuntansi, Manajemen, dan Perencanaan Kebijakan*, 2(1), 13-13.
- Bintara, R. (2022). Effect of Transactions of Privileged Relations, Liquidity and Company Size on Tax Aggressiveness. *International Journal of Management Studies and Social Science Research*, 4(4).
- Caraka, R. E. (2019). Pengantar Spasial Data Panel. In Wade. Tentu! Berikut adalah tabel hasil uji normalitas dengan format yang jelas dan terstruktur.
- Darma, S. S. (2020). The Effect of Liquidity and Size of The Company Towards Company Tax Aggressiveness. *JASa (Jurnal Akuntansi, Audit dan Sistem Informasi Akuntansi)*, 4(2), 271-286.
- Dinar, M., Yuesti, A., & Dewi, N. P. S. (2020). Pengaruh profitabilitas, likuiditas dan leverage terhadap agresivitas pajak pada perusahaan manufaktur yang terdaftar di BEI. *Kumpulan Hasil Riset Mahasiswa Akuntansi (KHARISMA)*, 2(1).
- Ginting, R. R. (2022). The Effect of Sales Growth, Profitability and Leverage on Tax Avoidance with Firm Size as Moderating Variable. *Accounting & Finance/Oblik i Finansii*, 98(4).
- Gitman, L. J., & Zutter, C. J. (2012). *Principles of Managerial Finance*. Pearson.
- Herlinda, A. R., & Rahmawati, M. I. (2021). Pengaruh Profitabilitas, likuiditas, leverage dan ukuran perusahaan terhadap agresivitas pajak. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, 10(1).
- Ismawati, Y. I., & Lutfillah, N. Q. (2019). Determinant Tax Avoidance. *Research In Management and Accounting*, 2(2), 76–86. <https://doi.org/10.33508/rima.v2i2.2604>
- Karlina, L. (2021). Pengaruh Profitabilitas, Likuiditas, Leverage dan Intensitas Aset Tetap Terhadap Agresivitas Pajak. *Jurnal Madani: Ilmu Pengetahuan, Teknologi, Dan Humaniora*, 4(2), 109-125.
- Khamisan, M. S. P., & Astuti, C. D. (2023). The effect of capital intensity, transfer pricing, and sales growth on tax avoidance with company size as a moderation variable. *Devotion: Journal of Research and Community Service*, 4(3), 709-720.
- Mulyaningsih, N., Soerono, A. N., & Mukhtar, M. (2023). Effect of Hedging, Financial Lease, Sales Growth, and Earning Management on Tax Aggressiveness. *Journal of Applied Business, Taxation and Economics Research*, 2(4), 434-450.

- Mustofa, M. A., Amini, M., & Djaddang, S. (2021). Pengaruh Profitabilitas Terhadap Agresivitas Pajak Dengan Capital Intensity Sebagai Variabel Moderasi. *Jurnal Ilmiah Akuntansi Kesatuan*, 9(1), 173-178.
- Pranata, I. P. A. A., Adhitanaya, K., Rizaldi, M. F., Winanda, G. B. E., Lestari, N. M. I. D., & Astuti, P. D. (2021). The effect of corporate social responsibility, firm size, and leverage on tax aggressiveness: An empirical evidence. *Universal Journal of Accounting and Finance*, 9(6), 1478-1486.
- Puspita, D. A., & Putra, H. C. (2021). Pengaruh Profitabilitas Dan Corporate Social Responsibility Disclosure Terhadap Agresivitas Pajak. *Jurnal Administrasi dan Bisnis*, 15(2), 71-81.
- Putty, V. A. F., & Badjuri, A. (2023). Faktor Yang Berpengaruh Terhadap Penghindaran Pajak Dengan Ukuran Perusahaan Sebagai Moderasi. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 7(2), 1211-1227.
- Rahayu, S., & Suryarini, T. (2021). The Effect of CSR Disclosure, Firm Size, Capital Intensity, and Inventory Intensity on Tax Aggressiveness. *Accounting Analysis Journal*, 10(3), 191-197.
- Rahayu, U., & Kartika, A. (2021). Pengaruh Profitabilitas, Corporate Social Responsibility, Capital Intensity, Ukuran Perusahaan Terhadap Agresivitas Pajak. *Jurnal Maneksi (Management Ekonomi Dan Akuntansi)*, 10(1), 25-33.
- Ratnawati, V., Wahyunir, N., & Abduh, A. (2019). The effect of institutional ownership, board of commissioners, audit committee on tax Aggressiveness; firm size as a moderating variable. *International Journal of Business and Economy*, 1(2), 103-114.
- Rizqi, R. M., & Pratiwi, A. (2024). Tax Avoidance Assessment In Relation To The Institutional Ownership, Size Of The Company, And Profitability. *Jurnal Riset Akuntansi Terpadu*, 17(1), 56-73.
- Sholekah, F. I., & Oktaviani, R. M. (2022). Pengaruh Profitabilitas, Sales Growth Dan Leverage Terhadap Penghindaran Pajak. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 6(2), 1406-1420.
- Stiawan, H., & Sanulika, A. (2021, March). Pengaruh Profitabilitas, Ukuran Perusahaan Dan Likuiditas Terhadap Agresivitas Pajak Dengan Corporate Social Responsibility Sebagai Variabel Moderator. In *Conference on Economic and Business Innovation (CEBI)* (pp. 906-918).
- Sudibyo, H. H. (2022). Pengaruh Profitabilitas, Leverage, Dan Pertumbuhan Penjualan Terhadap Penghindaran Pajak. *Jurnal Akuntansi Dan Manajemen Bisnis*, 2(1), 78-85.
- Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Supraptiningsih, J. D., & Nuridah, S. (2022). Pengaruh Profitabilitas Dan Good Corporate Governance Terhadap Agresivitas Pajak. *Jurnal Pendidikan dan Konseling (JPDK)*, 4(6), 8084-8094.
- Suryatna, I. K. D., Werastuti, D. N. S., & Yuniarta, G. A. (2023). The Effect of Institutional Ownership, Sales Growth, Firm Size on Tax Avoidance with Corporate Social Responsibility as a Moderating Variable. *International Journal of Social Science and Business*, 7(3), 618-629.
- Tiyanto, G. M., & Achyani, F. (2022). Effect of Capital Intensity, Thin Capitalization, Transfer Pricing, Profitability and Sales Growth on Tax Aggressiveness. *The International Journal of Business Management and Technology*, 6(4).

- Utomo, A. B., & Fitria, G. N. (2021). Ukuran Perusahaan Memoderasi Pengaruh Capital Intensity dan Profitabilitas Terhadap Agresivitas Pajak. *Esensi: Jurnal Bisnis Dan Manajemen*, 10(2), 231-246.
- Yahya, A., & Cahyana, D. (2020). Determinan Audit Report Lag (Studi Empiris Pada Perusahaan LQ-45 Tahun 2014-2018. *Akuntansi Dewantara*, 4(2).
- Yanti, L. D., & Hartono, L. (2019). Effect of Leverage, Profitability and Company Size on Tax Aggressiveness. (Empirical Study: Subsector Manufacturing Companies Food, Beverage, Cosmetics and Household Purposes Manufacturing Listed on the Indonesia Stock Exchange for 2014-2017). *ECo-Fin*, 1(1), 1-11.
- Yosephine, K., & Gunawan, J. (2023). Influence of profitability, leverage, and capital intensity on tax aggressiveness with company size as moderating variable. *International Journal of Research in Commerce and Management Studies (IJRCMS)*, 5(4), 115-132.
- Yu, J., & Li, G. (2024). *Statistical methods for mediation, confounding and moderation analysis using R and SAS*. Chapman & Hall/CRC.



AN EMPIRICAL STUDY ON THE IMPACT OF SUSTAINABILITY REPORTING ON FINANCIAL PERFORMANCE: INVESTMENT EFFICIENCY AS A MODERATING VARIABLE IN THE CONTEXT OF FINANCIAL COMPANIES

Jocelyn Larisa Jono Sia¹

Faculty of Economic and Business, Universitas Katolik Indonesia Atma Jaya, Indonesia
jocelynlarisa@gmail.com

Thia Margaretha Tarigan^{2*}

Faculty of Economic and Business, Universitas Katolik Indonesia Atma Jaya, Indonesia
thia.margaretha@atmajaya.ac.id
(*Corresponding Author)

Received on 22 May 2025

Accepted on 17 June 2025

Abstract - This study attempts to examine how sustainability reporting affects financial performance in financial firms using investment efficiency as a moderating variable listed on the Indonesia Stock Exchange (IDX). This study's sample consisted of 98 financial firms that were listed on the IDX, had complete annual reports from 2019 to 2023, and did not cease operations during that time. The data analyzed were expressed in Rupiah (IDR). The results of the study showed that Sustainability Reporting had an effect on Financial Performance, this shows that the commitment to sustainability stated in Sustainability Reporting can improve the company's Financial Performance. Furthermore, it has been demonstrated that investment efficiency moderates the relationship between financial performance and sustainability reporting. This means that businesses with effective investment management are better able to translate sustainability practices into profitable outcomes. This demonstrates that effective investment management is crucial for bolstering the beneficial impact of sustainability reporting on financial performance, boosting the company's appeal to investors, and promoting peak performance.

Keywords: Sustainability Reporting; Financial Performance; Investment Efficiency.

1. INTRODUCTION

1.1 Research Background

It is becoming increasingly essential for financial firms that are listed on the Indonesia Stock Exchange (IDX) to consider sustainability in their operations. Companies respond to this demand by providing information about the social, environmental, and economic effects of their operations through sustainability reporting. Feeney (2024) states that the goals of sustainability reporting are to improve stakeholder interactions, give a complete view of a company's performance, and boost corporate transparency. Even though sustainability reporting is now a crucial component of business strategy, there is ongoing debate on how it affects financial performance, particularly in the financial industry. Several studies have shown the positive impact of Sustainability Reporting on corporate performance by increasing reputation and investor trust. However, other opinions state that Sustainability Reporting does not directly effect corporate profitability, especially in the short term (Ronaldo, 2023; Felita

& Faisal, 2021; Weerarathna et al., 2021). This report shows the company's commitment to Sustainability, which in turn increases the trust of stakeholders, such as investors, customers, and business partners. This higher trust drives increased operational activities and better Financial Performance (Felita & Faisal, 2021).

Nevertheless, Ronaldo (2023) asserts, that sustainability reporting as a whole has no bearing on financial performance. This is because the company's net profit, which is impacted by a number of external factors like operating expenses, market demand, and governmental regulations, determines Return on Asset (ROA). Investigating additional elements, such as investment efficiency, that may improve the correlation between sustainability reporting and financial performance is crucial. According to Fajriani (2021), a company's capacity to deploy resources optimally in order to optimize outcomes and avoid risks is known as investment efficiency, and it can have a big impact on long-term financial performance.

According to a study by Mulpiani (2019), the company's financial performance, as determined by Return on Asset (ROA), is positively and significantly impacted by the disclosure of economic information in sustainability reporting. A company's financial performance increases with the amount of economic information it discloses because this can boost the company's reputation, draw in investors, and eventually boost sales and financial performance. Although Amalia & Triwacananingrum (2022) argue that Sustainability Reporting can provide nonfinancial information that has the potential to help investment decision-making, they argue that its influence on Investment Efficiency is still limited. This is due to several factors, such as the lack of understanding and application of Sustainability information by investors, as well as limited access and availability of Sustainability Reporting in Indonesia.

Based on the background description that has been presented, this study is formulated with the following questions:

1. Does Sustainability Reporting effect the company's Financial Performance?
2. Can Investment Efficiency moderate Sustainability Reporting on Financial Performance?

1.2 Literature Review

1.2.1 Legitimacy Theory

Legitimacy theory emphasizes the importance of public acceptance and recognition of the operations of an organization or company. The success of a company is not only measured by economic achievements alone but also by the extent to which it is able to meet the expectations and social norms of its surrounding environment. This can be likened to an implicit social contract; the company is given the authority to operate and carry out its activities in exchange for a commitment to act responsibly and sustainably. Therefore, companies are required to always be adaptive to changes in community values and expectations, by adjusting business practices, operational policies, and communication strategies to align with applicable norms. Companies that understand and apply legitimacy theory will be able to build stronger relationships with stakeholders, gain broader support, improve their reputation, and minimize potential risks caused by unanticipated changes in the external environment (Ronaldo, 2023; Gama et al., 2024).

1.2.2 Sustainability Reporting

Sustainability Reporting is a report that covers the economic, environmental, and social performance of an organization over a certain period. This report provides an overview of how the organization manages its impacts and contributions to sustainability. Ronaldo (2023)

stated that transparency and comprehensiveness of the report are important for building corporate legitimacy. In Indonesia, the Financial Services Authority (OJK) requires companies to create Sustainability Reporting to improve transparency and accountability. The Global Reporting Initiative (GRI) is an important international framework in Sustainability Reporting, emphasizing transparency, accountability, and creating long-term value for stakeholders. Organizations can find and disclose pertinent impacts with the use of the GRI standards, which were introduced in 2016. Communicating how businesses generate value for stakeholders and cultivate enduring relationships is the primary goal of sustainability reporting. The implementation of Sustainability Reporting for Indonesian public corporations, issuers, and financial services organizations is governed by OJK No. 51/POJK.03/2017.

1.2.3 Financial Performance

A company's financial performance, which shows its capacity to earn revenue and manage resources, is a crucial component of evaluating its overall health. Cui et al. (2020) assert that while adequate investment, technical innovation, and Corporate Social Responsibility (CSR) can have a good influence, financial subsidies do not necessarily drive success. Hadi et al. (2021) emphasize that financial statement analysis, including financial ratios, is an important tool for the public and potential investors to understand the health of Financial Performance and the effectiveness of the company in achieving its financial goals. According to Nurhayati et al. (2023), financial performance is a reflection of the company's financial health and is the outcome of management's resource management. Understanding financial performance is crucial because it enables management to pinpoint areas for development, make the most use of available resources, and create plans to increase revenue and give shareholders the best returns. Effective management, strategic choices, and financial reporting openness are crucial in addition to outside influences. To support economic decision-making, Indonesia's Financial Accounting Standards (SAK) place a strong emphasis on the need for financial statements to appropriately depict the entity's financial condition and performance (Indonesia, 2022).

1.2.4 Investment Efficiency

The concept of investment efficiency quantifies how well an investment uses the time, money, and energy that are available to produce benefits. This efficiency is essential for raising profitability and firm worth, allowing for the payment of debts and operational enhancements (Fajriani et al, 2021). Profitability ratio measurements, such as Return On Investment (ROI), are used to evaluate a company's ability to generate profits. Arum et al. (2022) stated that a high ROI indicates efficient use of capital, while a negative ROI reflects insufficient investment income. Sari (2022) emphasized the importance of ROI in assessing investment performance. In addition, Seran et al. (2024) discussed two important concepts: "Do Things Right," which focuses on efficient processes and accurate data, and "Do the Right Things," which emphasizes ethical responsibility in investing for a positive impact on society.

1.3 Conceptual Hypothesis

1.3.1 .Sustainability Reporting effect the Company's Financial Performance

Sustainability reporting is the disclosure of information regarding the economic, environmental, and social impacts generated by a company, with the aim of providing a clear picture of the management of risks and opportunities related to Sustainability. According to Felita & Faisal (2023), transparency in this report can improve operational efficiency and the company's potential profitability, through managing Sustainability issues such as waste

reduction and energy efficiency. Reime's (2020) research shows a positive influence between Sustainability Reporting and Financial Performance, where companies that are active in this disclosure gain more trust from stakeholders, which leads to an increase in Return on Assets (ROA). However, Weerarathna et al. (2021) found that Sustainability Reporting does not have a significant impact on Financial Performance, influenced by external factors such as economic conditions and regulations. Therefore, the hypothesis of this study is:

H1: Sustainability Reporting effect the Company's Financial Performance

1.3.2 Investment Efficiency can moderate Sustainability Reporting on Financial Performance

Legitimacy theory emphasizes the importance of societal acceptance and recognition of an organization's or company's operations. A company's success is not solely measured by its economic achievements, but also by the extent to which it fulfills the expectations and social norms of its surrounding environment. This can be likened to an implicit social contract, wherein the company is granted the license to operate in exchange for a commitment to act responsibly and sustainably (Ronaldo, 2023; Gama et al., 2024). Therefore, the disclosure of sustainability reporting is essential for providing accurate information, thereby enhancing stakeholders' trust in the company's financial performance. Research by Safi et al. (2023) shows that the implementation of Corporate Social Responsibility (CSR) has a positive impact on investment efficiency and company financial performance. Hence, by reducing agency problems and improving relationships with stakeholders, CSR encourages better investment decision-making and improves the company's reputation, attracts more loyal consumers, and increases profitability, supporting long-term sustainability and creating added value. Mulpiani (2019) argues that disclosure of sustainability information in the economic dimension can improve the company's image and reputation, both in the commodity market and the capital market, which contributes to consumer loyalty, increased sales, and financial performance. Commitment to sustainability reflects the company's long-term vision that focuses on managing resources responsibly, thereby creating a competitive advantage and increasing shareholder value through investment efficiency and better access to capital markets. Therefore, the hypothesis of this study is:

H2: Investment Efficiency can moderate Sustainability Reporting on Financial Performance.

2. RESEARCH METHODOLOGY

2.1 Operational Definition of Variables

2.1.1 Sustainability Reporting

Sustainability Reporting is an independent variable in this study, reflecting the company's commitment to transparency and economic, environmental, and social responsibility. The measurement is carried out by analyzing the availability and quality of information presented in the annual report or special Sustainability Reporting. To measure the quality of information, this study will refer to the Global Reporting Initiative (GRI) standards as the main reference. The measurement scale used is a nominal scale by determining whether the company publishes Sustainability Reporting or not. The Sustainability Reporting variable will be measured by the total nominal that is generated from the evaluation of this scale. The measurement of Sustainability Reporting that has been carried out by Felita & Faisal (2021) uses the following formula:

$$SR = \frac{\text{Number of items disclosed by the company}}{\text{Number of items expected}}$$

2.1.2 Financial Performance

Financial Performance, as a dependent variable, is a measure of a company's financial health. To measure it, this study will use financial ratios that are commonly used in financial analysis. The ratio used is Return On Assets (ROA), which shows the company's ability to generate profits from its assets. The financial data used to calculate this ratio will be taken from the company's annual financial report. The unit of measurement for this ratio is percent (%). ROA measurements that have been carried out by Hadi et al. (2021) using the following formula:

$$ROA = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

2.1.3 Investment Efficiency

Investment Efficiency acts as a moderating variable in this study, indicating the company's ability to manage investment funds to generate profits. This study will use Return on Investment (ROI) as an indicator of Investment Efficiency. The measurement scale uses percent (%) as a unit of measurement. The higher the ROI, the more efficient the company is in managing its investments. ROI measurements have been carried out by Guna et al. (2023) using the following formula:

$$ROI = \frac{\text{Total Comprehensive Income}}{\text{Total Assets}}$$

By measuring these three variables objectively and consistently, this study is expected to provide a deeper understanding of the relationship between Sustainability Reporting, Financial Performance, and Investment Efficiency.

2.2 Data Collection Methods

This study uses secondary data obtained from various sources relevant to the topic being studied, namely the effect of Sustainability Reporting on the Financial Performance of financial companies listed on the Indonesia Stock Exchange (IDX) website (www.idx.co.id) and each company's website, with Investment Efficiency as a moderating variable. The sampling method used is purposive sampling with the following criteria:

1. The company is a company engaged in the financial sector and is listed on the Indonesia Stock Exchange (IDX).
2. Financial sector companies with annual reports for the period 2019 to 2023 that contain complete information.
3. Companies that do not stop their operational activities in the financial sector.
4. All data used in this study are stated in Rupiah (IDR).

2.3 Data Analysis Method

This study investigates the relationship between Sustainability Reporting, Financial Performance, and the moderating role of Investment Efficiency. To reveal the influence of these variables, multiple linear regression analysis is applied in SPSS version 29. This study uses descriptive analysis and partial, simultaneous, and coefficient of determination tests to test the proposed hypotheses.

3. RESULT AND DISCUSSION

3.1 Results

The data in this study were obtained using a purposive sampling method, based on the following criteria which are:

Table 1. Sampling Criteria

No	Criteria	Amount
1	Data of companies engaged in the financial sector and listed on the Indonesia Stock Exchange (IDX).	525
2	Data of financial sector companies with annual reports for the period 2019 to 2023 do not contain complete information.	(20)
3	Data of companies that have stopped operating in the financial sector.	(15)
4	The data used in this study are not expressed in Rupiah (IDR).	(0)
Total Sample		490

Table 2. Descriptive Analysis Test

	N	Minimum	Maximum	Mean	Std. Dev
FP	490	-13.83753	8.30385	-4.07968	3.39855
SR	490	0.002381	0.80952	0.31344	0.16031
IE	490	-8.89290	0.68594	-0.01321	0.41375
XZ	490	-0.52934	0.22865	0.00208	0.03293

The Financial Performance Variable (FP) value was obtained with a range from the lowest -13.83753 to the highest 8.30385. The lowest ROA at -13.83753 at PT. Bank Panin Dubai Syariah Tbk. in 2019 is a large minus figure and this means that there are still several companies in the sample that have losses due to the total assets owned. However, at the highest ROA figure of 8.30385 at PT. Onix Capital Tbk. In 2022, there are companies that are relatively efficient in getting profit from their assets. In other words, the average ROA of -4.07968 obtained in this study proves that most of the sample companies experience more losses in the use of assets so they are not used effectively. Meanwhile, the standard deviation value of 3.39855 shows that Financial Performance between companies is quite widespread. This reflects the inequality in the company's ability to generate profit from the assets it owns. Some companies are efficient in utilizing their assets, indicated by high Financial Performance, while others are inefficient, indicated by low Financial Performance. Companies with low Financial Performance may face problems such as poor management, high debt, or inability to optimize existing assets. Conversely, companies with high Financial Performance may have an efficient business model, good management, or a strong market position. Although the standard deviation values are quite widespread, the data distribution tends to be normal indicating that the majority of companies have performance that is not too far from the average, which means that most companies have a relatively stable level of asset efficiency.

Analysis of the Sustainability Reporting (SR) variable shows a minimum value of 0.002381 at PT. Victoria Investama Tbk. in 2019 and a maximum of 0.80952 at PT. Bank Tabungan Negara (Persero) Tbk. in 2023. The average SR of 0.31344 indicates that most companies have a moderate proportion of Sustainability disclosure, while the standard deviation of 0.16031 indicates that the data is widely distributed in the level of disclosure. This means that although many companies are around the average value, there are a number of companies that have low or higher levels of disclosure than the average. This variation can be caused by factors such as company size, industry sector, or internal policies that influence how much Sustainability information is decided to be announced to the public.

The analysis of the Investment Efficiency (IE) variable shows a wide range, with a minimum value of -8.89290 at PT. Onix Capital Tbk. in 2022 indicating a large loss on investment in several companies, and a maximum value of 0.68594 at PT. Charnic Capital Tbk. in 2021 indicating that despite the profits, no company achieved a very high return on investment. Although the average EI shows less profitable results, with a value of -0.01321

indicating that companies in this sample generally do not get significant returns on their investments, the standard deviation of 0.41375 shows that the data is quite widespread among these companies. This means that some companies experience large losses, while others manage to make positive profits, although not much. The spread of this data is likely influenced by various factors such as the type of industry, investment strategy, and risk management implemented by each company. In contrast, the Interaction variable (XZ) shows a minimum value of -0.529 at PT. Onix Capital Tbk. in 2022 and a maximum of 0.229 at PT. Charnic Capital Tbk. in 2021. This negative minimum value may reflect companies that have low Sustainability disclosure and are inefficient in investment so the interaction of the two has a negative impact on investment returns. Conversely, a positive maximum value indicates that in some companies, good Sustainability disclosure can be associated with higher investment returns, although the effect is not large. Meanwhile, the average Interaction of 0.00208 reflects that in general, the interaction between Sustainability Reporting and Investment Efficiency is very small or almost neutral, which means that there is no strong influence between the two variables in most companies in the sample.

However, the low standard deviation of 0.03293 indicates that most of the interaction values are distributed quite tightly around the average. This could be due to external factors or other controls, such as industry conditions, company size, and government policies, which can effect the relationship between Sustainability Reporting disclosure and Investment Efficiency. This shows that Sustainability Reporting disclosure is not only influenced by internal company factors but also by the wider external environment. The results of this descriptive analysis test need to conduct a classical assumption test to ensure the validity of the results of further analysis.

Tabel 3. Partial Test

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	-3.608	.331		<.001
	SR	-1.878	.950	-.089	.048
	EI	-3.424	.686	-.417	<.001
	XZ	34.306	8.687	.332	<.001

a. Dependent Variable: LNNY

Source: Processed using SPSS 29

The partial test results show that the Sustainability Reporting (SR) variable has a significant effect on the Financial Performance (FP) variable. This can be seen from the t-statistic value of -1.978, with a significant probability value of 0.048, which is smaller than 0.05 ($0.048 < 0.05$). The Investment Efficiency (IE) variable has a significant effect on the FP variable with a t-statistic value of -4.993 and a significance probability value of less than 0.001, which is smaller than 0.05. In addition, the Interaction variable (XZ) has a significant effect on the KK variable with a t-statistic value of 3.949 and a significance probability value of less than 0.001, which is smaller than 0.05.

Tabel 4. Simultaneous Test (F)

ANOVA ^a					
Model		Sum of Squares	df	Mean Square	Sig.
1	Regression	309.046	3	103.015	9.377
	Residual	5338.983	486	10.986	<.001 ^b
	Total	5648.029	489		

a. Dependent Variable: LNNY

b. Predictors: (Constant), XZ, SR, EI

Source: Processed using SPSS 29

The Financial Performance (KK) variable is significantly impacted by the variables Sustainability Reporting (SR), Investment Efficiency (Z), and Interaction (XZ) all at the same time, according to regression research. The significance level of 0.05 is exceeded by the value of less than 0.001 in the F test results. This result shows that, when accounting for the influence of the independent variables and their interactions, the regression model under test can adequately explain fluctuations in the FP variable.

Tabel 5. Coefficient of Determination (R^2)

Model	Model Summary ^b				
	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.234 ^a	.055	.049	3.31445	1.645

a. Predictors: (Constant), XZ, SR, EI
b. Dependent Variable: LNNY
Source: Processed using SPSS 29

The determination coefficient can be seen in the Adjusted R-squared value of 0.049 or 4.9% indicating that the regression model built is only able to explain 4.9% and 95% of the variables are influenced by other factors. This indicates that the contribution of the influence of the Sustainability Reporting (SR), Investment Efficiency (IE), and Interaction (XZ) variables to the Financial Performance (FP) variable is relatively small.

3.2 Discussion

3.2.1 Sustainability Reporting effect the Company's Financial Performance

Research shows that Sustainability Reporting effects the company's Financial Performance. This finding is based on the results of a partial test which shows a significant value of 0.048 which is smaller than 0.05. In other words, the results of the study provide sufficient evidence to conclude that Sustainability Reporting has an influence on the company's Financial Performance.

Based on research data, a significant relationship has been found between Sustainability Reporting and the Financial Performance of the companies studied, there are balanced Sustainability Reporting and Financial Performance scores each year. For example, PT. Bank Central Asia Tbk. recorded a Sustainability Reporting score ranging from 0.48 to 0.57 in the 2019–2023 period. The company's Financial Performance in the same period varied between 2.72% and 3.57%. This is also seen in PT. Wahana Ottomitra Multiartha Tbk. has a Sustainability Reporting score between 0.13 and 0.53, wit Financial Performance ranging from 0.85% to 3.85% in the same period. PT. KDB Tifa Finance Tbk. shows a Sustainability Reporting score of between 0.20 and 0.51, while the company's Financial Performance varies between 1.29% and 3.80%. This condition indicates that Sustainability Reporting appears to have a significant influence on the company's Financial Performance.

The results of the study indicate a significant influence between Sustainability Reporting and the Company's Financial Performance. Although the report has provided a comprehensive picture of the company's economic, social, and environmental performance, the relationship between the two still requires further investigation. According to Ronaldo (2023), the publication of transparent and comprehensive Sustainability Reporting can be an important instrument in building corporate legitimacy. This report must explain the company's commitment to social, environmental, and economic responsibility in its operational environment, which in turn increases stakeholder trust. This increased transparency can strengthen the company's reputation and improve stakeholder relations,

which can then improve the company's Financial Performance. However, although Sustainability Reporting has the potential to improve a company's reputation and legitimacy, other factors such as investment strategy, technological innovation, and efficient resource management often play a greater role in increasing a company's profitability and competitiveness in the long term.

This study is in line with the conclusions of Reime (2020), that there is a correlation between Sustainability Reporting and Financial Performance. Stakeholders are more likely to trust businesses that actively publish sustainability reporting. Being open and honest about the effects on society, the environment, and corporate governance shows a dedication to sustainability and social responsibility, which enhances one's standing and connections with stakeholders. By raising Return on Assets (ROA), enhancing relationships and reputation can help the business perform better financially. Increased ROA is a sign of effective asset use, which boosts earnings and, over time, the company's competitiveness and sustainability. However, although Sustainability Reporting can improve a company's reputation and legitimacy, other factors such as investment strategy, technological innovation, and efficient resource management often play a greater role in increasing a company's profitability and competitiveness in the long term.

3.2.2 Investment Efficiency can moderate Sustainability Reporting on Financial Performance

The research data shows that Investment Efficiency can moderate Sustainability Reporting and Financial Performance. The partial test of the interaction variable (XZ) shows a significance value of less than 0.001, which is less than 0.05, indicating a significant effect. The simultaneous test also shows a significance value of less than 0.001, which is less than 0.05, strengthening the finding that the moderating variable has a significant effect.

This study shows a significant relationship between Sustainability Reporting and the Financial Performance of the companies studied, indicated by Investment Efficiency. The Investment Efficiency, Sustainability Reporting, and Financial Performance scores of the companies tend to be at a moderate level each year. For example, PT. Asuransi Tugu Pratama Indonesia Tbk. recorded a Sustainability Reporting score ranging from 0.17 to 0.61 in the 2019–2023 period. The company's Financial Performance in the same period varied between 1.35% to 5.57%, while Investment Efficiency had a value between 1.71% to 5.38%. This is similar to PT. Clipan Finance Indonesia Tbk., which has a Sustainability Reporting score between 0.19 and 0.47. The company's Financial Performance ranged from 0.40% to 9.08% in the same period, while Investment Efficiency had a value between 0.48% to 8.21%. PT. BFI Finance Indonesia Tbk. also shows a Sustainability Reporting score between 0.32 to 0.46, with the company's Financial Performance varying between 3.73% to 9.62%. The company's Investment Efficiency has a value between 3.19% to 8.30% in the same period. This condition indicates that Investment Efficiency can moderate the influence of Sustainability Reporting on the company's Financial Performance.

The study's findings suggest that the association between sustainability reporting and the financial performance of the company is moderated by investment efficiency. This result supports the idea that boosting investment efficiency is essential to raising profitability and business value. Investment Efficiency, which refers to optimizing resource allocation to maximize results with minimal risk, ensures that a company's investment decisions can support long-term Sustainability and provide greater returns (Fajriani et al., 2021; Arum et al., 2022). In this case, Sustainability Reporting, which includes the company's efforts in managing economic, social, and environmental impacts, serves to improve reputation and

relationships with stakeholders. However, without efficient investment management, the positive impact of Sustainability Reporting on the company's Financial Performance will not be maximized. This proves that the right investment can turn Sustainability commitments into real financial results and increase the overall value of the company.

This study is in line with the findings of Mulpiani (2019) which shows that transparency in Sustainability Reporting can contribute positively to Investment Efficiency. He emphasized that by disclosing relevant and reliable Sustainability information, companies can increase investor confidence in their Financial Performance, which in turn encourages increased Investment Efficiency. This study shows that Investment Efficiency acts as a moderating variable that strengthens the relationship between Sustainability Reporting and Financial Performance. This study examines the relationship between Sustainability Reporting and a company's Financial Performance, expanding the findings of previous research by Mulpiani (2019). While Mulpiani focused on the role of Sustainability Reporting transparency in increasing investor confidence and Financial Performance, this study shows that Investment Efficiency plays an important role in strengthening the positive impact of Sustainability Reporting on Financial Performance. This shows that transparency in Sustainability Reporting supported by Investment Efficiency can be more effective in improving Financial Performance than relying solely on transparency.

4. CONCLUSION

This study analyzes the impact of Sustainability Reporting on the Financial Performance of companies listed on the Indonesia Stock Exchange (IDX) with Investment Efficiency as a moderation. Financial Performance is measured through Return On Assets (ROA), while Sustainability Reporting is an independent variable. Investment Efficiency acts as a moderating variable measured using Return On Investment (ROI). Data analysis was performed using SPSS software version 29 to test the relationship between variables. Based on the results of the data analysis, it can be concluded that:

5. Sustainability Reporting effects the company's Financial Performance. This study shows that the partial test significance value of 0.048, less than 0.05, indicates a significant direct relationship between the two variables. This is because Sustainability Reporting provides a comprehensive picture of the company's economic, social, and environmental performance, the impact of which is increasing profitability in the short term.
6. Investment Efficiency can moderate Sustainability Reporting on Financial Performance. This study shows that the significant value of the interaction variable (XZ) on the relationship is below 0.05, both partially and simultaneously. This finding is in line with the theory that Investment Efficiency can increase company profitability by maximizing investment returns and minimizing risks, thereby supporting Sustainability and improving overall Financial Performance. Transparency in Sustainability Reporting, which provides information about the company's efforts in managing economic, social, and environmental impacts, can improve the company's reputation and relationships with stakeholders. However, without Investment Efficiency, the positive impact of Sustainability Reporting on Financial Performance will not be achieved optimally. Therefore, companies that are able to manage investments efficiently can turn Sustainability commitments into real financial results, which in turn can increase the company's value.

5. LIMITATION

The study focuses solely on financial companies listed on the Indonesia Stock Exchange from 2019 to 2023.

6. ACKNOWLEDGMENT

This study contributes to the corporate sector by offering insight into the effective management of corporate investments, which can enhance financial performance. Nevertheless, sustainability reporting remains essential in fostering strong relationships between companies and their stakeholders. For academic institutions, this study offers potential contributions by stimulating the advancement and diversification of student research endeavors, thereby fostering the exploration of a broader range of topics and generating novel insights that may inform and inspire subsequent scholarly investigation.

The coefficient of determination in this study is indicated by an adjusted R-squared value of 4.9%, suggesting that the influence of sustainability reporting on financial performance through investment efficiency is relatively limited, with the remaining 95.1% attributable to other explanatory factors. Accordingly, future studies are recommended to include additional variables that may impact financial performance or to consider alternative moderating factors, such as corporate governance mechanisms.

7. REFERENCES

- Amalia, D. R., & Triwacananingrum, W. (2022). The Disclosure Effect of Sustainability Reporting and Financial Statements on Investment Efficiency: Evidence in Indonesia. *Indonesian Journal of Sustainability Accounting and Management*, 6(1). <https://doi.org/10.28992/ijSAM.v6i1.512>
- Anis, I. (2021). Kinerja Tanggung Jawab Sosial Perusahaan dan Efisiensi Investasi. *Neraca Keuangan Jurnal Ilmiah Akuntansi Dan Keuangan*, 16(1), 40–54. <https://doi.org/10.32832/neraca.v16i1.4613>
- Cui, Y., Khan, S. U., Li, Z., & Zhao, M. (2020). Environmental effect, price subsidy and financial performance: Evidence from Chinese new energy enterprises. *Energy Policy*, 149, 112050. <https://doi.org/10.1016/j.enpol.2020.112050>
- Fajriani, A., Wijaya, S. Y., & Widyastuti, S. (2021). Determinasi Efisiensi Investasi. *Konferensi Riset Nasional Ekonomi Manajemen dan Akuntansi*, 2(1), 1541-1554
- Felita & Faisal, A., & Faisal, F. (2021). The effect of Sustainability reporting on company performance. *Diponegoro Journal of Accounting*, 10(4).
- Fernandes, A. A. R. (2022). Metode Analisis Data Penelitian: Pendekatan Regresi. Universitas Brawijaya Press.
- Gama, A. W. S., Mitariyani, N. W. E., & Widnyani, N. M. (2024). Kumpulan Teori Bisnis: Perspektif Keuangan, Bisnis, dan Strategik. Nilacakra.
- GRI - Standards. (2024). Globalreporting. Retrieved September 11, 2024, from <https://www.globalreporting.org/standards/>
- Guna, R. A., Fauzan, F. H. A., & Kusumastuti, R. (2023). Pengaruh ROI (Return On Investment) dan ROE (Return On Equity) Terhadap Harga Saham di Cimb Niaga Periode 2020-2021. *Jurnal Ilmiah Manajemen Bisnis Dan Kewirausahaan*, 3(2), 197–205. <https://doi.org/10.55606/jurimbik.v3i2.478>
- Hadi, M., Ambarwati, R. D., & Haniyah, R. (2021). Pengaruh Return on Asset, Return on Equity, Net Interest Margin, Net Profit Margin, Earning per Share dan Net Income

- terhadap Stock Price Sektor Perbankan Tahun 2016–2020. *Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi*, 8(3).
- Mulpiani, W. (2019). Pengaruh Pengungkapan Sustainability Report Terhadap Kinerja Perusahaan Publik di Indonesia. *Akurasi: Jurnal Studi Akuntansi Dan Keuangan*, 2(2), 77-90.
- Muthmainnah, A., Amirullah, S., Dr. Sumarsih, Erwin, & Novitasari, E. (2022). Panduan EViews Untuk Ekonometrika Dasar. <https://anyflip.com/slusg/koof/basic>
- Nurhayati, L.A. (2023). Pengaruh Intellectual Capital, Struktur Modal dan Good Corporate Governance Terhadap Kinerja Keuangan. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, 12(9).
- Pradipta, P., Khairunnisa, A., Yudistira, O., & Baradja, L. (2022). Pengaruh Sustainability Report, Ukuran Dewan Direksi, Ukuran Perusahaan Serta Leverage Terhadap Kinerja Keuangan Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia Pada Tahun 2018-2020. *Jurnal Ekonomi Trisakti*, 2(2), 1517–1528. <https://doi.org/10.25105/jet.v2i2.14944>
- Ronaldo, N. G., & Handayani, R. S. (2023). Pengaruh Pengungkapan Sustainability Reporting Terhadap Kinerja Keuangan Perusahaan Perbankan di Indonesia. *Diponegoro Journal of Accounting*, 12(4).
- Safi, A., Chen, Y., Qayyum, A., Wahab, S., & Amin, M. (2023). How does corporate social and environmental responsibility contribute to investment efficiency and performance? Evidence from the financial sector of China. *Economic research-Ekonomska istraživanja*, 36(2).
- Seran, A., Sia, J. L. J., Kumala, B. M., & Marinda, L. C. (2024). Moral Principles and Decision-Making Study of Governance, Risk and Compliance in Running a Business Entity. *Tuijin Jishu/ Journal of Propulsion Technology*, 45. <https://www.propulsiontechjournal.com/index.php/journal/article/view/6981/4548>
- OJK. (2017). Penerapan Keuangan Berkelanjutan bagi Lembaga Jasa Keuangan, Emiten, dan Perusahaan Publik. Otoritas Jasa Keuangan. Retrieved November 10, 2024, from <https://www.ojk.go.id/id/Regulasi/Default.aspx>
- Indonesia, I. A. (2022). PSAK 201 Penyajian Laporan Keuangan. IAI Global. <https://web.iaiglobal.or.id/PSAK-Umum/7#gsc.tab=0>
- Vitriani, N. P. L., & Budiasih, I. G. a. N. (2019). Pengaruh kualitas pelaporan keuangan dan Sustainability reporting pada Efisiensi Investasi. *E-Jurnal Akuntansi*, 188. <https://doi.org/10.24843/eja.2019.v28.i01.p08>
- Weerarathna, R. S., Lokeshwara, A. A., Sandali, W. A. P. L., Chandula, G. W. K. N., & Nirman, M. A. C. (2021). Sustainability Reporting on Financial Performance of Sri Lankan Listed Companies: How Strong is the Impact?. *Indonesian Journal of Sustainability Accounting and Management*, 5(1), 162-174.
- Wibowo, F. X. P. (2022). Statistika Bisnis dan Ekonomi dengan SPSS 25. Penerbit Salemba.

THE IMPACT OF GREENWASHING ON FIRM VALUE DURING THE PERIOD BEFORE AND DURING THE COVID-19 CRISIS IN INDONESIA

Freshtriana^{1*}

Magister Management, Universitas Pelita Harapan, Indonesia
freshtriana10@gmail.com

Kim Sung Suk²

Magister Management, Universitas Pelita Harapan, Indonesia
sungsuk.kim@uph.edu

*Corresponding Author

Received on 17 March 2025

Accepted on 29 May 2025

Abstract - This study examines the effect of greenwashing on firm valuation in Indonesia using panel data from 2018 to 2022. The research aims to determine whether greenwashing negatively impacts firm value, particularly during times of crisis. The results indicate a significant negative relationship between greenwashing practices and firm value, especially during crisis periods such as the COVID-19 pandemic. These findings underscore the importance of transparency in sustainability reporting and suggest that investors are becoming more critical of greenwashing claims. This study contributes to the growing body of literature on corporate sustainability and greenwashing, offering valuable insights into how misleading environmental claims can affect firm performance. It also has important implications for policymakers, investors, and companies in encouraging genuine sustainability efforts. Firms are urged to adopt authentic and verifiable sustainability practices, as failure to do so may erode investor trust and firm value. Overall, the study emphasizes the risks associated with deceptive sustainability reporting in a more environmentally conscious market.

Keywords: Greenwashing; Firm Value; Crisis; ESG; Statistical Analysis

1. INTRODUCTION

Companies tend to be increasingly concerned about environmental and social issues, prompting them to demonstrate their commitment by being responsible for their activities. According to (Shapsugova, 2023), in an increasingly global world, the role of companies has changed perspective. Profit as the main factor in economic growth was the primary perspective in the past, but now companies must take actions beyond profit, namely engaging in sustainable business practices. Sustainable business is a business concept that focuses on sustainability dimensions, not only on the company's economic profit but also on how the company affects society and the community intending to minimize negative effects on the environment and society to create long-term value for the company, making it an attractive proposition for stakeholders. However, in practice, not all companies are committed to implementing sustainable business practices. This is due to various challenges faced by companies, namely the phenomenon of greenwashing. Greenwashing is the action of a company that presents a positive image to external parties that is not practiced, to enhance the

brand image to gain economic benefits. According to (Delmas & Burbano, 2011), some factors drive the actions of greenwashing. The first factor is the increasing consumer demand for environmental awareness, which drives companies to engage in greenwashing to meet market demands. The second factor is the culture and policies within the organization. Companies that prioritize openness and ethics are less likely to engage in greenwashing, whereas companies that prioritize profit over ethics and lack transparency in environmental matters are more likely to engage in greenwashing. The third factor is the pressure to meet certain performance targets without strict supervision. Fourth, the lack of strict supervision and sanctions encourages companies to continue such actions.

The crisis conditions during the COVID-19 pandemic effected the global economy, including Indonesia. The COVID-19 pandemic has created difficult economic conditions, leading companies to be more inclined to engage in greenwashing to maintain a positive image without actually taking sustainable actions, thereby increasing the firm's value. However, several studies show that the strategies employed by companies yield opposite results. According to research conducted by (Selaković et al., 2024), during periods of crisis, companies involved in greenwashing often face stricter scrutiny from the media and the public, which can lead to regulatory sanctions and significant financial losses. However, on the contrary, companies committed to sustainable actions tend to withstand crises better, thanks to stronger support from stakeholders and a better reputation, thereby improving financial performance and creating long-term value (Ms. S. Shireesha et al., 2024). With differing views on the effect of greenwashing actions, there is a need to understand the effect of greenwashing on firm value in Indonesia. Therefore, this research discusses the effect of greenwashing on firm value before the crisis period (pre-pandemic), specifically in the years 2018-2019, and during the crisis period (pandemic) from 2020-2022. The selection of companies to be analyzed are those that already have sustainability reports. This serves as a reference that the company in question has a long-term commitment to conducting sustainable business practices. Is there an influence of greenwashing on the value of companies in Indonesia before the COVID-19 crisis? Is there an influence of greenwashing on the value of companies in Indonesia during the COVID-19 crisis?

2. RESEARCH METHODOLOGY

The research data used is secondary data from S&P Capital IQ and ESG Intelligence. The data obtained from S&P Capital IQ consists of financial statements to determine the values of Tobin's Q, Sales Growth (SG), Leverage (LEV), Working Capital to Total Assets (WCTA), Return on Asset (ROA), and Total Assets (TA), while ESG Intelligence is needed to determine the greenwashing score from the calculation of ESG score and ESG disclosure for the years 2018-2022. The data population in this study consists of 97 companies. In this study, three variables are used, consisting of dependent variables, independent variables, and control variables. The dependent variable is the variable that is influenced by other variables, so if other variables change, the dependent variable will be effected. Tobin's Q ratio is one of the ratios that measure a firm's value based on the value of tangible and intangible assets relative to the market value.

The independent variable is a variable that does not depend on other variables, so this variable can be altered to see its effect on the dependent variable. The first and second empirical models state that the independent variable is the greenwashing score, which is the difference between the ESG disclosure score and the actual ESG score. A more negative greenwashing score indicates that the real ESG disclosure is higher compared to the ESG disclosure, suggesting a higher likelihood of greenwashing actions. On the other hand, if the

real ESG score is lower compared to the ESG disclosure, it is assumed that the company's greenwashing actions are lower. The calculation of the greenwashing score is as follows.

$$\text{Greenwashing score} = \frac{\text{ESGdis},i,t - \text{ESGdis}}{\sigma_{\text{dis}}} - \frac{\text{ESGreal},i,t - \text{ESGreal}}{\sigma_{\text{real}}}$$

Where:

ESGdis,*i,t* is the ESG disclosure score of company *i* in year *t*

ESGreal,*i,t* is the actual ESG performance score of company *i* in year *t*

ESGdis is the average ESG disclosure score of all companies

ESGreal is the average actual ESG performance score of all companies

σ_{dis} is the standard deviation of the ESG disclosure score

σ_{real} is the standard deviation of the actual ESG performance score

In simpler terms, the greenwashing score is calculated by taking the difference between a company's ESG disclosure and its actual ESG performance, each normalized by subtracting the average and dividing by the standard deviation. A more negative score indicates a higher likelihood of greenwashing. This is because the real ESG performance is higher than the ESG disclosure, suggesting the company is overstating its sustainability efforts. Conversely, a less negative or positive score suggests lower greenwashing activity. The ESG score itself is derived from the division of disclosure by the index, where disclosure is an item disclosed based on GRI (Global Reporting Initiative) while the index is an item that should be disclosed by the company based on GRI.

Control variables are variables that can limit the influence of unexamined external factors, thereby keeping the relationship between independent and dependent variables constant. The control variables in this study are Sales Growth (SG), Leverage (LEV), Working Capital to Total Assets (WCTA), Total Assets (TA), Return on Assets (ROA), and GWSDummy. An empirical model for analysis in this research using quantitative techniques. The technique with the research variables is measured through numbers. The form of the regression equation is based on the hypothesis:

$$FV_{i,t} = \alpha_0 + \beta_0 GWS_{i,t} + \beta_1 GWS * COVID19_{i,t} + \gamma_1 SG_{i,t} + \gamma_2 LEV_{i,t} + \gamma_3 WCTA_{i,t} + \gamma_4 TA_{i,t} + \gamma_5 ROA_{i,t} + \epsilon_{i,t}$$

3. RESULT AND DISCUSSION

3.1 Descriptive Analysis

Descriptive statistical analysis is conducted to determine the magnitude of the mean, maximum, minimum, and standard deviation of each variable.

Tabel 1. Results of Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max
TOBINSQ	475	1.712	2.066	0.387	17.678
GWSCORE	475	-3.046	12.922	-59.55	50.13
SG	475	8.962	30.778	-88.391	183.581
WCTA	475	0.005	0.378	-1.079	0.901
LEV	475	0.636	1.038	-3.996	4.631
ROA	475	0.040	0.111	-0.661	0.921
TA	475	16.926	1.798	11.943	21.413

Based on Table 1, Tobin's Q value has an average of 1.712 with a standard deviation of 2.066, and a minimum value of 0.387 to a maximum value of 17.678. The average Tobin's Q value of 1.712 indicates that the market values the company higher than the value of its physical assets. This indicates that there is a high value of intangible assets, which presents potential for future growth, leading the market to have positive expectations for the company. The greenwashing score has an average of -3.046 with a standard deviation of 12.922, and a minimum value of -59.55 to a maximum value of 50.13. The greenwashing score can be interpreted such that the smaller the greenwashing score, the better the company is at disclosing its activities that effect the environment, society, and governance. The average sales growth is 8.962 with a standard deviation of 30.778, and a minimum value of -88.391 to a maximum value of 183.581. The positive sales growth indicates that there is a positive growth of 89.62%. Working capital to asset averages 0.005 with a standard deviation of 0.378, with a minimum value of -1.079 and a maximum value of 0.901. The average value of 0.005 indicates that the company's working capital is only about 0.5% of its total assets. The average leverage value is 0.636 with a standard deviation of 1.038, ranging from a minimum of -3.996 to a maximum of 4.631.

This average leverage explains that the company uses 63.6% of its total assets for operational financing. The average ROA value is 0.04 with a standard deviation of 0.111, and a minimum value of -0.661 to a maximum value of 0.921. The average ROA result can be explained by each rupiah of assets owned by each company generating a profit of 4. The average total assets amount to 16,926 with a standard deviation of 1,798, a minimum value of 11,943, and a maximum value of 21,413. The average total asset value serves as an indication of the average measurement of company size. A large range and standard deviation indicate that the company sizes in this study include relatively large and relatively small companies. The variables before and during the crisis in this study are explained using dummy variables. The crisis period is measured using a dummy variable for the years 2020-2022 with a value of 1, while the pre-crisis period is measured using a dummy variable for the years 2018-2019 with a value of 0. The selection of the panel data regression model in this study was conducted to obtain accurate and efficient estimates by considering statistical tests. Model selection testing can be conducted in several ways, namely the Chow Test, Hausman Test, and Lagrange Multiplier Test. The Chow test resulted in the Fixed Effect Model as the best model with an F test value of 0.0000. The Hausman Test results in a significance value of 0.0000, which is lower than the 5% (0.05) threshold, indicating that the Fixed Effect model is the best. The classical assumption test in this study was conducted by performing two tests, namely the heteroscedasticity test and the autocorrelation test. The heteroscedasticity test in this study was conducted using the Breusch-Pagan test.

The result heteroscedasticity test, the probability value generated is less than 0.05, so it can be concluded that this regression model has heteroscedasticity, rejecting the H_0 model. This study conducted an autocorrelation test using the Wooldridge test. the results of the autocorrelation test indicate that there is autocorrelation in the research model because the probability result is less than 0.005. Based on the results of the model test that has been conducted, it show that the fixed effect is the best model in this study. However, the classical assumption tests that have been conducted also indicate the presence of heteroscedasticity and autocorrelation. Therefore, further testing is necessary to address the issues of heteroscedasticity and autocorrelation with panel data regression.

3.2. The Effect of Greenwashing on Firm Value During The Period Before The COVID-19 Crisis in Indonesia

Tabel 2. Results of Hypothesis Testing Before the Crisis Period Covid-19

Variable	Coefficient	T-stat	Probability
GWSCORE	-0.002	-1.000	0.372
SG	-0.002	-1.530	0.200
WCTA	-1.008	-1.570	0.191
LEV	0.017	0.250	0.818
ROA	2.007	4.140	0.014**
TA_	-0.048	-0.220	0.836
cons	2.454	0.690	0.527
Number of obs	475		
Number of groups	97		
F test	106.11		
Probability	0.0002		
R-Square	0.0265		

Table 2, the pre-crisis test shows that the R-Square value produced is 0.0265, meaning that 2.65% of the firm value variable can be explained by the greenwashing score variable, sales growth, and all other control variables, while the remaining 97.35% is influenced by other variables outside this study. The results of the panel data regression before the crisis period produced a significant and positively influential ROA variable with a positive coefficient value and a probability value of 0.014, which is less than 0.05. The value of the greenwashing score variable and the control variables (sales growth, working capital to asset, leverage, and total asset) have an insignificant influence because all the probability values of each variable are greater than 0.05. The values of the greenwashing score, sales growth, working capital to an asset, and total asset hurt the firm's value, so as the values of the greenwashing score, sales growth, working capital to an asset, and total asset increase, the firm's value decreases. On the other hand, the value of leverage has a positive effect on the firm's value, so as the value of leverage increases, the firm's value also increases. Based on the data analysis results before the crisis, it is concluded that the first hypothesis in this study is accepted, although not significantly.

3.3 The Effect of Greenwashing on Firm Value During The COVID-19 Crisis in Indonesia

Tabel 3. Hypothesis Test Results During the Crisis Period COVID-19

Variable	Coefficient	T-stat	Probability
Crisis	-0.445***	-7.010	0.002
CrisisGW	-0.006***	-6.970	0.002
SG	-0.002	-1.640	0.175
WCTA	-1.175	-1.630	0.177
LEV	-0.015	-0.260	0.806
ROA	1.845**	4.020	0.016
TA_	0.329	1.020	0.365
cons	-3.651	-0.680	0.535
Number of obs	475		
Number of groups	97		
F test	16.85		
Probability	0.0080		
R-Square	0.0680		

Based on Table 3, it can be explained that the results of the regression test during the crisis period produced an R square value of 0.0680, meaning that 6.80% of the firm value variable can be explained by the greenwashing score variable, the crisis period, and all other control variables, while the remaining 93.20% is influenced by other variables outside this study. The greenwashing variable on firm value during the crisis has a negative and significant effect during the crisis. The probability value generated for CrisisGW is 0.002, which is less than 0.05. The coefficient value of -0.06 indicates that the higher the greenwashing score, the lower the firm's value. This indicates that the more a company provides false information regarding sustainability reports, the more investor distrust in the company increases, thereby effecting the firm's value. This result is supported by the crisis variable, which yields a probability value of 0.02 with a negative coefficient value of -0.445. The ROA variable has a positive and significant effect on the firm's value. The probability result for that variable is 0.016, which is less than 0.05. The coefficient value produced is 1.845. The coefficient value and the probability result generated for the ROA variable can explain that the higher the company's ROA value, the higher the firm's value will be. This indicates that during times of crisis, the company's financial performance tends to withstand the economic crisis that occurs. The sales growth variable has a negative and insignificant effect on the firm's value.

The probability result of the sales growth variable is 0.175, which is greater than 0.05. The resulting coefficient value is -0.0017. A probability value greater than 0.05 indicates that the variable does not have a significant effect on the firm's value. The negative coefficient value indicates that during a crisis, the greater the sales growth, the lower the firm's value. The negative effect of sales growth on firm value during a crisis indicates that there is a decrease in the company's sales targets, necessitating a strategy of lowering sales prices. This causes the profit margin generated by the company to decrease. The working capital to asset variable of 0.177 is greater than 0.05. The resulting coefficient value is -1.1749. The probability result greater than 0.05 means that working capital to assets has an insignificant effect on the firm's value. The negative coefficient value indicates that during a crisis, the higher the working capital to asset ratio, the lower the value of the company. Then, the leverage variable has a negative and insignificant effect on the firm's value. The probability value produced is 0.806, which is greater than 0.05. The leverage coefficient value is -0.014. A probability value greater than 0.05 indicates that the leverage variable is not significant to the firm's value. The negative coefficient value on the leverage variable indicates that during a crisis, the higher the leverage value, the lower the firm value. The value of the company has a positive but insignificant effect on total assets. The probability value produced is 0.365, which is greater than 0.05. The coefficient value for total assets is 0.329. A probability value greater than 0.05 indicates that the total asset variable is not significant to the company. The positive coefficient value indicates that during a crisis, the higher the total asset value, the higher the firm value.

Based on the stages of model testing up to regression with panel data that have been conducted, it shows that in Indonesia, greenwashing does not have a significant effect on firm value before the crisis period. The insignificant effect on the firm's value is caused by several factors. The first factor is that before the pandemic period (2020-2022), sustainability reports were not mandatory for companies to disclose. Sustainability reports are an important instrument in the ESG reporting approach that illustrate the company's involvement in addressing climate, social, and stakeholder risks in the company's activities.

The second factor is the lack of accurate standard measurements in determining the ESG score. The implementation of ESG in Indonesia first appeared in 2016. In the same year, several companies had already reported sustainability reports. However, adjustments in disclosing sustainability reports, indicate that the company has not accurately conveyed the results of the implementations carried out in the company. There are indications that the claims made are not accurate, leading to the company being interpreted as making "green claims" when, in reality, it has not implemented green claims. Based on these factors, the company has not yet developed a perspective on corporate sustainability. The view on the company's business growth before the COVID-19 pandemic is still the main focus. This is supported by the company's limited understanding of the sanctions and benefits in the effort to run a sustainable business. Therefore, the issue regarding the effect of greenwashing on firm value becomes insignificant. The research conducted by (P. Chen & Dagestani, 2023) explains the effect of greenwashing on firm value by exploring the role of board characteristics in China. The background of this research discusses the increasing environmental pressure on companies, which encourages them to actively disclose environmental responsibility reports.

On the other hand, there are concerns that companies may engage in insincere actions in disclosing their environmental responsibilities. This is because it will effect sustainability reports and the firm's value. The results of this study explain that companies engaging in greenwashing actions have a positive effect on company performance, which correlates with the firm's value. The research conducted by (Miao et al., 2023) explains that corporate sustainability actions, emphasizing the balance between social, economic, and environmental factors through green development models and sustainable resource practices, are necessary actions to undertake. However, in the implementation of these actions, there are challenges in balancing efficiency and cost pressures, which leads to the occurrence of corporate greenwashing. This research explains the environmental performance of employees in relation to the company's greenwashing environment, through the mediating variable of organizational values in gas service and chemical production companies in China. The role of this mediating variable is to identify the alignment of employee performance values with the effect of greenwashing, which subsequently effects environmental performance. The result of the research indicates that the greenwashing actions taken by the company harm the environmental performance of the company's employees. This is caused by the misalignment between employee values and organizational values. This influence shows that organizations need to minimize greenwashing behavior to align organizational values with employee values, thereby improving environmental performance. Based on this research, it is implicitly explained that the factor of greenwashing is indirectly influenced by environmental performance, so maintaining a positive environment will effect the firm's value, with employee performance being one of the important aspects to consider.

The subsequent research conducted by (Testa et al., 2018) discusses the pressures faced in balancing market-based logic and environmental logic with a panel of 3,490 companies over the period 2002-2014. The balancing of this logic is caused by the potential difference between actual actions and the commitments expressed. This measurement is conducted using the Green Practice Index (GPI) and the Green Communication Index (GCI) to identify that alignment, thereby enabling the identification of greenwashing and brownwashing behaviors. This identification needs to be carried out to reduce the misalignment that effects negative perceptions and effects on the company's finances. Based on this research, it was found that companies engaging in greenwashing practices do not provide financial benefits to the company. The regression model, producing negative but insignificant coefficients, serves as

an indication that the market does not respond positively when companies make false environmental claims. The analysis of brownwashing practices yields the same results as greenwashing, meaning that companies that do not effectively communicate their environmental commitments tend to have low market value and operational performance.

Based on several previous studies that have been conducted, some results support and differ from the author's research. The differences observed are assumed to be caused by the differing characteristics of the countries. The characteristics of China and Indonesia differ despite having similarities, as both are classified as developing countries. However, there is an assumption that differences in institutional and legal factors in a country that lead to environmental regulations could be a factor in determining environmental communication strategies. Additionally, the research conducted with an approach to board characteristic variables in explaining the effect of greenwashing on firm value can be a factor in the difference in the author's research results compared to previous studies. Greenwashing during a crisis has a significant effect on the value of the company. The crisis period during the COVID-19 pandemic from 2020-2022 caused global economic growth to weaken, which in turn effected the value of companies, leading to a decline. The weakening economic conditions have caused investor apprehension towards making investments. The research conducted (Bodhanwala & Bodhanwala, 2023) [8] compared the effect of ESG on firm value in India during the pre-crisis and post-crisis periods, with quarterly data processing each year from 2018 to 2022. The results of this study explain that during the crisis period, the influence of greenwashing on firm value is not significant and does not have a negative effect. The factor of investor indifference towards a company's ESG performance level influences the results of the research.

Therefore, the projections regarding ESG values and investor attitudes indicate that there are actually instances of greenwashing that are not explicitly explained in the research. This is due to the suspicion that the disclosed ESG score is not fully accurate and the assumption that a high ESG score for environmentally compliant companies actually indicates greenwashing. On the contrary, there is also an assumption that a low ESG score could indicate that the company is engaging in sustainability actions. The research (Meier et al., 2024) offers a different perspective. This research provides a fundamental approach through stock market performance. Stock market performance reflects the movement of a company's stock prices in the capital market, making it a direct proxy for investors' views on the firm's value. The sample used in this study is the STOXX Europe 6000 and S&P 50, with an approach examining the relationship between companies' ESG compliance and stock prices during the economic pressure period, specifically during the COVID-19 pandemic. The results of this study indicate that companies adhering to ESG performance enhance stock market resilience during the pandemic. Although the results of this study also explain that the ESG components, namely the environmental and social factors, have a significant contribution to stock market resilience compared to the governance component. Therefore, the improvement in stock market performance will increase market capitalization, and one of the components of market capitalization becomes the basis for calculating the firm's value, thus creating a good correlation. Based on this research, it provides the view that during a crisis, companies that comply with ESG and report ESG correctly will survive and have an effect on the firm's value. The presence of a transparent disclosure attitude will correlate with increasing investor trust in the company, which in turn correlates with an increase in the firm's value. Therefore, the previous research conducted serves as the author's assumption and projection that companies that are not transparent in disclosing sustainability reports or

provide misleading disclosures will decrease investor trust, leading to a decline in the firm's value in the long term. This correlates with the research results conducted by the author.

The finding that greenwashing negatively impacts firm value, particularly during crises, can be explained through several well-established theories. Firstly, from a valuation theory perspective, these results align with the principle that a firm's value is a function of its expected future cash flows, discounted by the appropriate cost of capital. Greenwashing introduces uncertainty regarding the sustainability of a company's practices and its long-term financial performance. Investors, perceiving this increased risk, tend to discount the firm's future cash flows more heavily, leading to a lower valuation.

Secondly, investor behavior theory offers additional insights. Investors are increasingly incorporating ESG factors into their decision-making processes. Greenwashing can be viewed as a breach of investor trust. Studies in behavioral finance suggest that investors react negatively to perceived deception, leading to a sell-off of shares and a decline in firm value. During crises, this effect is amplified as investors become more risk-averse and seek out companies with transparent and sustainable practices. The research results during the crisis period show that the greenwashing variable has a negative and significant effect on firm value. This is supported by the ROA variable, which has a positive and significant effect on firm value during and before the crisis.

Thirdly, signaling theory posits that companies use disclosures to signal their quality to investors. Authentic sustainability reporting can be a positive signal, attracting investors, and enhancing firm value. Conversely, greenwashing acts as a deceptive signal, which, when detected, can severely damage a company's reputation and credibility. The negative impact is particularly pronounced during crises when stakeholders pay closer attention to corporate behavior and transparency. These findings support the idea that deceptive signals related to ESG are penalized by the market, resulting in decreased firm value.

4. CONCLUSION

Based on the research that has been conducted, the conclusion is that in the pre-crisis period, the greenwashing variable had a negative and insignificant effect. The variables of sales growth, working capital to assets, and total assets show negative but insignificant effects on the firm's value. The leverage variable shows a positive but insignificant effect on the firm's value. During the COVID-19 crisis, it was found that the greenwashing variable had a negative and significant impact on the firm's value. Then, the variables of sales growth, working capital to assets, and leverage have a negative but not significant effect on the firm's value. The variable total assets have a positive but insignificant effect on the firm's value. The ROA variable has a positive and significant impact on the firm's value during the crisis and before the crisis.

Managers should prioritize genuine sustainability practices and transparent reporting over superficial greenwashing efforts. Stakeholder trust, built upon authentic ESG performance, is crucial for maintaining firm value, especially during economic downturns. Companies should invest in robust ESG frameworks and ensure accurate, verifiable disclosure of their sustainability initiatives. Furthermore, aligning organizational values with employee values is essential to minimize greenwashing behavior and improve environmental performance. Regulators should establish and enforce stricter standards for sustainability reporting to prevent greenwashing and promote transparency. This includes developing standardized metrics for ESG performance and implementing rigorous auditing mechanisms to ensure the accuracy of corporate disclosures. Furthermore, providing clear guidelines and incentives for companies to adopt sustainable business practices can foster a more responsible

and resilient corporate sector. The Government needs to take a role in providing understanding regarding sanctions and benefits in an effort to run a sustainable business.

5. LIMITATION

Research limitations are necessary to avoid deviating from the problem formulation to be discussed, which are first, the researcher analyzes companies that have ESG score and ESG disclosure data during the period of 2018-2022; second, the criteria used in the sample selection are companies that already have sustainability reports in Indonesia; and third, this research uses descriptive statistical analysis and hypothesis testing using regression tests on Stata software.

6. REFERENCE

- Bodhanwala, S., & Bodhanwala, R. (2023). Environmental, social and governance performance: influence on market value in the COVID-19 crisis. *Management Decision*, 61(8), 2442–2466. <https://doi.org/10.1108/MD-08-2022-1084>
- Chen, P., & Dagestani, A. A. (2023). Greenwashing behavior and firm value – From the perspective of board characteristics. *Corporate Social Responsibility and Environmental Management*, 30(5), 2330–2343. <https://doi.org/10.1002/csr.2488>
- Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. *California management review*, 54(1), 64-87.
- Meier, J. H., Lipkow, N., & Paientko, T. (2024). Stock market performance in the face of external shocks. Does ESG compliance immunize against the pandemic? *Zeszyty Teoretyczne Rachunkowosci*, 48(2), 129–144. <https://doi.org/10.5604/01.3001.0054.62>
- Miao, G., Chen, G., Wang, F., & Das, A. K. (2023). The Effect of Corporate Greenwashing on Employees' Environmental Performance: Person– Organization Values Fit Perspective. *Sustainability (Switzerland)*, 15(4). <https://doi.org/10.3390/su15043498>
- Selaković, M., Ljepava, N., Bagheri, N., & Al Chami, R. (2025). From greenwashing to greenbleaching: green communication and mitigating moral outrage in the context of revisited situational crisis communication theory. *Corporate Communications: An International Journal*, 30(2), 209-223.
- Shapsugova, M. (2023). ESG principles and social responsibility. In *E3S Web of Conferences* (Vol. 420, p. 06040). EDP Sciences.
- Shireesha, S., Lakshmi, T.V & Anusha, S. (2024). Balancing Profitability and Environmental Responsibility: Financial Strategies at Renew Power Limited. *International Research Journal on Advanced Engineering and Management (IRJAEM)*, 2(5), 1677–1679. <https://doi.org/10.47392/irjaem.2024.0240>
- Testa, F., Miroshnychenko, I., Barontini, R., & Frey, M. (2018). Does it pay to be a greenwasher or a brownwasher? *Business Strategy and the Environment*, 27(7), 1104–1116. <https://doi.org/10.1002/bse.2058>

SIMFONI NILAI PERUSAHAAN DAN FAKTOR-FAKTOR YANG MEMPENGARUHINYA

Angellica Eugenia^{1*}

Program Studi Akuntansi, Institut Bisnis dan Informatika Kwik Kian Gie
angellicaeugenia820@gmail.com

Prima Apriwenni²

Program Studi Akuntansi, Institut Bisnis dan Informatika Kwik Kian Gie
prima.apriwenni@kwikkiangie.ac.id

(*Corresponding Author)

Diterima 2 Maret 2025

Disetujui 26 Juni 2025

Abstract – *The study focuses on explaining the factors that affect company value. The dependent variable used is company value, while the independent variables are Net Profit Margin, leverage, and company size. The secondary data used in this research were obtained from the annual financial reports of 59 manufacturing companies listed on the Indonesia Stock Exchange (IDX) website from 2021 to 2023, yielding a total of 177 data points. The analysis was conducted using the Multiple Regression Analysis method with SPSS 26. The results of this research show that Net Profit Margin has a positive and significant effect on company value. Leverage also has a positive and significant effect on company value. However, the results do not support a positive and significant effect of company size on company value. These findings suggest that profitability and leverage are important factors in enhancing firm value, while company size may not necessarily influence investor perception or market valuation in the context of manufacturing firms during the study period.*

Keywords: *Company Value; Net Profit Margin; Leverage; Company Size*

1. PENDAHULUAN

1.1 Latar Belakang

Nilai perusahaan menurut Hernita (2019) menunjukkan situasi saat ini dan potensi dari perusahaan tersebut di masa mendatang. Mekanisme penawaran dan permintaan pada pusat jual beli saham yang dapat tinjau melalui harga pada pusat jual beli saham, menentukan nilai perusahaan yang telah dikenal secara luas. Tinggi atau rendahnya harga saham menjadi cara untuk menentukan nilai suatu perusahaan. Menurut Aryadita, Hariyanto, Wahyuni, dan Fitriati (2024) investor menggunakan informasi ini untuk menentukan perusahaan mana yang kemungkinan akan menguntungkan di masa mendatang. Sehingga suatu perusahaan harus meningkatkan kualitas dan kuantitas penawarannya untuk menarik para pemangku kepentingan agar nilainya meningkat sebagaimana ditunjukkan oleh harga sahamnya.

Fenomena yang terjadi akhir-akhir ini yang menyangkut nilai perusahaan dilihat melalui adanya peningkatan jumlah investor pasar modal pertahunnya, dari peningkatan tahun 2021 hingga 2022 yang menunjukkan persentase kenaikan sebesar 36,68% serta dari tahun 2022 hingga 2023 dengan persentase kenaikan sebesar 13,76% ([ksei.co.id](https://www.ksei.co.id)). Adapun pada sektor manufaktur di tahun 2021, terlihat bahwa sektor tersebut pulih dari perlambatan dan

menunjukkan ketahanan yang luar biasa. Jumlah investasi yang terealisasi pada tahun 2021 meningkat signifikan menjadi Rp236,79 triliun. Mengingat kembali pandemi yang masih berlangsung, kenaikan 17,3% ini menunjukkan bahwa investor semakin yakin dengan prospek pengembangan sektor industri Indonesia (liputan6.com). Sepanjang tahun 2022 industri manufaktur di Indonesia tetap konsisten dalam pertumbuhan ekspansif, tercermin dari *Purchasing Managers' Index* (PMI) manufaktur saat tahun 2022 yang lebih besar dari 50. PMI Manufaktur Indonesia berhasil mencapai 50,9 pada Desember 2022, meningkat dari 50,3 pada bulan sebelumnya. Bahkan Indonesia juga mengungguli PMI Manufaktur beberapa negara lain, dengan percontohan dari negara Jerman (47,4), Jepang (48,8), Australia (50,4), Myanmar (42,1), Belanda (48,6), Prancis (47,4), Korea Selatan (48,2), Inggris (44,7), Amerika Serikat (46,2), dan Zona Eropa (47,8) (antaranews.com). Dan seiring berjalannya waktu, di tahun 2023 pertumbuhan aktivitas industri manufaktur di Indonesia bertumbuh positif walaupun adanya tekanan ekonomi global yang tidak stabil. Dikatakan bahwa manufaktur Indonesia memiliki *Purchasing Manager's Index* (PMI) yang naik 0,2 poin menjadi 51,7 pada November 2023, yang mengindikasikan industri manufaktur akan terus tumbuh dari kuartal IV hingga 2023 (kontan.co.id). Melihat fenomena yang terjadi dimana harga saham sektor manufaktur tetap naik bahkan mampu menunjukkan ketahanan dan adaptabilitas dalam menghadapi tantangan di tahun 2021-2023 seperti COVID-19, ketidakpastian ekonomi global, dan inflasi akibat pelonggaran uang (*Quantitative Easing/QE*) mendorong peneliti untuk mengetahui pengaruh *Net Profit Margin*, *leverage*, serta ukuran perusahaan atas nilai perusahaan dari sektor manufaktur pada Bursa Efek Indonesia periode 2021-2023.

Seperti yang dikatakan oleh Brigham dan Houston (2012) dalam penelitian Rachman (2016) rasio nilai pasar menunjukkan ekspektasi investor terhadap perusahaan yang dilakukan dengan harga saham dibandingkan indikator keuangan seperti pendapatan, arus kas, atau nilai buku. Dengan ini, manajemen dapat mengetahui sejauh mana investor tertarik terhadap kinerja perusahaan dan mengambil tindakan yang diperlukan untuk meningkatkan persepsi investor.

Nilai perusahaan sangat dipengaruhi oleh *Net Profit Margin*. Karena *Net Profit Margin* menunjukkan bagaimana perusahaan menetapkan harga penjualan dan pengendalian perusahaan biaya operasionalnya, rasio ini sangat penting bagi perusahaan, dimana efisiensi suatu perusahaan beroperasi dapat dilihat dari semakin besarnya *Net Profit Margin* perusahaan. Nengsih (2020) dan Hidayah (2021) menyatakan bahwa *Net Profit Margin* memiliki pengaruh positif terhadap nilai perusahaan dimana jika pendapatan bersih yang diterima oleh perusahaan tinggi, nilai perusahaan akan mengalami kenaikan dan akan meningkatkan nilai investor. Sebaliknya, menurut Setiawan, Rohanda, dan Abbas (2021) serta Supia, Aprilia, Sembiring, Sekali, dan Aruan (2021) *Net Profit Margin* memiliki pengaruh negatif terhadap nilai perusahaan berarti dengan *Net Profit Margin* yang rendah, artinya perusahaan kurang efisien dalam meningkatkan penjualan menjadi laba.

Selain *Net Profit Margin*, saat menilai nilai perusahaan *leverage* juga salah satu elemen yang penting. *Leverage* adalah jumlah hutang yang digunakan bisnis sebagai bagian dari modal kerjanya. *Leverage* berpotensi meningkatkan laba bersih perusahaan melalui penggunaan mekanisme arbitrase antara suku bunga pinjaman dan imbal hasil saham. Sutama & Lisa (2018) menyatakan bahwa Investor akan ragu untuk berinvestasi pada perusahaan dengan aset besar tetapi risiko *leverage* tinggi. Hal ini karena *leverage* adalah rasio perbandingan total hutang dengan aktivitas perusahaan dan menentukan berapa banyak yang disediakan oleh kreditor. Maka dari itu terdapat beberapa penelitian yang menyatakan pendapat mengenai dampak *leverage* terhadap nilai perusahaan yaitu, *leverage* berpengaruh

positif terhadap nilai perusahaan (Sari & Wahidahwati, 2021). Novita (2022) juga menyatakan *leverage* memiliki dampak yang positif signifikan atas nilai perusahaan hal ini disebabkan perusahaan dapat meningkatkan keuntungan dan nilai mereka dengan menggunakan hutang sebagai sumber pendanaan. Sedangkan sebaliknya, Dina & Wahyuningtyas (2022) serta Anisa, Hermuningsih, dan Maulida (2022) dari hasil penelitiannya telah didapat pengaruh yang negatif antara rasio *leverage* dengan nilai perusahaan, yang berarti semakin tinggi tingkat hutang, nilai dari perusahaan semakin rendah.

Terakhir, aspek yang juga perlu untuk dipertimbangkan adalah ukuran perusahaan. Ukuran perusahaan biasanya berkorelasi dengan kapasitasnya untuk memperluas pasar modal dan melakukan lebih banyak investasi. Seiring dengan semakin besarnya perusahaan, proses struktural dan manajerial yang diperlukan untuk menangani masalah baru biasanya menjadi lebih rumit. Ukuran perusahaan dapat mempengaruhi kerugian karena meningkatkan kapasitas perusahaan untuk meningkatkan modal guna memenuhi tujuannya. Namun, perusahaan besar akan menanggung banyak hutang karena sangat kecil kemungkinannya untuk memenuhi janjinya (Indriyani, 2017). Penelitian sebelumnya secara konsisten mengindikasikan bahwa ukuran perusahaan merupakan determinan penting atas penentuan nilai perusahaan. Adhyasta & Sudarsi (2023) menyatakan ukuran perusahaan memiliki pengaruh positif dan signifikan terhadap nilai perusahaan yang sejalan dengan penelitian Dina & Wahyuningtyas (2022) artinya investor akan tertarik pada ukuran perusahaan yang besar dan nantinya akan berdampak pada peningkatan nilai perusahaan. Sedangkan menurut Irawan & Kusuma (2019) dan Fadhilah, Idawati, Praptiningsih (2021) analisis empiris menunjukkan bahwa terdapat pengaruh negatif antara variabel ukuran perusahaan dengan variabel nilai perusahaan.

Melihat perbedaan yang ditunjukkan oleh beberapa penelitian terdahulu penelitian ini dilakukan oleh peneliti yang bertujuan untuk mengetahui, menganalisis dan menarik kesimpulan bagaimana *Net Profit Margin*, *leverage*, dan ukuran perusahaan mempengaruhi nilai perusahaan dengan mengambil sampel berupa perusahaan manufaktur yang telah terdaftar di Bursa Efek Indonesia periode 2021-2023.

1.2 Rumusan Masalah

Berdasarkan masalah-masalah yang telah diidentifikasi sebelumnya maka peneliti membatasi masalah menjadi :

1. Apakah *Net Profit Margin* berpengaruh terhadap nilai perusahaan sektor manufaktur?
2. Apakah *leverage* berpengaruh terhadap nilai perusahaan sektor manufaktur?
3. Apakah ukuran perusahaan berpengaruh terhadap nilai perusahaan sektor manufaktur?

1.3 Tinjauan Literatur dan Hipotesis

1.3.1 Teori Keagenan (*Agency Theory*)

Hubungan keagenan didefinisikan oleh Jensen & Meckling (1976) sebagai sebuah bentuk perjanjian atau kesepakatan kontrak ditengah dari pemegang perusahaan (sebagai prinsipal) dan pengelola (sebagai agen) yang ditunjuk untuk mengelola perusahaan. Diasumsikan bahwa agen akan bertindak demi kepentingan terbaik prinsipal apabila antar dua *stakeholder* berupaya mencapai tujuan yang sama untuk meningkatkan nilai perusahaan. Eisenhardt (1989) menyatakan bahwa teori agensi berkaitan dengan penyelesaian antar masalah dalam hubungan keagenan yang mungkin terjadi. Dalam hal ini, masalah keagenan yang muncul adalah ketika (a) konflik antara prinsipal dan agen mengenai tujuan serta keinginan mereka serta (b) susah atau perlu harga yang tinggi untuk prinsipal melakukan uji kebenaran mengenai kegiatan yang sedang dilakukan oleh agen. Problematika yang muncul

ini adalah ketika prinsipal dan agen mengalami perbedaan dalam pengambilan keputusan yang berbeda karena perbedaan preferensi risiko. Masalah yang muncul atas problematika ditengah prinsipal dan agenlah yang disebut masalah keagenan.

1.3.2 Teori Sinyal (*Signaling Theory*)

Dikembangkan oleh Spence (1973), *signaling theory* memiliki pemahaman yaitu penyampaian potongan-potongan informasi yang relevan kepada para penerimanya yang dapat dimanfaatkan. Penerima sinyal akan menyesuaikan perilaku sesuai dengan apa yang dipahaminya terhadap sinyal tersebut. Kemudian *signaling theory* dikembangkan kembali oleh Ross (1977) dengan menjelaskan bahwa informasi lebih positif dari perusahaan oleh pihak perusahaan akan disampaikan kepada calon investor supaya adanya peningkatan saham perusahaan. Menurut Brigham & Houston (2007) teori signal atau *signaling theory* adalah sebuah isyarat yang dihasilkan oleh manajemen perusahaan dengan memberi informasi yang relevan mengenai laporan keuangan perusahaan untuk mengeksplorasi prospek perusahaan kedepannya. Terdapat *signaling theory* dalam pembagian informasi berupa status perusahaan yang berbentuk perilaku manajemen melalui sinyal. Pemilik perusahaan dan pihak yang berkepentingan mengirimkan sinyal melalui bentuk pemasaran dan informasi untuk menunjukkan bahwa dibanding dengan perusahaan lain, perusahaan mereka lebih unggul. Selain itu, pengungkapan informasi perusahaan yang relevan dan akurat, akan menjadi pertimbangan bagi investor ataupun calon investor terhadap investasi sahamnya (Givoly & Palmon 1982).

1.3.3 Nilai Perusahaan

Dalam Endaryono (2019:6) disampaikan bahwa nilai saham dan nilai hutang menjadi bagian nilai perusahaan guna memenuhi ekspektasi pemegang saham, kenaikan harga pasar saham bisa menjadi cerminan dari kesejahteraan pemegang saham. Dengan kata lain untuk meningkatkan nilai perusahaan, manajemen keuangan akan berupaya untuk meningkatkan harga pasar saham sehingga memberikan keuntungan maksimal melalui kemakmuran pemegang saham. Hal yang utama bagi pendiri perusahaan merupakan bagaimana mereka dapat memaksimalkan nilai perusahaannya. Kesejahteraan pemegang saham bergantung pada perusahaan dengan nilai yang tinggi sehingga nilai perusahaan dianggap sangat penting. Perusahaan perlu memperhatikan persepsi pemegang saham terhadap potensi masa depan perusahaan, dimana setiap pengambilan keputusan oleh perusahaan perlu memberikan dampak positif bagi nilai perusahaan karena hal ini menjadi indikator penting dalam kepercayaan investor sehingga ada hubungan timbal balik antar pihak.

1.3.4 Net Profit Margin

Jirwanto, Aqsa, Agusven, Herman, dan Sulfitri (2024:33) menjelaskan bahwa *Net Profit Margin* menjadi salah satu indikator pengukur keahlian perusahaan atas menghasilkan keuntungan bersih setelah pajak dengan penjualannya. Hal ini memiliki makna bahwa naiknya rasio keuntungan bersih maka artinya perusahaan mampu menunjukkan kinerja operasionalnya untuk menghasilkan laba bersih. Pada umumnya industri menetapkan *Net Profit Margin* sebesar 20% sebagai tolak ukur performa yang gemilang. Selain itu, *Net Profit Margin* diartikan sebagai perbandingan kapasitas perusahaan dalam memanfaatkan penjualan yang dilakukan untuk menghasilkan laba bersih, rasio ini mengindikasikan laba bersih yang timbul dari kegiatan penjualan (Febri & Fauziah, 2021). Rasio ini menjadi salah satu acuan untuk investor dalam menentukan keputusan investasinya serta tolak ukur atas kinerja perusahaan. Perusahaan yang dapat meningkatkan *Net Profit Margin* dengan maksimal akan

memiliki posisi yang kuat dalam persaingan serta dapat mengalokasikan lebih banyak sumber daya untuk kedepannya.

1.3.5 Leverage

Leverage dalam Kasmir (2019:112) dijelaskan sebagai pengukur kemampuan perusahaan atas aktivitasnya dengan hutang sebagai pendanaan. Berarti *leverage* menunjukkan tanggungan beban hutang jika dibanding dengan total aktiva yang dimilikinya. Dalam hal ini berarti rasio ini dapat menunjukkan kapasitas perusahaan untuk melunasi hutang jangka panjang ataupun pendeknya jika dibubarkan atau dilikuidasi. Menurut Suhardi (2021), saat mengevaluasi laporan keuangan, *leverage* merupakan metrik yang menunjukkan berapa banyak jaminan yang dapat diakses oleh kreditor. Dari pengertian diatas, *leverage* digunakan sebagai alat pendanaan perusahaan serta strategi dalam meningkatkan potensi keuntungan yang dihasilkan. Pada dasarnya, memungkinkan bagi perusahaan mengelola sumber daya tanpa harus menggunakan seluruh modal perusahaan dan mempertahankan kendali atas perusahaan melalui *leverage*. Dengan *leverage* yang optimal perusahaan dapat meningkatkan laba jika keuntungan lebih dari beban tetap perusahaan.

1.3.6 Ukuran Perusahaan

Perusahaan dengan skala yang besar cenderung mengelola resiko dengan melalui ekspansi dan diversifikasi. Hal ini dilakukan perusahaan besar untuk mengurangi resiko kegagalan yang mungkin terjadi terutama dalam memperkecil skala potensi terjadinya kebangkrutan usaha. Dengan itu, dampak negatif yang dihadapi perusahaan dengan skala besar cenderung akan lebih mampu ditangani dibanding dengan perusahaan dengan skala yang kecil (Irma et al, 2021). Menurut Rahmawati, Topowijono, dan Sulasmiyati (2015) besar kecilnya suatu perusahaan atau ukuran perusahaan menjadi pengaruh bagi investor dalam menilai perusahaan dalam keputusan investasinya. Jika dibanding dengan perusahaan yang memiliki total aset kecil, perusahaan dengan total aset yang tinggi menunjukkan stabilitas perusahaan yang baik serta potensi dalam menghasilkan laba yang lebih tinggi sehingga prediksi yang dimiliki masa depan perusahaan akan lebih baik (Anggita, 2022). Adapun Menurut Sudarmadji & Sularto (2007) variabel yang dapat digunakan sebagai pengukuran ukuran perusahaan yaitu total aset, total penjualan serta kapitalisasi pasar. Hal ini dikarenakan ketiga variabel tersebut dapat mencerminkan besar kecilnya suatu perusahaan.

1.3.7 Pengaruh *Net Profit Margin* Terhadap Nilai Perusahaan

Net Profit Margin cenderung sering dipakai sebagai alat informasi tingkat keuntungan suatu perusahaan. Dapat diketahui bahwa kinerja perusahaan optimal dari semakin tinggi *Net Profit Margin* yang dihasilkan karena artinya perusahaan mampu dalam mengelola biaya operasionalnya dan dapat menghasilkan laba yang lebih tinggi. Hal ini memberikan pandangan kepada investor atas kemakmuran yang bisa didapat atas laba tersebut dalam bentuk *return* saham. Berdasarkan Ross (1977), sinyal yang disampaikan oleh perusahaan mengenai *Net Profit Margin* yang tinggi cenderung menjadikan umpan aktif atas perhatian para investor dalam melakukan kegiatan aktivitas penanaman modal dengan harapan tingginya prospek perusahaan kedepannya, sehingga terjadi peningkatan harga saham serta nilai perusahaannya. Sedangkan dengan teori agensi oleh Eisenhardt (1989) adanya informasi *Net Profit Margin* yang akurat akan dapat mengurangi konflik antar pihak karena artinya hal ini mengurangi asumsi kemampuan manajemen dalam menghasilkan laba serta memberikan kepastian atas kinerja manajemen kepada investor. Fikriyah & Mustaqim (2024) Menyatakan bahwa perusahaan yang menyanggupi dalam memproduksi laba besar umumnya dipandang

memiliki kinerja keuangan yang efisien, dan laba tersebut juga akan berpengaruh pada peningkatan laba per saham dan nilai perusahaan itu sendiri. Sehingga dapat dikatakan *Net Profit Margin* memiliki pengaruh positif dan signifikan terhadap nilai perusahaan. Hal ini sejalan dengan penelitian Hidayah (2021).

Ha1: *Net Profit Margin* berpengaruh positif terhadap nilai perusahaan

1.3.8 Pengaruh *Leverage* Terhadap Nilai Perusahaan

Dalam konteks teori agensi oleh Scott (2015), *leverage* dapat mengurangi konflik antara pemegang saham (prinsipal) dan manajemen (agen) yang akan berhati-hati dan fokus untuk memaksimalkan keuntungan pemegang saham, bukan hanya kepentingan pribadinya saja yang akhirnya meningkatkan nilai perusahaan, dan sesuai dengan teori sinyal Spence (1973) penggunaan hutang untuk menghasilkan laba oleh perusahaan menjadi tanda atau sinyal bagi investor bahwa artinya perusahaan yakin dalam menghasilkan keuntungan yang cukup untuk membayar kewajiban hutangnya. Hal ini didukung oleh penelitian Wibowo (2021) dimana rasio *leverage* yang semakin tinggi pada suatu perusahaan dapat memberikan dampak yang positif untuk peningkatan nilai perusahaan. Alasannya, *leverage* perusahaan memiliki biaya bunga yang harus dibayarkan sehingga menurunkan pembayaran pajak. *Leverage* yang perlu dibayar perusahaan akan meningkatkan efisiensi perusahaan untuk menghindari kebangkrutan. Di sisi lain, penelitian Novita et al (2022) juga menyatakan bahwa *leverage* memiliki pengaruh positif terhadap nilai perusahaan.

Ha2: *Leverage* berpengaruh positif terhadap nilai perusahaan

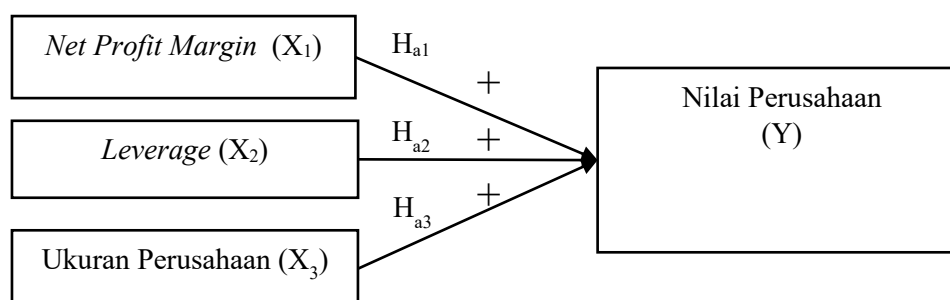
1.3.9 Pengaruh Ukuran Perusahaan Terhadap Nilai Perusahaan

Ukuran perusahaan yang besar dapat mencerminkan kekuatan perusahaan tersebut dalam pasar yang signifikan. Perusahaan dengan pangsa pasar yang besar biasanya memiliki daya tawar lebih tinggi dengan pemasok, pelanggan, dan pesaing. Artinya jika dihubungkan dengan teori sinyal oleh Spence (1973) perusahaan dengan ukuran besar menjadi sinyal bahwa perusahaan memiliki keunggulan kompetitif serta posisi yang kuat dalam menghadapi risiko dan ketidakpastian keuangan yang dianggap sebagai sinyal positif bagi pemegang saham untuk berinvestasi. Sedangkan menurut teori agensi oleh Jensen & Meckling (1976) perusahaan berukuran besar cenderung memiliki biaya keagenan lebih besar pula, sehingga pengungkapan data yang lebih lengkap dilakukan oleh pihak manajer untuk mengurangi biaya tersebut. aset perusahaan besar yang lebih tinggi daripada perusahaan kecil menjadikan para investor dapat termotivasi dalam melakukan kegiatan penanaman modal secara aktif karena dianggap bahwa perusahaan tersebut mampu dalam bersaing di pasar modal dan memberikan *return* saham yang tinggi (Anggita, 2022). Penelitian dari Adhyasta & Sudarsi (2023) serta Dina & Wahyuningtyas (2022) juga mengatakan adanya ukuran perusahaan berpengaruh positif terhadap nilai perusahaan.

Ha3: Ukuran perusahaan berpengaruh positif terhadap nilai perusahaan

1.3.10 Kerangka Penelitian

Berdasarkan pembahasan dan uraian dari landasan teoritis dan hipotesis diatas, atas maka dari itu dapat diinterpretasikan melalui sebuah kerangka pemikiran yaitu:



Gambar 1. Kerangka Pemikiran

2. METODOLOGI DAN ANALISIS DATA

2.1 Desain Penelitian

Dengan metode kuantitatif, perusahaan manufaktur yang telah terdaftar pada Bursa Efek Indonesia menjadi objek penelitian ini. Sumber data sekunder yang dipakai atas penelitian ini diambil melalui laporan keuangan perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia yang tersedia di situs web resmi www.idx.co.id. Variabel yang digunakan sebagai variabel dependen adalah nilai perusahaan, dan variabel independennya melibatkan *Net Profit Margin*, *leverage*, dan ukuran perusahaan. Data yang diambil untuk diteliti merupakan data pada periode 2021-2023.

2.2 Populasi dan Sampel

Penentuan dalam proses pengambilan sampel penelitian digunakan melalui metode *purposive sampling*, dimana berdasarkan Sekaran & Bougie (2016) perlu untuk mengumpulkan informasi dari kelompok sasaran tertentu, dimana penelitian membatasi sampel pada kelompok atau individu tertentu, baik karena ketersediaan informasi maupun karena kriteria yang ditetapkan peneliti terpenuhi. Berikut merupakan standarisasi pada penelitian ini yang digunakan atas pemilihan sampel penelitian :

Tabel 1. Proses Pengambilan Sampel

No	Kriteria	Jumlah	Akumulasi
1	Perusahaan sektor manufaktur yang telah terdaftar pada Bursa Efek Indonesia tahun 2021-2023.		165
2	Perusahaan manufaktur yang tidak menerbitkan laporan keuangannya berturut-turut periode 2021-2023 pada situs resmi Bursa Efek Indonesia	(16)	149
3	Perusahaan manufaktur yang melampirkan laporan keuangan selain dalam mata uang Rupiah	(26)	123
4	Perusahaan manufaktur yang mengalami ketidakuntungan selama periode 2021-2023	(57)	66
5	Perusahaan manufaktur yang tidak terdapat data komplit berupa harga saham, ekuitas, Jumlah saham beredar, laba setelah pajak, Penjualan, total hutang, dan total aset pada periode 2021-2023	(2)	64
6	Perusahaan manufaktur yang di outlier	(5)	59
Total data yang terpilih sebagai sampel (59x3 tahun)			177

2.3 Variabel Dependen

Market to Book Ratio (MBR), yaitu rasio pembandingan harga pasar saham dengan nilai buku saham. MBR dapat menunjukkan tinggi atau rendahnya harga saham perusahaan, sehingga para investor sering kali menggunakan MBR untuk dijadikan acuan. Nilai perusahaan dengan proksi MBR oleh Komarudin (2020) dihitung dengan rumus :

$$\text{Market to Book Ratio} = \frac{\text{Market value per share}}{\text{Book value per share}}$$

2.4 Variabel Independen

a. *Net Profit Margin*

Seperti yang dikatakan oleh Nabela et al (2023) tingginya *Net Profit Margin* mengindikasikan bahwa perusahaan sangat baik dalam pengelolaan operasi bisnisnya sehingga dapat menghasilkan laba bersih yang maksimal, dimana hal ini berdampak positif atas nilai perusahaan dan pemegang saham karena memberikan keuntungan yang lebih besar. Dalam pengukuran *Net Profit Margin*, Siswanto (2021) menggunakan rumus:

$$\text{Net Profit Margin (NPM)} = \frac{\text{EAT}}{\text{Sales}}$$

b. *Leverage*

Debt to Assets Ratio yang mengukur seberapa besar total aset milik perusahaan dibiayai hutang perusahaan digunakan pada penelitian ini sebagai alat ukur tingkat *leverage*. *Debt to Assets Ratio* yang tinggi memperlihatkan bahwa perusahaan mampu dalam mengelola hutangnya, karena pada dasarnya diperlukan *Debt to Assets Ratio* yang cukup dalam mencapai tingkat laba yang diinginkan perusahaan. Rumus *Debt to Assets Ratio* yang digunakan oleh Kasmir (2019) adalah :

$$\text{Debt to Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

c. Ukuran Perusahaan

Pada umumnya, investor cenderung melirik perusahaan yang memiliki kondisi stabil dan memiliki kredibilitas tinggi dihadapan masyarakat. Besar kecilnya ukuran atas penelitian ini dinilai berdasarkan kondisi keuangan perusahaan, yaitu melihat jumlah total aset perusahaan. Ukuran perusahaan oleh Thomas (2023) dirumuskan dengan :

$$\text{SIZE} = \text{Ln}(\text{Total Assets})$$

2.5 Metode Analisis Data

Menggunakan *software SPSS 26*, penelitian dilakukan dengan metode analisis linear berganda. Pengujian yang dilakukan mencakup statistik deskriptif yang akan menjabarkan statistik data tiap variabel. Setelah itu, kelayakan model regresi akan dilakukan dengan uji asumsi klasik (uji normalitas, uji multikolinearitas, uji autokorelasi, dan uji heteroskedastisitas) dan analisis linear berganda. Terakhir, uji hipotesis (uji statistik F, uji statistik t, koefisien determinasi) akan dilakukan guna mengetahui pengaruh simultan dan parsial serta potensi dari variabel independen untuk menjelaskan variasi variabel dependennya. Model regresi yang telah ditentukan untuk penelitian yaitu:

$$\text{CVAL} = \beta_0 + \beta_1 \text{NPM} + \beta_2 \text{LEV} + \beta_3 \text{SIZE} + \varepsilon$$

Keterangan :

CVAL : Nilai perusahaan

NPM : *Net Profit Margin*

LEV : *Leverage*

SIZE : Ukuran perusahaan
 β_0 : Konstanta
 $\beta_{1,2,3}$: Koefisien regresi
 ε : Error

3. HASIL ANALISIS DAN PEMBAHASAN

3.1 Analisis Statistik Deskriptif

Tabel 2. Statistik Deskriptif

	N	Minimum	Maximum	Mean	Std. Deviation
CVAL	177	,1970	8,4642	1,8247	1,6754
NPM	177	,0008	,3369	,0909	,0722
LEV	177	,0326	,7420	,3319	,1503
SIZE	177	25,1609	33,7306	29,0144	1,6686

Seperti yang ditunjukkan pada tabel 2, penelitian memiliki total sampel (N) sebesar 177 sampel. Uji statistik deskriptif yang dilakukan menunjukkan tingkat rata-rata penilaian pasar terhadap nilai perusahaan merupakan sebesar 1,8247. Ada pula perusahaan dengan nilai perusahaan paling rendah sebesar 0,1970 yaitu PT Indonesia Tobacco Tbk pada tahun 2022, Disisi yang lain perusahaan dengan kinerja yang baik yaitu PT Impack Pratama Industri Tbk memiliki nilai perusahaan tertinggi sebesar 8,4642 di tahun 2023. Standar deviasi dari nilai perusahaan sebesar 1,6754 lebih kecil dari rata-ratanya, artinya tidak ada kesenjangan atau perbedaan antar data yang terlalu tinggi.

Variabel independen berupa *Net Profit Margin* tercatat dengan nilai terendah yaitu 0,0008 yang dialami PT Sekar Bumi Tbk di tahun 2023. Sementara itu ditahun yang sama, PT Indofood CBP Sukses Makmur Tbk dengan nilai *Net Profit Margin* paling tinggi memiliki nilai 0,3369. Rata-rata *Net Profit Margin* pada penelitian ini terdata memiliki nilai sebesar 0,0909, dengan standar deviasi yang lebih rendah yaitu 0,0722 yang artinya perbedaan antar data tidak terlalu tinggi atau merata.

Selanjutnya hasil variabel *leverage* terendah sebesar 0,0326 diperoleh dari perusahaan PT Sinergi Inti Plastindo Tbk di periode 2022, sebaliknya hasil *leverage* tertinggi sebesar 0,7420 dari perusahaan PT Alakasa Industrindo Tbk periode 2021. Rata-rata yang mencerminkan proporsi penggunaan hutang dibanding ekuitas ditentukan oleh variabel *leverage* yaitu sebesar 0,3319. Dengan adanya standar deviasi sebesar 0,1503 yang relatif lebih rendah dari rata-rata artinya perbedaan antar data tidak terlalu tinggi atau merata.

Ukuran perusahaan dalam penelitian ini memiliki hasil nilai minimum sebesar 25,1609 dialami oleh PT Sinergi Inti Plastindo Tbk tahun 2021 serta hasil nilai maksimum sebesar 33,7306 yang diperoleh dari perusahaan PT Astra International Tbk tahun 2023. Nilai rata-rata yang dimiliki variabel nilai perusahaan sebesar 29,0144 dan standar deviasi 1,6686 lebih kecil dibanding dengan rata-ratanya sehingga artinya perbedaan antar data tidak terlalu tinggi atau merata.

3.2 Uji Asumsi Klasik

Tabel 3. Hasil Uji Asumsi Klasik

Nama pengujian	Kriteria	Hasil			Keputusan
Normalitas	Sig. > 0,05	0,200			Tidak Tolak Ho
Multikolinearitas	Tolerance > 0,1 dan VIF < 10	Variabel	Tolerance	VIF	Tidak Tolak Ho
		NPM	0,897	1,115	
		LEV	0,819	1,222	
		SIZE	0,884	1,131	
Autokorelasi	dU < dW < 4-dU, dengan Nilai Du (K=4, N=177) adalah 1,8005	2,004			Tidak Tolak Ho
Heterokedastisitas	Sig > 0,05	Variabel	Sig		Tidak Tolak Ho
		NPM	0,351		
		LEV	0,253		
		SIZE	0,864		

Peneliti mengumpulkan data finansial atas 59 perusahaan manufaktur dengan telah terdaftar oleh BEI periode 2021-2023, sehingga diperoleh total sampel sebanyak 177 sampel. Melalui uji normalitas menggunakan *One-Sample Kolmogorov-Smirnov* (K-S) dikatakan bahwa data penelitian berdistribusi normal, hal ini diperlihatkan melalui nilai signifikansi sebesar 0,200 lebih besar dari kriteria signifikansi nya yaitu >0,05.

Uji multikolinearitas yang dilakukan menggunakan kriteria dimana jika variabel pada model regresi memiliki nilai *variance inflation factor* (VIF) < 10 dan nilai tolerance $\geq 0,10$ maka artinya tidak terdapat multikolinearitas telah dijabarkan pada tabel 3 bahwa tolerance dan VIF dari ketiga variabel independen memiliki VIF < 10 dan nilai *tolerance* > 0,10 sehingga didapat bahwa tidak ada masalah multikolinearitas antar variabel independen dalam model regresi.

Dalam uji autokorelasi, model regresi dikatakan terhindar dari autokorelasi ketika nilai *Durbin-Watson* berada lebih besar dibanding nilai *upper bound* (du) serta lebih kecil dibanding nilai $(4 - du)$. Penelitian ini memiliki empat variabel (k) beserta dengan 177 sampel (n), jika dilihat dari tabel *Durbin-Watson* diperoleh *upper bound* (du) sebesar 1,8005 dan nilai $(4 - du)$ sebesar 2,1995 Artinya nilai *Durbin-Watson* yang telah diolah sebesar 2,004 terletak diantara *upper bound* (dua) serta nilai $(4 - du)$ maka tidak terdapat autokorelasi $(1,8005 < 2,004 < 2,1995)$.

Terjadinya ketidaksamaan varian residual semua pengamatan dalam model regresi diketahui melalui uji heterokedastisitas. Pada penelitian ini, uji heterokedastisitas dilakukan melalui metode uji glejser dengan menguji nilai signifikansi antara variabel independen dan absolut residual lebih besar dari 0,05 maka tidak terjadi heterokedastisitas. Terlihat bahwa variabel *Net profit Margin*, *leverage* dan ukuran perusahaan dalam model regresi penelitian ini homokedastisitas.

3.3 Analisis Linear berganda

Analisis regresi linear berganda memiliki tujuan dalam mengukur kuatnya hubungan pada ketiga variabel independen atas variabel dependen yang diteliti. Sesuai data hasil pengolahan, diperoleh susunan persamaan regresi sebagai berikut:

$$CVAL = -1,235 + 6,213 NPM + 0,867 LEV + 0,022 SIZE$$

3.4 Uji Hipotesis

3.4.1 Uji Statistik F

Tabel 4. Hasil Uji Statistik F

	F	Sig.	Keterangan
Regression	1,331	0,000	Tolak Ho

Pengaruh tiap variabel secara simultan atau serentak terhadap variabel dependen pada model regresi bisa dilihat melalui uji statistik F. Uji F pada tabel 4 menunjukkan nilai 1,331 dengan nilai signifikansi $0,000 < \alpha (0,05)$, artinya model regresi yang digunakan signifikan atau variabel-variabel independen yaitu *Net Profit Margin*, *leverage*, dan ukuran perusahaan secara bersama-sama atau serentak memiliki dampak signifikan atas variabel dependen nilai perusahaan.

3.4.2 Uji Statistik t

Tabel 5. Hasil Uji Statistik t

	B	Sig.	Sig./2 (one-tailed)	Keterangan
NPM	6,213	0,000	0,000	Tolak H_{01}
LEV	0,867	0,035	0,017	Tolak H_{02}
SIZE	0,022	0,544	0,272	Tidak Tolak H_{03}

Dari hasil uji t, diperoleh bahwa hipotesis pertama dalam penelitian ini yang membahas mengenai pengaruh *Net Profit Margin* terhadap nilai perusahaan ditunjukkan melalui tabel 4, terlihat bahwa nilai sig./2 pada variabel *Net Profit Margin* memiliki nilai sebesar 0,000 lebih kecil dari 0,05 yang berarti variabel *Net Profit Margin* memiliki pengaruh signifikan ke arah positif terhadap nilai perusahaan. Sehingga, terbukti bahwa hipotesis pertama (H_{a1}) yaitu *Net Profit Margin* berpengaruh positif terhadap nilai perusahaan yang artinya **tolak H_{01}** .

Hipotesis kedua dalam penelitian ini merupakan pengaruh dari *leverage* terhadap nilai perusahaan. Tabel 5 menunjukkan variabel *leverage* memiliki nilai sig./2 0,017 lebih kecil dari 0,05 yang artinya *leverage* memiliki pengaruh signifikan ke arah positif terhadap nilai perusahaan. Maka dari itu, hipotesis kedua (H_{a2}) yang menyatakan bahwa *leverage* berpengaruh positif terhadap nilai perusahaan terbukti, yang artinya **tolak H_{02}** .

Hipotesis ketiga atas penelitian dengan membahas mengenai pengaruh ukuran perusahaan terhadap nilai perusahaan. Hipotesis ketiga dalam penelitian ini adalah ukuran perusahaan. Menurut hasil olah yang telah dilakukan variabel ukuran perusahaan memiliki nilai sig./2 sebesar 0,272 lebih besar dari 0,05 yang artinya ukuran perusahaan tidak memiliki pengaruh signifikan terhadap nilai perusahaan. Disimpulkan bahwa hipotesis ketiga (H_{a3}) yaitu ukuran perusahaan berpengaruh positif terhadap nilai perusahaan tidak terbukti, artinya **tidak tolak H_{03}** .

3.4.3 Koefisien Determinasi

Tabel 6. Hasil Uji Koefisien Determinasi

Model	Adjusted R Square
1	0,252

Tabel 6 menunjukkan *adjusted R square* (R^2) bernilai 0,252 atau 25,2% dimana hal ini berarti pengaruh yang diberikan oleh *Net Profit Margin*, *leverage*, dan ukuran perusahaan atas nilai perusahaan adalah sebesar 25,2%, disisi berlainan variabel independen lainnya yang tidak terdapat pada penelitian ini mempengaruhi nilai perusahaan sebesar 74,8%.

3.5 Pembahasan

3.5.1 Pengaruh *Net Profit Margin* Terhadap Nilai Perusahaan

Dalam penelitian ini, terbukti bahwa hipotesis 1 diterima, berarti tingkat *Net Profit Margin* memiliki pengaruh yang positif signifikan terhadap nilai perusahaan dilihat melalui koefisien regresi (β_1) sebesar 6,213 dan nilai sig./2 $0,000 < 0,05$. Sesuai dengan teori agensi, artinya *Net Profit Margin* yang tinggi menjadi salah satu indikator bagi investor atas kinerja manajemen yang baik. Nilai perusahaan cenderung meningkat dengan peningkatan *Net Profit Margin*, yang mendorong perilaku manajemen yang lebih produktif. Sedangkan *Net Profit Margin* yang memiliki hubungan dengan teori sinyal menunjukkan bahwa *Net Profit Margin* dipandang sebagai sinyal bagi investor terutama pada kinerja keuangan dan prospek pertumbuhannya, dimana investor akan mentafsirkan sinyal ini untuk mengevaluasi kemungkinan investasi melalui efisiensi perusahaan dalam operasi dan menghasilkan laba yang mencerminkan nilai perusahaan. Semakin tinggi *Net Profit Margin* yang dihasilkan perusahaan, semakin kuat pula sinyal positif yang terkirim.

Net Profit Margin mencerminkan kemampuan perusahaan dalam mengelola biaya keuangannya serta menghasilkan laba dari setiap pendapatan penjualannya. Semakin tinggi *Net Profit Margin*, semakin besar pendapatan yang dapat dikonversi menjadi laba. Hal ini berdampak ke arah positif secara langsung pada nilai perusahaan karena menunjukkan profitabilitas yang kuat dan pertumbuhan yang menjanjikan. Perusahaan dengan *Net Profit Margin* yang tinggi biasanya akan dinilai lebih tinggi oleh investor karena menunjukkan kemampuan perusahaan untuk menghasilkan arus kas yang stabil dan konsisten, yang meningkatkan kepercayaan investor sehingga meningkatkan nilai perusahaan.

Hasil penelitian ini sejalan dengan penelitian Nengsih (2020) dan Hidayah (2021) yang menunjukkan adanya pengaruh positif signifikan dari *Net Profit Margin* terhadap nilai perusahaan yang menjelaskan investor tertarik pada perusahaan dengan *Net Profit Margin* yang tinggi karena menunjukkan kondisi keuangan perusahaan yang baik.

3.5.2 Pengaruh *Leverage* Terhadap Nilai Perusahaan

Analisis statistik memperlihatkan secara tegas adanya keterkaitan positif dengan signifikan antara variabel *leverage* dengan nilai perusahaan. Maka demikian, hipotesis yang menyatakan bahwa *leverage* berpengaruh positif terhadap nilai perusahaan dapat diterima terlihat dari nilai koefisien regresi (β_1) sebesar 0,867 dan nilai sig./2 $0,017 < 0,05$. Dalam konteks teori agensi, *leverage* dapat menjadi salah satu alat untuk mengendalikan konflik antara kepentingan prinsipal dan agen. Dengan adanya *leverage* kepentingan manajemen dan investor menjadi selaras, hal ini dikarenakan manajemen akan termotivasi untuk meningkatkan nilai perusahaan untuk meningkatkan kemampuan perusahaan membayar kewajibannya serta menghindari kebangkrutan. Selain itu teori sinyal membuktikan bahwa adanya peningkatan *leverage* sebagai sebuah pertanda baik bagi investor karena perusahaan yang sehat secara finansial cenderung lebih berani mengambil risiko dengan hutang. Dengan keputusan ini, perusahaan dapat meningkatkan kepercayaan investor, meningkatkan investasi saham serta nilai perusahaan.

Dengan pengelolaan *leverage* yang baik, perusahaan dapat memiliki dampak positif terhadap nilai perusahaannya. Hutang yang digunakan perusahaan dapat meningkatkan aset perusahaan tanpa adanya tambahan modal sendiri sehingga jika aset yang didanai hutang dapat menghasilkan laba lebih tinggi dari hutang tersebut, perusahaan memiliki kesempatan untuk mempercepat pertumbuhan perusahaan. Hal ini dapat menjadi cara untuk meningkatkan saham perusahaan dan menarik minat investor sehingga berdampak positif untuk nilai perusahaan.

Temuan penelitian sejalan dengan penelitian yang diteliti Sari & Wahidahwati (2021) dan Novita (2022) dimana temuan penelitiannya memperlihatkan adanya pengaruh positif dan signifikan dari *leverage* terhadap nilai perusahaan.

3.5.3 Pengaruh Ukuran Perusahaan Terhadap Nilai Perusahaan

Melalui nilai $\text{sig.}/2$ sebesar $0,272 > 0,05$, hasil penelitian melalui tes uji hipotesis ketiga menampilkan ukuran perusahaan tidak berpengaruh positif signifikan atas nilai perusahaan, maka hipotesis 3 ditolak. Berdasarkan teori sinyal, pemegang saham tidak selalu memberi sinyal yang positif hanya kepada perusahaan dengan ukuran besar melainkan pemegang saham akan lebih fokus pada sinyal-sinyal lain yang lebih mencerminkan prospek serta kualitas perusahaan tersebut secara komprehensif untuk mengambil keputusan investasi. Sedangkan dengan teori agensi, tidak ada jaminan bahwa ukuran perusahaan yang besar mendapatkan keyakinan yang cukup dari pemegang saham atas efisiensi dan tata kelola perusahaan yang kompleks sehingga pada akhirnya tidak membuat goyah nilai perusahaan.

Biasanya, pengukuran ukuran perusahaan disepakati melalui total aset atau kekayaan yang dimilikinya. Namun ukuran dari sebuah perusahaan tidak selalu mencerminkan nilai perusahaan, karena selain ukuran perusahaan investor cenderung melakukan penilaian terhadap perusahaan dari faktor-faktor lainnya yang mempunyai kontribusi lebih besar seperti efisiensi operasional, fokus bisnis, serta kondisi pasar yang dimiliki perusahaan. Oleh karena itu, ukuran perusahaan bukan satu-satunya hasil kalkulasi yang intensif dari para investor dalam inisiasi kegiatan investasi karena investor juga perlu melakukan pertimbangan atas kemampuan serta resiko yang dimiliki perusahaan baik perusahaan besar ataupun kecil.

Pemikiran ini tidak senada dengan apa yang diteliti oleh Adhyasta & Sudarsi (2023) dan Dina & Wahyuningtyas (2022) bahwa ukuran perusahaan memiliki pengaruh positif signifikan atas nilai perusahaan.

4. KESIMPULAN DAN SARAN

4.1 Kesimpulan

Melalui hasil atas penelitian yang dilakukan dan pembahasan penelitian, peneliti dapat memperoleh kesimpulan dari penelitian mengenai pengaruh *Net Profit Margin*, *leverage*, dan ukuran perusahaan terhadap nilai perusahaan sektor manufaktur yang terdaftar di bursa efek Indonesia periode 2021-2023 dan dijabarkan sebagai berikut :

1. Terdapat cukup bukti bahwa *Net Profit Margin* berpengaruh positif terhadap nilai perusahaan sektor manufaktur.
2. Terdapat cukup bukti bahwa *leverage* berpengaruh positif terhadap nilai perusahaan sektor manufaktur.
3. Tidak terdapat cukup bukti bahwa ukuran perusahaan berpengaruh positif terhadap nilai perusahaan sektor manufaktur.

4.2 Implikasi

Implikasi pada penelitian ini mengacu pada perlu adanya peningkatan terhadap nilai perusahaan melalui tinjauan yang telah diteliti, yaitu *Net Profit Margin*, *leverage*, dan ukuran perusahaan. Perusahaan perlu untuk mengevaluasi kinerja perusahaan secara lebih teratur dalam mengendalikan faktor-faktor pengendali atas nilai perusahaan. Perusahaan perlu bisa memberikan informasi yang diperlukan secara efisien untuk menghasilkan nilai perusahaan yang maksimal. Investor diharapkan untuk lebih teliti dalam mengevaluasi setiap aspek-aspek penting perusahaan sebelum berinvestasi di perusahaan agar tidak terkena risiko kerugian yang tinggi akibat asimetri informasi suatu perusahaan. Sesuai dengan hasil penelitian,

Terutama *Net Profit Margin* dan *leverage* perusahaan perlu menjadi pertimbangan bagi investor untuk melakukan investasi.

4.3 Keterbatasan

Dalam penelitian ini, terdapat beberapa batasan waktu dan lingkup yaitu penelitian hanya dibatasi pada 3 periode yaitu 2021 sampai 2023 sehingga belum cukup untuk menangkap kondisi ekonomi perusahaan manufaktur yang lebih luas. Selain itu penelitian hanya menggunakan sektor manufaktur saja sehingga membatasi generalisasi temuan atas kuadran yang lainnya, terakhir penelitian hanya menggunakan 3 variabel independen saja dan belum mencakup aspek penentu atas penelitian yang relevan atas nilai perusahaan.

4.4 Saran

Penelitian di masa yang akan datang diharapkan untuk memperpanjang waktu penelitian sehingga dapat memperluas sampel penelitian. Selain itu, penelitian di masa mendatang disarankan menggunakan sektor perusahaan lain seperti perusahaan sektor pertambangan atau perbankan sehingga dapat membandingkan nilai perusahaan disetiap sektornya. Terakhir, disarankan untuk menggunakan lebih banyak variabel independen yang memiliki hubungan dengan nilai perusahaan untuk mengetahui pengaruhnya, misalkan struktur modal, kebijakan dividen, *Good Corporate Governance*, dan lain-lain.

5. REFERENSI

- Adhyasta, D., & Sudarsi, S. (2023). Pengaruh Profitabilitas, Likuiditas, Solvabilitas, Ukuran Perusahaan, terhadap Nilai Perusahaan pada Perusahaan Manufaktur yang Terdaftar di BEI. *Ekonomis: Journal of Economics and Business*, 7(1), 520.
- Anggita, K. T. (2022). Pengaruh Sales Growth, Ukuran Perusahaan, Profitabilitas, Likuiditas dan Leverage terhadap Nilai Perusahaan. *Jurnal Ilmu Dan Riset Akuntansi*, 11(3), 1–20.
- Anisa, N., Hermuningsih, S., & Maulida, A. (2022). Pengaruh Ukuran Perusahaan, Leverage, Kebijakan Dividen dan Profitabilitas terhadap Nilai Perusahaan Studi pada Perusahaan Manufaktur Sektor Food And Beverages. *Reslaj: Religion Education Social Laa Roiba Journal*, 4(2), 321–335.
- Aryadita, P. H., Hariyanto, E., Wahyuni, S., & Fitriati, A. (2024). Analisis Faktor-faktor Yang Mempengaruhi Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Moderasi. *Owner*, 8(2), 1632–1647.
- Brigham, E. F., & Houston, J. F. (2007). Fundamentals of Financial Management. In *Cengage Learning, Inc.* (11th ed.).
- Dina, D. A. S., & Wahyuningtyas, E. T. (2022). Pengaruh Profitabilitas, Leverage, Dan Ukuran Perusahaan Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Lq45 Pada Bursa Efek Indonesia Periode 2018-2020. *Accounting and Management Journal*, 6(1), 36–49.
- Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *Academy of Management Review*, 14(1), 57–74.
- Endaryono, B. T. (2019). Manajemen Keuangan. In *Intisfhar Publishing*. Intisfhar Publishing.
- Fadhilah, R., Idawati, W., & Praptiningsih, P. (2021). Pengaruh Ukuran Perusahaan, Profitabilitas, Leverage, Dan Struktur Kepemilikan Institusional Terhadap Nilai Perusahaan Dengan Corporate Social Responsibility Sebagai Variabel Moderasi. *Jurnal Akunida*, 7(2), 190–204.

- Febri, F., & Fauziah, F. (2021). Analisis Pengaruh Net Profit Margin, Public Ownership, Dan Loan To Deposit Ratio Terhadap Nilai Perusahaan Pada Perusahaan Perbankan Yang Terdaftar Di BEI. *Borneo Student Research (BSR)*, 2(2), 1287–1294.
- Fikriyah, A. K., & Mustaqim, M. (2024). Pengaruh Roa, Roe, Nim Dan Npm Terhadap Nilai Perusahaan Pada Bank Yang Terdaftar Di Bursa Efek Indonesia Periode 2020-2022. *Edunomic Jurnal Pendidikan Ekonomi*, 12(1), 1–11.
- Givoly, D., & Palmon, D. (1982). Timeliness of Annual Earnings Announcements: Some Empirical Evidence. *The Accounting Review*, 57(4), 486–508.
- Henry Jirwanto, S.E., M. ., muhammad ali aqsa, M. B., Tubel Agusven, ST., M. ., Dr. Hendri Herman, S.E., M.Si., C., & Dr. Virna Sulfitri MBA., C. (2024). *Manajemen Keuangan*. Azka Pustaka.
- Hernita, T. (2019). Faktor-Faktor yang Mempengaruhi Nilai Perusahaan Manufaktur di Bursa Efek Indonesia. *ESENSI: Manajemen Bisnis*, 22(3), 325–336.
- Hidayah, E. (2021). Analisis Pengaruh Net Profit Margin (NPM), Company Size (CS), Non Performing Loan (NPL) Terhadap Nilai Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia. *Borneo Student Research*, 2(3), 2150–2156.
- Indriyani, E. (2017). Pengaruh Ukuran Perusahaan dan Profitabilitas Terhadap Nilai Perusahaan. *Akuntabilitas*, 10(2), 333–348.
- Irawan, D., & Kusuma, N. (2019). Pengaruh Struktur Modal Dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Jurnal Aktual STIE Trisna Negara*, 17(1), 66–81.
- Irma, Puspitasari, D., Rachamawati, D. W., Husnatarina, F., Suriani, Evi, T., Aprih, S., Anas, M., Muliadi, S., & Sari, D. C. (2021). *Manajemen Keuangan*. In *Nuta Media, Yogyakarta* (Issue 1).
- Jensen, M. C., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305–360.
- Junida, A. I. (2023). *Industri manufaktur RI tercatat ekspansif sepanjang 2022*. <https://www.antaranews.com/berita/3333111/industri-manufaktur-ri-tercatat-ekspansif-sepanjang-2022>
- Kasmir. (2019). *Pengantar Manajemen Keuangan* (7th ed.). Prenadamedia Group.
- Komarudin, M. (2020). *Buku Seri Manajemen Keuangan Mengukur Nilai Perusahaan*. AA Rizky.
- Kustodian Sentral Efek Indonesia. (2023). *Antusiasme Investor Muda Berinvestasi Terus Meningkat*. https://www.ksei.co.id/files/uploads/press_releases/press_file/id-id/232_berita_pers_antusiasme_investor_muda_berinvestasi_terus_meningkat_20231031134735.pdf
- M. Eisenhardt, K. (1989). Agency Theory: An Assessment and Review. *The Academy of Management Review*, 14(1), 57–74.
- Masitoh, S. (2024). *PMI Manufaktur RI Pada November 2023 Sedikit Membaik, Naik Ke Level 51,7*. <https://industri.kontan.co.id/news/pmi-manufaktur-ri-pada-november-2023-sedikit-membaik-naik-ke-level-517>
- Melani, A. (2022). *91 Emiten Dapat Peringatan Tertulis I Imbas Telat Rilis Laporan Keuangan 2021*. <https://www.liputan6.com/saham/read/4961218/91-emiten-dapat-peringatan-tertulis-i-imbas-telat-rilis-laporan-keuangan-2021?page=2>
- Nabela, I. N., Fitriano, Y., & Hidayah, N. R. (2023). Pengaruh Net Profit Margin (NPM)

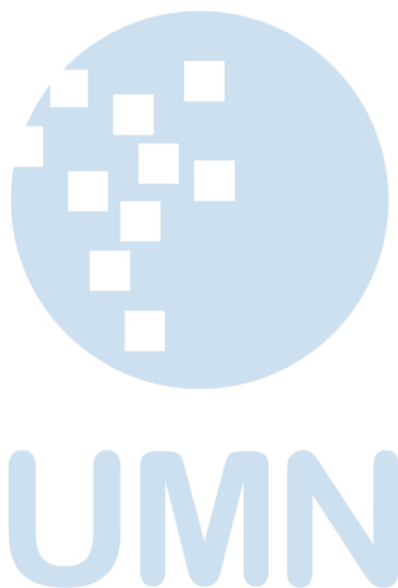
- Return On Asset (ROA), Return On Equity (ROA) Terhadap Nilai Perusahaan PT. Astra International TBK Tahun 2017-2021. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, 11(2), 1153–1168.
- Nengsih, R. (2020). Pengaruh Current Ratio, Net Profit Margin dan Modal Terhadap Nilai Perusahaan. *Jurnal Humaniora*, 4(1), 120–129. \
- Novita, H., Samosir, R., Rutmia, Sarumaha, K., & Saragih, E. (2022). Pengaruh Harga Saham, Ukuran Perusahaan, Profitabilitas Dan Leverage Terhadap Nilai Perusahaan Manufaktur Terdaftar BEI 2018-2020. *Akurasi Jurnal Studi Akuntansi Dan Keuangan*, 5(1), 77–86.
- Nuradawiyah, A., & Susilawati, S. (2020). Analisis Faktor-Faktor yang Mempengaruhi Nilai Perusahaan (Studi Kasus pada Perusahaan Indeks LQ45). *Jurnal Akuntansi*, 9(2), 218–232.
- Rachman, N. A. (2016). Faktor-Faktor yang Mempengaruhi Nilai Perusahaan Pada Sektor Industri Food and Beverages Yang Terdaftar Di Bursa Efek Indonesia (Bei) Pada Tahun 2011- 2015. *Jurnal Pendidikan Dan Ekonomi*, 5(5), 405–416.
- Rahmawati, A. D., Topowijono, & Sulasmiyati, S. (2015). Pengaruh Ukuran Perusahaan, Profitabilitas, struktur Modal, dan Keputusan Investasi Terhadap Nilai Perusahaan ((Studi pada Perusahaan Sektor Properti, Real Estate, dan Building Construction yang Terdaftar di Bursa Efek Indonesia (BEI) Periode 2010-2013). *Jurnal Administrasi Bisnis*, 23(2), 7. administrasibisnis.studentjournal.ub.ac.id
- Ross., S. A. (1977). The Determination of Financial Structure: The Incentive-Signalling Approach. *The Bell Journal of Economics*, 8(1), 23–40.
- Sari, D. K., & Wahidahwati. (2021). Pengaruh Pengungkapan Sustainability Report, Ukuran Perusahaan, Profitabilitas, Dan Leverage Terhadap Nilai Perusahaan. *Jurnal Ilmu Dan Riset Akuntansi*, 10(4), 1–19.
- Scott, W. R. (2015). *Financial Accounting Theory. Seventh Edition. Pearson Prentice Hall: Toronto.*
- Sekaran, U., & Bougie, R. (2016). *research methods for business a skill building approach* (7th ed.). Wiley & Sons.
- Setiawan, D., Rohanda, I., & Abbas, D. S. (2021). Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan, Struktur Modal Dan Net Profit Margin Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Consumer Goods yang Terdaftar di Bursa Efek Indonesia 2016-2018). 417–424.
- Siswanto, E. (2021). Buku Ajar Manajemen Keuangan Dasar. In *Universitas Negeri Malang* (Issue 1). Universitas Negeri Malang.
- Spence, M. (1973). Job Market Signaling. *Quarterly Journal of Economics*, 87, 355–374.
- Sudarmadji, A. M., & Sularto, L. (2007). Pengaruh Ukuran Perusahaan, Profitabilitas, Leverage, Kepemilikan Perusahaan Terhadap Luas Voluntary Disclosure. *Proceeding PESAT*, 2, 21–22.
- Suhardi, H. (2021). Pengaruh Leverage, Profitabilitas, dan Ukuran Perusahaan Terhadap Nilai Perusahaan Manufaktur Sektor Industri Dasar dan Kimia yang Terdaftar di BEI. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, 5(1), 77–81.
- Supia, M. I., Aprilia, S., Sembiring, N., Sekali, L. M. B. K., & Aruan, D. A. (2021). Pengaruh Current Ratio, Intensitas Modal Dan Net Profit Margin Terhadap Nilai Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2017-2019. *Jurnal Ilmiah*

MEA (Manajemen, Ekonomi, Dan Akuntansi), 5(2), 498–515.

Sutama, D. R., & Lisa, E. (2018). Pengaruh Leverage dan Profitabilitas terhadap Nilai Perusahaan (Studi pada Perusahaan Sektor Manufaktur Food and Beverage yang terdaftar di Bursa Efek Indonesia). *Sains Manajemen Dan Akuntansi*, 10(2), 65–85.

Thomas, S. G. (2023). Monograf: Financial Distress. In *International Journal of Theoretical and Applied Finance*. Indomedia Pustaka.

Wibowo, C. A. (2021). Pengaruh Leverage, Profitabilitas, Kebijakan Dividen, Dan Firm Size Terhadap Nilai Perusahaan. *Jurnal Ilmu Dan Riset Akuntansi*, 10(2), 1–20.



GREEN BANKING, MANAJEMEN RISIKO, DAN KEPEMILIKAN ASING: ANALISIS DETERMINAN NILAI PASAR PERBANKAN DI INDONESIA

Ni Luh Gde Lydia Kusumadewi¹

Fakultas Ekonomi dan Bisnis, Universitas Katolik Indonesia Atma Jaya, Indonesia
lydia.kusumadewi@atmajaya.ac.id

Hyasshinta Dyah Sweztika Lukitaning Paramitadewi²

Fakultas Ekonomi dan Bisnis, Universitas Katolik Indonesia Atma Jaya, Indonesia
hyasshinta.dyah@atmajaya.ac.id

Synthia Madyakusumawati^{3*}

Fakultas Ekonomi dan Bisnis, Universitas Katolik Indonesia Atma Jaya, Indonesia
synthia.madya@atmajaya.ac.id

(*Corresponding author)

Diterima 20 Mei 2025

Disetujui 20 Juni 2025

Abstract - The aim of this study is to analyze the effect of Green Banking (GB) disclosure and Enterprise Risk Management (ERM) disclosure on the financial performance of banking institutions in Indonesia, with foreign ownership serving as a moderating variable. As environmental concerns intensify, banks face growing pressure to integrate sustainable development principles into their operations and reporting through Green Banking Disclosures. Effective risk disclosure also requires a robust ERM framework to strengthen transparency and investor confidence. Foreign ownership often brings improved governance standards, technological capabilities, and managerial discipline. This study offers a novel perspective by examining the combined influence of sustainability disclosure, risk management practices, and ownership structure on firm performance, an area still underexplored in emerging markets. Hypotheses were tested using linear regression analysis with pooled data processed through SPSS. The results indicate that both Green Banking and ERM disclosures do not have a significant effect on firm performance as measured by Tobin's Q. In contrast, foreign ownership demonstrates a significant positive impact. As a moderating variable, foreign ownership weakens the relationship between Green Banking Disclosure and firm performance, while the interaction between ERM disclosure and foreign ownership does not show a significant effect. These findings suggest that although disclosure practices are increasingly adopted, they may not yet be perceived by the market as strong value signals, particularly during the heightened uncertainty of the Covid-19 period. This underscores the need for more strategic, credible, and standardized disclosures to enhance market perceptions of sustainability and risk management commitments.

Keywords: Green Banking Disclosure; Enterprise Risk Management Disclosure; Firm Performance; Foreign Ownership

1. PENDAHULUAN

1.1 Latar Belakang

Perubahan iklim dan kerusakan lingkungan dewasa ini telah menjadi isu global yang mendesak, sehingga mendorong sektor perbankan untuk lebih bertanggung jawab dalam mengintegrasikan aspek sosial dan lingkungan ke dalam aktivitas bisnisnya. Salah satu langkah yang banyak dilakukan adalah penerapan *Green Banking*, yaitu upaya meminimalkan dampak negatif operasional perbankan terhadap lingkungan sekitar (Dharwal & Agarwal, 2013; Nath et al., 2014). *Green Banking* menempatkan keberlanjutan sebagai salah satu prioritas utama dalam strategi pengelolaan perbankan. Meskipun industri perbankan bukanlah penyumbang utama emisi karbon maupun konsumsi energi secara langsung, peran strategis bank sebagai lembaga intermediasi menjadikannya kunci dalam mendorong pembangunan ekonomi yang lebih berkelanjutan.

Di Indonesia, kewajiban penerapan prinsip *Green Banking* diatur melalui berbagai regulasi, antara lain PBI Nomor 8/21/PBI/2006, Surat Edaran Nomor 8/22/DPbS, dan POJK Nomor 51/POJK.03/2017 tentang Penerapan Keuangan Berkelanjutan bagi Lembaga Jasa Keuangan, Emiten, dan Perusahaan Publik. Regulasi ini menetapkan bahwa Lembaga Jasa Keuangan, termasuk bank asing dan bank BUKU 3 dan 4, wajib menyusun laporan keberlanjutan sejak 1 Januari 2019, sementara bank BUKU 1 dan 2 mengikuti kewajiban ini mulai 2020. Namun demikian, temuan penelitian mengenai dampak pengungkapan *Green Banking* terhadap kinerja keuangan masih menunjukkan hasil yang beragam. Karyani & Obrien (2020) mengungkapkan adanya potensi dampak negatif akibat peningkatan biaya, sedangkan studi lain justru menemukan kontribusi positif terhadap profitabilitas perusahaan (Anggraini et al., 2020; Jannah, 2021).

Pengungkapan *Green Banking* sendiri mencakup penyajian informasi mengenai kebijakan, program, dan komitmen bank dalam mendukung keberlanjutan lingkungan. Dalam kerangka regulasi POJK 51/POJK.03/2017, bank diwajibkan menyampaikan laporan yang memuat aspek *Environmental, Social, and Governance* (ESG). Penelitian ini menggunakan Indeks Pengungkapan *Green Banking* yang terdiri dari 21 item pengungkapan yang dirumuskan berdasarkan ketentuan regulasi dan kajian literatur sebelumnya, sebagai tolok ukur tingkat keterbukaan keberlanjutan perusahaan perbankan.

Di sisi lain, pesatnya integrasi pasar keuangan global dalam satu dekade terakhir membuat risiko yang dihadapi bank semakin kompleks. Krisis keuangan global yang terjadi dalam periode tersebut menunjukkan bahwa keterbatasan atau ketidakakuratan pengungkapan risiko oleh lembaga keuangan dapat menimbulkan gejolak yang signifikan di pasar modal (Giner et al., 2020). *Enterprise Risk Management* (ERM) diyakini dapat menjadi instrumen untuk meningkatkan transparansi risiko dan mendukung pengambilan keputusan yang lebih tepat sasaran, sehingga memperkuat kepercayaan investor (Agustina & Baroroh, 2016; Buckby, 2015). Namun, praktik pengungkapan risiko di Indonesia hingga kini masih terbatas pada laporan tahunan, belum memiliki standar bentuk yang baku, dan umumnya hanya mencakup risiko keuangan (SE OJK Nomor 16/SEOJK.04/2021).

Selain aspek keberlanjutan dan pengelolaan risiko, struktur kepemilikan saham juga menjadi faktor penting yang mempengaruhi kinerja perusahaan. Kepemilikan asing di perbankan sering dikaitkan dengan peningkatan efisiensi manajerial, transfer teknologi, dan praktik tata kelola yang lebih baik (Hermiyetti, 2017). Namun, di sisi lain, perbedaan budaya organisasi dan ekspektasi antara investor asing dan manajemen domestik berpotensi memicu konflik (Perdana & Septiani, 2017). Menurut Porter (1990), struktur kepemilikan menjadi aspek strategis yang dapat membentuk arah kebijakan perusahaan.

Dalam kurun waktu 2019 hingga 2022, sektor perbankan di Indonesia menghadapi dinamika yang signifikan. Fluktuasi nilai pasar perusahaan, yang sebagian dipengaruhi oleh pandemi COVID-19, serta meningkatnya tuntutan transparansi dari investor, menjadi momentum penting untuk meninjau sejauh mana pengungkapan *Green Banking* dan ERM dapat memberikan nilai tambah bagi bank.

Penelitian ini memfokuskan perhatian secara khusus pada sektor perbankan karena bank memiliki posisi strategis dalam menggerakkan pembiayaan pembangunan ekonomi, sekaligus memikul tanggung jawab untuk mengimplementasikan prinsip tata kelola keberlanjutan yang lebih ketat dibandingkan sektor lainnya. Selain itu, perbankan merupakan industri yang paling terdampak regulasi keberlanjutan dan memiliki eksposur risiko yang tinggi, sehingga menjadi konteks yang tepat untuk dikaji lebih dalam.

Tujuan utama dari penelitian ini adalah untuk menganalisis pengaruh pengungkapan *Green Banking* dan *Enterprise Risk Management* terhadap kinerja keuangan perusahaan perbankan di Indonesia, dengan kepemilikan asing sebagai variabel moderasi. Riset ini dilandasi oleh kesadaran yang semakin berkembang terhadap pentingnya keberlanjutan dan transparansi pengelolaan risiko di sektor jasa keuangan (Handajani, 2019; Mustofa et al., 2020). Pengungkapan yang dilakukan perusahaan tidak hanya menjadi kewajiban regulasi, tetapi juga berfungsi sebagai sinyal bagi pasar dan investor tentang komitmen perusahaan dalam membangun tata kelola yang kredibel (Giner et al., 2020; Utamaningsih, 2013). Namun demikian, hasil penelitian terdahulu masih memperlihatkan temuan yang bervariasi terkait kontribusi pengungkapan tersebut terhadap kinerja keuangan (Karyani & Obrien, 2020; Khrawish & Al-Sa'di, 2011). Dengan menggunakan pengukuran kinerja pasar melalui Tobin's Q, penelitian ini diharapkan dapat memberikan kontribusi empiris yang memperkaya pemahaman mengenai peran pengungkapan keberlanjutan, pengelolaan risiko, dan struktur kepemilikan asing dalam meningkatkan nilai perusahaan perbankan di Indonesia.

1.2 Rumusan Masalah

Berdasarkan latar belakang tersebut, maka rumusan masalah dalam penelitian ini adalah:

1. Apakah pengungkapan *Green Banking* berpengaruh terhadap kinerja keuangan perbankan?
2. Apakah pengungkapan ERM berpengaruh terhadap kinerja keuangan perbankan?
3. Apakah kepemilikan asing berpengaruh terhadap kinerja keuangan perbankan?
4. Apakah kepemilikan asing memoderasi pengaruh *Green Banking* dan ERM terhadap kinerja keuangan perbankan?

1.3 Telaah Literatur dan Hipotesis

1.3.1 Teori Keagenan

Saat ini telah banyak perusahaan menyadari untuk melakukan pemisahan kepemilikan (*ownership*) dengan pengendalian (*control*), semakin besar ukuran sebuah korporasi maka akan semakin besar kecenderungan pengendalian atau kontrol untuk memisahkan diri dari kepemilikan (Jensen & Meckling, 1976). Teori keagenan dipilih untuk menjadi landasan teori dalam penelitian ini dan diharapkan dapat memberikan pandangan hubungan antara struktur kepemilikan dan kinerja perusahaan. Teori keagenan diharapkan dapat memberikan penjelasan hubungan antara dua belah pihak yang memiliki kepentingan yang berbeda dalam menjalankan sebuah usaha. Keinginan untuk memisahkan diri ini dijelaskan melalui teori keagenan, di mana teori ini mengartikan hubungan keagenan sebagai kontrak atau perjanjian antara satu orang atau lebih (dalam hal ini pemilik) dengan pihak manajemen. Manajemen diharapkan dapat memanfaatkan sumber daya yang ada seoptimum mungkin untuk

meningkatkan kesejahteraan pemilik perusahaan, baik dalam tujuan jangka pendek maupun tujuan jangka panjang. Kedua pihak tergabung dalam satu perusahaan yang sama, namun memiliki kepentingan serta tujuan yang berbeda, perbedaan inilah yang dapat menimbulkan konflik, yang kita kenal dengan *agency problem* (Panda & Leepsa, 2017). Transparansi atas suatu informasi menjadi salah satu cara yang digunakan untuk memperbaiki masalah keagenan. Pengungkapan informasi bertujuan untuk menyelaraskan kepentingan antara pemilik dan manajemen (Nahar et al., 2016). *Agency theory* mengasumsikan setiap individu memiliki kepentingan diri sendiri sehingga akan dapat menimbulkan konflik kepentingan antara *principal* dan *agen*. Sedangkan pemegang saham sebagai *principal* tentu akan mengadakan kontrak dengan tujuan untuk memaksimalkan kesejahteraan dirinya sendiri yakni supaya profitabilitas perusahaan selalu meningkat.

1.3.2 Teori Sinyal

Masalah asimetri informasi yang muncul di sektor pasar modal dapat dijelaskan melalui teori sinyal. Teori sinyal ini menyatakan bahwa perusahaan yang berada dalam kondisi keuangan yang baik akan berusaha melaporkan informasi yang akan ditangkap sebagai sinyal atau kabar baik bagi investor. Informasi ini bertujuan agar pasar bereaksi dengan positif dan baik (Utamaningsih, 2013). Sinyal ini bertujuan sebagai pemberi tanda bagi perusahaan mengenai informasi dan kualitas perusahaan, serta apakah perusahaan tersebut mengalami untung atau rugi. Melalui informasi yang diberikan pihak manajemen, investor dapat memberikan penilaian serta melihat prospek masa depan dan juga menilai baik dan buruknya kualitas manajemen perusahaan (Mayangsari, 2018). Hal ini memberikan basis informasi bagi investor untuk mendapatkan wawasan tentang nilai suatu perusahaan. Berdasarkan informasi yang diterima dari investor, pasar dapat terlebih dahulu menganalisis apakah informasi tersebut merupakan kabar baik atau kabar buruk. Manajemen berharap dengan memberikan signal yang baik, maka harga saham perusahaan akan meningkat, serta pada akhirnya pendapatan perusahaan juga bertumbuh

1.3.3 Pengaruh Pengungkapan *Green Banking* terhadap Kinerja Keuangan Perbankan

Green banking merupakan pendekatan strategis perbankan yang mengintegrasikan prinsip keberlanjutan dalam aktivitas bisnis. Dalam konteks teori sinyal, perusahaan yang memiliki kualitas baik akan mengungkapkan informasi yang mencerminkan tanggung jawab sosial dan lingkungan untuk menarik perhatian investor (Mayangsari, 2018; Utamaningsih, 2013). Pengungkapan *Green Banking* dinilai sebagai bentuk sinyal positif bahwa bank tidak hanya mengejar keuntungan finansial, tetapi juga memperhatikan dampak jangka panjang terhadap lingkungan dan masyarakat. Hal ini dapat meningkatkan persepsi investor, yang tercermin dalam peningkatan nilai pasar perusahaan (Tobin's Q) (Anggraini et al., 2020; Jannah, 2021). Investor dengan kesadaran akan keberlanjutan akan lebih condong berinvestasi pada bank yang mendukung prinsip *Environmental, Social, and Governance* (ESG). Dengan meningkatnya kepercayaan dan preferensi investor, harga saham cenderung naik, sehingga meningkatkan Tobin's Q sebagai indikator kinerja pasar. Dengan demikian, hipotesis yang diajukan adalah:

H1: Pengungkapan *Green Banking* berpengaruh terhadap kinerja keuangan perbankan.

1.3.4 Pengaruh Pengungkapan *Enterprise Risk Management* terhadap Kinerja Keuangan Perbankan

Pengungkapan *Enterprise Risk Management* (ERM) adalah bagian dari upaya tata kelola yang baik dan transparansi perusahaan dalam mengelola risiko-risiko yang dihadapi. Dalam kerangka teori keagenan, pengungkapan ERM berperan dalam mengurangi asimetri

informasi antara manajemen dan pemilik modal, serta meningkatkan kepercayaan investor terhadap kualitas tata kelola perusahaan (Hermiyetti, 2017). Studi sebelumnya menunjukkan bahwa pengungkapan risiko yang memadai berdampak positif terhadap nilai perusahaan, karena investor merasa lebih yakin terhadap prospek jangka panjang perusahaan (Buckby et al., 2015; Mardiana et al., 2018; Sulistyawati & Suryani, 2022). Pengungkapan ERM juga menjadi sinyal bahwa perusahaan memiliki sistem manajemen risiko yang terstruktur dan responsif terhadap perubahan pasar. Dengan demikian, hipotesis yang diajukan adalah:

H2: Pengungkapan *Enterprise Risk Management* berpengaruh terhadap Kinerja Keuangan Perbankan.

1.3.5 Pengaruh Kepemilikan Asing terhadap Kinerja Keuangan Perbankan

Struktur kepemilikan menjadi salah satu aspek penting dalam tata kelola perusahaan yang dapat memengaruhi arah strategi dan kinerja keuangan. Kepemilikan asing, dalam hal ini mengacu pada kepemilikan saham oleh individu atau entitas luar negeri, diyakini memiliki peran strategis dalam meningkatkan nilai perusahaan, terutama dalam industri perbankan. Dalam konteks teori keagenan, keberadaan investor asing dapat berperan sebagai mekanisme pengawasan terhadap manajemen. Investor asing umumnya memiliki keterbatasan informasi terkait kondisi operasional lokal, sehingga mereka lebih menekankan pada transparansi, efisiensi, dan disiplin manajerial (Jensen & Meckling, 1976). Hal ini mendorong manajemen untuk mengelola perusahaan dengan lebih hati-hati, akuntabel, dan efisien, sehingga dapat meminimalkan konflik keagenan antara prinsipal dan agen (Panda & Leepsa, 2017). Dengan demikian, kehadiran investor asing diyakini tidak hanya memperkuat tata kelola internal, tetapi juga meningkatkan reputasi perusahaan di mata pasar, yang pada akhirnya akan memberikan dampak pada kinerja keuangan berbasis pasar, seperti nilai saham atau rasio Tobin's Q. Dengan demikian, hipotesis yang diajukan adalah:

H3: Kepemilikan Asing berpengaruh terhadap Kinerja Keuangan Perbankan

1.3.6 Kepemilikan Asing Memoderasi Pengaruh Pengungkapan *Green Banking* dan Pengungkapan *Enterprise Risk Management* terhadap Kinerja Keuangan Perbankan

Kepemilikan asing dalam struktur perusahaan dapat memberikan dampak yang signifikan terhadap arah kebijakan strategis dan efektivitas tata kelola perusahaan. Investor asing umumnya membawa praktik manajerial yang lebih profesional, akses terhadap teknologi mutakhir, serta tuntutan terhadap tingkat transparansi dan akuntabilitas yang lebih tinggi (Hermiyetti, 2017). Dalam konteks ini, teori keagenan memandang kehadiran investor asing sebagai salah satu mekanisme pengawasan yang dapat mengurangi asimetri informasi dan konflik kepentingan antara manajer dan pemilik modal (Jensen & Meckling, 1976; Panda & Leepsa, 2017). Oleh karena itu, kepemilikan asing dapat berfungsi sebagai penguat terhadap efektivitas pengungkapan informasi perusahaan, termasuk pengungkapan *Green Banking* dan pengelolaan risiko.

Dari sudut pandang teori sinyal, pengungkapan *Green Banking* dan *Enterprise Risk Management* merupakan bentuk sinyal yang dikirim oleh perusahaan kepada pasar untuk menunjukkan kualitas tata kelola, komitmen terhadap keberlanjutan, dan kemampuan mengelola risiko (Utamaningsih, 2013). Ketika sinyal ini dikombinasikan dengan adanya pemilik asing, sinyal tersebut diharapkan menjadi lebih kuat karena investor asing cenderung memberikan tekanan kepada manajemen untuk menyampaikan informasi yang relevan dan berkualitas tinggi. Oleh sebab itu, kepemilikan asing diperkirakan memperkuat persepsi positif pasar terhadap pengungkapan-pengungkapan tersebut, yang pada akhirnya berdampak pada peningkatan nilai pasar perusahaan.

Namun demikian, literatur juga menunjukkan bahwa keberadaan pemilik asing tidak selalu menghasilkan efek yang konsisten. Perbedaan budaya, nilai, dan orientasi tujuan antara investor asing dan manajemen lokal dapat menyebabkan konflik dalam pelaksanaan strategi perusahaan, termasuk dalam hal keberlanjutan dan pengelolaan risiko (Perdana & Septiani, 2017). Investor asing mungkin memiliki fokus jangka pendek dan *profit-oriented*, sementara inisiatif seperti *Green Banking* dan ERM seringkali bersifat jangka panjang dan non-finansial. Dalam konteks ini, sinyal yang dikirim perusahaan melalui pengungkapan tersebut dapat ditafsirkan berbeda oleh investor asing, bahkan bisa dianggap sebagai sinyal negatif, terutama bila tidak disertai hasil finansial yang konkret.

Dengan mempertimbangkan peran ganda kepemilikan asing sebagai pemantau sekaligus potensi sumber konflik, maka penelitian ini mengajukan hipotesis bahwa kepemilikan asing berperan sebagai variabel moderasi dalam hubungan antara pengungkapan *Green Banking* dan ERM terhadap kinerja keuangan perbankan. Hubungan ini dapat bersifat memperkuat atau memperlemah, tergantung bagaimana sinyal yang dikirim perusahaan dipersepsikan oleh investor asing di pasar berkembang seperti Indonesia. Dengan demikian, hipotesis moderasi yang diajukan adalah:

H4a: Kepemilikan asing memoderasi pengaruh antara pengungkapan *Green Banking* terhadap kinerja keuangan perbankan.

H4b: Kepemilikan asing memoderasi hubungan antara pengungkapan *Enterprise Risk Management* terhadap kinerja keuangan perbankan.

2. METODOLOGI DAN ANALISIS DATA

2.1 Populasi dan Sampel Penelitian

Penelitian ini mengambil sampel data yang merupakan seluruh perusahaan perbankan yang terdaftar Bursa Efek Indonesia (BEI) pada periode 2019 sampai dengan 2022. Teknik yang digunakan dalam pengambilan sampel dilakukan secara *purposive sampling*. Teknik ini bertujuan untuk mendapatkan sampel yang menginformasikan data yang dibutuhkan dalam menghitung variabel yang dianalisis. Adapun kriteria pemilihan sampel yang digunakan dalam penelitian ini:

1. Perusahaan perbankan yang terdaftar di BEI dan tidak mengalami *delisting* selama periode 2019 sampai dengan tahun 2022.
2. Perusahaan perbankan yang mempublikasikan laporan keuangan tahunan yang telah diaudit untuk periode 31 Desember 2019 sampai dengan tahun 2022.
3. Perusahaan perbankan yang mengungkapkan informasi terkait dengan *Green Banking*, baik melalui *annual report* atau *sustainability report* selama periode 2019 sampai dengan tahun 2022.

Data yang digunakan dalam penelitian ini adalah data sekunder yang diperoleh melalui www.idx.co.id.

2.2 Model Penelitian

Persamaan yang digunakan untuk menguji hipotesis yaitu:

$$\text{FIRM_PERF}_{j,i,t} = \alpha_0 + \beta_1 \text{GBDI}_{i,t} + \beta_2 \text{ERM} + \beta_3 \text{FOREIGN}_{i,t} + \beta_3 \text{GBDI} * \text{FOREIGN}_{i,t} + \beta_4 \text{ERM} * \text{FOREIGN}_{i,t} + \varepsilon_{i,t}$$

Keterangan:

$\text{FIRM_PERF}_{j,i,t}$ = Kinerja keuangan perusahaan, dengan jenis perusahaan i dan tahun t , yang diukur berdasarkan nilai pasar (Tobin's Q).

$GBDI_{i,t}$	= <i>Green Banking Disclosure Index</i> berdasarkan jenis perusahaan i dan tahun t , yang diukur dengan jumlah item yang diungkapkan dibagi dengan total item pengungkapan (21 item).
$ERM_{i,t}$	= <i>Enterprise Risk Management Disclosure</i> .
$FOREIGN_{i,t}$	= kepemilikan asing.
$GBDI*FOREIGN_{i,t}$	= variabel moderasi <i>GBDI (Green Banking Disclosure Index)</i> dan <i>FOREIGN</i>
$ERM*FOREIGN_{i,t}$	= variabel moderasi <i>Enterprise Risk Management Disclosure</i> dan <i>FOREIGN</i>
$\varepsilon_{i,t}$	= Error term atau residual berdasarkan jenis perusahaan i dan tahun t .

2.3 Penelitian

2.3.1 Variabel Dependen

Firm value dalam penelitian ini diukur melalui Tobin's Q. Tobin's Q merupakan pengukuran yang diperkenalkan oleh James Tobin pada tahun 1968. Tobin's Q dianggap sebagai salah satu alat pengukuran pasar terbaik karena menggambarkan ekspektasi pasar, sehingga dianggap bebas dari manipulasi manajemen perusahaan. Berdasarkan Wardhana & Tandililin (2011), Tobin's Q mengukur nilai pasar perusahaan dengan mendasari pada nilai buku. Dalam penelitian ini, Tobin's Q diharapkan mampu menangkap nilai ekuitas pasar yang mencerminkan keuntungan perusahaan di masa mendatang. Beberapa penelitian terdahulu yang telah menggunakan Tobin's Q dalam mengukur kinerja keuangan berbasis pasar antara lain Haryono et al. (2017); King & Santor (2008); Kusumadewi & Wardhani (2020). Rumus dalam menghitung Tobin's Q, yaitu:

$$Tobin's Q = \frac{\text{Market Value of Equity} + \text{Book Value of Liabilities}}{\text{Book Value of Total Assets}}$$

2.3.2 Variabel Independen

1. Pengungkapan *Green Banking*

Variabel *Green Banking* digunakan sebagai variabel independen yang diukur dengan *Green Banking Disclosure Index (GBDI)* berdasarkan (Bose et al., 2018). Indeks ini terdiri dari 21 item pengungkapan sesuai ketentuan regulator. Setiap item diberi skor 1 jika diungkapkan dalam laporan keberlanjutan dan 0 jika tidak. Jumlah skor kemudian dibagi dengan total skor maksimum untuk menghasilkan persentase. Semakin tinggi persentase GBDI, semakin besar tingkat keterlibatan perusahaan dalam praktik *Green Banking*. Pengukuran pengungkapan *Green Banking* dapat dituliskan sebagai berikut:

$$GBDI = \frac{\text{Jumlah item yang diungkapkan}}{21}$$

Berikut adalah daftar 21 item yang tertera dalam *Green Banking Disclosure Index (GBDI)*.

Tabel 1. Komponen *Green Banking Disclosure Index* (GBDI)

No	Item GBDI
1	Kebijakan bank atas pelestarian dan perubahan kondisi lingkungan
2	Pemberian kredit atas proyek yang ramah lingkungan serta pemantauannya
3	Efisiensi penggunaan kertas serta pengolahan limbah
4	Pemanfaatan kebijakan dan teknologi untuk mengurangi dampak terhadap lingkungan dalam operasional internal
5	Penggunaan material <i>eco-friendly</i>
6	Efisiensi energi dalam operasional
7	Upaya dalam mengurangi dampak kerusakan lingkungan oleh karyawan
8	Informasi atas <i>green product</i> bank
9	Keterlibatan bank dalam membangun komunitas untuk menangani masalah lingkungan
10	Evaluasi secara menyeluruh atas dampak yang ditimbulkan oleh bisnis debitur sebelum pemberian sanksi
11	Pengorganisasian kegiatan untuk meningkatkan <i>awareness</i> masyarakat
12	Menjalankan peran sebagai bank ramah lingkungan yang berkontribusi dalam perbaikan lingkungan, serta keunggulan dalam pelaporan <i>green banking</i>
13	Penghargaan atas inisiatif pelestarian lingkungan
14	Inisiatif bank dalam mendukung program lingkungan
15	Pembentukan dana untuk praktik <i>green banking</i>
16	<i>Green branch</i> sebagai efisiensi operasional
17	Internalisasi konsep <i>green</i> dalam media komunikasi internal
18	Inisiatif bank dalam melatih karyawan atas konsep <i>green</i>
19	Anggaran yang dialokasikan untuk praktik <i>green banking</i>
20	Total belanja untuk praktik <i>green banking</i>
21	Halaman terpisah dalam pelaporan <i>green banking</i>

Sumber: Bose et al. (2018)

2. *Enterprise Risk Management (ERM) Disclosure Index*

Pengukuran pengungkapan *Enterprise Risk Management* menggunakan 108 indikator pengungkapan yang dikembangkan oleh Desender & Lafuente (2011) yang didasarkan pada 8 dimensi dari *Enterprise Risk Management* yang diungkapkan oleh COSO pada tahun 2004. Delapan dimensi dari *Enterprise Risk Management* tersebut adalah:

1. Internal environment
2. Objective setting
3. Event identification
4. Risk assessment
5. Risk response
6. Control activities
7. Information and communication
8. Monitoring

Penilaian dari kriteria yang ditetapkan didasarkan pada pengungkapan laporan tahunan perusahaan. Setiap kriteria yang tercantum dalam laporan tahunan perusahaan akan diberi skor 1, sedangkan jika kriteria tidak tercantum dalam laporan perusahaan maka akan diberi skor 0. Jumlah maksimal total poin yang dapat diperoleh oleh setiap perusahaan adalah 108, sedangkan jumlah minimum yang dapat diperoleh perusahaan adalah 0.

$$ERM = \frac{\text{Jumlah kriteria yang diungkapkan}}{108}$$

2.3.3 Variabel Moderasi

1. Kepemilikan Asing

UU No. 25 Tahun 2006 menjadi dasar struktur kepemilikan modal asing, kepemilikan asing berarti dimiliki oleh perseorangan warga negara asing, badan usaha asing, dan pemerintah asing yang melakukan penanaman modal di wilayah Republik Indonesia. Pada penelitian ini kepemilikan asing diukur dengan menggunakan persentase kepemilikan asing dibanding proporsi saham biasa (Anggraini et al., 2020). Rumus dalam menghitung kepemilikan asing, yaitu:

$$\text{Kepemilikan Asing} = \frac{\text{Jumlah kepemilikan asing}}{\text{Total Saham Beredar}} \times 100\%$$

Penelitian ini tidak menggunakan variabel kontrol, karena fokus analisis diarahkan pada pengaruh langsung pengungkapan *Green Banking*, pengungkapan *Enterprise Risk Management*, kepemilikan asing, serta interaksi di antara variabel-variabel tersebut terhadap nilai pasar perusahaan.

3. HASIL PENELITIAN DAN DISKUSI

3.1 Objek Penelitian

Objek dari penelitian ini adalah perusahaan perbankan yang telah terdaftar di Bursa Efek Indonesia (BEI) selama periode 2019 hingga 2022, yaitu sebanyak 188 data observasi. Kemudian dilakukan penghapusan data *outliers* karena memiliki nilai ekstrem, sehingga jumlah total data observasi yang digunakan dalam penelitian ini adalah sebanyak 149 unit.

Tabel 2. Gambaran Umum Objek Penelitian

Kriteria	Jumlah Observasi Tahun
Total observasi awal (47 perusahaan x 4 tahun)	188
Dikurangi observasi tidak lengkap (tidak ditemukan data laporan	(1)
Outlier yang ditemukan pada sampel	(38)
Jumlah sampel yang digunakan pada penelitian	149

Outlier yang dikeluarkan dari sampel dilakukan dengan cara mengeluarkan data yang muncul dari tabel “*casewise list*” sampai diperoleh data yang terdistribusi dengan normal

3.2. Analisis Statistik Deskriptif

Analisis statistik deskriptif digunakan untuk menjelaskan kondisi data dari setiap variabel. Tabel 2 menampilkan nilai rata-rata (*mean*), standar deviasi, nilai minimum, dan nilai maksimum yang digunakan untuk menggambarkan karakteristik masing-masing variabel.

Tabel 3. Statistik Deskriptif

	N	Minimum	Maximum	Mean	Std. Deviation
TOBINSQ	149	,04	1,33	,3213	,17263
GB	149	,14	,96	,3613	,22424
ERM	149	,00	,70	,3481	,14488
FOREIGN	149	,00	,99	,3526	,40274
GBxFOREIGN	149	,00	,89	,2681	,31905
ERMxFOREIGN	149	,00	,94	,2890	,32832
Valid N (listwise)	149				

Berdasarkan Tabel 2, dapat diketahui bahwa nilai rata-rata dari variabel Tobin's Q adalah sebesar 0,3213, dengan nilai maksimum sebesar 1,33 yang diperoleh oleh Bank ARTO pada tahun 2022, dan nilai minimum sebesar 0,04 yang diperoleh oleh Bank BANK pada tahun 2019. Hal ini menunjukkan adanya variasi tingkat nilai pasar perusahaan perbankan dalam sampel penelitian.

Pada variabel pengungkapan *Green Banking* (GB), nilai maksimum sebesar 0,96 dicapai oleh beberapa bank, yaitu PNB 2019, NOBU 2019–2020, BACA 2019, dan BNBA 2020, sedangkan nilai minimum sebesar 0,14 diperoleh oleh beberapa bank lainnya. Rata-rata pengungkapan *Green Banking* dalam sampel adalah 0,3613, yang mengindikasikan bahwa secara umum, tingkat pengungkapan aspek keberlanjutan oleh perbankan Indonesia masih berada pada level menengah.

Untuk variabel pengungkapan *Enterprise Risk Management*, nilai maksimum sebesar 0,70 diperoleh oleh DNAR pada tahun 2019, sedangkan nilai minimum sebesar 0,00 menunjukkan bahwa beberapa bank dalam sampel sama sekali tidak mengungkapkan praktik manajemen risiko dalam laporan mereka. Nilai rata-rata *Enterprise Risk Management* adalah 0,3481, dengan standar deviasi relatif kecil, yaitu 0,14488, yang menunjukkan variasi yang cukup terbatas antar perusahaan dalam pengungkapan risiko.

Sementara itu, untuk variabel kepemilikan asing (FOREIGN), nilai maksimum mencapai 0,99 atau 99% saham dimiliki asing, yang tercatat pada BANK 2019, AMAR 2019, dan BNLI dari 2020 hingga 2022. Rata-rata kepemilikan asing dalam sampel adalah sebesar 35,26%, menunjukkan bahwa sebagian besar bank memiliki proporsi kepemilikan asing yang cukup signifikan, meskipun distribusinya sangat bervariasi antar bank (standar deviasi 0,40274).

Untuk variabel interaksi $GB \times FOREIGN$ dan $ERM \times FOREIGN$, masing-masing memiliki nilai rata-rata sebesar 0,2681 dan 0,2890, dengan standar deviasi masing-masing sebesar 0,31905 dan 0,32832, yang menunjukkan adanya variabilitas interaksi yang cukup tinggi di antara perusahaan dalam hal bagaimana praktik keberlanjutan dan manajemen risiko berurusan dengan kepemilikan asing.

Secara keseluruhan, statistik deskriptif ini menunjukkan bahwa setiap variabel memiliki sebaran data yang memadai, yang memungkinkan untuk dilakukan pengujian lebih lanjut melalui regresi guna mengetahui hubungan dan pengaruh antar variabel.

3.3 Uji Asumsi Klasik

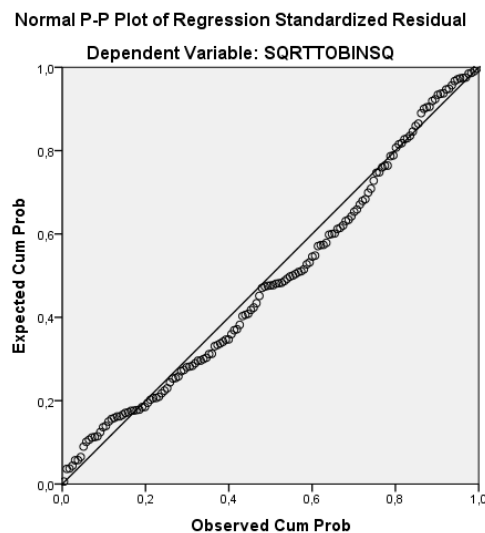
Uji asumsi klasik yang akan digunakan dalam penelitian ini meliputi uji normalitas, uji autokorelasi, uji multikolinieritas, dan uji heteroskedastisitas

3.3.1 Uji Normalitas

Tabel 4. Hasil Pengujian One-Sample Kolmogorov-Smirnov

		Unstandardized Residual
N		149
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,14596741
Most Extreme Differences	Absolute	,068
	Positive	,068
	Negative	-,044
Test Statistic		,068
Asymp. Sig. (2-tailed)		,085 ^c

Tabel 4 menjelaskan hasil dari uji normalitas, diinformasikan bahwa nilai signifikansi sebesar 0.085. Nilai signifikansi tersebut lebih besar dari 0.05, sehingga hal ini mengindikasikan bahwa data terdistribusi normal



Gambar 1. P-Plot

Gambar 1 menunjukkan garis P-Plot yang menggambarkan sebaran data berada merata di sepanjang garis, hal ini menandakan data terdistribusi normal.

3.3.2 Uji Autokorelasi

Tabel 5. Hasil Uji Autokorelasi

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,327 ^a	,107	,076	,14850	1,841
a. Predictors: (Constant), ERMxFOREIGN, GB, ERM, GBxFOREIGN, FOREIGN					
b. Dependent Variable: TOBINSQ					

Sumber: Hasil olahan penulis

Berdasarkan kriteria pengujian untuk hasil uji autokorelasi, dengan nilai Durbin Watson sebesar 1,841 yang terdapat dalam Tabel 5 maka dapat disimpulkan bahwa data tidak memiliki masalah autokorelasi.

3.3.3 Uji Multikolonieritas

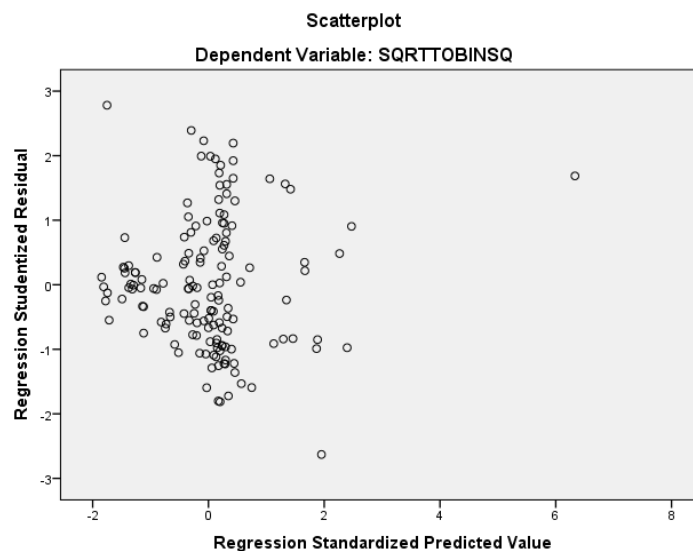
Tabel 6. Hasil Uji Multikolinearitas

		Collinearity Statistics	
		Tolerance	VIF
	(Constant)		
	GB	,648	1,543
	ERM	,579	1,728
	FOREIGN	,017	58,650
	GBxFOREIGN	,040	25,288
	ERMxFOREIGN	,020	50,157

Sumber: Hasil olahan penulis

Berdasarkan hasil uji multikolinearitas dalam tabel 6, dapat dilihat bahwa variabel GB dan ERM secara berurutan nilai *tolerance* lebih besar dari 0.1 dan VIF lebih kecil dari 10, maka dari itu dapat disimpulkan bahwa data dalam penelitian tidak memiliki permasalahan multikolinearitas. Variabel FOREIGN, GBxFOREIGN, ERM x FOREIGN memiliki VIF lebih dari 10 karena variabel tersebut digunakan sebagai variabel moderasi

3.3.4 Uji Heteroskedastisitas



Gambar 2. Diagram Scatterplot

Berdasarkan Gambar 2 menunjukkan bahwa titik-titik pada *scatterplot* tidak membentuk pola tertentu dan titik-titik menyebar secara acak baik diatas maupun dibawah angka 0 pada sumbu Y, sehingga dapat disimpulkan bahwa tidak terjadi heteroskedastisitas pada model regresi.

3.4 Analisis Regresi Linear Berganda

3.4.1 Uji Koefisien Determinasi

Tabel 7. Uji R²

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
,327 ^a	,107	,076	,14850	1,841

Sumber: Hasil olahan penulis

Berdasarkan Tabel 7 di atas, nilai koefisien determinasi menunjukkan angka 0.327 atau 32,7%, yang mengindikasikan bahwa variabel *Green Banking* (GB), *Enterprise Risk Management* (ERM), dan variabel moderasi *Foreign* dapat menjelaskan nilai perusahaan (TOBINSQ) sebesar 32,7% sementara 67,3% dipengaruhi oleh faktor lain di luar variabel penelitian.

3.4.2 Uji Signifikansi Simultan (Uji Statistik F)

Tabel 8. Uji Anova

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	,378	5	,076	3,429	,006 ^b
	Residual	3,153	143	,022		
	Total	3,531	148			

Sumber: Hasil olahan penulis

Berdasarkan Tabel 7, Uji F memberikan hasil yang signifikan sebesar 0.006 yang berarti lebih kecil dari 0.05 yang merupakan kriteria pengujian. Dengan nilai signifikan yang lebih kecil dari 0,005 maka dapat diartikan bahwa secara simultan atau bersamaan variabel independen yakni *Green Banking*, *ERM*, dan *Foreign* sebagai variabel moderasi memiliki pengaruh terhadap variabel dependen yakni nilai perusahaan yang diukur melalui TOBINSQ.

3.4.3 Uji Signifikansi Parameter Individual (Uji Statistik t)

Tabel 9. Hasil Uji Regresi Linear Berganda (Uji t)

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	,365	,046		7,946	,000		
	GB	-,048	,068	-,069	-,703	,483	,648	1,543
	ERM	-,074	,111	-,070	-,671	,503	,579	1,728
	FOREIGN	,535	,231	1,404	2,320	*,022	,017	58,650
	GBxFOREIGN	-,668	,191	-1,390	-3,498	*,001	,040	25,288
	ERMxFOREIGN	-,053	,262	-,112	-,201	,841	,020	50,157

Sumber: Hasil olahan penulis

Berdasarkan hasil yang diperoleh dari Tabel 9, maka persamaan regresi linear berganda dalam penelitian ini dapat dituliskan sebagai berikut:

$$\text{Tobin's } Q = 0,365 - 0,048 \cdot \text{GB} - 0,074 \cdot \text{ERM} + 0,535 \cdot \text{FOREIGN} - 0,668 \cdot (\text{GB} \times \text{FOREIGN}) - 0,053 \cdot (\text{ERM} \times \text{FOREIGN})$$

Keterangan:

- Tobin's Q = nilai pasar perusahaan
- GB = indeks pengungkapan *Green Banking*
- ERM = indeks pengungkapan *Enterprise Risk Management*
- FOREIGN = proporsi kepemilikan asing
- $GB \times FOREIGN$ = interaksi *Green Banking* dan kepemilikan asing
- $ERM \times FOREIGN$ = interaksi *Enterprise Risk Management* dan kepemilikan asing

Persamaan regresi di atas menunjukkan arah dan besar pengaruh masing-masing variabel independen dan interaksi terhadap variabel dependen, yaitu nilai pasar perusahaan (Tobin's Q). Selanjutnya, untuk memahami signifikansi dan implikasi dari setiap variabel dalam model, dilakukan pembahasan berdasarkan hasil uji t yang tercantum pada Tabel 9, antara lain:

Berdasarkan hasil uji t, nilai signifikansi pengungkapan *Green Banking* sebesar 0,483 ($p > 0,05$) yang menunjukkan bahwa pengungkapan *Green Banking* tidak berpengaruh signifikan terhadap kinerja keuangan. Dengan demikian Hipotesis 1 (H1) tidak diterima karena nilai koefisien regresi tidak signifikan secara statistik ($p > 0,05$). Temuan studi ini sesuai dengan penelitian sebelumnya yang menyatakan bahwa pengungkapan *Green Banking* mungkin belum dianggap benar-benar menambah nilai secara material oleh investor pasar di negara berkembang seperti Indonesia (Bose et al., 2018). Dalam konteks teori sinyal, hasil ini menandakan bahwa pengungkapan *Green Banking* yang dilakukan oleh bank belum mampu berfungsi sebagai sinyal positif yang bermakna bagi investor pasar modal di Indonesia. Padahal, teori sinyal menyatakan bahwa perusahaan dengan prospek baik akan secara aktif menyampaikan informasi yang menjadi kabar baik atau sinyal kepada pasar (Utamaningsih, 2013). Meskipun Anggraini et al. (2020) dan Jannah (2021) menyatakan bahwa praktik *Green Banking* dapat menjadi sinyal positif yang meningkatkan kepercayaan pasar, namun berdasarkan studi ini ternyata menunjukkan bahwa investor pasar modal Indonesia belum secara eksplisit merespons informasi keberlanjutan sebagai determinan nilai saham. Dengan demikian, menandakan bahwa investor di negara berkembang, seperti Indonesia, kemungkinan belum menganggap informasi tentang *Green Banking* sebagai sesuatu yang penting atau berdampak besar dalam pengambilan keputusan investasi. Mereka mungkin masih lebih fokus pada indikator keuangan tradisional seperti profitabilitas, likuiditas, atau efisiensi operasional, daripada isu-isu keberlanjutan lingkungan. Dengan kata lain, meskipun bank sudah mengungkapkan komitmen terhadap lingkungan (*Green Banking*), pasar belum meresponsnya secara signifikan karena belum dianggap sebagai faktor utama yang menentukan nilai perusahaan. Meskipun rata-rata pengungkapan *Green Banking* tinggi, pengaruhnya terhadap nilai pasar tidak signifikan. Hal ini kemungkinan disebabkan karena investor masih lebih memprioritaskan indikator kinerja keuangan tradisional, seperti profitabilitas, dibandingkan informasi keberlanjutan. Selain itu, pengungkapan yang bersifat formalitas tanpa komitmen nyata cenderung tidak memberikan sinyal positif yang kuat kepada pasar (Karyani & Obrien, 2020). Periode observasi penelitian (2019–2022) mencakup masa pandemi Covid-19 yang berdampak signifikan pada stabilitas ekonomi dan pasar keuangan. Situasi pandemi menyebabkan fluktuasi harga saham bank, perubahan preferensi investor terhadap aset likuid, serta meningkatnya risiko kredit dan likuiditas. Oleh karena itu, ketidakpastian pasar yang tinggi selama periode Covid-19 dapat menjadi salah satu faktor yang mengaburkan hubungan antara pengungkapan keberlanjutan dan nilai pasar perusahaan.

Selanjutnya, diketahui nilai signifikansi pengungkapan *Enterprise Risk Management* sebesar 0,503 ($p > 0,05$) juga menunjukkan bahwa *Enterprise Risk Management* tidak

berpengaruh signifikan terhadap kinerja keuangan. Dengan demikian Hipotesis 2 (H2) tidak diterima karena nilai koefisien regresi tidak signifikan secara statistik ($p > 0,05$). Berdasarkan teori keagenan, pengungkapan ERM seharusnya menjadi alat yang mampu meminimalisir asimetri informasi antara pemilik modal (*principal*) dan manajer (*agent*) melalui transparansi risiko, sehingga meningkatkan kepercayaan investor dan kinerja pasar (Abdullah, 2017; Jensen & Meckling, 1976). Namun, dalam praktiknya, informasi mengenai manajemen risiko yang disampaikan dalam laporan tahunan bank sering kali belum disampaikan secara transparan, spesifik, dan relevan, sehingga tidak mudah dipahami oleh investor publik. Akibatnya, pengungkapan risiko belum menjadi pertimbangan utama bagi investor dalam mengambil keputusan investasi. Hal ini dapat disebabkan oleh pengungkapan yang masih bersifat umum, normatif, dan kurang menggambarkan risiko spesifik yang dihadapi perusahaan, sehingga pasar tidak merespons informasi tersebut secara signifikan. Dengan demikian, fungsi pengungkapan risiko sebagai mekanisme untuk menyelaraskan kepentingan antara manajer (agen) dan investor (prinsipal), sebagaimana dijelaskan dalam teori keagenan, belum berjalan secara efektif. Serupa dengan pengungkapan *Green Banking*, pengaruh pengungkapan *Enterprise Risk Management* (ERM) terhadap nilai pasar juga tidak signifikan. Meskipun, rata-rata tingkat pengungkapan ERM cukup tinggi, menunjukkan banyak bank sudah aktif melaporkan informasi risiko. Namun, tingginya *mean* ini belum direspons positif karena investor masih kurang memahami manfaat strategis ERM, dan laporan ERM belum terstandardisasi sehingga sulit dievaluasi. Selain itu, ketidakpastian akibat pandemi Covid-19 membuat investor lebih fokus pada risiko makro daripada risiko internal perusahaan.

Variabel kepemilikan asing memiliki nilai signifikansi 0,022 ($< 0,05$), yang menunjukkan bahwa kepemilikan asing berpengaruh positif signifikan terhadap nilai pasar bank. Dengan demikian hipotesis 3 (H3) diterima, yang artinya semakin tinggi proporsi kepemilikan asing, semakin tinggi pula nilai pasar perusahaan. Temuan ini sejalan dengan teori keagenan, di mana investor asing bertindak sebagai pihak yang lebih aktif dalam melakukan pengawasan dan menuntut praktik tata kelola yang lebih baik, sehingga dapat mengurangi konflik keagenan dan meningkatkan nilai perusahaan. Hal ini selaras dengan literatur yang menyebutkan bahwa investor asing biasanya membawa teknologi, efisiensi manajerial, dan reputasi yang lebih baik (Hermiyetti, 2017). Kepemilikan asing berkontribusi terhadap peningkatan nilai perusahaan melalui penerapan praktik tata kelola yang lebih baik dan pemantauan kinerja yang lebih efektif (Lin & Fu, 2017). Investor asing biasanya membawa standar tata kelola perusahaan yang lebih tinggi, misalnya dalam hal transparansi, akuntabilitas, dan pengawasan terhadap manajemen. Mereka juga cenderung lebih aktif dalam memantau kinerja perusahaan, sehingga dapat mendorong efisiensi dan pengambilan keputusan yang lebih rasional. Akibatnya, keberadaan pemegang saham asing dapat meningkatkan kepercayaan pasar dan mendorong kenaikan nilai perusahaan. Kondisi ini dapat meningkatkan kepercayaan pasar, termasuk pada periode penuh ketidakpastian akibat pandemi Covid-19. Ketika risiko pasar meningkat, keberadaan pemegang saham asing yang memiliki reputasi kuat dan standar pengawasan lebih ketat dapat menjadi sinyal positif yang menenangkan investor lain, sehingga mendorong kenaikan nilai perusahaan meskipun situasi ekonomi tidak stabil.

Interaksi antara pengungkapan *Green Banking* dan kepemilikan asing ($GB \times FOREIGN$) berpengaruh negatif signifikan terhadap kinerja keuangan (nilai sig. = 0,001). Artinya, keberadaan pemegang saham asing justru melemahkan pengaruh positif dari pengungkapan *Green Banking*. Hasil ini mendukung hipotesis H4a dengan arah negatif. Dalam kerangka teori sinyal, hasil ini dapat diartikan bahwa pengungkapan keberlanjutan justru menjadi sinyal yang ditafsirkan negatif oleh investor asing, terutama pada masa

pandemi Covid-19 ketika orientasi investor lebih terfokus pada likuiditas dan profitabilitas jangka pendek dibandingkan komitmen keberlanjutan jangka panjang. Hal ini mungkin terjadi karena adanya ketidaksesuaian ekspektasi antara manajemen lokal yang berfokus pada kepatuhan regulasi dan tanggung jawab sosial, dengan investor asing yang lebih berorientasi pada efisiensi, profitabilitas, dan hasil jangka pendek (Mayangsari, 2018; Perdana & Septiani, 2017). Dalam konteks ini, *Green Banking* dianggap sebagai sinyal biaya yang belum berdampak langsung secara ekonomi, sehingga dinilai kontraproduktif bagi pemegang saham asing.

Nilai signifikansi antara pengungkapan *Enterprise Risk Management* dan kepemilikan asing ($ERM \times FOREIGN$) sebesar 0,841 ($> 0,05$) menunjukkan bahwa interaksi antara pengungkapan *Enterprise Risk Management* dan kepemilikan asing tidak berpengaruh signifikan terhadap kinerja keuangan. Dengan demikian Hipotesis 4b (H4b) tidak diterima karena nilai koefisien regresi tidak signifikan secara statistik ($p > 0,05$). Menurut teori keagenan, interaksi ini semestinya memperkuat efektivitas pengungkapan risiko dalam mereduksi konflik kepentingan dan meningkatkan nilai perusahaan (Abdullah, 2017). Namun, ketidaksignifikanan ini dapat disebabkan oleh beberapa faktor, termasuk ketidakpastian tinggi selama pandemi Covid-19. Dalam periode krisis, fokus investor sering bergeser pada risiko sistemik dan kondisi makroekonomi, sehingga informasi pengungkapan risiko internal perusahaan menjadi kurang relevan dalam pengambilan keputusan investasi (Giner et al., 2020). Hal ini bisa disebabkan oleh rendahnya kualitas pengungkapan, kurangnya standarisasi, atau perbedaan budaya organisasi antara investor asing dan manajemen lokal yang dapat menghambat pemanfaatan informasi risiko secara optimal (Perdana & Septiani, 2017).

4. KESIMPULAN DAN SARAN

4.1 Kesimpulan

Penelitian ini secara empiris mengkaji pengaruh pengungkapan *Green Banking*, pengungkapan *Enterprise Risk Management*, dan kepemilikan asing terhadap kinerja keuangan berbasis pasar perusahaan perbankan di Indonesia, yang diukur dengan rasio Tobin's Q. Hasil penelitian menunjukkan bahwa baik pengungkapan *Green Banking*, pengungkapan *Enterprise Risk Management* tidak berpengaruh signifikan terhadap nilai perusahaan. Temuan ini mengindikasikan bahwa dalam konteks negara berkembang seperti Indonesia, informasi keberlanjutan dan risiko belum sepenuhnya dianggap relevan atau bernilai oleh para pelaku pasar. Hal ini selaras dengan teori sinyal, di mana sinyal yang tidak efektif, dalam hal ini seperti pengungkapan yang bersifat tidak strategis, gagal memengaruhi persepsi investor.

Sebaliknya, kepemilikan asing terbukti berpengaruh positif dan signifikan terhadap kinerja perusahaan, yang menunjukkan bahwa keberadaan pemegang saham asing mampu meningkatkan nilai perusahaan melalui peningkatan tata kelola, pengawasan, dan disiplin strategis, sesuai dengan penjelasan dalam teori keagenan. Menariknya, interaksi antara pengungkapan *Green Banking* dan kepemilikan asing menunjukkan pengaruh negatif yang signifikan, yang dapat mencerminkan adanya perbedaan harapan antara investor asing dan manajemen terhadap inisiatif keberlanjutan. Sementara itu, interaksi antara pengungkapan ERM dan kepemilikan asing tidak menunjukkan pengaruh yang signifikan, yang menunjukkan keterbatasan keselarasan strategis atau relevansi informasi risiko dalam proses penilaian investor.

Secara teoritis, penelitian ini memberikan kontribusi penting dengan menggabungkan perspektif teori keagenan dan teori sinyal untuk memahami bagaimana praktik pengungkapan,

struktur kepemilikan, dan kinerja perusahaan saling terkait dalam konteks industri perbankan. Dari sisi empiris, penelitian ini memperluas wawasan kita tentang bagaimana pasar merespons informasi non-keuangan di negara berkembang seperti Indonesia, yang ternyata belum sekuat yang diharapkan. Secara ekonomi, temuan ini menyiratkan bahwa untuk memaksimalkan nilai perusahaan, institusi perbankan tidak hanya perlu melakukan pengungkapan keberlanjutan dan risiko, tetapi juga memastikan bahwa informasi yang disampaikan bersifat transparan dan sesuai dengan ekspektasi investor.

4.2 Keterbatasan

Penelitian ini memiliki beberapa keterbatasan yang perlu diperhatikan. Pertama, penelitian hanya berfokus pada sektor perbankan di Indonesia dalam periode 2019–2022, sehingga temuan tidak dapat digeneralisasikan untuk sektor industri lain yang memiliki karakteristik pasar, struktur kepemilikan, dan regulasi yang berbeda.

Kedua, penggunaan Tobin's Q sebagai satu-satunya indikator kinerja pasar membatasi sudut pandang dalam mengevaluasi kinerja keuangan perusahaan. Indikator ini tidak menangkap faktor-faktor internal non-keuangan yang juga dapat memengaruhi persepsi investor, seperti budaya organisasi, reputasi perusahaan, atau inovasi dalam keberlanjutan.

Ketiga, pendekatan kuantitatif yang digunakan hanya menilai ada atau tidaknya pengungkapan informasi, tanpa memperhatikan kualitas, konteks, atau kedalaman isi pengungkapan. Akibatnya, nilai strategis dari pengungkapan *Green Banking* dan *Enterprise Risk Management* mungkin belum sepenuhnya tercermin dalam hasil penelitian, terutama jika informasi tersebut bersifat naratif atau simbolik.

4.3 Saran

Sebagai tindak lanjut atas keterbatasan tersebut, berikut adalah beberapa saran untuk penelitian selanjutnya:

1. Memperluas cakupan sektor dan wilayah dengan melibatkan industri di luar sektor perbankan atau memperluas cakupan geografis ke negara-negara lain agar hasil penelitian dapat diuji konsistensinya dalam konteks yang lebih beragam.
2. Menggunakan indikator kinerja keuangan yang lebih beragam, baik dari sisi akuntansi (seperti ROA/ROE) maupun non-keuangan, guna memberikan pemahaman yang lebih utuh mengenai pengaruh pengungkapan terhadap kinerja perusahaan.
3. Menerapkan pendekatan kualitatif atau metode campuran (*mixed methods*) untuk mengevaluasi kualitas dan substansi dari pengungkapan *Green Banking* dan ERM secara lebih mendalam. Analisis konten dapat membantu menilai sejauh mana pengungkapan tersebut bersifat strategis dan relevan bagi investor serta pemangku kepentingan lainnya.

4.4 Implikasi Penelitian

Penelitian ini memberikan sejumlah implikasi penting, baik dari sisi teoritis, praktis, maupun kebijakan:

1. **Implikasi Teoritis**
Hasil penelitian menunjukkan bahwa tidak semua pengungkapan informasi, seperti *Green Banking* dan manajemen risiko, langsung berpengaruh terhadap nilai pasar perusahaan. Ini memberikan masukan bagi pengembangan teori keagenan dan teori sinyal dalam konteks negara berkembang, bahwa efektivitas informasi sangat tergantung pada kualitas dan persepsi pasar.

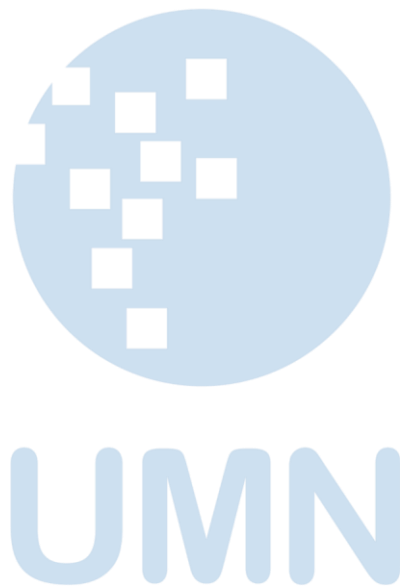
2. Implikasi Praktis bagi Perusahaan Perbankan
Bagi manajemen perbankan, temuan ini menjadi pengingat bahwa pengungkapan tidak cukup hanya dilakukan, tetapi juga harus disampaikan secara jelas, relevan, dan berkualitas agar benar-benar memengaruhi investor dan meningkatkan nilai perusahaan.
3. Implikasi Kebijakan bagi Regulator dan Otoritas Pasar
Bagi regulator seperti OJK, hasil ini menunjukkan pentingnya mendorong standar pengungkapan yang lebih mendalam dan bermakna, tidak hanya sekedar memenuhi kewajiban formal, tetapi juga membantu pasar dalam menilai kinerja dan tata kelola perusahaan secara lebih baik.

5. REFERENSI

- Abdullah, B. , S. M. H. , H. M. A. , & Y. P. (2017). The Effect of Enterprise Risk Management on Firm Value: Evidence from Malaysian Technology Firms. *Jurnal Pengurusan*, 49, 3–11. <https://doi.org/10.17576/pengurusan-2017-49-01>
- Agustina, L., & Baroroh, N. (2016). The relationship between Enterprise Risk Management (ERM) and firm value mediated through the financial performance. *Review of Integrative Business and Economics Research*, 5(1), 128–138.
- Anggraini, D., Nita Aryani, D., Budi Prasetyo, I., & Malang Kucecwara, S. (2020). Analisis Implementasi Green Banking dan Kinerja Keuangan terhadap Profitabilitas Bank di Indonesia (2016-2019). *JBMI (Jurnal Bisnis, Manajemen, Dan Informatika)*, 17(2), 141–161.
- Bose, S., Khan, H. Z., Rashid, A., & Islam, S. (2018). What drives green banking disclosure? An institutional and corporate governance perspective. *Asia Pacific Journal of Management*, 35(2), 501–527. <https://doi.org/10.1007/s10490-017-9528-x>
- Buckby, S. , G. G. , & M. J. (2015). An Analysis of Risk Management Disclosures: Australian Evidence. *Managerial Auditing Journal*, 30(8–9), 812–869.
- Desender, K. A., & Lafuente, E. (2011). The Influence of Board Composition, Audit Fees and Ownership Concentration on Enterprise Risk Management. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1495856>
- Dharwal & Agarwal. (2013). Green banking: An innovative initiative for sustainable development. . *ACCMAN Institute of Management Article*, 2(3).
- Giner, B., Allini, A., & Zampella, A. (2020). The Value Relevance of Risk Disclosure: An Analysis of the Banking Sector. *Accounting in Europe*, 17(2), 129–157. <https://doi.org/10.1080/17449480.2020.1730921>
- Handajani, L. (2019). Corporate Governance dan Green Banking Disclosure: Studi pada Bank di Indonesia. *Jurnal Dinamika Akuntansi Dan Bisnis*, 6(2), 121–136. <https://doi.org/10.24815/jdab.v6i2.12243>
- Haryono, S. A., Fitriany, & Fatima, E. (2017). Pengaruh Struktur Modal dan Struktur Kepemilikan terhadap Kinerja Perusahaan. *Jurnal Akuntansi Dan Keuangan Indonesia*, 14(2), 119–140.
- Hermiyetti, H. , & K. E. (2017). Analisis Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional, Kepemilikan Asing, dan Komite Audit terhadap Kinerja Keuangan Perusahaan. *Media Riset Akuntansi*, 6(2), 25–43.
- Jannah, L. & H. E. (2021). Konsep Green Marketing Dan Dampaknya Terhadap Perilaku Konsumen Indonesia. *Jurnal Bina Manajemen*, 9(2), 92–112.

- 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. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Karyani, E., & Obrien, V. V. (2020). Green Banking and Performance: The Role of Foreign and Public Ownership. *Jurnal Dinamika Akuntansi Dan Bisnis*, 7(2), 221–234. <https://doi.org/10.24815/jdab.v7i2.17150>
- Khrawish, H. A., & Al-Sa'di, N. M. (2011). The Impact of E-Banking on Bank Profitability: Evidence from Jordan. *Middle Eastern Finance and Economics*, 0(13), 142–158.
- King, M. R., & Santor, E. (2008). Family values: Ownership structure, performance and capital structure of Canadian firms. *Journal of Banking and Finance*, 32(11), 2423–2432. <https://doi.org/10.1016/j.jbankfin.2008.02.002>
- Kusumadewi, N. L. G. L., & Wardhani, R. (2020). The effect of three types of agency problems on the firm performance: Evidence from Indonesia. *International Journal of Monetary Economics and Finance*, 13(3), 279–286. <https://doi.org/10.1504/IJMEF.2020.108824>
- Lin, Y. R., & Fu, X. M. (2017). Does institutional ownership influence firm performance? Evidence from China. *International Review of Economics & Finance*, 49, 17–57. <https://doi.org/10.1016/j.iref.2017.01.021>
- Mayangsari, R. (2018). Pengaruh Struktur Modal, Keputusan Investasi, Kepemilikan Manajerial, dan Komite Audit terhadap Nilai Perusahaan Aneka Industri yang Listing di Bursa Efek Indonesia Periode 2012-2016. In *Jurnal Ilmu Manajemen* (Vol. 6, Issue 4, pp. 477–485).
- Mustofa, U. A., Edy, R. N. A. P., Kurniawan, M., & Kholid, M. F. N. (2020). Green Accounting Terhadap CSR pada Bus di Indonesia dengan Kinerja Keuangan Sebagai Variabel Intervening. *Jurnal Ilmiah Ekonomi Islam*, 6(3), 508. <https://doi.org/10.29040/jiei.v6i3.1372>
- Nahar, S., Azim, M., & Jubb, C. A. (2016). Risk disclosure, cost of capital and bank performance. *International Journal of Accounting and Information Management*, 24(4), 476–494. <https://doi.org/10.1108/IJAIM-02-2016-0016>
- Nath, V., Nayak, N., & Goel, A. (2014). Green banking Practices - A Riview. *IMPACT: International Journal of Research in Business Management (IMPACT: IJRBM)*, 2, 45–62. www.impactjournals.us
- Panda, B., & Leepsa, N. M. (2017). Agency theory : Review of Theory and Evidence on Problems and Perspectives. *Indian Journal of Corporate Governance*, 10(1), 74–95. <https://doi.org/10.1177/0974686217701467>
- Perdana, V. A., & Septiani, A. (2017). Pengaruh Corporate Governance Terhadap Kinerja Keuangan (Studi Empiris Pada Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2013-2016). *Diponegoro Journal of Accounting*, 6(4), 1–8. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Porter, M. E. (1990). The Competitive Advantage of Nations. *Harvard Business Review*, 68(2), 73–93.
- Utamaningsih, A. , T. E. , H. S. , & S. A. R. (2013). Asymmetric Information in the IPO Underwriting Process on the Indonesia Stock Exchange: Pricing, Initial Allocation, Underpricing, and Price Stabilization. *Journal of Indonesian Economy and Business*, 28(3), 311–321.

Wardhana, L. I., & Tandelilin, E. (2011). Institutional ownership and agency conflict controlling mechanism. *Journal of Indonesian Economy and Business*, 26(3), 389 – 406.



DETERMINAN NILAI PERUSAHAAN DI BURSA EFEK INDONESIA

Ilham Fajar Eko Saputro^{1*}

Departemen Sistem Informasi, Fakultas Teknik dan Informasi, Universitas Bina Sarana
Informatika Tegal, Indonesia
ilham.ifs@bsi.ac.id

Nurhadi Kamaluddin²

Departemen Accounting, University Muhammadiyah Tegal, Indonesia
nurhadikamaluddin84@email.com

(*Corresponding author)

Diterima 20 Mei 2025

Disetujui 20 Juni 2025

Abstract — *The main objective of this study is to investigate the effect of profitability on firm value, as well as to examine the moderating function of the independent board of commissioners in this relationship. This study is motivated by the urgency of firm value as the main benchmark for investors, as well as the inconsistency of previous empirical findings regarding the relationship between profitability and firm value. The novelty of this study lies in the formulation of a moderation model that combines profitability variables and the structure of the independent board of commissioners, with a coverage of 139 manufacturing companies listed on the Indonesia Stock Exchange in the period 2020 to 2024. The sampling technique was carried out using purposive sampling. This study uses a quantitative approach by applying interaction analysis techniques through Moderated Regression Analysis (MRA). The results of the study show that profitability has a positive and significant effect on firm value, and the presence of an independent board of commissioners is proven to strengthen this effect. This finding confirms that the combination of solid profitability and good governance mechanisms is a crucial signal for investors in the investment decision-making process.*

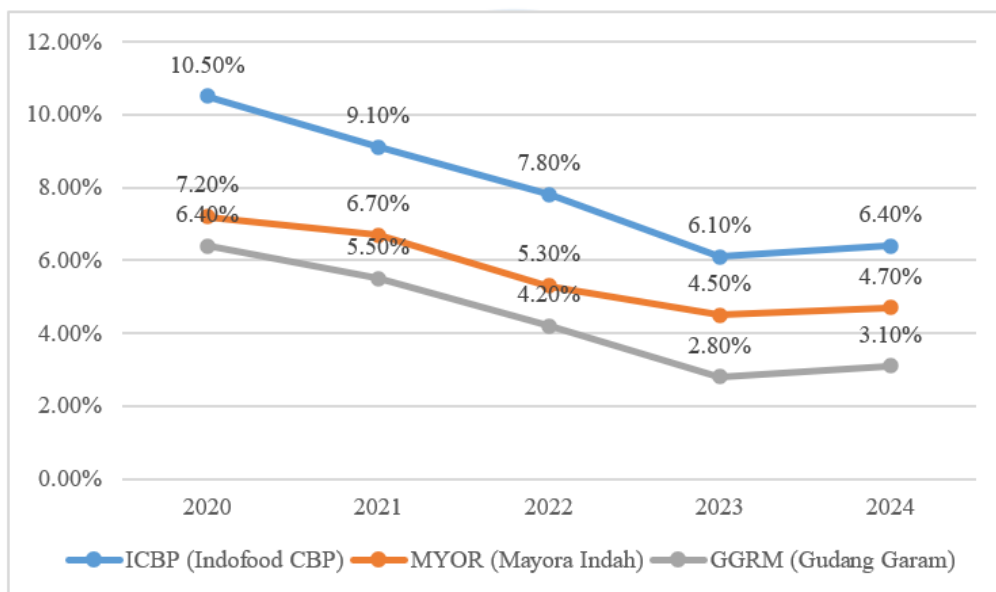
Keywords: *Profitability; Board of Commissioners; Company Value.*

1. PENDAHULUAN

1.1 Latar Belakang

Dalam beberapa tahun terakhir, sektor manufaktur menghadapi tantangan yang cukup besar, terutama terkait penurunan kinerja keuangan. Penurunan tersebut menjadi alasan utama dilakukannya penelitian ini, mengingat profitabilitas memiliki peran yang signifikan dalam menentukan nilai perusahaan (Purwanti, 2020). Berdasarkan data dari Bursa Efek Indonesia dan Statistik Industri BPS, terdapat penurunan margin laba bersih pada banyak subsektor manufaktur selama periode 2020 hingga 2023. Meskipun tekanan ekonomi juga dirasakan oleh sektor lainnya, sektor manufaktur menjadi salah satu yang paling terdampak karena ketergantungannya yang tinggi terhadap bahan baku impor, fluktuasi nilai tukar, serta lonjakan biaya logistik pasca pandemi (Fatoni, 2021). Hal ini menyebabkan tekanan pada struktur biaya perusahaan yang berdampak langsung terhadap laba bersih dan persepsi investor.

Pemilihan sektor manufaktur sebagai objek penelitian didasarkan pada kontribusinya yang signifikan terhadap perekonomian nasional, baik dari sisi produk domestik bruto (PDB), penyerapan tenaga kerja, maupun aktivitas ekspor. Selain itu, perusahaan manufaktur yang tercatat di Bursa Efek Indonesia juga memiliki keterbukaan informasi yang relatif tinggi dan data yang tersedia secara lengkap, sehingga memungkinkan analisis yang lebih mendalam dan valid (Kurniati, 2019). Kompleksitas struktur biaya, dinamika operasional yang cepat, serta peran strategisnya dalam perekonomian menjadikan sektor ini relevan untuk menguji bagaimana kinerja keuangan memengaruhi nilai perusahaan dan sejauh mana dewan komisaris independen dapat memperkuat pengaruh tersebut melalui mekanisme tata kelola yang efektif (Robiyanto et al., 2021). Gambaran lebih lanjut mengenai tren penurunan margin laba bersih pada beberapa perusahaan manufaktur besar selama periode 2020–2024 dapat dilihat pada Gambar 1 berikut.



Gambar 1. NPM Gabungan Perusahaan Manufaktur 2020–2024.

Grafik tersebut memberikan gambaran nyata mengenai tantangan keuangan yang dihadapi sektor manufaktur, yang berdampak langsung pada persepsi investor dan nilai pasar perusahaan. Berdasarkan data *Net Profit Margin* (NPM) selama periode 2020 hingga 2024, ketiga perusahaan manufaktur besar, mengalami tren penurunan profitabilitas yang signifikan dari tahun 2020 hingga 2023, sebelum menunjukkan sedikit perbaikan pada tahun 2024. Penurunan NPM ini mencerminkan permasalahan struktural dan operasional yang memengaruhi kinerja keuangan mereka. Pada ICBP, NPM menurun dari 10,5% pada 2020 menjadi 6,1% pada 2023, Hal ini terutama dipicu oleh naiknya biaya produksi sebagai akibat dari peningkatan harga bahan baku serta biaya logistik setelah masa pandemi. Meskipun tahun 2024 terjadi pemulihan ke 6,4%, margin tersebut belum kembali ke tingkat ideal seperti di awal periode. Begitu pula pada MYOR, NPM turun dari 7,2% menjadi 4,5% selama periode yang sama, menandakan tantangan dalam mempertahankan efisiensi operasional dan daya saing di tengah tekanan inflasi dan melemahnya daya beli konsumen. Sedangkan GGRM mengalami penurunan NPM yang lebih tajam, dari 6,4% menjadi 2,8%, yang erat kaitannya dengan regulasi ketat, seperti kenaikan cukai rokok, serta perubahan perilaku konsumen terhadap produk tembakau. Pemulihan pada 2024 hanya sedikit menjadi 3,1%, menunjukkan bahwa kondisi perusahaan tersebut belum optimal.

Tingkat valuasi entitas korporasi dapat ditentukan oleh beragam determinan, salah satunya ialah performa finansial yang dalam studi ini diproksikan melalui indikator profitabilitas sebagai representasi efisiensi perusahaan dalam mengelola sumber dayanya guna menghasilkan keuntungan. Menurut Purwanti, (2020), profitabilitas menunjukkan kemampuan perusahaan dalam memperoleh laba melalui pemanfaatan aset atau modal dalam jangka waktu tertentu. Berdasarkan teori sinyal, Tingkat profitabilitas yang tinggi mencerminkan prospek usaha yang menjanjikan, sehingga mendorong respon positif dari investor dalam bentuk peningkatan ketertarikan untuk menanamkan modal Bhattacharya, (1979) dalam (Sari, 2020). Hal ini juga terlihat dari peningkatan pembagian dividen yang menjadi sinyal positif tambahan bagi investor.

Studi sebelumnya seperti yang dilakukan oleh Amaliyah & Herwiyanti, (2021); Kamaliah, (2020); Kurniasari & Bernawati, (2020); Kurniati, (2019); Lusy et al., (2020); Nuryaman, (2015); Robiyanto et al., (2021) menunjukkan bahwa profitabilitas memiliki pengaruh positif dan signifikan terhadap nilai perusahaan. Temuan-temuan ini mendukung pandangan dalam teori sinyal bahwa profitabilitas merupakan indikator penting yang mencerminkan prospek keuangan perusahaan dan menjadi sinyal positif bagi investor. Namun demikian, hasil berbeda ditemukan oleh Komara et al., (2020), Yuwono & Aurelia, (2021), Yuwono & Aurelia, (2021) profitabilitas berpengaruh negatif terhadap nilai perusahaan. Temuan ini mengindikasikan bahwa peningkatan profitabilitas belum tentu mendorong persepsi positif dari investor, terutama ketika tidak disertai dengan transparansi informasi, kesinambungan kinerja, atau strategi pertumbuhan jangka panjang.

Faktor kedua adalah struktur dewan komisaris. Menurut Kurniati, (2019), semakin banyak komisaris independen, maka pengambilan keputusan akan lebih objektif, yang pada akhirnya dapat meningkatkan kinerja keuangan. Mekanisme pengawasan yang efektif dari dewan komisaris juga diharapkan mampu mendorong peningkatan harga saham. Temuan ini diperkuat oleh penelitian Kamaliah, (2020); Lusy et al., (2020); Robiyanto et al., (2021); Suhadak et al., (2019), yang mengindikasikan bahwa keberadaan komisaris independen dapat meningkatkan efek kinerja keuangan terhadap nilai perusahaan.

Namun demikian, hasil berbeda ditemukan oleh Amaliyah & Herwiyanti, (2021), yang menyatakan bahwa jumlah komisaris independen tidak selalu berdampak signifikan karena sering kali hanya dijadikan formalitas untuk memenuhi aturan. Kurniasari & Bernawati, (2020) juga menambahkan bahwa rendahnya implementasi prinsip *good corporate governance* menyebabkan lemahnya pengaruh pengawasan terhadap nilai perusahaan. Perusahaan yang hanya menerapkan GCG sebagai simbol kepatuhan, tanpa diikuti praktik nyata, cenderung gagal memberi nilai tambah yang substansial dan bahkan bisa memberikan sinyal negatif kepada pemangku kepentingan.

Terdapat perbedaan hasil dari penelitian-penelitian sebelumnya mendorong penulis untuk melakukan studi lanjutan dengan pendekatan yang diperbarui. Penelitian ini mengadaptasi studi dari Kurniati, (2019) namun memiliki perbedaan dalam hal objek penelitian, penggunaan variabel moderasi, serta periode yang dianalisis. Salah satu hal yang membedakan adalah penggunaan dewan komisaris independen sebagai variabel moderasi, yang diyakini memiliki pengaruh dalam memperkuat hubungan antara profitabilitas dan nilai perusahaan. Temuan dari studi terdahulu memperlihatkan bahwa keberadaan dewan komisaris berkontribusi dalam menciptakan tata kelola yang sehat dan akuntabel, yang pada akhirnya dapat menjaga kepercayaan investor dan pemangku kepentingan lainnya.

1.2 Literature Review

1.2.1 Teori Sinyal

Menurut Leland dan Pyle (1977) dalam Lusy et al., (2020), *Signal Theory* menjelaskan bahwa pihak manajemen yang menguasai informasi internal secara lebih menyeluruh biasanya memiliki kecenderungan untuk mengomunikasikan informasi tersebut kepada calon investor. Melalui penyampaian informasi tersebut, perusahaan berupaya memberikan sinyal positif terkait kondisi dan prospek perusahaan, salah satunya melalui laporan tahunan, dengan tujuan meningkatkan nilai perusahaan. Sejalan dengan itu, Fajaria, (2018) Menjelaskan bahwa teori sinyal menyatakan intitas dapat memberikan sinyal kepada pihak-pihak yang menggunakan laporan keuangan, termasuk investor, sebagai bentuk strategi untuk meningkatkan nilai saham.

1.2.2 Pengaruh Profitabilitas terhadap Nilai Perusahaan

Profitabilitas merupakan elemen penting dalam menjaga keberlangsungan perusahaan sebagai entitas yang layak dijadikan pilihan investasi. Menurut Nuryaman, (2015), Profitabilitas menggambarkan sejauh mana perusahaan mampu memperoleh keuntungan dengan mengoptimalkan seluruh sumber daya yang dimilikinya, seperti pendapatan dari penjualan, modal, arus kas, jumlah karyawan, hingga cakupan jaringan operasional. Fatoni, (2021) Peningkatan *Return on Equity* (ROE) mencerminkan perbaikan kinerja perusahaan dalam menarik minat investor. Nilai perusahaan yang tinggi secara konseptual berkorelasi positif dengan tingkat kesejahteraan pemegang saham. Menurut Bhattacharya (1979), tingkat profitabilitas yang tinggi berperan sebagai sinyal informatif yang menunjukkan prospek jangka panjang perusahaan yang menjanjikan, termasuk potensi peningkatan distribusi dividen kepada para pemegang saham. Pandangan ini diperkuat oleh Kurniasari & Bernawati, (2020), yang menyebutkan bahwa laba tinggi mendorong keyakinan investor untuk menanamkan modal, karena potensi imbal hasil yang lebih menjanjikan. Oleh karena itu, profitabilitas menjadi indikator kunci yang dapat meningkatkan nilai perusahaan.

H₁: Profitabilitas (*Return on Equity*) memberikan dampak positif terhadap peningkatan nilai perusahaan.

1.2.3 Dewan Komisari Memoderasi Pengaruh Profitabilitas terhadap Nilai Perusahaan.

Keberadaan komisaris independen dianggap krusial karena mereka berasal dari luar perusahaan dan mampu memberikan pengawasan yang lebih objektif (Amaliyah & Herwiyanti, 2021). Penelitian oleh Robiyanto et al., (2021) mengindikasikan bahwa implementasi tata kelola perusahaan yang optimal, melalui peran strategis komisaris independen serta komite audit, berkontribusi terhadap penguatan mekanisme pengawasan korporat, dapat membentuk mekanisme pengawasan yang kuat serta mendukung peningkatan nilai perusahaan. Kurniati, (2019) Menjelaskan bahwa meningkatnya proporsi komisaris independen dalam perusahaan dapat mendorong terciptanya keputusan yang lebih objektif, yang pada gilirannya memberikan pengaruh. Tingkat profitabilitas yang tinggi turut membangun kepercayaan dari investor maupun publik karena menunjukkan kemampuan perusahaan dalam menciptakan keuntungan. Fatoni, (2021) yang menyebutkan bahwa pelaksanaan *good corporate governance* mampu mendorong peningkatan harga saham, yang kemudian berdampak pada naiknya nilai perusahaan.

H₂: Dewan Komisaris memperkuat pengaruh profitabilitas terhadap nilai perusahaan.

2. METODOLOGI PENELITIAN

Penelitian ini menggunakan metode kuantitatif dengan pendekatan kausal komparatif untuk menguji pengaruh profitabilitas terhadap nilai perusahaan serta peran moderasi dewan komisaris independen. Studi ini menetapkan seluruh entitas manufaktur yang tercatat di Bursa Efek Indonesia (BEI) dalam rentang waktu 2020 hingga 2024 sebagai populasi penelitian. Pemilihan sampel dilakukan melalui pendekatan *purposive sampling*, yaitu metode penentuan sampel berdasarkan kriteria-kriteria tertentu yang disesuaikan dengan tujuan penelitian. Adapun kriteria pemilihan sampel ditetapkan sebagai berikut: 1) bahwa perusahaan secara berkelanjutan menerbitkan laporan tahunan dan laporan keuangan, 2) memiliki kelengkapan data sesuai kebutuhan analisis, 3) serta menunjukkan kinerja positif tanpa mencatatkan kerugian selama periode observasi. Alasan penggunaan kriteria tersebut adalah untuk memastikan konsistensi data, validitas pengukuran variabel, serta menghindari distorsi akibat nilai ekstrem atau outlier yang mungkin timbul dari perusahaan dengan kondisi keuangan tidak stabil. Selain itu, dengan hanya memilih perusahaan yang memiliki laporan keuangan lengkap dan tidak mengalami kerugian, maka analisis dapat lebih fokus dalam mengukur keterkaitan kinerja keuangan dengan nilai perusahaan dalam konteks yang sehat secara operasional. Dari 195 perusahaan, sebanyak 139 memenuhi kriteria dengan total 417 data observasi selama tiga tahun.

Variabel profitabilitas diukur menggunakan *Return on Equity* (ROE), yang menggambarkan profitabilitas dari sudut pandang pemegang saham (Kurniati, 2019). Proporsi dewan komisaris independen diukur berdasarkan persentase anggota dewan yang berasal dari luar perusahaan, yang berfungsi sebagai pengawas objektif tanpa konflik kepentingan (Suhadak et al., 2019). Sementara itu, nilai perusahaan diproksi melalui rasio Tobin's Q, yang mencerminkan penilaian pasar terhadap kinerja dan prospek perusahaan (Lusy et al., 2020). Dalam tahap analisis data, penelitian ini memanfaatkan perangkat lunak SPSS versi 25 dengan pendekatan regresi linear berganda dan pengujian moderasi. Teknik regresi linear berganda diaplikasikan untuk mengidentifikasi pengaruh baik secara bersama-sama maupun individual dari variabel bebas terhadap variabel terikat, serta untuk mengonfirmasi pemenuhan asumsi-asumsi klasik yang diperlukan dalam model analisis (Ghozali, 2018). Untuk menguji peran moderasi dari dewan komisaris independen, digunakan pendekatan *Moderated Regression Analysis* (MRA) yang mencakup interaksi antar variabel dalam model regresi (Ghozali, 2018).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 X_2 + e$$

Keterangan: Y = Nilai Perusahaan
 α = Konstanta
 X_1 = Profitabilitas
 X_2 = Dewan Komisaris (moderasi)
 β = Koefisien regresi yang akan dihitung
 e = *error tolerance*

3. HASIL DAN PEMBAHASAN

3.1 Analisis Data

Tabel.1 Analisis Statistik Deskriptif

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Profitabilitas	417	0,246	0,804	22,793	0,05466	0,146957
Nilai Perusahaan	417	0,090	25,500	716,300	1,71775	2,050159
Dewan Komisaris	417	0,250	1,670	175,870	0,42175	0,118387

Sumber: SPSS versi 25, (2025)

Berdasarkan hasil analisis statistik deskriptif pada tabel 1 terhadap 417 observasi menunjukkan bahwa profitabilitas, yang diproksikan dengan *Return on Equity* (ROE), memiliki nilai minimum sebesar 0,246 dan maksimum 0,804, dengan nilai rata-rata sebesar 0,05466 dan standar deviasi 0,146957. Nilai rata-rata yang relatif rendah mengindikasikan bahwa sebagian besar perusahaan dalam sampel hanya menghasilkan pengembalian atas ekuitas yang kecil, sementara standar deviasi yang cukup besar menunjukkan adanya variasi yang signifikan antarperusahaan dalam hal kemampuan menghasilkan laba. Untuk nilai perusahaan, yang diukur menggunakan rasio Tobin's Q, diperoleh nilai minimum sebesar 0,090 dan maksimum 25,500. Rata-rata Tobin's Q tercatat sebesar 1,71775 dengan standar deviasi sebesar 2,050159. Hal ini menunjukkan bahwa terdapat ketimpangan yang besar dalam penilaian pasar terhadap perusahaan-perusahaan dalam sampel. Beberapa perusahaan dinilai pasar dengan sangat tinggi, sedangkan sebagian lainnya memiliki valuasi yang rendah, mencerminkan disparitas persepsi pasar terhadap prospek dan kinerja perusahaan. Sementara itu, proporsi dewan komisaris independen, hasil analisis menunjukkan nilai minimum sebesar 0,250 dan maksimum 1,670, dengan rata-rata sebesar 0,42175 dan standar deviasi sebesar 0,118387. Rata-rata tersebut mengindikasikan bahwa secara umum sekitar 42% dari anggota dewan komisaris perusahaan dalam sampel berasal dari pihak independen, yang tidak memiliki hubungan kepentingan dengan manajemen perusahaan.

Tabel 2. Hasil Uji Asumsi Klasik

		Profitabilitas	Dewan Komisaris	Profitabilitas *Dewan Komisaris
Multikolinearitas	Tolerance	0,471	0,782	0,398
	VIF	2,105	1,279	2,512
Heteroskedastisitas	(Tanda)	0,152	0,214	0,420
Autokorelasi	Runs Test		0,220	
Normalitas	Kolmogorov-Smirnov		0,087	

Sumber: Data sekunder diolah SPSS 25, (2025)

Berdasarkan Tabel 2, hasil uji asumsi klasik menunjukkan bahwa model regresi telah memenuhi kriteria bebas dari multikolinearitas. Nilai tolerance untuk variabel profitabilitas sebesar 0,471, dewan komisaris sebesar 0,782, dan interaksi profitabilitas*dewan komisaris sebesar 0,398, seluruhnya berada di atas ambang batas minimum 0,10. Sementara itu, nilai *Variance Inflation Factor* (VIF) masing-masing adalah 2,105; 1,279; dan 2,512, yang semuanya berada di bawah nilai kritis 10. Dengan demikian, dapat disimpulkan bahwa tidak terdapat gejala multikolinearitas dalam model regresi ini. Menurut Ghazali, (2018), model dinyatakan bebas dari multikolinearitas jika memiliki nilai tolerance di atas 0,10 dan VIF di bawah 10.

Lebih lanjut, uji heteroskedastisitas menunjukkan bahwa seluruh variabel memiliki nilai signifikansi di atas 0,05, yaitu profitabilitas (0,152), dewan komisaris (0,214), dan interaksi (0,420), sehingga dapat disimpulkan bahwa model tidak mengalami heteroskedastisitas dan memenuhi asumsi homoskedastisitas. Uji autokorelasi menggunakan metode *Runs Test* menghasilkan nilai signifikansi sebesar 0,220 ($> 0,05$), yang menunjukkan bahwa residual tersebar secara acak dan tidak membentuk pola tertentu, sehingga tidak terjadi autokorelasi. Terakhir, hasil uji normalitas dengan metode *Kolmogorov-Smirnov* menunjukkan nilai signifikansi sebesar 0,087 ($> 0,05$), yang berarti residual berdistribusi normal (Ghozali, 2018).

Dengan demikian, seluruh asumsi klasik regresi telah terpenuhi, sehingga model layak untuk digunakan dalam pengujian lebih lanjut.

Tabel 3. Hasil Uji Hipotesis

Variabel	B	t	Sig.
(Constant)	0,920	2,343	,020
Profitabilitas	8,436	2,705	,007
Dewan Komisaris	1,442	1,567	,118
Profitabilitas *Dewan Komisaris	27,313	3,541	,000
<i>R Square</i>		0,881	
<i>Adjusted R Square</i>		0,810	
F-Hitung		13,286	
Sig-F		0,000	

Sumber: Data sekunder diolah SPSS 25, (2025)

Tabel 3 menyajikan hasil estimasi model yang menunjukkan nilai *Adjusted R Square* sebesar 0,810. Angka ini merefleksikan bahwa sebesar 81,0% fluktuasi dalam nilai perusahaan dapat dijelaskan oleh kontribusi variabel profitabilitas dan dewan komisaris sebagai moderator. Sementara itu, sisanya sebesar 19,0% dijelaskan oleh variabel lain di luar model yang tidak dimasukkan dalam penelitian ini. Nilai F hitung sebesar 13,286 dengan tingkat probabilitas 0,000, yang berada di bawah ambang signifikansi 0,05, mengonfirmasi bahwa keseluruhan variabel bebas termasuk interaksi antara variabel independen dan moderasi berpengaruh secara signifikan terhadap variabel dependen. Oleh karena itu, model regresi yang dibangun dalam studi ini dinilai sahih secara statistik dan memiliki kemampuan penjelas yang memadai terhadap hubungan antarvariabel. Berdasarkan hasil tersebut, dapat disusun bentuk persamaan regresi moderasi sebagaimana ditampilkan dalam Tabel 3.

$$Y = 0,920 + 8,436 (\text{ROE}) + 1,442 (\text{DK}) + 27,313 (\text{ROE} \cdot \text{DK}) + e$$

Hasil ini menunjukkan bahwa konstanta sebesar 0,920 mengindikasikan nilai perusahaan ketika seluruh variabel independen bernilai nol. Koefisien ROE sebesar 8,436 mengimplikasikan bahwa setiap peningkatan satu satuan dalam profitabilitas akan meningkatkan nilai perusahaan sebesar 8,436 satuan, dengan asumsi variabel lainnya konstan. Selain itu, persentase dewan komisaris independen juga berkontribusi secara positif, di mana setiap kenaikan satu satuan pada variabel DK akan berdampak pada peningkatan nilai perusahaan sebesar 1,442. Salah satu temuan paling signifikan dari hasil regresi adalah nilai koefisien interaksi antara ROE dan dewan komisaris independen sebesar 27,313.

3.2 Pembahasan

Temuan empiris dalam penelitian ini menunjukkan bahwa profitabilitas berkontribusi secara positif dan signifikan terhadap peningkatan nilai perusahaan. Hal tersebut tercermin dari estimasi koefisien regresi sebesar 8,436 dengan nilai probabilitas 0,007, yang berada di bawah tingkat signifikansi 0,05. Oleh karena itu, hipotesis pertama (H1) dinyatakan dapat diterima secara statistik. Hasil ini mengindikasikan bahwa semakin tinggi *Return on Equity* (ROE) yang dicapai suatu entitas, maka semakin besar pula kemampuan perusahaan dalam menghasilkan keuntungan, yang pada gilirannya berdampak positif terhadap pertumbuhan nilai perusahaan. Tingkat profitabilitas yang tinggi menjadi indikator yang menjanjikan bagi investor karena mencerminkan peluang pengembalian investasi yang lebih menguntungkan. Dengan demikian, perusahaan yang memiliki ROE tinggi cenderung lebih diminati oleh

investor. Dalam konteks *Signaling Theory*, profitabilitas yang tinggi berperan sebagai sinyal positif yang mencerminkan prospek bisnis yang cerah serta stabilitas kinerja keuangan perusahaan. Sinyal ini ditangkap pasar sebagai indikasi manajemen yang berkinerja baik, sehingga memengaruhi preferensi investor dalam pengambilan keputusan investasi. Sejumlah peneliti seperti Amaliyah & Herwiyanti, (2021); Kamaliah, (2020); Kurniasari & Bernawati, (2020); Kurniati, (2019); Lusy et al., (2020); Nuryaman, (2015); Robiyanto et al., (2021), yang pada umumnya menyatakan bahwa profitabilitas berpengaruh signifikan terhadap peningkatan nilai perusahaan.

Hasil penelitian ini memberikan bukti bahwa keberadaan dewan komisaris independen berperan sebagai variabel moderasi dalam menjembatani hubungan antara profitabilitas dan nilai perusahaan. Hal tersebut didukung oleh nilai koefisien interaksi sebesar 27,313 yang menunjukkan arah positif, serta tingkat signifikansi 0,000 yang berada di bawah ambang kritis 0,05. Berdasarkan hasil tersebut, hipotesis kedua (H2) dapat diterima secara empiris dan dinyatakan signifikan secara statistik. Temuan ini menunjukkan bahwa dewan komisaris independen yang berperan secara aktif dapat memperkuat efektivitas tata kelola perusahaan, terutama dalam memaksimalkan hasil dari kinerja keuangan yang positif. Profitabilitas yang tinggi memberikan potensi laba yang lebih besar kepada pemegang saham dan menjadi sinyal positif bagi investor mengenai kestabilan profitabilitas dan kapabilitas manajerial perusahaan. Fungsi pengawasan yang dijalankan oleh dewan komisaris turut meningkatkan efektivitas pengelolaan, yang pada akhirnya berdampak pada kenaikan harga saham dan peningkatan nilai perusahaan secara menyeluruh.

Dalam konteks signaling theory, fungsi moderasi dewan komisaris independen memperkuat kredibilitas sinyal profitabilitas yang dikirimkan ke pasar. Tanpa pengawasan yang independen, informasi laba yang tinggi bisa saja diragukan oleh investor karena berpotensi mengandung bias atau rekayasa manajerial. Namun, jika perusahaan memiliki struktur pengawasan yang kuat dan independen, maka informasi keuangan, termasuk profitabilitas, akan lebih dipercaya sebagai sinyal yang valid oleh pasar. Hal ini pada akhirnya meningkatkan kepercayaan investor dan memperbesar pengaruh profitabilitas terhadap nilai perusahaan. Hasil ini selaras dengan penelitian sebelumnya oleh Kamaliah, (2020); Lusy et al., (2020); Robiyanto et al., (2021); Suhadak et al., (2019), yang menunjukkan bahwa keberadaan komisaris independen dapat memperkuat pengaruh profitabilitas terhadap peningkatan nilai perusahaan.

4. KESIMPULAN DAN SARAN

4.1 Kesimpulan

Berdasarkan hasil analisis, *Return on Equity* (ROE) yang diposisikan sebagai indikator kinerja finansial, terbukti memiliki kontribusi positif dan signifikan terhadap eskalasi nilai perusahaan. Selain itu, dewan komisaris independen terbukti memperkuat hubungan tersebut. Artinya, perusahaan dengan profitabilitas tinggi dan didukung oleh pengawasan tata kelola yang baik cenderung memiliki nilai lebih tinggi di mata investor. Secara teori, temuan ini sejalan dengan *Signaling Theory*, di mana profitabilitas menjadi sinyal positif bagi investor, yang semakin kuat jika diawasi oleh dewan komisaris independen secara objektif. Secara empiris, penelitian ini memperkaya kajian keuangan dengan membuktikan bahwa dewan komisaris independen berperan sebagai moderator dalam hubungan antara profitabilitas dan nilai perusahaan, khususnya pada sektor manufaktur di Indonesia. Dari sisi ekonomi, hasil ini menekankan pentingnya peningkatan profitabilitas dan penguatan mekanisme pengawasan internal dalam menarik investor dan menjaga kepercayaan pasar, yang secara tidak langsung juga mendorong pertumbuhan ekonomi melalui aktivitas investasi. Penelitian mendatang

disarankan untuk menambahkan variabel lain, seperti ukuran perusahaan, struktur kepemilikan, atau faktor makroekonomi, serta memperpanjang periode penelitian guna melihat dampak jangka panjang. Bagi pembaca dan investor, temuan ini menunjukkan bahwa profitabilitas tinggi dan tata kelola yang baik merupakan indikator penting dalam menilai potensi investasi perusahaan.

4.2 Keterbatasan dan Saran

Studi ini mengandung beberapa keterbatasan metodologis yang perlu diperhatikan. Salah satunya adalah ketergantungan pada kualitas dan keterbukaan informasi yang tercantum dalam laporan keuangan tahunan yang dipublikasikan oleh Bursa Efek Indonesia. Meskipun data yang digunakan merupakan data sekunder resmi, tingkat akurasi dan transparansi yang berbeda-beda antar perusahaan berpotensi memengaruhi validitas hasil penelitian. Apabila terdapat penyajian data yang tidak lengkap atau indikasi manipulasi, maka interpretasi atas temuan dapat menjadi bias. Oleh karena itu, penelitian selanjutnya disarankan untuk mengombinasikan data sekunder dengan metode kualitatif, seperti wawancara manajerial atau analisis laporan keberlanjutan, guna memperoleh pemahaman yang lebih mendalam dan akurat.

Kedua, pendekatan kuantitatif yang digunakan belum mempertimbangkan aspek kualitatif seperti reputasi manajemen, citra perusahaan, atau kebijakan strategis internal, yang juga dapat memberikan pengaruh signifikan terhadap nilai perusahaan namun sulit diukur secara numerik. Ketiga, periode penelitian yang terbatas pada tahun 2020 hingga 2024 mencakup masa pemulihan pasca pandemi COVID-19 dan ketidakstabilan kondisi ekonomi global, sehingga hasil temuan dalam studi ini berpotensi dipengaruhi oleh faktor eksternal yang tidak dimasukkan secara eksplisit ke dalam model penelitian. Dengan demikian, penelitian di masa mendatang sebaiknya memperluas cakupan waktu ke periode sebelum dan sesudah pandemi serta mempertimbangkan variabel eksternal seperti kondisi makroekonomi, struktur kepemilikan, dan kebijakan industri, untuk memperoleh hasil yang lebih general dan relevan secara jangka panjang.

5. REFERENSI

- Amaliyah, F., & Herwiyanti, E. (2021). The Determinants of Firm Value and Financial Performance in Islamic Stocks. *Equilibrium: Jurnal Ekonomi Syariah*, 9(1), 1. <https://doi.org/10.21043/equilibrium.v9i1.9307>
- Fajaria, A. Z., & Isnalita. (2018). The Effect of Profitability, Liquidity, Leverage and Firm Growth of Firm Value with its Dividend Policy as a Moderating Variable. *International Journal of Managerial Studies and Research*, 6(10), 55–69. <https://doi.org/10.20431/2349-0349.0610005>
- Fatoni, H. A. (2021). Pengaruh Profitabilitas Terhadap Nilai Perusahaan Dengan Good Corporate Governance (Gcg) Sebagai Variabel Moderasi. *Sistem Informasi, Keuangan, Auditing Dan Perpajakan*, 5(2), 137–143.
- Ghozali, I. (2018). *Multivariate Analysis Application With IBM SPSS 25 Program*. Badan Penerbit Universitas Diponegoro.
- Kamaliah. (2020). Disclosure of corporate social responsibility (CSR) and its implications on company value as a result of the impact of corporate governance and profitability. *International Journal of Law and Management*, 62(4), 339–354. <https://doi.org/10.1108/IJLMA-08-2017-0197>
- Komara, A., Ghozali, I., & Januarti, I. (2020). Examining the Firm Value Based on Signaling

Theory. *1st International Conference on Accounting, Management and Entrepreneurship (ICAMER 2019)*, 123(Icamer 2019), 1–4.
<https://doi.org/10.2991/aebmr.k.200305.001>

- Kurniasari, K., & Bernawati, Y. (2020). Corporate social responsibility disclosure and good corporate governance toward firm value with profitability as intervening variable. *International Journal of Innovation, Creativity and Change*, 13(4), 869–888.
- Kurniati, S. (2019). Stock returns and financial performance as mediation variables in the influence of good corporate governance on corporate value. *Corporate Governance (Bingley)*, 19(6), 1289–1309. <https://doi.org/10.1108/CG-10-2018-0308>
- Lusy, Budiyanto, & Riduwan, A. (2020). Financial Performance And Value Of SOEs: Seen From Good Corporate Governance, Intellectual Capital, And Corporate Social Responsibility. *International Journal of Economics and Management Studies*, 7(1), 9–17. <https://doi.org/10.14445/23939125/ijems-v7i1p102>
- Nuryaman. (2015). The Influence of Intellectual Capital on The Firm's Value with The Financial Performance as Intervening Variable. *Procedia - Social and Behavioral Sciences*, 211(September), 292–298. <https://doi.org/10.1016/j.sbspro.2015.11.037>
- Purwanti, T. (2020). The Effect of Profitability, Capital Structure, Company Size, and Dividend Policy on Company Value on the Indonesia Stock Exchange. *International Journal of Seocology*, 01(02), 060–066. <https://doi.org/10.29040/seocology.v1i02.9>
- Robiyanto, R., Putra, A. R., & Lako, A. (2021). The effect of corporate governance and intellectual capital toward financial performance and firm value of socially responsible firms. *Contaduria y Administracion*, 66(1), 1–24.
<https://doi.org/10.22201/fca.24488410e.2021.2489>
- Sari, I. A. G. D. M. (2020). Profitability and liquidity on firm value and capital structure as intervening variable. *International Research Journal of Management, IT and Social Sciences*, 7(1), 116–127. <https://doi.org/10.21744/irjmis.v7n1.828>
- Suhadak, Kurniaty, Handayani, S. R., & Rahayu, S. M. (2019). Stock return and financial performance as moderation variable in influence of good corporate governance towards corporate value. *Asian Journal of Accounting Research*, 4(1), 18–34.
<https://doi.org/10.1108/AJAR-07-2018-0021>
- Yuwono, W., & Aurelia, D. (2021). The Effect of Profitability, Leverage, Institutional Ownership, Managerial Ownership, and Dividend Policy on Firm Value. *Journal of Global Business and Management Review*, 3(1), 15.
<https://doi.org/10.37253/jgbmr.v3i1.4992>

PERKEMBANGAN PENELITIAN KUALITAS AUDIT DI INDONESIA

Widya Septi Faradilla^{1*}

Universitas Sebelas Maret

widyaseptifaradilla@gmail.com

Doddy Setiawan²

Universitas Sebelas Maret

doddy.setiawan@staff.uns.ac.id

(*Corresponding Author)

Diterima 24 Februari 2025

Disetujui 28 Juni 2025

Abstract— *In the current competitive global landscape, the demand for transparency and accountability in financial reporting has significantly increased. Investors require accurate and reliable information to make well-informed decisions, while regulatory authorities have heightened oversight by enforcing stricter regulations and penalties for non-compliance. This environment calls for robust financial reporting systems and independent audits to maintain high standards of financial disclosure. High-quality audits are essential for maintaining stakeholder trust. However, the prevalence of fraud cases in Indonesia raises concerns about the effectiveness of current audit practices and the ability of auditors to detect and prevent fraud. As a result, the importance of audit quality has garnered increased attention from researchers. This study examines the trends in audit quality research in Indonesia as published in SINTA 2 journals from 2015 to 2024. The research employs the Charting the Field method, examining 108 articles categorized by topic and research method. The results reveal that the determinants of audit quality most frequently examined are independence, audit rotation, audit tenure, audit fees, and competence. In contrast, the most commonly investigated consequential variable is earnings management.*

Keywords: *Audit Quality; Literature Review; Charting the Field; Review and Mapping; Research Trends*

1. PENDAHULUAN

1.1 Latar Belakang

Di era globalisasi yang semakin kompetitif, tuntutan akan penyajian laporan keuangan yang transparan dan akuntabel semakin meningkat. Kualitas informasi yang dihasilkan perusahaan menjadi dasar *stakeholder* dalam mengambil keputusan. Untuk menjamin kualitas informasi tersebut, perusahaan membutuhkan pengawasan yang objektif dari pihak eksternal (Atmojo & Sukirman, 2019). Auditor, sebagai pihak profesional, dipandang sebagai pihak yang paling tepat untuk menjalankan fungsi pengawasan ini (Sari dkk, 2019). Berdasarkan Standar Audit Seksi 110, auditor sebagai pihak independen, memiliki tanggung jawab untuk memberikan keyakinan memadai mengenai kewajaran laporan keuangan. Selain itu, auditor juga memiliki tanggung jawab untuk menghasilkan audit yang berkualitas dengan memastikan bahwa laporan keuangan sesuai dengan standar.

Kualitas audit menjadi penting karena menjadikan informasi keuangan lebih *reliable* dalam pengambilan keputusan. Kualitas audit yang seharusnya menjadi pondasi *stakeholder*

dalam pengambilan keputusan justru ternodai oleh banyaknya kasus *fraud* yang terjadi. Hal ini menimbulkan keraguan di kalangan masyarakat mengenai kinerja auditor dan kebenaran suatu laporan keuangan yang disajikan. Di Indonesia sendiri, banyak terjadi kasus *fraud* yang melibatkan berbagai sektor perusahaan, seperti PT Garuda Indonesia Tbk (2018) karena kasus pengakuan pendapatan, PT Asuransi Jiwasraya (2018) karena kasus penyalahgunaan investasi, PT. Adisarana Wanaartha Life Insurance (2019) karena kasus manipulasi dengan tidak melaporkan adanya peningkatan produksi produk asuransinya, PT Hanson Internasional Tbk (2019) karena kasus manipulasi penjualan tanah siap bangun, dan PT Tiga Pilar Sejahtera Food Tbk (2020) karena kasus penggelembungan labanya (Handayani & Khairunnisa, 2024). Bahkan perusahaan yang diaudit oleh Big 4, seperti PT Bank Bukopin Tbk (2017) oleh KAP yang berafiliasi dengan EY dan PT Sunprima Nusantara Financing (2018) oleh KAP yang berafiliasi dengan Deloitte juga melakukan *fraud*. Banyaknya kasus yang terjadi, menunjukkan bahwa pengawasan terhadap *fraud* di Indonesia masih belum optimal.

Sebagai respon atas maraknya kasus tersebut, Menteri Keuangan mengambil langkah tegas dengan mengeluarkan sanksi, baik kepada perusahaan yang terlibat maupun auditor atau KAP yang bersangkutan. Berdasarkan hasil putusan Otoritas Jasa Keuangan (2019), pada kasus Garuda, AP Kasner Sirumapea dikenakan sanksi satu tahun pembekuan izin dan KAP Tanubrata, Sutanto, Fahmi, Bambang & Rekan yang berafiliasi dengan BDO diminta untuk memperbaiki Sistem Pengendalian Mutu, sementara untuk pihak Garuda sendiri dikenakan denda 100 juta untuk seluruh direksi dan komisaris yang menandatangani persetujuan keaslian laporan keuangan. Pada kasus PT. Adisarana Wanaartha Life Insurance, PT Adisarana sendiri dikenakan sanksi berupa pencabutan izin usaha dan KAP Kosasih, Nurdjaman, Mulyadi, Tjahjo & Partner yang berafiliasi dengan Crowe diberi sanksi berupa pembatalan tanda terdaftar di OJK (Otoritas Jasa Keuangan, 2022).

Penelitian mengenai kualitas audit di Indonesia terus menunjukkan adanya peningkatan. Hal ini terlihat dari adanya penelitian mengenai konsekuensi kualitas audit, seperti dampaknya terhadap persyaratan agunan pinjaman (Butar-Butar, 2020), *income smoothing* (Trisanti, 2019; Purwanti & Nugrahanti, 2017), *earning management* (Thamlim & Mulyani, 2023; Kusumawati, 2019; Wahyono dkk, 2019), *tax avoidance* (Tiara dkk, 2023; Maraya & Yendrawati, 2016; Saputra dkk, 2015), *tax aggressiveness* (Alkausar dkk, 2021), *accounting misstatement* (Adiwibowo & Nurmala, 2023), pengungkapan anti korupsi (Hartomo & Silvia, 2019), *accounting conservatism* (Achyani dkk, 2022), dan *cost of equity* (Ulhaq dkk, 2021; Wiyadi dkk, 2017). Selain itu, terdapat penelitian yang membahas determinan dari kualitas audit, seperti rotasi audit, *tenure* dan spesialisasi audit (Fitriany dkk, 2016; Aqmarina & Yendrawati, 2019; Sari dkk, 2019), *audit fee*, *competence*, *independence*, *auditor ethics*, and *time budget pressure* (Meidawati & Assidiqi, 2019), dan *political connection* (Armadiyanti & Iswati, 2019). Berdasarkan hal tersebut, peneliti termotivasi untuk menggali lebih dalam terkait perkembangan penelitian kualitas audit di Indonesia, mengingat pentingnya isu ini dalam menjaga integritas laporan keuangan.

Penelitian mengenai perkembangan kualitas audit secara global telah dilakukan oleh Ciger (2020) melalui *bibliometric analysis*. *Gap* yang peneliti temukan dari penelitian Ciger (2020) adalah pada ruang lingkup dan kedalaman analisis yang dilakukan. Pertama, penelitian Ciger (2020) membatasi pengelompokan hanya pada dimensi jumlah sitasi, penulis, serta kolaborasi antar penulis dan negara. Penelitian ini memperluas cakupan dengan mengelompokkan aspek lain, seperti variabel yang diteliti (anteseden, konsekuensi, dan lainnya), populasi, pengukuran atau proksi, sumber data, serta teori yang digunakan, sehingga diharapkan mampu memetakan tren penelitian secara lebih komprehensif. Kedua, penelitian Ciger memanfaatkan database jurnal internasional terindeks Scopus dengan periode panjang

(1981–2020). Sementara itu, penelitian ini menggunakan artikel yang dipublikasikan dalam jurnal nasional terakreditasi SINTA 2 dengan periode 10 tahun, yaitu 2015–2024. Fokus pada SINTA 2 dipilih karena jumlah jurnal akuntansi SINTA 1 masih terbatas dan dinilai belum cukup merepresentasikan keberagaman topik serta metodologi penelitian di Indonesia. Adapun pembatasan periode 10 tahun terakhir bertujuan agar hasil pemetaan mencerminkan tren dan perkembangan penelitian yang lebih relevan dengan kondisi saat ini.

1.2 Telaah Literatur

Jensen dan Meckling (1976) mendefinisikan hubungan keagenan sebagai hubungan kontraktual antara prinsipal dan agen, dimana agen diberi wewenang untuk bertindak dan mengambil keputusan atas nama dan kepentingan prinsipal. Namun, dalam praktiknya, kepentingan kedua belah pihak seringkali tidak sejalan (Ananda dkk., 2021). Perbedaan kepentingan ini menimbulkan masalah keagenan. Masalah keagenan yang timbul akan memicu adanya biaya agensi. Jensen dan Meckling (1976) membagi biaya agensi ke dalam tiga jenis, yaitu biaya *monitoring* yang dikeluarkan prinsipal untuk mengawasi agar tindakan agen tetap sejalan dengan kepentingannya; biaya *bonding* yang dikeluarkan agen untuk meyakinkan prinsipal bahwa ia tidak akan bertindak merugikan; serta *residual loss*, yaitu kerugian yang tetap muncul meskipun telah dilakukan *monitoring* dan *bonding*. Melalui biaya *monitoring*, prinsipal menunjuk auditor eksternal untuk menjalankan fungsi pengawasan guna memastikan keandalan laporan keuangan (Asiriuwa dkk., 2018).

Secara umum, audit merupakan proses pemberian opini mengenai kewajaran dalam penyajian laporan keuangan oleh auditor independen (Lisa dkk, 2023). Adapun kualitas audit dapat didefinisikan dalam beberapa cara, yaitu berdasarkan atribut auditor itu sendiri, berdasarkan tujuan atau tanggung jawab auditor saat melakukan proses audit, dan berdasarkan pandangan struktural mengenai lingkungan audit yang berkualitas. Pertama, berdasarkan atribut auditor, kualitas audit mengacu pada sejauh mana audit mampu mendeteksi dan melaporkan kesalahan material dalam laporan keuangan (Arens dkk, 2010). Hal ini mencerminkan perlunya kompetensi auditor dalam menemukan kesalahan dan kebutuhan akan objektivitas, profesionalisme, dan independensi auditor dalam pelaporan kesalahan. Kedua, berdasarkan tujuan atau tanggung jawab auditor, audit dikatakan berkualitas jika patuh terhadap standar audit. Kualitas audit yang rendah terjadi ketika terdapat penyimpangan yang bersifat material dari standar audit yang ada, sehingga diperlukan keahlian khusus untuk mendeteksi kesalahan dalam laporan keuangan (Ningtyas & Aris, 2018). Ketiga, berdasarkan pandangan struktural mengenai lingkungan audit yang berkualitas. Terdapat enam tingkatan audit, yaitu *input* audit, proses audit, KAP, industri dan pasar audit, lembaga, dan konsekuensi ekonomi dari hasil audit. Evaluasi kualitas audit dilakukan secara multidimensi sehingga diperlukan sistem kualitas audit yang seimbang dan komprehensif untuk memenuhi kebutuhan berbagai pemangku kepentingan di setiap tingkatan (Taqi dkk., 2021).

Banyaknya kasus *fraud* akibat lemahnya kualitas audit mendorong para peneliti mempelajari lebih dalam mengenai topik ini. Hal ini terlihat dengan meningkatnya penelitian di bidang kualitas audit, baik secara nasional maupun internasional. Penelitian yang dilakukan oleh Taqi dkk. (2021) mengidentifikasi faktor yang menjadi determinan dan konsekuensi dari kualitas audit. Determinan kualitas audit sendiri meliputi besar kecilnya perusahaan audit, spesialisasi industri audit, *tenure* audit, dan rotasi audit. Sementara itu, sebagai konsekuensi, kualitas audit dapat berdampak pada meningkatnya biaya audit, reputasi auditor, nilai perusahaan, dan menurunkan risiko litigasi.

2. METODOLOGI DAN ANALISIS DATA

Metode yang digunakan dalam penelitian ini adalah *Charting the Field*, yaitu dengan mengumpulkan artikel terkait kualitas audit dan mengelompokkannya berdasarkan topik dan metodologi yang digunakan. Penelitian sebelumnya yang menggunakan metode ini, antara lain *Audit Quality: A Bibliometric Analysis* (1981-2020) oleh Ciger (2020) dan *Audit Quality Research : A Bibliometric Analysis* oleh Taqi dkk (2021).

Peneliti menggunakan artikel dari jurnal terakreditasi SINTA 2 tahun 2015-2024. Jurnal SINTA 2 dipilih karena cukup representatif menggambarkan tren penelitian kualitas audit di Indonesia. Adapun pembatasan periode sepuluh tahun terakhir bertujuan agar hasil pemetaan mencerminkan tren dan perkembangan penelitian yang lebih relevan dengan kondisi saat ini.

Proses pengelompokan artikel dengan metode *Charting the Field* dilakukan melalui beberapa tahapan berikut: (1) tahap identifikasi jurnal dan artikel melalui portal <https://sinta.kemdikbud.go.id/> dengan menggunakan keyword “Akuntansi”, “Accounting”, “Audit”, “Auditing”, “Ekonomi”, “Economic”, “Bisnis”, “Business”, “Keuangan”, dan “Finance” untuk memastikan cakupan jurnal yang relevan di bidang akuntansi dan auditing. (2) tahap *screening* artikel dengan pencarian topik spesifik menggunakan kata kunci “Kualitas Audit” dan “Audit Quality” pada laman jurnal terpilih. Artikel yang memenuhi kriteria, yaitu terbit di jurnal SINTA 2 dan berada pada periode 2015–2024, diunduh dan dimasukkan ke dalam dataset. (3) tahap *charting*, yaitu mengelompokkan artikel ke dalam kategori yang telah ditentukan, seperti jumlah sitasi, jenis variabel (anteseden, konsekuensi, lainnya), metode penelitian, populasi dan teori yang digunakan.

Berdasarkan pencarian tersebut, peneliti menemukan 34 jurnal yang relevan dengan topik kualitas audit. Dari jurnal tersebut diperoleh 108 artikel yang akan dikelompokkan berdasarkan kategori yang telah ditentukan. Pengelompokan ini bertujuan untuk memetakan penelitian yang telah dilakukan dan mengidentifikasi area penelitian yang masih perlu dikembangkan.

3. HASIL DAN PEMBAHASAN

Kualitas audit merujuk pada tingkat keberhasilan suatu audit dalam mengidentifikasi dan mengungkapkan kesalahan material dalam laporan keuangan. Semakin berkualitas audit yang dihasilkan, maka informasi yang dihasilkan semakin andal dalam pengambilan keputusan. Peneliti melakukan analisis terhadap perkembangan penelitian kualitas audit pada jurnal terakreditasi SINTA 2 selama 10 tahun, yaitu 2015-2024. Selama periode tersebut, jumlah penelitian berfluktuatif dengan peningkatan terjadi pada tahun 2015-2019. Namun, pada tahun 2020-2024, terjadi variasi signifikan dalam jumlah penelitian. Jumlah tertinggi terlihat pada tahun 2021 dengan total 24 artikel, diikuti tahun 2023 dengan total 19 artikel dan tahun 2019 dengan total 17. Temuan ini menunjukkan bahwa topik kualitas audit masih relevan untuk dikaji, meskipun tingkat perhatian terhadap topik ini cenderung beragam.



Gambar 1 Perkembangan Penelitian Kualitas Audit di Indonesia

3.1 Pengelompokan Berdasarkan Jumlah Sampel dan Sitasi

Tabel 1 Jumlah Sampel dan Sitasi

Jurnal	Artikel	Jumlah Artikel	Rata-Rata Sampel	Jumlah Sitasi	Rata-Rata Sitasi
JAK	(Butar-Butar, 2020)	3	595	95	32
	(Trisanti, 2019)				
	(Fitriany dkk, 2016)				
JAAI	(Utama & Anridho, 2024)	9	307	672	75
	(Karina, 2021)				
	(Bahtiar dkk, 2021)				
	(Meidawati & Assidiqi, 2019)				
	(Aqmarina & Yendrawati, 2019)				
	(Maraya & Yendrawati, 2016)				
	(Utami & Diyanty, 2015)				
	(Saputra dkk, 2015)				
	(Sandy & Lukviarman, 2015)				
JRAK - Keuangan	(Rasuli dkk, 2024)	4	78	13	3
	(Lisa dkk, 2023)				
	(Saraswati & Puteri, 2023)				
	(Alkausar dkk, 2021)				
JAKI	(Armadiyanti & Iswati, 2019)	1	1213	12	12
JAMAL	(Yefni & Sari, 2021)	1	-	17	17
JKA	(Adiwibowo & Nurmala, 2023)	2	574	8	4
	(Hartomo & Silvia, 2019)				
REAKSI	(Sambuaga & Herusetya, 2022)	12	209	402	34
	(Suwarno dkk, 2021)				
	(Achyani dkk, 2022)				
	(Ulhaq dkk, 2021)				
	(Nursiam dkk, 2021)				
	(Suwarno dkk, 2020)				
	(Kusumawati, 2019)				
	(Wahyono dkk, 2019)				
	(Sari dkk, 2019)				
	(Andriani & Nursiam, 2018)				
	(Wiyadi dkk, 2017)				
	(Ningtyas & Aris, 2018)				
ASET	(Indiarti & Widiatmoko, 2023)	4	148	7	2
	(Mappanyuki dkk, 2023)				
	(Deliana dkk, 2023)				
	(Christy dkk, 2021)				
JEMA	(Adhikara & Widodo, 2023)	1	123	0	0
ASSETS	(Bawono dkk, 2021)	1	124	3	3
JAB	(Karyadi & Slamet, 2022)	7	402	72	10
	(Nugrahanti & Nugroho, 2022)				
	(Hartoko & Astuti, 2021)				
	(Jannah & Harymawan, 2021)				
	(Novia dkk, 2021)				

Jurnal	Artikel	Jumlah Artikel	Rata-Rata Sampel	Jumlah Sitasi	Rata-Rata Sitasi
JDA	(Prabowo dkk, 2020)	4	507	22	6
	(Achmad, 2019)				
	(Liemmmuel & Eriandani, 2022)				
	(Sukirman & Asih, 2021)				
	(Nono & Khomsatun, 2018)				
MRAAI	(Purwanti & Nugrahanti, 2017)	6	237	233	39
	(Thamlim & Mulyani, 2023)				
	(Astuti dkk, 2022)				
	(Wardani & Putriane, 2020)				
	(Astuti & Pangestu, 2019)				
AKRUAL	(Lestari & Murtanto, 2018)	1	43	2	2
	(Tussiana & Lastanti, 2018)				
	(Biduri dkk, 2021)				
	(Handayani & Khairunnisa, 2024)				
	(Tjan dkk, 2024)				
e-JA	(Akbar dkk, 2022)	11	88	212	19
	(Sutisman dkk, 2022)				
	(Widodo & Fanani, 2020)				
	(Sukma & Bernawati, 2019)				
	(Hajering dkk, 2019)				
JIAB	(Monoarfa & Dama, 2018)	1	79	2	2
	(Idawati, 2018)				
	(Djanegara, 2017)				
	(Sihombing dkk, 2017)				
	(Sari & Fakhriyyah, 2024)				
JDAB	(Ananda & Faisal, 2023)	2	463	32	16
	(Hidayatullah & Sulhani, 2018)				
	(Karina & Kusumawardhani, 2023)				
	(Yanthi dkk, 2021)				
	(Kartika dkk, 2021)				
JRAK - Kontemporer		3	22	46	15
IJSAM	(Hermawan dkk, 2021)	1	65	15	15
JABE	(Nugrahanti & Pratiwi, 2023)	1	122	54	54
AAJ	(Ardillah & Vesakhadevi, 2021)	5	863	64	13
	(Budindru, 2021)				
	(Srikandhi & Suryandari, 2020)				
	(Atmojo & Sukirman, 2019)				
	(Kurniasih & Kiswanto, 2019)				
TIAR	(Fawziah dkk, 2023)	2	25	50	25
	(Priyanti & Dewi, 2019)				
JAI	(Yulianti dkk, 2024)	3	135	52	17
	(Reskino & Darma, 2023)				
	(Amalia dkk, 2019)				
JASF	(Farida & Sugesti, 2023)	2	95	31	16
	(Kartika & Pramuka, 2019)				
IJAR	(Sambuaga dkk, 2021)	2	217	34	17
	(Kristanti & Almilia, 2019)				
AFRE	(Tiara dkk, 2023)	1	-	0	0
JIAFR	(Aisyah dkk, 2023)	2	66	8	4
	(Ridloi, 2021)				
JKP	(Handoyo & Agustianingrum, 2017)	2	250	35	18
	(Widyasari dkk, 2017)				
EKUITAS	(Ikhsan dkk, 2023)	5	955	93	19
	(Ananda dkk, 2022)				

Jurnal	Artikel	Jumlah Artikel	Rata-Rata Sampel	Jumlah Sitasi	Rata-Rata Sitasi
JEM	(Endiana & Suryandari, 2021),	2	505	5	3
	(Diyanty dkk, 2018)				
	(Hariyanto & Suhardianto, 2018)				
	(Sihono & Munandar, 2023)				
JSB	(Puspa dkk, 2021)	1	120	13	13
	(Rawi & Muchlish, 2022)				
JEBAV	(Harianto, 2022)	4	933	69	17
	(Sitorus dkk, 2020)				
	(Prabowo & Suhartini, 2021)				
	(Winoto & Harindahyani, 2021)				
IJBE - Entrepreneurship	(Eriandani dkk, 2024)	1	198	0	0
IJBE - Economics	(Juliardi & Erisco, 2023)	1	52	0	0
Total		108	293	2373	22

Tabel 1 menyajikan informasi mengenai jumlah sampel dan sitasi dari setiap jurnal SINTA 2 per 11 November 2024. Jurnal dengan rata-rata sampel tertinggi adalah JAKI dengan 1.213 sampel, diikuti oleh EKUITAS dengan 955 sampel dan JEBAV dengan 933 sampel. Artikel dengan jumlah sampel tertinggi ditemukan pada JEBAV dengan 2.600 sampel, diikuti artikel pada EKUITAS dengan 1.902 sampel dan JAAI dengan 1.749. Sedangkan, sampel terendah terdapat pada artikel di jurnal ASET dengan 30 sampel dan JIAFR dengan 31 sampel. Beberapa artikel tidak mencantumkan jumlah sampel sehingga data tersebut kosong, seperti salah satu artikel pada JAAI, JAMAL, e-JA, dan AFRE. Secara keseluruhan, rata-rata jumlah sampel adalah 29.

Terkait jumlah sitasi, ditemukan rata-rata sitasi tertinggi pada artikel JAAI sebesar 75, diikuti oleh JABE dengan rata-rata sitasi sejumlah 54, dan MRAAI sejumlah 39. Temuan ini menunjukkan bahwa artikel yang diterbitkan pada jurnal tersebut cenderung menjadi rujukan penting dalam penelitian kualitas audit di Indonesia. Sementara itu, rata-rata sitasi terendah, yakni sebesar 0, ditemukan pada artikel pada jurnal JEMA, IJBE, AFRE, dan JEM yang sebagian besar merupakan artikel baru yang diterbitkan pada periode 2023–2024. Berdasarkan hasil tersebut, terlihat bahwa rata-rata sitasi artikel dengan topik kualitas audit di Indonesia cukup tinggi. Secara keseluruhan, rata-rata sitasi artikel pada jurnal SINTA 2 sebesar 22, yang menunjukkan tingkat perhatian yang baik terhadap isu kualitas audit di Indonesia.

3.2 Pengelompokan Berdasarkan Topik Pembahasan

Pengelompokan sampel dalam penelitian dibagi menjadi anteseden, konsekuensi, dan kategori lainnya. Kelompok anteseden mencakup faktor-faktor yang memengaruhi terciptanya kualitas audit, sedangkan konsekuensi mencakup dampak yang dihasilkan dari kualitas audit tersebut. Sementara itu, kategori lainnya mencakup artikel yang membahas topik kualitas audit dengan pendekatan yang tidak termasuk dalam dua kategori utama sebelumnya.

Tabel 2 Pengelompokan Artikel Berdasarkan Topik

Topik	Jumlah	%
Anteseden	51	47%
Konsekuensi	46	42%
Lainnya	11	10%
Total	108	100%

Tabel 2 menyajikan informasi mengenai hasil pengelompokan topik pada artikel terkait kualitas audit di Indonesia. Dari total 108 artikel yang dianalisis, topik mengenai anteseden atau determinan kualitas audit sebesar 47% atau sebanyak 51 artikel. Temuan ini menunjukkan bahwa sebagian besar peneliti lebih tertarik untuk mengidentifikasi dan menguji faktor-faktor yang memengaruhi kualitas audit. Di sisi lain, topik yang membahas konsekuensi dari kualitas audit menempati sekitar 42% atau 46 artikel. Persentase yang relatif besar ini menunjukkan adanya perhatian yang cukup besar dari peneliti terhadap implikasi atau dampak dari kualitas audit. Kategori lainnya, yang mencakup topik penelitian sebagai moderasi dan intervening tercatat sebesar 10% atau 11 artikel. Secara keseluruhan, distribusi ini menunjukkan bahwa riset kualitas audit di Indonesia masih didominasi oleh kajian mengenai determinan dan konsekuensi, sementara penelitian mengenai mekanisme hubungan (moderasi/intervening) relatif lebih terbatas.

3.3 Pengelompokan Variabel Anteseden

Tabel 3 Pengelompokan Variabel Anteseden

<i>Antecedent</i>	<i>Jumlah Artikel</i>	<i>%</i>	<i>Pengaruh</i>		
			<i>Positive</i>	<i>Negative</i>	<i>No</i>
<i>Audit Rotation</i>	9	6%	(Aqmarina & Yendrawati, 2019), (Nursiam dkk, 2021)	(Astuti dkk, 2022), (Priyanti & Uswati Dewi, 2019)	(Fitriany dkk, 2016), (Suwarno dkk, 2020), (Sari dkk, 2019), (Andriani & Nursiam, 2018), (Christy dkk, 2021)
<i>Audit Tenure</i>	9	6%	(Aqmarina & Yendrawati, 2019), (Sari dkk, 2019), (Ananda & Faisal, 2023)		(Fitriany dkk, 2016), (Suwarno dkk, 2020), (Andriani & Nursiam, 2018), (Astuti dkk, 2022), (Atmojo & Sukirman, 2019), (Priyanti & Uswati Dewi, 2019)
<i>Auditor Specialization</i>	6	4%	(Fitriany dkk, 2016), (Sari dkk, 2019), (Sukirman & Asih, 2021), (Atmojo & Sukirman, 2019), (Kurniasih & Kiswanto, 2019)	(Ananda & Faisal, 2023)	
<i>IT Governance</i>	1	1%	(Utama & Anridho, 2024)		
<i>Audit Fee</i>	10	6%	(Yefni & Sari, 2021), (Andriani & Nursiam, 2018), (Astuti dkk, 2022), (Tjan dkk, 2024), (Idawati, 2018)	(Meidawati & Assidiqi, 2019), (Ananda & Faisal, 2023)	(Nursiam dkk, 2021), (Suwarno dkk, 2020), (Sari dkk, 2019)
<i>Competence</i>	9	6%	(Meidawati & Assidiqi, 2019), (Rasuli dkk, 2024), (Yefni & Sari, 2021), (Ningtyas & Aris, 2018), (Deliana dkk, 2023), (Handayani & Khairunnisa, 2024), (Hajering dkk, 2019), (Kartika & Pramuka, 2019), (Akbar dkk, 2022)		

<i>Antecedent</i>	<i>Jumlah Artikel</i>	<i>%</i>	<i>Pengaruh</i>		
			<i>Positive</i>	<i>Negative</i>	<i>No</i>
<i>Independence</i>	13	8%	(Yefni dan Sari, 2021), (Ningtyas dan Aris, 2016), (Handayani dan Khairunnisa, 2024), (Tjan dkk, 2024), (Sutisman dkk, 2021), (Fawziah dkk, 2023), (Amalia dkk, 2019), (Prabowo dan Suhartini, 2021), (Akbar dkk, 2022)		(Meidawati dan Assidiqi, 2019), (Rasuli dkk, 2024), (Biduri dkk, 2021)
<i>Auditor Ethics</i>	7	4%	(Meidawati & Assidiqi, 2019), (Handayani & Khairunnisa, 2024), (Hajering dkk, 2019), (Kartika dkk, 2021), (Hermawan dkk, 2021), (Yulianti dkk, 2024), (Sitorus dkk., 2020)		
<i>Time Budget Pressure</i>	8	5%	(Meidawati & Assidiqi, 2019), (Amalia dkk, 2019)	(Lisa dkk, 2023), (Monoarfa & Dama, 2018), (Amalia dkk, 2019)	(Biduri dkk, 2021), (Sari & Fakhriyyah, 2024), (Juliardi & Erisco, 2023)
<i>Age of Publication</i>	1	1%		(Aqmarina & Yendrawati, 2019),	
<i>Negative Entranchment Effect</i>	1	1%	(Utami & Diyanty, 2015)		
<i>Professional Scepticism</i>	7	4%	(Rasuli dkk, 2024), (Adhikara & Widodo, 2023), (Tjan dkk, 2024), (Kartika dkk, 2021), (Hermawan dkk, 2021), (Fawziah dkk, 2023), (Ridloi, 2021)		
<i>Integrity</i>	5	3%	(Lisa dkk, 2023), (Deliana dkk, 2023), (Idawati, 2018), (Hermawan dkk, 2021), (D. D. B. Prabowo & Suhartini, 2021)		
<i>Political Connection</i>	1	1%	(Armadiyanti & Iswati, 2019)		
<i>Work Experience</i>	4	3%	(Yefni & Sari, 2021), (Ningtyas & Aris, 2018), (Handayani & Khairunnisa, 2024), (Sari & Fakhriyyah, 2024)		
<i>Number of Client</i>	1	1%			(Sambuaga & Herusetya, 2022)
<i>Client Complexity</i>	1	1%			(Sambuaga & Herusetya, 2022)

<i>Antecedent</i>	<i>Jumlah Artikel</i>	<i>%</i>	<i>Pengaruh</i>		
			<i>Positive</i>	<i>Negative</i>	<i>No</i>
<i>Auditor Reputation</i>	4	3%	(Nursiam dkk, 2021), (Christy dkk, 2021)		(Suwarno dkk, 2020), (Andriani & Nursiam, 2018)
<i>Accounting Firm Size</i>	4	3%	(Ananda & Faisal, 2023)		(Sari dkk, 2019), (Astuti dkk, 2022), (Priyanti & Uswati Dewi, 2019)
<i>Due Professional Care</i>	5	3%	(Ningtyas & Aris, 2018), (Adhikara & Widodo, 2023), (Biduri dkk, 2021), (Sari & Fakhriyyah, 2024), (Budiandru, 2021)		
<i>PSAK Adoption IFRS</i>	1	1%	(Mappanyuki dkk, 2023)		
<i>Dysfunctional Audit</i>	1	1%	(Mappanyuki dkk, 2023)		
<i>Auditor Accountability</i>	5	3%	(Adhikara & Widodo, 2023), (Hajering dkk, 2019), (Sari & Fakhriyyah, 2024), (Budiandru, 2021)		(Deliana dkk, 2023)
<i>Audit Fee Stickiness</i>	2	1%	(Adhikara & Widodo, 2023)	(Adhikara & Widodo, 2023)	
<i>Auditor Switching</i>	1	1%	(Sukirman & Asih, 2021)		
<i>Public Accountant Firm Reputation</i>	3	2%	(Sukirman & Asih, 2021), (Budiandru, 2021)	(Atmojo & Sukirman, 2019)	
<i>Workload</i>	1	1%			(Sukirman & Asih, 2021)
<i>Audit Committe Effectiveness</i>	1	1%			(Sukirman & Asih, 2021)
<i>Objectivity</i>	1	1%	(Handayani & Khairunnisa, 2024)		
<i>Audit Complexity</i>	1	1%		(Akbar dkk, 2022)	
<i>Auditor Ability</i>	1	1%	(Sutisman dkk, 2022)		
<i>Risk Auditing</i>	1	1%	(Sutisman dkk, 2022)		
<i>Audit Committee Characteristic</i>	2	1%	(Sukma & Bernawati, 2019)		(Sukma & Bernawati, 2019)
<i>Dysfunctional Behavior</i>	2	1%		(Monoarfa & Dama, 2018)	(Yulianti dkk, 2024)
<i>Professionalism</i>	4	3%	(Idawati, 2018), (Yulianti dkk, 2024),		(Sitorus dkk, 2020)
<i>Auditor Education Level</i>	1	1%	(Kartika dkk, 2021)		
<i>Auditor Expertise</i>	1	1%	(Hermawan dkk, 2021)		
<i>Remote Audit</i>	1	1%	(T. P. Nugrahanti & Pratiwi,		

<i>Antecedent</i>	<i>Jumlah Artikel</i>	<i>%</i>	<i>Pengaruh</i>		
			<i>Positive</i>	<i>Negative</i>	<i>No</i>
			2023)		
<i>Audit Committee Expertise</i>	2	1%	(Kurniasih & Kiswanto, 2019)		(Kurniasih & Kiswanto, 2019)
<i>Client Company Size</i>	1	1%	(Priyanti & Dewi, 2019)		
<i>Audit Procedure</i>	1	1%	(Amalia dkk, 2019)		
<i>Quality Control System</i>	1	1%			(Ridloi, 2021)
<i>Managerial Ownership</i>	1	1%		(Ananda dkk, 2022)	
<i>Institutional Ownership</i>	1	1%	(Ananda dkk, 2022)		
<i>Foreign Ownership</i>	1	1%	(Ananda dkk, 2022)		
<i>Government Ownership</i>	1	1%			(Ananda dkk, 2022)
<i>Family Ownership</i>	2	1%	(Ananda dkk, 2022), (Diyanty dkk, 2018)		
<i>Audit Committee Activities</i>	1	1%	(Ananda dkk, 2022)		
<i>Family Leadership</i>	1	1%	(Diyanty dkk, 2018)		
<i>Monitoring Role of BOC</i>	1	1%	(Diyanty dkk, 2018)		
<i>Client Acceptability</i>	1	1%	(Sitorus dkk, 2020)		
<i>E-Audit</i>	1	1%		(Prabowo & Suhartini, 2021)	
<i>Auditor's Work Stress</i>	1	1%		(Winoto & Harindahyani, 2021)	
<i>Deadline Pressure</i>	1	1%			(Juliardi & Erisco, 2023)
<i>Work Pressure</i>	1	1%			(Juliardi & Erisco, 2023)
<i>Internal Control</i>	1	1%	(Lisa dkk, 2023)		
<i>Locus of Control</i>	2	1%	(Fawziah dkk, 2023)	(Fawziah dkk, 2023)	
<i>Information Technology (IT)</i>	2	1%	(T. P. Nugrahanti & Pratiwi, 2023)		(Rasuli dkk, 2024)
TOTAL	160	100%			

Tabel 3 menyajikan informasi mengenai distribusi variabel anteseden terkait kualitas audit di Indonesia. Variabel yang paling sering digunakan antara lain *independence* (8%),

audit rotation, *audit tenure*, *audit fee*, dan *competence* (masing-masing 6%), diikuti *time budget pressure* (5%) serta *audit specialization*, *auditor ethics*, dan *professional scepticism* sebesar 4%. Berdasarkan hasil analisis tersebut, sebagian besar peneliti di Indonesia menggunakan *independence*, *audit rotation*, *audit tenure*, *audit fee*, dan *competence* sebagai faktor dilakukannya penelitian kualitas audit di Indonesia. Adanya independensi untuk memastikan opini yang dihasilkan bebas dari pengaruh pihak lain. *Audit rotation* dan *audit tenure* diteliti karena masa hubungan kerja yang terlalu panjang dapat mengurangi independensi, sementara masa yang terlalu pendek menunjukkan pemahaman auditor yang kurang atas bisnis klien. Sementara itu, *competence* menjadi penting karena kualitas audit sangat bergantung pada keahlian, pengalaman, dan pemahaman auditor atas standar audit serta kompleksitas bisnis klien (Yefni dan Sari, 2021; Aqmarina & Yendrawati, 2019).

3.4 Pengelompokan Variabel Konsekuensi

Tabel 4 Pengelompokan Variabel Konsekuensi

Variabel Anteseden	Jumlah Artikel	%	Pengaruh		
			<i>Positive</i>	<i>Negative</i>	<i>No</i>
<i>Loan Collateral</i>	2	4%		(Butar-Butar, 2020), (Puspa dkk, 2021)	
<i>Income Smoothing</i>	2	4%	(Trisanti, 2019)		(Purwanti & Nugrahanti, 2017)
<i>Earning Management</i>	19	37%	(Prabowo dkk, 2020), (Aisyah dkk, 2023), (Kusumawati, 2019)	(Handoyo & Agustianingrum, 2017), (Nugrahanti & Nugroho, 2022), (Thamlim & Dwi Mulyani, 2023), (Yanthi dkk, 2021), (Ardillah & Vesakhadevi, 2021), (Aisyah dkk, 2023), (Harianto, 2022), (Wiyadi dkk, 2017)	(R. Karina, 2021), (Wahyono dkk, 2019), (Astuti & Pangestu, 2019), (Lestari & Murtanto, 2018), (Yanthi dkk, 2021), (Farida & Sugesti, 2023), (Harianto, 2022), (Wiyadi dkk, 2017)
<i>Going Concern Opinion</i>	3	6%	(Endiana & Suryandari, 2021)	(Bawono dkk, 2021)	(Bahtiar dkk, 2021)
<i>Tax Avoidance</i>	4	8%		(Maraya & Yendrawati, 2016), (Sandy & Lukviarman, 2015)	(Saputra dkk., 2015), (Tiara dkk, 2023)
<i>Earning Quality</i>	3	6%	(Hartoko & Tri Astuti, 2021)		(Saraswati & Puteri, 2023), (Karyadi & Slamet, 2022)
<i>Tax Aggressiveness</i>	1	2%			(Alkausar dkk, 2021)
<i>Accounting Misstatement</i>	1	2%			(Adiwibowo & Nurmala, 2023)
<i>Anti Corruption Disclosure</i>	1	2%	(Hartomo & Silvia, 2019)		
<i>Accounting Conservatism</i>	1	2%			(Achyani dkk, 2022)
<i>Cost of Equity</i>	2	4%		(Wardani & Putriane, 2020)	
<i>Forward-looking</i>	1	2%			(Novia dkk, 2021)

Variabel Anteseden	Jumlah Artikel	%	Pengaruh		
			Positive	Negative	No
<i>Information</i>					
<i>Fraudulent Financial Reporting</i>	2	4%		(Reskino & Darma, 2023)	(Achmad, 2019)
Integritas Laporan Keuangan	1	2%		(Tussiana & Lastanti, 2018)	
Kualitas LKPD	1	2%	(Djanegara, 2017)		
<i>Stock Return</i>	1	2%			(Sihombing dkk, 2017)
<i>Financial Restatement Periode</i>	1	2%	(Sambuaga dkk, 2021)		
<i>Earning Response Coefficient</i>	1	2%			(Kristanti & Almilia, 2019)
<i>Earning Persistency</i>	1	2%	(Ikhsan dkk., 2023)		
<i>Earnings Variability</i>	1	2%			(Hariyanto & Suhardianto, 2018)
CSR	1	2%	(Rawi & Muchlish, 2022)		
<i>Firm Risk</i>	1	2%			(Eriandani dkk, 2024)
TOTAL	51	100%			

Tabel 4 menyajikan informasi mengenai variabel konsekuensi terkait penelitian kualitas audit di Indonesia. *Earning management* menjadi variabel konsekuensi yang paling sering digunakan dengan 37% (19 artikel), diikuti dengan *tax avoidance* sebesar 8% (4 artikel), *going concern opinion* dan *earning quality* sebesar 6% (3 artikel), serta *loan collateral*, *income smoothing*, *cost of equity*, dan *fraudulent financial reporting* sebesar 4% (2 artikel). Berdasarkan hal tersebut, sebagian besar penelitian di Indonesia menggunakan *earning management*, *tax avoidance*, *going concern opinion* dan *earning quality* sebagai dampak dari penelitian kualitas audit di Indonesia.

Fokus pada *earnings management* dan *earnings quality* menunjukkan bahwa kualitas audit yang baik dapat menekan praktik manipulasi laba dan meningkatkan kredibilitas informasi keuangan (Handoyo & Agustianingrum, 2017; Hartoko & Tri Astuti, 2021). Sementara itu, kajian tentang *tax avoidance* sebagai konsekuensi mencerminkan upaya bagaimana audit yang berkualitas dapat membatasi ruang manajemen untuk melakukan strategi penghindaran pajak yang agresif (Maraya & Yendrawati, 2016). Penggunaan variabel *going concern opinion* juga relevan, karena opini kelangsungan usaha yang diberikan auditor sering dijadikan indikator penting oleh pasar dan kreditor dalam menilai risiko perusahaan. Secara keseluruhan, penelitian di Indonesia masih menempatkan kualitas audit sebagai alat mitigasi risiko yang berdampak langsung pada keandalan laporan keuangan dan perilaku oportunistik manajemen.

3.5 Pengelompokan Topik Lainnya

Tabel 5 Pengelompokan Topik Lainnya

Topik Lainnya	Jumlah
Variabel Moderasi	10
Variabel Intervening	1
Jumlah	11

Tabel 5 menyajikan rincian penggunaan kualitas audit sebagai topik lainnya pada artikel jurnal SINTA 2. Pada klasifikasi lainnya, penelitian mengenai kualitas audit, ditemukan 10 artikel sebagai variabel moderasi, dan 1 artikel sebagai variabel intervening. Temuan ini menunjukkan bahwa sebagian besar penelitian di Indonesia belum banyak mengkaji bagaimana kualitas audit berperan dalam memperkuat atau memperlemah hubungan antar variabel.

3.6 Pengujian Moderasi dan Intervening

Tabel 6 Pengelompokan Variabel Moderasi dan Intervening

Penulis	Variabel	Pengaruh	Hasil
(Widyasari dkk, 2017)	Moderasi	Strategi Bisnis terhadap Manajemen Laba	Memperlemah
(Suwarno dkk, 2021)	Moderasi	Manajemen Laba terhadap <i>Firm Value</i>	Tidak Memoderasi
(Indiarti & Widiatmoko, 2023)	Moderasi	<i>Political Connections</i> terhadap <i>Tax Avoidance</i>	Memperlemah
(Liemmuel & Eriandani, 2022)	Moderasi	<i>Relevance of Accounting (Earnings) Information</i> terhadap <i>Stock Prices</i>	Memperkuat
		<i>Relevance of Accounting (book value and operating cash flow) Information</i> terhadap <i>Stock Prices</i>	Tidak Memoderasi
(Nono & Khomsatun, 2018)	Moderasi	<i>Reserve Account Disclosure</i> terhadap <i>Accrual Earning Management</i>	Memperkuat
(Widodo & Fanani, 2020)	Moderasi	<i>Military Background and Political Connections</i> terhadap <i>Earning Quality</i>	Tidak Memoderasi
(Hidayatullah & Sulhani, 2018)	Moderasi	Manipulasi Laporan Keuangan dan Karakteristik CFO terhadap Ketepatanwaktuan Pelaporan Keuangan	Tidak Memoderasi
(Karina & Kusumawardhani, 2023)	Moderasi	<i>Solvability dan Firm Size</i> terhadap <i>Audit Delay</i>	Memperlemah
		<i>Liquidity</i> terhadap <i>Audit Delay</i>	Tidak Memoderasi
(Srikandhi & Suryandari, 2020)	Moderasi	<i>Independent Commisioner</i> terhadap <i>Integrity of Financial Statement</i>	Memperkuat
		<i>Audit Committee and Whistleblowing System</i> terhadap <i>Integrity of Financial Statement</i>	Tidak Memoderasi
(Sihono & Munandar, 2023)	Moderasi	<i>Political Connection</i> terhadap <i>Tax Aggressiveness</i>	Tidak Memoderasi
		<i>Executive Compensation</i> terhadap <i>Tax</i>	Memperlemah

Penulis	Variabel	Pengaruh	Hasil
		<i>Aggressiveness</i>	
(Ulhaq dkk, 2021)	Intervening	<i>Audit Attribut</i> terhadap <i>Cost of Equity</i>	Tidak Memediasi

Tabel 6 menyajikan informasi mengenai pengelompokan kualitas audit sebagai variabel moderasi dan intervening. Untuk variabel moderasi masih ditemukan hasil yang beragam, seperti penelitian oleh Widyasari dkk (2017) menemukan bahwa kualitas audit dapat melemahkan pengaruh strategi bisnis terhadap manajemen laba, penelitian Indiarti & Widiatmoko (2023) menemukan bahwa kualitas audit memperkuat pengaruh *reserve account disclosure* terhadap *accrual earning management*, serta penelitian Widodo & Fanani (2020) menemukan bahwa kualitas audit tidak memoderasi pengaruh *military background and political connections* terhadap *earning quality*. Untuk variabel intervening, penelitian Ulhaq dkk (2021) menghasilkan temuan bahwa kualitas audit tidak memediasi pengaruh *audit attribut* terhadap *cost of equity*. Variasi temuan ini menunjukkan bahwa meskipun kualitas audit sering diasumsikan berperan sebagai penguat atau penengah pengaruh antar variabel, dalam konteks ini peran tersebut tidak selalu sama.

3.7 Pengelompokan Populasi

Tabel 7 Pengelompokan Populasi

Populasi	Jumlah
Perusahaan yang Terdaftar di BEI	10
Perusahaan Manufaktur	27
Perusahaan Sektor Pertambangan	3
Perusahaan Sektor Pertambangan dan Kelapa Sawit	1
Perusahaan Sektor Industri Kimia	1
Perusahaan Sektor Industrial	1
Perusahaan Sektor Consumer Goods	3
Perusahaan Subsektor Food and Beverage	2
Perusahaan Subsektor Property, Real Estate dan Building	4
Perusahaan Sektor Basic Materials, Industrial, Consumer Goods, dan Healthcare Pharmaceutical	1
Perusahaan Jasa Telekomunikasi dan Sektor Retail	1
Perbankan di BEI	2
Perusahaan BUMN di BEI	1
Perusahaan Sektor Keuangan	1
Perusahaan Non Keuangan	12
Perusahaan Non Perbankan	1
Perusahaan yang Terdaftar dalam Index LQ 45	3
Perusahaan Manufaktur dengan Klasifikasi 31-56 BEI	1
Perusahaan yang Terdaftar dalam CGPI	1
Perusahaan Manufaktur yang Terdaftar di JII	1
Perusahaan yang Terdaftar di JII dan LQ 45	1
KAP BIG 4	1

Populasi	Jumlah
BUMN di Jakarta	1
BPK RI di Provinsi Riau	1
BPKP Jayapura	1
BAWASDA Gorontalo	1
LKPD di Jawa dan Sumatera	1
Inspektorat di Sulawesi Selatan	1
Inspektorat di Jawa Barat	1
KAP di Pulau Jawa	1
KAP di Jawa Tengah dan Yogyakarta	1
KAP di Jawa Tengah	1
KAP di Jawa Timur	1
KAP di Jakarta	5
KAP di Jakarta Selatan	1
KAP di Semarang	2
KAP di Surabaya	3
KAP di Riau	1
KAP di Malang	2
KAP di Medan	1
KAP di Sidoarjo dan Surabaya	1
KAP di Makassar	2
Total	108

Tabel 7 menyajikan informasi mengenai pengelompokan populasi penelitian kualitas audit di Indonesia. Populasi yang paling sering digunakan dari 108 artikel yang ada adalah sektor manufaktur yang *listed* di BEI sebanyak 27 artikel, diikuti sektor nonkeuangan sebanyak 12 artikel, serta seluruh perusahaan *listed* di BEI sebanyak 10 artikel. Sisanya, sebanyak 59 artikel menggunakan populasi lebih spesifik, seperti sub-sektor tertentu atau kriteria perusahaan khusus.

Tabel 8 Pengelompokan Jurnal Berdasarkan Topik Penelitian

Jurnal	Anteseden	%	Konsekuensi	%	Lainnya	%	Total
JAK	1	2%	2	4%	0	0%	3
JIAB	1	2%	0	0%	0	0%	1
JAAI	4	8%	5	11%	0	0%	9
JRAK - Keuangan	2	4%	2	4%	0	0%	4
JAKI	1	2%	0	0%	0	0%	1
REAKSI	6	12%	4	9%	2	18%	12
JAB	1	2%	6	13%	0	0%	7
JDA	1	2%	1	2%	2	18%	4
e-JA	8	16%	2	4%	1	9%	11
ASET	3	6%	0	0%	1	9%	4
JEMA	1	2%	0	0%	0	0%	1

Jurnal	Anteseden	%	Konsekuensi	%	Lainnya	%	Total
ASSETS	0	0%	1	2%	0	0%	1
AKRUAL	1	2%	0	0%	0	0%	1
MRAAI	1	2%	5	11%	0	0%	6
IJSAM	1	2%	0	0%	0	0%	1
AAJ	3	6%	1	2%	1	9%	5
JABE	1	2%	0	0%	0	0%	1
JSB	0	0%	1	2%	0	0%	1
EKUITAS	2	4%	3	7%	0	0%	5
JAMAL	1	2%	0	0%	0	0%	1
JKA	0	0%	2	4%	0	0%	2
JEBAV	3	6%	1	2%	0	0%	4
IJBE - Entrepreneurship	0	0%	1	2%	0	0%	1
JRAK - Kontemporer	1	2%	1	2%	1	9%	3
JDAB	1	2%	0	0%	1	9%	2
TIAR	2	4%	0	0%	0	0%	2
JAI	2	4%	1	2%	0	0%	3
JASF	1	2%	1	2%	0	0%	2
IJAR	0	0%	2	4%	0	0%	2
JIAFR	1	2%	1	2%	0	0%	2
AFRE	0	0%	1	2%	0	0%	1
JKP	0	0%	1	2%	1	9%	2
JEM	0	0%	1	2%	1	9%	2
IJBE - Economic	1	2%	0	0%	0	9%	1
TOTAL	51	100%	46	100%	11	100%	108

Tabel 8 menyajikan klasifikasi jurnal penelitian kualitas audit berdasarkan topik anteseden, konsekuensi, serta topik lainnya. Penelitian anteseden ditemukan dalam 51 artikel yaitu dengan dominasi terbesar terdapat pada e-JA sebesar 16%, REAKSI sebesar 12%, JAAI sebesar 8%, serta ASET, AAJ, dan JEBAV yang masing-masing sebesar 6%, sedangkan sisanya di bawah 5%. Untuk penelitian konsekuensi, ditemukan dalam 46 artikel yaitu dengan dominasi terbesar terdapat pada JAB sebesar 13%, JAAI dan MRAAI sebesar 11%, REAKSI sebesar 9%, serta EKUITAS sebesar 7%, sedangkan sisanya di bawah 5%. Untuk topik lainnya ditemukan dalam 12 artikel yaitu dengan dominasi terbesar terdapat pada REAKSI dan JDA sebesar 17%, diikuti oleh JAK, e-JA, ASET, AAJ, JRAK-Kontemporer, JDAB, JKP, dan JEM yang masing-masing sebesar 9%. Temuan tersebut menunjukkan bahwa penelitian mengenai anteseden, konsekuen dan lainnya dari topik kualitas audit ditemukan paling banyak pada artikel yang terdapat pada masing-masing jurnal e-JA, JAB, dan REAKSI.

3.8 Pengelompokan Berdasarkan Sumber Data

Secara umum, penelitian dapat dikategorikan berdasarkan jenis sumber data yang digunakan, yaitu data primer dan data sekunder. Data primer diperoleh langsung dari

responden melalui teknik seperti survei, kuesioner, atau wawancara, sedangkan data sekunder bersumber dari data yang telah dipublikasikan sebelumnya, seperti laporan keuangan.

Tabel 9 Pengelompokan Sumber Data

Sumber Data	Jumlah	%
Data Sekunder	78	72%
Data Primer	30	28%
Total	108	100%

Tabel 9 menyajikan penjelasan rinci mengenai sumber data dalam penelitian kualitas audit pada jurnal SINTA 2. Sebanyak 78 artikel ditemukan menggunakan data sekunder, sementara 30 artikel lainnya menggunakan data primer. Temuan ini menunjukkan bahwa peneliti di Indonesia cenderung lebih mengandalkan data yang sudah tersedia secara publik, seperti laporan keuangan, karena data tersebut relatif lebih mudah diakses dan diolah. Sebaliknya, jumlah penelitian yang menggunakan data primer melalui survei atau kuesioner cenderung rendah.

3.9 Pengelompokan Berdasarkan Pengukuran/P

Kualitas audit dapat diukur melalui berbagai pendekatan, yang masing-masing memiliki fokus dan metode pengukuran tersendiri. Beberapa pendekatan utama untuk data sekunder meliputi ukuran KAP, *discretionary accruals*, *atribut audit*, serta metode lainnya. Ukuran KAP sering kali digunakan untuk mengelompokkan KAP ke dalam kategori Big 4 dan Non-Big 4, di mana KAP Big 4 umumnya diasumsikan memiliki kualitas audit lebih tinggi. *Discretionary accruals* digunakan untuk menganalisis tingkat manipulasi akuntansi dalam laporan keuangan, dengan menilai sejauh mana auditor mampu mendeteksi dan mencegah manipulasi tersebut. *Audit attribut* berfokus pada karakteristik internal proses audit itu sendiri, seperti rotasi auditor, masa kerja auditor (*tenure audit*), spesialisasi auditor dalam industri tertentu (*audit specialization*), dan besaran biaya audit (*audit fee*). Sementara itu, pengukuran lainnya merupakan pengukuran kualitas audit selain dari yang disebutkan di atas, seperti penggunaan *going concern opinion* dll. Adapun untuk data primer, indikator *skala likert* digunakan dalam pengukuran.

Tabel 10 Pengelompokan Pengukuran Topik Penelitian

Ukuran	Jumlah	%
Ukuran KAP (Big 4 dan Non Big 4)	49	45%
<i>Discretionary Accrual</i>	10	9%
<i>Audit Attribut</i>	8	7%
Indikator (Skala Likert)	30	28%
Lainnya	11	10%
Total	108	100%

Tabel 10 menyajikan penjelasan rinci mengenai pengukuran atau proksi kualitas audit. Peneliti menemukan bahwa pengukuran yang paling banyak digunakan adalah ukuran KAP (*dummy* Big 4 dan Non-Big 4), yaitu sebanyak 46% dengan jumlah 50 artikel dan indikator dengan Skala Likert yaitu sebanyak 28% dengan jumlah 30 artikel. Temuan ini menunjukkan bahwa, meskipun pendekatan objektif (berbasis data sekunder) masih lebih dominan, terdapat

kecenderungan untuk melengkapi pemahaman kualitas audit melalui pendekatan subjektif berbasis persepsi melalui data primer.

3.10 Pengelompokan Berdasarkan Teori

Tabel 11 Pengelompokan Teori

Jenis Teori	Jumlah
<i>Agency Theory</i>	57
<i>Signalling Theory</i>	7
<i>Attribution Theory</i>	10
<i>Positive Accounting Theory</i>	3
Lainnya	31
Total	108

Tabel 11 menyajikan penjelasan mengenai penggunaan teori pada topik kualitas audit. Peneliti menemukan bahwa teori yang paling banyak digunakan adalah teori agensi/keagenan yaitu sejumlah 57 artikel, diikuti oleh teori atribusi sejumlah 10 artikel dan teori sinyal sejumlah 7 artikel. Dominasi teori agensi disebabkan karena sebagian besar penelitian kualitas audit di jurnal SINTA 2 berfokus pada faktor-faktor determinan kualitas audit, seperti independensi, *audit tenure*, dan *audit fee* yang berkaitan erat dengan peran auditor sebagai pihak independen yang bertugas meminimalkan konflik kepentingan antara manajemen (sebagai agen) dan pemilik atau shareholder (sebagai prinsipal). Sementara itu, penggunaan teori atribusi dan teori sinyal meskipun lebih terbatas, mencerminkan adanya upaya sebagian peneliti untuk melihat kualitas audit dari perspektif perilaku pengambilan keputusan dan bagaimana auditor serta perusahaan menyampaikan informasi yang bernilai kepada pasar.

4. KESIMPULAN DAN SARAN

4.1 Kesimpulan

Kualitas audit berperan penting dalam membangun kepercayaan *stakeholder* dengan meningkatkan keandalan informasi perusahaan. Kesadaran akan pentingnya peran kualitas audit dalam menciptakan akuntabilitas mendorong banyak peneliti untuk menganalisis lebih lanjut mengenai topik ini. Dalam upaya memetakan penelitian kualitas audit di Indonesia, peneliti menganalisis artikel pada jurnal SINTA 2 tahun 2015-2024. Secara rinci, terdapat 68 jurnal yang teridentifikasi, dengan final sampel yang digunakan sebanyak 34 jurnal di antaranya memuat total 108 artikel. Variabel antededen yang paling banyak diteliti meliputi *independence*, *audit rotation*, *audit tenure*, *audit fee*, dan *competence*, sedangkan *earning management* menjadi variabel konsekuensi yang paling sering diteliti. Adapun penelitian mengenai kualitas audit sebagai topik lainnya (moderasi dan intervening) masih cukup terbatas di Indonesia.

4.2 Keterbatasan

Dari total 68 jurnal SINTA 2 yang dianalisis, sampel akhir penelitian ini hanya mencakup 108 artikel dari 34 jurnal terpilih sehingga hasil penelitian belum sepenuhnya merepresentasikan keseluruhan jurnal SINTA 2. Selain itu, meskipun proses pengelompokan dilakukan secara sistematis, potensi bias subjektif dapat terjadi, khususnya dalam menentukan kategori topik penelitian.

4.3 Saran

Berdasarkan hasil analisis di atas, peneliti menemukan beberapa area yang perlu dikembangkan, diantaranya:

1. Pada Tabel 3 mengenai pengelompokan variabel anteseden, terdapat beberapa determinan kualitas audit yang jarang dikaji, seperti *ownership structure* (*managerial, family, foreign, institutional, dan government*), *auditor attribute* (*auditor experience, workload, education level*), karakteristik komite audit dan lain-lain.
2. Pada Tabel 4 yang memuat variabel konsekuensi, terdapat beberapa konsekuensi dari kualitas audit yang juga belum banyak diteliti, seperti pengaruhnya terhadap *fraudulent financial reporting, cost of equity, dan tax avoidance*.
3. Pada Tabel 7 menunjukkan bahwa penelitian terkait kualitas audit pada sektor tertentu, seperti sektor keuangan, pertambangan, dan BUMN, masih tergolong sedikit.
4. Pada Tabel 9 memperlihatkan bahwa pemanfaatan data primer dalam penelitian kualitas audit masih cukup rendah.

Berdasarkan temuan tersebut, peneliti menyarankan agar penelitian selanjutnya dapat memanfaatkan peluang dengan mengkaji determinan kualitas audit yang belum banyak diteliti (misalnya *ownership structure, auditor attribute, dan karakteristik komite audit*), mengeksplorasi konsekuensi kualitas audit yang masih jarang dibahas (seperti *fraudulent financial reporting, cost of equity, dan tax avoidance*), memperluas cakupan sektor yang diteliti termasuk sektor keuangan, pertambangan, serta BUMN, serta menggunakan data primer.

4.4 Implikasi Penelitian

Penelitian ini memberikan kontribusi dengan memetakan perkembangan penelitian kualitas audit di Indonesia melalui analisis terhadap artikel-artikel yang terbit di jurnal SINTA 2 tahun 2015-2024. Hasil penelitian menunjukkan perlu adanya pengembangan kajian lebih lanjut mengenai ruang lingkup, variabel, maupun metode yang masih relatif jarang dibahas. Bagi akademisi, hasil ini dapat menjadi acuan untuk memperluas cakupan penelitian yang lebih luas. Sementara bagi perusahaan dan regulator, pemetaan ini dapat menjadi dasar dalam menyusun kebijakan atau program peningkatan kompetensi auditor yang selaras dengan tren dan isu terbaru.

5. REFERENSI

- Achmad, T. (2019). Pengaruh Kualitas Audit dan Auditor Switching terhadap Kecurangan Pelaporan Keuangan: Kepemilikan Institusional sebagai Variabel Moderating. *Jurnal Akuntansi dan Bisnis*, 18(2), 110. <https://doi.org/10.20961/jab.v18i2.380>
- Achyani, F., Lovita, L., & Putri, E. (2022). The Effect of Good Corporate Governance, Sales Growth, and Capital Intensity on Accounting Conservatism (Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange 2017-2019). *Riset Akuntansi dan Keuangan Indonesia*, 6(3), 255–267.
- Adhikara, M. A., & Widodo, A. M. (2023). Public accountant professional skepticism behavior in improving audit quality: A path analysis. *Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, 20(2), 264–282. <https://doi.org/10.31106/jema.v20i2.20616>
- Adiwibowo, A. S., & Nurmala, P. (2023). Audit Quality on Accounting Misstatements in Companies Under Capital Market Pressure. *Jurnal Kajian Akuntansi*, 7(1), 71. <https://doi.org/10.33603/jka.v7i1.7598>

- Aisyah, S., Firman, M. A., & Pratiwi, R. (2023). The Effect of Audit Quality and Capital Intensity Ratio on Earning Management in Sharia Listed Companies. *Journal of Islamic Accounting and Finance Research*, 5(1), 109–130. <https://doi.org/10.21580/jiafr.2023.5.1.13744>
- Akbar, M. A., Toatubun, N., Mzen, A. H., Nur, I. S. M., & Prasertianingrum, S. (2022). Examining Linkage Audit Quality Factors Intervening by Time Budget Pressure. *Jurnal Akuntansi*, 26(1), 92. <https://doi.org/10.24912/ja.v26i1.819>
- Alkausar, B., Kawakibi, F. B., & Lasmana, M. S. (2021). Corporate Governance And Tax Aggressiveness: Agency Theory Relationship. *Jurnal Reviu Akuntansi dan Keuangan*, 11(1), 138–149. <https://doi.org/10.22219/jrak.v11i1.15610>
- Amalia, F. A., Sutrisno, S., & Baridwan, Z. (2019). Audit Quality: Does Time Pressure Influence Independence and Audit Procedure Compliance of Auditor? *Journal of Accounting and Investment*, 20(1), 130–144. <https://doi.org/10.18196/jai.2001112>
- Ananda, A. S., Sumarta, N. H., Satriya, K. K. T., & Amidjaya, P. G. (2022). Determinants of Audit Quality: The Effect of Ownership Structure And Audit Committee Activities. *Jurnal Ekonomi dan Keuangan*, 6(3), 333–350. <https://doi.org/10.24034/j25485024.y2022.v6.i3.5214>
- Ananda, C., & Faisal, F. (2023). Audit Fees, Audit Tenure, Auditor Industry Specialization, Audit Firm Size, and Audit Quality: Evidence from Indonesian Listed Companies. *Jurnal Dinamika Akuntansi dan Bisnis*, 10(2), 213–230. <https://doi.org/10.24815/jdab.v10i2.27750>
- Andriani, N., & Nursiam. (2018). Pengaruh Fee Audit, Audit Tenure, Rotasi Audit dan Reputasi Auditor terhadap Kualitas Audit (Studi Empiris Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2013-2015). *Riset Akuntansi Dan Keuangan Indonesia*, 3(1), 29–39.
- Aqmarina, V., & Yendrawati, R. (2019). The Factors that Influence Audit Quality by Earnings Surprise Benchmark. *Jurnal Akuntansi & Auditing Indonesia*, 23(1), 21–29. <https://doi.org/10.20885/jaai.vol23.iss1.art3>
- Ardillah, K., & Vesakhadevi, S. (2021). Determinant of Earnings Management Practices in Indonesia's Consumer Goods Companies. *Accounting Analysis Journal*, 10(3), 198–205.
- Arens, A. A., Elder, R. J., & Beasley M. S. (2010). *Auditing and Assurance Service An Integrated Approach* (13rd Edition). Pearson Prentice-Hall, Inc. New Jersey-USA.
- Armadiyanti, P., & Iswati, S. (2019). Corporate Political Connection and Audit Quality. *Jurnal Akuntansi dan Keuangan Indonesia*, 16(2), 122–140. <https://doi.org/10.21002/jaki.2019.07>
- Astuti, C. D., & Pangestu, N. (2019). Kualitas Audit, Karakteristik Perusahaan dan Manajemen Laba Riil. *Media Riset Akuntansi, Auditing & Informasi*, 19(2), 191–208. <https://doi.org/10.25105/mraai.v19i2.5442>
- Astuti, I. N., Senjani, Y. P., & Haryono, S. (2022). Determinan Kualitas Audit Berdasarkan Standar Perikatan dan Ukuran KAP. *Media Riset Akuntansi, Auditing & Informasi*, 22(2), 231–252. <https://doi.org/10.25105/mraai.v22i2.13985>
- Atmojo, R. T., & Sukirman, S. (2019). Effect of Tenure, Audit Specialization, and KAP's Reputation on the Quality of Audit Mediated by Audit Committees. *Accounting Analysis Journal*, 8(1), 66–73.

- Bahtiar, A., Meidawati, N., Setyono, P., Putri, N. R., & Hamdani, R. (2021). Determinants of Going Concern Audit Opinion: An Empirical Study in Indonesia. *Jurnal Akuntansi & Auditing Indonesia*, 25(2), 183–193. <https://doi.org/10.20885/jaai.vol25.iss2.art8>
- Bawono, I. R., Kanivia, A., & Rusmana, O. (2021). Factors Affecting the Financial and Non-Financial Ratios on Going-Concern Audit Opinion. *Jurnal Akuntansi dan Pendidikan*, 10(2), 87. <https://doi.org/10.25273/jap.v10i2.7024>
- Biduri, S., Hermawan, S., Hariyanto, W., & Ningdia, E. W. (2021). Auditor Experience as Moderator on Audit Quality in creating Qualified Financial Statements. *Jurnal Akuntansi*, 13(1), 14–25. <https://doi.org/10.26740/jaj.v13n1.p14-25>
- Binti Nono, L., & Khomsatun, S. (2018). The Relationship of Reserve Account Disclosure Transparency and Accrual Earning Management with Audit Quality as Moderating. *Jurnal Dinamika Akuntansi*, 10(1), 58–70. <https://doi.org/10.15294/jda.v10i1.13183>
- Budiandru. (2021). Audit Quality of Pandemic Era Public Accounting Firms. *Accounting Analysis Journal*, 10(2), 78–85.
- Butar Butar, S. (2020). The Effects of Corporate Governance, Audit Quality, and Conservatism on Loan Collateral Requirements. *Jurnal Akuntansi dan Keuangan*, 22(1), 28–39. <https://doi.org/10.9744/jak.22.1.28-39>
- Christy, Y., Tin, S., & Odellia, G. (2021). The Influence of Auditor Rotation and Auditor's Reputation on Audit Quality with Auditor Specialization as a Moderating Variable . *Akuntansi Riset*, 13(2), 220–233.
- Ciger, A. (2020). Audit Quality: A Bibliometric Analysis (1981-2020). *Scientific Annals of Economics and Business*, 67(4), 473–494. <https://doi.org/10.47743/saeb-2020-0031>
- Deliana, D., Rahman, A., Syahputra, R., Listiorini, L., & Simbolon, K. (2023). Determinant's of Audit Quality. *Akuntansi Riset*, 15(2), 229–240.
- Diyanty, V., Fatima, E., & Syahroza, A. (2018). Pengaruh Kepemilikan dan Kepemimpinan Keluarga serta Efektifitas Pengawasan Dekom terhadap Kualitas Audit. *Jurnal Ekonomi dan Keuangan*, 2(2), 203–223. <https://doi.org/10.24034/j25485024.y2018.v2.i2.3941>
- Djanegara, M. S. (2017). Pengaruh Kualitas Audit Terhadap Kualitas Laporan Keuangan Pemerintah Daerah. *Jurnal Akuntansi*, 21(3), 461–483. <https://doi.org/10.24912/ja.v21i3.252>
- Endiana, I. D. M., & Suryandari, N. N. A. (2021). Opini Going Concern: Ditinjau Dari Agensi Teori Dan Pemicunya. *Jurnal Ekonomi dan Keuangan*, 5(2), 224. <https://doi.org/10.24034/j25485024.y2021.v5.i2.4490>
- Eriandani, R., Wijaya, M. G., & Sulistiawan, D. (2024). Corporate Governance and Firm Risk: Earnings Management as Moderating Variable. *Indonesian Journal of Business and Entrepreneurship*, 10, 531–543. <https://doi.org/10.17358/ijbe.10.3.531>
- Farida, A. L., & Sugesti, P. F. (2023). Determinant of Earnings Management: Financial Distress, Tax Planning, Audit Quality, and Public Accountant Firm Size. *Journal of Accounting and Strategic Finance*, 6(1), 1–15. <https://doi.org/10.33005/jasf.v6i1.386>
- Fawziah, I. N., Iqbal, S., & Trisno, S. (2023). The Role of Locus of Control in Moderating the Effect of Auditor's Independence and Professional Skepticism on Audit Quality. *The Indonesian Accounting Review*, 13(2), 233–247. <https://doi.org/10.14414/tiar.v13i2.3791>
- Fitriany, F., Utama, S., Martani, D., & Rosietta, H. (2016). Pengaruh Tenure, Rotasi dan Spesialisasi Kantor Akuntan Publik (KAP) Terhadap Kualitas Audit: Perbandingan

- Sebelum dan Sesudah Regulasi Rotasi KAP di Indonesia. *Jurnal Akuntansi dan Keuangan*, 17(1). <https://doi.org/10.9744/jak.17.1.12-27>
- Handayani, W. S., & Khairunnisa, K. (2024). Independence, Competence, Objectivity, Ethics And Auditor Experience On Auditor Quality. *Jurnal Akuntansi*, 28(3), 420–437. <https://doi.org/10.24912/ja.v28i3.2167>
- Handoyo, S., & Agustianingrum, W. B. (2017). GCG Role and Audit Quality in Reducing Earnings Management Action in Indonesian Manufacturing Firms. *Jurnal Keuangan dan Perbankan*, 21(3). <https://doi.org/10.26905/jkdp.v21i3.673>
- Harianto, S. (2022). Political Connection, Auditor Quality, Family Ownership, and Earnings Management: Real and Accrual. *Journal of Economics, Business, & Accountancy Ventura*, 25(2), 204–216. <https://doi.org/10.14414/jebav.v25i2.3012>
- Hariyanto, I. T., & Suhardianto, N. (2018). Tata Kelola Perusahaan Dan Variabilitas Laba. *Jurnal Ekonomi dan Keuangan*, 2(2), 224–246. <https://doi.org/10.24034/j25485024.y2018.v2.i2.3943>
- Hartoko, S., & Tri Astuti, A. A. (2021). Pengaruh Karakteristik Dewan Komisaris, Karakteristik Komite Audit, dan Kualitas Audit Terhadap Kualitas Laba. *Jurnal Akuntansi dan Bisnis*, 21(1), 126. <https://doi.org/10.20961/jab.v21i1.658>
- Hartomo, O. D., & Silvia, B. M. (2019). Anteseden Pengungkapan Kebijakan Anti Korupsi Perusahaan di Bursa Efek Indonesia. *Jurnal Kajian Akuntansi*, 3(2), 196. <https://doi.org/10.33603/jka.v3i2.2919>
- Hermawan, S., Rahayu, D., Biduri, S., Rahayu, R. A., & Salisa, N. A. N. (2021). Determining Audit Quality in the Accounting Profession with Audit Ethics as a Moderating Variable. *Indonesian Journal of Sustainability Accounting and Management*, 5(1), 11–22. <https://doi.org/10.28992/ijSAM.v5i1.138>
- Hidayatullah, A., & Sulhani, S. (2018). Pengaruh Manipulasi Laporan Keuangan dan Karakteristik Chief Financial Officer terhadap Ketepatanwaktuan Pelaporan Keuangan dengan Kualitas Audit Sebagai Variabel Pemoderasi. *Jurnal Dinamika Akuntansi dan Bisnis*, 5(2), 117–136. <https://doi.org/10.24815/jdab.v5i2.10872>
- Idawati, W. (2018). Analisis Karakteristik Kunci Yang Mempengaruhi Kualitas Audit. *Jurnal Akuntansi*, 22(1), 33–50. <https://doi.org/10.24912/ja.v22i1.321>
- Ikhsan, A., Lubis, P. K. D., Evi, T., Hidayat, S., & Kumala, R. (2023). Good Corporate Governance, Auditor Quality and Auditor Opinion on Earning Persistency . *Jurnal Ekonomi dan Keuangan*, 7(3), 394–414. <https://doi.org/10.24034/j25485024.y2023.v7.i3.5750>
- Indiarti, M. G. K., & Widiatmoko, J. (2023). Political Connections and Tax Avoidance: Does Audit Quality Moderate The Relationship? *Akuntansi Riset*, 15(2), 295–306.
- Jannah, A. P. A., & Harymawan, I. (2021). Pengaruh Audit Fee Stickiness Terhadap Kualitas Audit. *Jurnal Akuntansi dan Bisnis*, 21(1), 41. <https://doi.org/10.20961/jab.v21i1.557>
- Juliardi, D., & Erisco, D. (2023). The Influence of Time Budget Pressure, Time Deadline Pressure and Work Stress on Audit Quality of External Auditor. *Integrated Journal of Business and Economics*, 7(1), 365–375. <https://doi.org/10.33019/ijbe.v7i1.630>
- Karina, A., & Kusumawardhani, F. (2023). Analysis of Solvability, Liquidity, and Company Size on Audit Delay with Audit Quality as Moderation. *Jurnal Riset Akuntansi Komtemporer*, 15(2), 209–218. <https://doi.org/10.23969/jrak.v15i2.7304>

- Karina, R. (2021). Corporate Governance and Earnings Management: Does Gender Matter? *Jurnal Akuntansi & Auditing Indonesia*, 25(2), 125–135. <https://doi.org/10.20885/jaai.vol25.iss2.art3>
- Kartika, D., & Pramuka, B. A. (2019). The Influence of Competency, Independency, and Professionalism on Audit Quality. *Journal of Accounting and Strategic Finance*, 2(2), 157–169. <https://doi.org/10.33005/jasf.v2i2.58>
- Kartika, M. R., Fitriana, F., & Yuliaty, F. (2021). Ethics, Education Level, and Professional Skepticism on Audit Quality. *Jurnal Riset Akuntansi Kontemporer*, 13(1), 32–36. <https://doi.org/10.23969/jrak.v13i1.3814>
- Karyadi, E. A., & Slamet, K. (2022). Earnings Quality: The Moderating Role of CEO's Demographic Backgrounds in Agency Relationships. *Jurnal Akuntansi dan Bisnis*, 22(2). <https://doi.org/10.20961/jab.v22i2.724>
- Kristanti, K. D., & Almilia, L. S. (2019). Factors Affecting Earnings Response Coefficient (ERC) in Manufacturing Companies Listed on BEI. *The Indonesian Journal of Accounting Research*, 22(2), 153–178. <https://doi.org/10.33312/ijar.451>
- Kurniasih, I., & Kiswanto. (2019). The Effect of Industrial Specialization Auditors and Audit Committee Expertise on Audit Quality. *Accounting Analysis Journal*, 8(2), 118–123.
- Kusumawati, E. (2019). Determinan Manajemen Laba: Kajian Empiris Pada Perusahaan Manufaktur Go Publik Di Bursa Efek Indonesia. *Riset Akuntansi Dan Keuangan Indonesia*, 4(1), 25–42.
- Lestari, E., & Murtanto, M. (2018). Pengaruh Efektivitas Dewan Komisaris dan Komite Audit, Struktur Kepemilikan, Kualitas Audit terhadap Manajemen Laba . *Media Riset Akuntansi, Auditing & Informasi*, 17(2), 97–116. <https://doi.org/10.25105/mraai.v17i2.2063>
- Liemmuel, S. E., & Eriandani, R. (2022). Relevance of Accounting Information: Audit Quality and Earnings Management as Moderating Variable. *Jurnal Dinamika Akuntansi*, 14(2), 138–155. <https://doi.org/10.15294/jda.v14i2.37575>
- Lisa, O., Muawanah, U., Heriyadi, H., & Dahlan, A. (2023). Internal Control As A Mediator Of Audit Quality. *Jurnal Reviu Akuntansi dan Keuangan*, 13(3), 570–587. <https://doi.org/10.22219/jrak.v13i3.29188>
- M. Rasuli, Zarefar, A., Zarefar, A., & Juhaira Johari, R. (2024). Professional Scepticism, Independence, Information Technology, Auditor Competence, And Audit Quality. *Jurnal Reviu Akuntansi dan Keuangan*, 14(1), 243–257. <https://doi.org/10.22219/jrak.v14i1.29963>
- Mappanyuki Ratna, Sumiyati, S., Nengsih, N., & Alam, S. (2023). Moderation Internal Control System: PSAK Adoption IFRS and Dysfunctional Audit Behaviour on Audit Quality. *Akuntansi Riset*, 15(2), 229–240.
- Maraya, A. D., & Yendrawati, R. (2016). Pengaruh Corporate Governance dan Corporate Social Responsibility Disclosure terhadap Tax Avoidance: Studi Empiris pada Perusahaan Tambang dan CPO. *Jurnal Akuntansi & Auditing Indonesia*, 20(2), 147–159. <https://doi.org/10.20885/jaai.vol20.iss2.art7>
- Meidawati, N., & Assidiqi, A. (2019b). The Influences of Audit Fees, Competence, Independence, Auditor Ethics, and Time Budget Pressure on Audit Quality. *Jurnal Akuntansi & Auditing Indonesia*, 23(2), 117–128. <https://doi.org/10.20885/jaai.vol23.iss2.art6>

- Monoarfa, R., & Dama, H. (2018). The Influence of Time Budget Pressure and Dysfunctional Behavior to Audit Quality at Bawasda in Gorontalo Province. *Jurnal Akuntansi*, 22(3), 420–436. <https://doi.org/10.24912/ja.v22i3.397>
- Muslim, Hajering, & Suun, M. (2019). Moderating Ethics Auditors Influence of Competence, Accountability on Audit Quality. *Jurnal Akuntansi*, 23(3), 468–481. <https://doi.org/10.24912/ja.v23i3.614>
- Ningtyas, W. A., & Aris, M. A. (2018). Independensi, Kompetensi, Pengalaman Kerja, dan Due Professional Care: Pengaruhnya terhadap Kualitas Audit yang Dimoderasi dengan Etika Profesi. *Riset Akuntansi dan Keuangan Indonesia*, 1(1), 75–88. <https://doi.org/10.23917/reaksi.v1i1.1971>
- Novia, I., Lukviarman, N., & Setiany, E. (2021). Pengaruh Corporate Governance Terhadap Pengungkapan Forward-Looking Information. *Jurnal Akuntansi dan Bisnis*, 21(2), 190. <https://doi.org/10.20961/jab.v21i2.690>
- Nugrahanti, T. P., & Pratiwi, A. S. (2023). The Remote Audit and Information Technology: The impact of Covid-19 Pandemics. *Journal of Accounting and Business Education*, 8(1), 15–39.
- Nugrahanti, Y. W., & Nugroho, A. T. (2022). Do Political Connections, Ownership Structure, and Audit Quality Affect Earnings Management? *Jurnal Akuntansi dan Bisnis*, 22(1), 47. <https://doi.org/10.20961/jab.v22i1.766>
- Nursiam, N., Putri, F. K., & Pardi Pardi. (2021). The Effect of Audit Fee, Audit Rotation, and Auditor Reputation on Audit Quality (Empirical Study on Manufacturing Companies Listed on the Idx for the Period 2014-2018). *Riset Akuntansi Dan Keuangan Indonesia*, 6(2), 113–120.
- Otoritas Jasa Keuangan. (2019). *SP 26/DHMS/OJK/VI/2019 tentang Pemberian Sanksi atas Kasus Garuda*.
- Otoritas Jasa Keuangan. (2022). *Keputusan Dewan Komisioner nomor KEP-5/NB.1/2023, KEP-3/NB.1/2023, dan KEP-4/NB.1/2023 tentang Pemberian Sanksi kepada AP dan KAP terkait Wanaartha Life*.
- Prabowo, D. D. B., & Suhartini, D. (2021). The Effect of Independence and Integrity on Audit Quality: Is There A Moderating Role for E-Audit? *Journal of Economics, Business, & Accountancy Ventura*, 23(3), 305–319. <https://doi.org/10.14414/jebav.v23i3.2348>
- Prabowo, M. A., Hananto, S. T., Budiwati, C., Triatmoko, H., & Widjajanto, A. (2020). Kualitas Audit dan Manajemen Laba Berbasis Operasional. *Jurnal Akuntansi dan Bisnis*, 20(2), 173. <https://doi.org/10.20961/jab.v20i2.570>
- Priyanti, D. F., & Uswati Dewi, N. H. (2019). The Effect of Audit Tenure, Audit Rotation, Accounting Firm Size, and Clients Company Size on Audit Quality. *The Indonesian Accounting Review*, 9(1), 1–14. <https://doi.org/10.14414/tiar.v9i1.1528>
- Purwanti, R., & Nugrahanti, Y. W. (2017). Prevention Strategy of Income Smoothing Practices with Good Corporate Governance Mechanism. *Jurnal Dinamika Akuntansi*, 8(1), 60–72. <https://doi.org/10.15294/jda.v8i1.9142>
- Puspa, R., Triana, L., Nopianti, R., & Tjeng, P. S. (2021). Pengaruh Tata Kelola Perusahaan, Kualitas Audit, dan Konservatisme terhadap Persyaratan Agunan Pinjaman. *Jurnal Ekonomi Modernisasi*, 17(2), 95–112. <https://doi.org/10.21067/jem.v17i2.5419>

- Rawi, R., & Muchlish, M. (2022). Audit Quality, Audit Committee, Media Exposure, and Corporate Social Responsibility. *Jurnal Siasat Bisnis*, 26(1), 85–96. <https://doi.org/10.20885/jsb.vol26.iss1.art6>
- Reskino, R., & Darma, A. (2023). The Role of Financial Distress and Fraudulent Financial Reporting: A Mediation Effect Testing. *Journal of Accounting and Investment*, 24(3), 779–804. <https://doi.org/10.18196/jai.v24i3.18397>
- Ridloi, H. (2021). The Effects of Quality Control System on Professional Skepticism and Its Implications to Audit Quality with Peer Review as a Moderating Variable (A Case Study on Public Accounting Firms in Semarang). *Journal of Islamic Accounting and Finance Research*, 3(1), 75–90. <https://doi.org/10.21580/jiafr.2021.3.1.7318>
- Sambuaga, E. A., Chen, C., Fransiska, K., & Yovanka, J. (2021). Financial Restatement Period: Internal and External Auditing Mechanism. *The Indonesian Journal of Accounting Research*, 24(1), 51–47. <https://doi.org/10.33312/ijar.519>
- Sambuaga, E. A., & Herusetya, A. (2022). Audit Quality of The Engagement Partner and Audit Firm. *Riset Akuntansi dan Keuangan Indonesia*, 7(1), 50–62. <https://doi.org/10.23917/reaksi.v7i1.17388>
- Sandy, S., & Lukviarman, N. (2015). Pengaruh Corporate Governance terhadap Tax Avoidance: Studi Empiris pada Perusahaan Manufaktur. *Jurnal Akuntansi & Auditing Indonesia*, 19(2), 85–98. <https://doi.org/10.20885/jaai.vol19.iss2.art1>
- Saputra, M. F., Rifa, D., & Rahmawati, N. (2015). Pengaruh Corporate Governance, Profitabilitas dan Karakter Eksekutif terhadap Tax Avoidance pada Perusahaan yang Terdaftar di BEI. *Jurnal Akuntansi & Auditing Indonesia*, 19(1), 1–12. <https://doi.org/10.20885/jaai.vol19.iss1.art1>
- Saraswati, E., & Puteri, A. A. (2023). Governance and Audit Quality: Can Improve Earnings Quality? *Jurnal Reviu Akuntansi dan Keuangan*, 13(3), 748–763. <https://doi.org/10.22219/jrak.v13i3.29507>
- Sari, A. F. K., & Fakhriyyah, D. D. (2024). Does Due Professional Care, Time Budget Pressure, Accountability, and Audit Experience effect on Audit Quality? *Jurnal Ilmiah Akuntansi dan Bisnis*, 19(1), 19–31. <https://doi.org/10.24843/JIAB.2024.v19.i01.p02>
- Sari, S. P., Diyanti, A. A., & Wijayanti, R. (2019). The Effect Of Audit Tenure, Audit Rotation, Audit Fee, Accounting Firm Size And Auditor Specialization To Audit Quality. *Riset Akuntansi Dan Keuangan Indonesia*, 4(3), 186–196.
- Sihombing, J., Agoes, S., & Santoso, U. (2017). Studi Empiris Terkait Dengan Pengungkapan Sukarela, Kualitas Audit Dan Asimetri Informasi Terhadap Stock Return Pada Perusahaan Manufaktur Yang Terdaftar Pada Bursa Efek Indonesia. *Jurnal Akuntansi*, 21(1), 1–20. <https://doi.org/10.24912/ja.v21i1.140>
- Sihono, A., & Munandar, A. (2023). Moderating Effect of Audit Quality: The Case of Political Connection, Executive Compensation and Tax Aggressiveness. *Jurnal Ekonomi Modernisasi*, 19(1), 15–30. <https://doi.org/10.21067/jem.v19i1.7762>
- Sitorus, T., Hendratono, T., & Fransisca, N. (2020). The Factors Affecting Audit Quality. *Journal of Economics, Business, & Accountancy Ventura*, 23(2), 243–253. <https://doi.org/10.14414/jebav.v23i2.2137>
- Srikandhi, M. F., & Suryandari, D. (2020). Audit Quality Moderates the Effect of Independent Commissioners, Audit Committee, and Whistleblowing System on the Integrity of Financial Statement. *Accounting Analysis Journal*, 9(3), 186–192.

- Sukirman, & Asih, P. (2021). Influence of Auditor Switching, Public Accounting Firm's Reputation, and Workload on The Audit Quality with The Audit Committee's Effectiveness as The Moderating Variable. *Jurnal Dinamika Akuntansi*, 13(1), 25–36.
- Sukma, P., & Bernawati, Y. (2019). The Impact of Audit Committe Characteristics on Audit Quality. *Jurnal Akuntansi*, 23(3), 363–378. <https://doi.org/10.24912/ja.v23i3.602>
- Sutisman, E., Ermawati, Y., Mariani, S., & Putra, A. H. P. K. (2022). Moderating Effect of Implementation Risk-Based Auditing on Audit Quality. *Jurnal Akuntansi*, 26(1), 276–293. <https://doi.org/10.24912/ja.v25i2.810>
- Suwarno, A. E., Anggraini, Y. B., & Puspawati, D. (2020). Audit Fee, Audit Tenure, Auditor's Reputation, and Audit Rotation on Audit Quality. *Riset Akuntansi Dan Keuangan Indonesia*, 5(1), 61–70.
- Suwarno, A. E., Rahiliya, F. D., & Kusumawati, E. (2021). Earnings Management on Firm Value, Audit Quality, and Managerial Ownership As Moderating Variables. *Riset Akuntansi dan Keuangan Indonesia*, 6(2), 132–141.
- Taqi, M., Rahmawati, Bandi, Payamta, & Rusydiana, A. S. (2021). Audit Quality Research: A Bibliometric Analysis. *Library Philosophy and Practice (e-journal)*.
- Thamlim, W., & Dwi Mulyani, S. (2023). Dampak Asimetri Informasi, ESOP, Kualitas Audit terhadap Manajemen Laba dengan Variabel Pemoderasi Kesulitan Finansial . *Media Riset Akuntansi, Auditing & Informasi*, 23(2), 353–374. <https://doi.org/10.25105/mraai.v23i2.17187>
- Tiara, N. R., Dewi, R. R., & Siddi, P. (2023). Tata Kelola Perusahaan dan Tax Avoidance. *Accounting and Financial Review*, 6(2), 270–278.
- Tjan, J. S., Muslim, M., Alimin, A., Noch, M. Y., & Sonjaya, Y. (2024). Independence, Professional Skepticism, And Audit Quality: The Moderating Role Of Audit Fees. *Jurnal Akuntansi*, 28(1), 40–60. <https://doi.org/10.24912/ja.v28i1.1698>
- Trisanti, T. (2019). Discretionary Accounting Choice and Management Opportunistic Behavior to Manage Income. *Jurnal Akuntansi dan Keuangan*, 21(1), 21–29. <https://doi.org/10.9744/jak.21.1.21-29>
- Tussiana, A. A., & Lastanti, H. S. (2018). Pengaruh Independensi, Kualitas Audit, Spesialisasi Industri Auditor dan Corporate Governance terhadap Integritas Laporan Keuangan . *Media Riset Akuntansi, Auditing & Informasi*, 16(1), 69–78. <https://doi.org/10.25105/mraai.v16i1.2076>
- Ulhaq, M. D., Diantimala, Y., & Abdullah, S. (2021). The Demand of Cost of Equity: Is Audit Attributes Matters? *Riset Akuntansi dan Keuangan Indonesia*, 6(3), 296–309.
- Utama, I. W., & Anridho, N. (2024). The Impact of It Governance on Audit Outcomes and Footnote Readability for Public Companies in Indonesia. *Jurnal Akuntansi & Auditing Indonesia*, 63–76. <https://doi.org/10.20885/jaai.vol28.iss1.art7>
- Utami, H. T., & Diyanty, V. (2015). Pengaruh Entrenchment Effect terhadap Kualitas Audit dan Peran Efektivitas Komite Audit. *Jurnal Akuntansi & Auditing Indonesia*, 19(2), 137–152. <https://doi.org/10.20885/jaai.vol19.iss2.art5>
- Wahyono, Novianto, A. N., & Putri, E. (2019a). The Effect of CSR Disclosure, Corporate Governance Mechanism, Auditor Independence, Auditor Quality, and Firm Size on Earning Management. *Riset Akuntansi dan Keuangan Indonesia*, 4(3), 156–170.
- Wahyono, W., Novianto, A. N., & Putri, E. (2019b). The Effect of CSR Disclosure, Corporate Governance Mechanism, Auditor Independence, Auditor Quality, and Firm Size on

- Earning Management. *Riset Akuntansi dan Keuangan Indonesia*, 4(3), 156–170. <https://doi.org/10.23917/reaksi.v4i3.9339>
- Wardani, D. K., & Putriane, S. W. (2020). Dampak Risiko Pajak dan Faktor Lain terhadap Biaya Modal Perusahaan Manufaktur . *Media Riset Akuntansi, Auditing & Informasi*, 20(1), 83–98. <https://doi.org/10.25105/mraai.v20i1.6491>
- Widodo, A., & Fanani, Z. (2020). Military Background, Political Connection, Audit Quality And Earning Quality. *Jurnal Akuntansi*, 24(1), 84–99. <https://doi.org/10.24912/ja.v24i1.658>
- Widyasari, P. A., Harindahyani, S., & Rudiawarni, F. A. (2017). Strategi Bisnis dalam Praktik Manajemen Laba pada Perusahaan Manufaktur di Indonesia. *Jurnal Keuangan dan Perbankan*, 21(3). <https://doi.org/10.26905/jkdp.v21i3.1179>
- Winoto, C. O., & Harindahyani, S. (2021). The Effect of Auditor's Work Stress on Audit Quality of Listed Companies in Indonesia. *Journal of Economics, Business, & Accountancy Ventura*, 23(3), 361–374. <https://doi.org/10.14414/jebav.v23i3.2416>
- Wiyadi, Amalina, N., Trisnawati, R., & Sasongko Noer. (2017). Perspektif Positif Praktik Manajemen Laba: Kajian Empiris Pada Perusahaan Manufaktur Go Publik Di Bursa Efek Indonesia. *Riset Akuntansi Dan Keuangan Indonesia*, 2(1), 49–60.
- Yanthi, N. P. D. C., Pratomo, D., & Kurnia, K. (2021). Audit Quality, Audit Committee, Institutional Ownership and Independent Director on Earning Management. *Jurnal Riset Akuntansi Kontemporer*, 13(1), 42–50. <https://doi.org/10.23969/jrak.v13i1.4312>
- Yefni, Y., & Sari, P. (2021). Akankah Fee Audit dan Karakteristik Auditor Menentukan Kualitas Audit? *Jurnal Akuntansi Multiparadigma*, 12(1). <https://doi.org/10.21776/ub.jamal.2021.12.1.10>
- Yulianti, Y., Saifudin, S., & Sari, R. N. (2024). Moderation Testing of Dysfunctional Audit Behavior: Internal Auditor Factors on Audit Quality. *Journal of Accounting and Investment*, 25(3), 971–989. <https://doi.org/10.18196/jai.v25i3.21944>

6. LAMPIRAN

Lampiran 1 Daftar Nama Jurnal SINTA 2

No	Jurnal SINTA 2
1	Jurnal Akuntansi dan Keuangan
2	Jurnal Ilmiah Akuntansi dan Bisnis
3	Jurnal Akuntansi dan Auditing Indonesia
4	Jurnal Reviu Akuntansi dan Keuangan
5	Jurnal Akuntansi dan Keuangan Indonesia
6	Riset Akuntansi dan Keuangan Indonesia
7	Jurnal Akuntansi dan Bisnis
8	Jurnal Dinamika Akuntansi
9	Jurnal Akuntansi
10	Jurnal Akuntansi Riset
11	Jurnal Ilmiah Bidang Akuntansi dan Manajemen
12	Jurnal Akuntansi dan Pendidikan

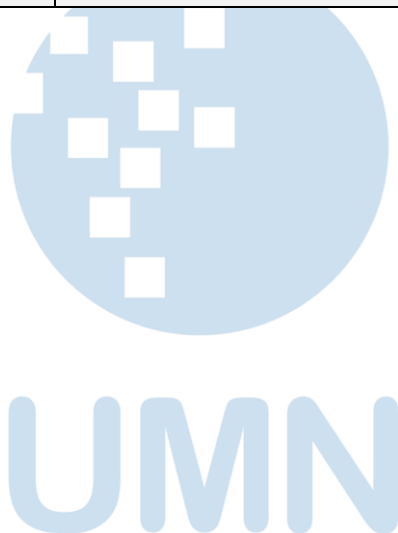
No	Jurnal SINTA 2
13	Jurnal Akuntansi
14	Media Riset Akuntansi Auditing & Informasi
15	Jurnal Siasat Bisnis
16	Jurnal Ekonomi dan Keuangan
17	Jurnal Akuntansi Multiparadigma
18	Jurnal Kajian Akuntansi
19	Jurnal Riset Akuntansi Kontemporer
20	Jurnal Dinamika Akuntansi dan Bisnis
21	Jurnal Keuangan dan Perbankan
22	Jurnal Ekonomi dan Moderasi
23	Indonesian Journal of Sustainability Accounting and Management
24	Journal of Economics, Business, & Accountancy Ventura
25	Indonesian Journal of Business and Entrepreneurship
26	The Indonesia Accounting Review
27	Journal of Accounting and Investment
28	Journal of Accounting and Strategic Finance
29	The Indonesian Journal of Accounting Research
30	Journal of Islamic Accounting and Finance Research
31	Accounting and Financial Review
32	Accounting Analysis Journal
33	Journal of Accounting and Business Education
34	Integrated Journal of Business and Economics

Lampiran 2 Sampel yang Ditemukan pada Jurnal Terakreditasi SINTA 2

Nama Jurnal	Kode	Artikel	Jumlah
Jurnal Akuntansi dan Keuangan	JAK	(Butar-Butar, 2020), (Trisanti, 2019), (Fitriany dkk, 2016)	3
Jurnal Ilmiah Akuntansi dan Bisnis	JIAB	(Sari & Fakhriyyah, 2024)	1
Jurnal Akuntansi dan Auditing Indonesia	JAAI	(Utama & Anridho, 2024), (R. Karina, 2021), (Bahtiar dkk, 2021), (Meidawati & Assidiqi, 2019), (Aqmarina & Yendrawati, 2019), (Maraya & Yendrawati, 2016), (Utami & Diyanty, 2015), (Saputra dkk., 2015), (Sandy & Lukviarman, 2015)	9
Jurnal Reviu Akuntansi dan Keuangan	JRAK	(Rasuli dkk, 2024), (Lisa dkk, 2023), (Saraswati & Puteri, 2023), (Alkausar dkk., 2021)	4
Jurnal Akuntansi dan Keuangan Indonesia	JAKI	(Armadiyanti & Iswati, 2019)	1
Riset Akuntansi dan Keuangan Indonesia	REAKSI	(Sambuaga & Herusetya, 2022), (Suwarno dkk, 2021), (Achyani dkk., 2022), (Ulhaq dkk, 2021), (Nursiam dkk, 2021), (Suwarno dkk, 2020), (Kusumawati, 2019), (Wahyono dkk, 2019), (Sari dkk, 2019), (Andriani & Nursiam, 2018), (Wiyadi dkk, 2017), (Ningtyas & Aris, 2018)	12
Jurnal Akuntansi dan Bisnis	JAB	(Karyadi & Slamet, 2022), (Nugrahanti & Nugroho,	7

Nama Jurnal	Kode	Artikel	Jumlah
		2022), (Hartoko & Astuti, 2021), (Jannah & Harymawan, 2021), (Novia dkk, 2021)), (Prabowo dkk, 2020), (Achmad, 2019)	
Jurnal Dinamika Akuntansi	JDA	(Liemmuell & Eriandani, 2022), (Sukirman & Asih, 2021), (Nono & Khomsatun, 2018), (Purwanti & Nugrahanti, 2017)	4
Jurnal Akuntansi	e-JA	(Handayani & Khairunnisa, 2024), (Tjan dkk, 2024), (Akbar dkk, 2022), (Sutisman dkk, 2022), (Widodo & Fanani, 2020), (Sukma & Bernawati, 2019) (Hajering dkk, 2019), (Monoarfa & Dama, 2018), (Idawati, 2018), (Djanegara, 2017), (Sihombing dkk, 2017)	11
Jurnal Akuntansi Riset	ASET	(Indiarti & Widiatmoko, 2023), (Mappanyuki dkk, 2023), (Deliana dkk, 2023), (Christy dkk, 2021)	4
Jurnal Ilmiah Bidang Akuntansi dan Manajemen	JEMA	(Adhikara & Widodo, 2023)	1
Jurnal Akuntansi dan Pendidikan	ASSETS	(Bawono dkk, 2021)	1
Akrual: Jurnal Akuntansi	AKRUAL	(Biduri dkk, 2021)	1
Media Riset Akuntansi Auditing & Informasi	MRAAI	(Thamlim & Mulyani, 2023), (Astuti dkk, 2022), (Wardani & Putriane, 2020), (Astuti & Pangestu, 2019), (Lestari & Murtanto, 2018), (Tussiana & Lastanti, 2018)	6
Jurnal Siasat Bisnis	JSB	(Rawi & Muchlish, 2022)	1
Jurnal Ekonomi dan Keuangan	EKUITAS	(Ikhsan dkk, 2023), (Ananda dkk, 2022), (Endiana & Suryandari, 2021), (Diyanty dkk, 2018), (Hariyanto & Suhardianto, 2018)	5
Jurnal Akuntansi Multiparadigma	JAMAL	(Yefni & Sari, 2021)	1
Jurnal Kajian Akuntansi	JKA	(Adiwibowo & Nurmala, 2023), (Hartomo & Silvia, 2019)	2
Jurnal Riset Akuntansi Kontemporer	JRAK	(Karina & Kusumawardhani, 2023), (Yanthi dkk, 2021), (Kartika dkk, 2021)	3
Jurnal Dinamika Akuntansi dan Bisnis	JDAB	(Ananda & Faisal, 2023), (Hidayatullah & Sulhani, 2018)	2
Jurnal Keuangan dan Perbankan	JKP	(Handoyo & Agustianingrum, 2017), (Widyasari dkk, 2017)	2
Jurnal Ekonomi dan Moderasi	JEM	(Sihono & Munandar, 2023), (Puspa dkk, 2021)	2
Indonesian Journal of Sustainability Accounting and Management	IJSAM	(Hermawan dkk, 2021)	1
Journal of Economics, Business, & Accountancy Ventura	JEBAV	(Harianto, 2022), (Sitorus dkk, 2020), (Prabowo & Suhartini, 2021), (Winoto & Harindahyani, 2021)	4
Indonesian Journal of Business and Entrepreneurship	IJBE	(Eriandani dkk, 2024)	1
The Indonesia Accounting Review	TIAR	(Fawziah dkk., 2023), (Priyanti & Dewi, 2019)	2
Journal of Accounting and	JAI	(Yulianti dkk, 2024), (Reskino & Darma, 2023), (Amalia	3

Nama Jurnal	Kode	Artikel	Jumlah
Investment		dkk, 2019),	
Journal of Accounting and Strategic Finance	JASF	(Farida & Sugesti, 2023), (Kartika & Pramuka, 2019)	2
The Indonesian Journal of Accounting Research	IJAR	(Sambuaga dkk, 2021), (Kristanti & Almilia, 2019)	2
Journal of Islamic Accounting and Finance Research	JIAFR	(Aisyah dkk, 2023), (Ridloi, 2021)	2
Accounting and Financial Review	AFRE	(Tiara dkk, 2023)	1
Accounting Analysis Journal	AAJ	(Ardillah & Vesakhadevi, 2021), (Budiandru, 2021), (Srikandhi & Suryandari, 2020), (Atmojo & Sukirman, 2019), (Kurniasih & Kiswanto, 2019)	5
Journal of Accounting and Business Education	JABE	(Nugrahanti & Pratiwi, 2023)	1
Integrated Journal of Business and Economics	IJBE	(Juliardi & Erisco, 2023)	1



THE ROLE OF AUDIT ROTATION, AUDIT COMMITTEE OVERSIGHT, AUDIT CAPACITY STRESS, AND AUDIT TENURE IN DETERMINING AUDIT QUALITY

Sabrina¹

Faculty of Social Sciences and Humanities, Universitas Bunda Mulia, Indonesia

sabrinaaa12001@gmail.com

Kurniawati^{2*}

Faculty of Social Sciences and Humanities, Universitas Bunda Mulia, Indonesia

corstira@gmail.com

(*Corresponding Author)

Received on 30 May 2025

Accepted on 29 June 2025

Abstract— The quality of audits is a crucial factor determining the credibility of financial reporting. This research aims to explore the determinants that impact audit quality for banking companies listed on the IDX from 2019 to 2023. This study examines the role of audit rotation, audit committee oversight, audit capacity stress, and audit tenure on audit quality. The results of this study are expected to provide insights for auditors, regulators, and organizations regarding how these factors influence auditor independence, experience, supervisory effectiveness, and the level of pressure faced by auditors. The study utilizes secondary data obtained through purposive sampling, focusing on the banking sector. The sample consist of conventional bank consistently listed on the Indonesia Stock Exchange (IDX) during 2019–2023, which publish annual financial reports audited by accounting firms registered with the Financial Services Authority (OJK). Based on this criteria, 34 banking companies are selected as research samples. Logistic regression analysis, conducted using EViews 10 program is employed to analyze the data. The findings indicate that audit rotation does not significantly affect audit quality, whereas audit committee oversight, audit capacity stress, and audit tenure have a positive effect on audit quality.

Keywords: Audit Rotation; Audit Committee Oversight; Audit Capacity Stress; Audit Tenure; Audit Quality

1. INTRODUCTION

1.1 Research Background

The growth of the digital economy and the rising number of retail investors in Indonesia have been accompanied by increased capital market activity. This is reflected in the rise of total investors to 14.84 million in 2024, consisting of stock, bond, and mutual fund investors. As a result, the IDX ranked 10th globally in terms of the number of IPOs, with total fund raised from IPOs reaching IDR 14.3 trillion and 943 companies listed by the end of 2024 (IDX, 2024). This increased capital market activity has increased stakeholders' desire to obtain relevant financial information to make informed investment choices. Financial reports play a key role in communicating a company's performance to internal and external parties, such as stakeholders and shareholders. The information presented in the financial statements contains crucial aspects, especially for external entities such as shareholders, as it enables

them to assess information presented by the company and make informed decisions (Kurniawan & Kurniawati, 2024).

According to POJK No. 14/POJK.04/2022, publicly traded entities on the IDX are obligated to provide financial disclosures that have undergone external auditing by certified public accountants affiliated with OJK (OJK, 2022). Banking companies as public entities listed on the IDX are one of the public companies that are required to submit financial reports that have been audited by external auditors, because banking companies are companies that have a role in helping the economy in Indonesia and have a very complex financial system. Therefore, it is crucial to ensure that audit reports in banking companies are of good quality to avoid a negative impact on the national economy. Financial reports composed by management may not be presented correctly, either intentionally or unintentionally. Auditing financial reports conducted by independent auditors is a way to gain confidence from various stakeholders that the financial reports are reliable and trustworthy. Stakeholders have high expectations for auditors to deliver high-quality reports that guide decision-making (Sari & Kurniawati, 2021). Audit quality is an auditor's ability in detecting and reporting material misstatements or fraud in the financial report (De Angelo, 1981). This highlights the role of auditors in detecting manipulation or violations committed by the client (Pamungkas et al, 2022). Several cases of financial statement manipulation occur in Indonesia and often cannot be detected by the auditor, which decreases investor confidence in audits. One of the phenomena that showed the decline in audit quality, is the bankruptcy case of Silicon Valley Bank. Bank Silicon Valley, or SVB, is a bank located in Silicon Valley, California, United States that focuses on financing startup business loans in the technology and health technology sectors.

In this case, one of the parties sued for guilt was KAP KPMG. Auditors from KPMG were unable to identify the risks that Silicon Valley Bank would face regarding the decline in deposits and losses experienced by Silicon Valley Bank, while KPMG's audit report could not show substantial doubts about the going concern of Silicon Valley Bank (Utari, 2023). This phenomenon demonstrates the significance of audit quality and the necessity for auditors to optimize their efforts to verify the credibility of financial information. Doing so can build trust among users who rely on these statements for informed decision-making. Audit quality determined from various factors, both from within the auditor or KAP itself and outside the KAP. From within the auditor, influencing factors such as audit rotation, auditor independence, audit tenure, KAP size, auditor workload, and auditor experience (Olivia & Setiawan, 2019) while from outside the KAP, such as cooperation with independent supervisory functions contained in the client company, such as the audit committee. (Fadhilah & Halmawati, 2021) defines audit rotation as the process of changing auditors or switching public accounting firms to help preserve auditor independence. Independent auditors are considered to have the courage to disclose material misstatements in the financial statements of their clients without being affected by the close relationship caused by the long-standing relationship (Handoyo & Putri, 2022). Audit committee, as an independent internal party, is expected to support external auditors to improve audit quality by providing comprehensive oversight of audit procedures and internal parties of the company who prepare the company's financial reports. Audit committee functions as an internal control unit and is tasked with supervising and assisting in maintaining audit integrity by overseeing the company's financial processes. To enhance effective oversight, audit committees are advised to conduct meetings at a minimum of four times a year (Mannuela & Kurniawati, 2024).

Audit committees are also valuable in helping external auditors get information about the company because the audit committee is an internal part that knows all information about

the company, so that it can help auditors improve the reliability of audit reports (Fadhilah & Halmawati, 2021). Audit capacity stress is the pressure experienced by auditors due to the large workload borne by auditors when serving multiple clients at the same time (Akhbar & Sebrina, 2024). Excessive workload can increase the risk of errors and reduce the time available for auditors to thoroughly analyze financial reports. A substantial volume of clients handled with the limited time they have causes auditors to experience pressure, which can reduce auditor skepticism so that the resulting audit quality decreases (Winoto & Harindahyani, 2021). Audit tenure refers to the contractual relationship established between KAP and the audited entity for auditing services within a certain period. Audit tenure with a long term is indicated to be able to improve audit quality, because a prolonged collaboration between auditors and the same accounting firm serving a particular client will make the auditor have knowledge related to the organization's characteristic by understanding operational risks and business processes of the client so that they can determine the appropriate audit procedures in examining the company's financial statements (Sari & Nurhidayat, 2024).

Several previous studies have analyzed factors that can increase and decrease audit quality, such as audit rotation, audit committee, audit capacity stress, and audit tenure. Research by (Winda & Hadiwibowo, 2023) audit rotation significantly improves audit quality. Audit rotation carried out by company will maintain auditor independence to continue to be able to provide the right opinion without being influenced by other parties. Similarly (Cahyati et al., 2021) affirm that audit rotation positively impacts audit quality. Conversely, (Lailatul & Yanthi, 2021) emphasize the audit committee's role in improving audit quality, as its oversight aids external auditors in planning and executing procedures effectively. These results, however, contradict a study by (Pamungkas et al, 2022) which found that the audit committee had no discernible impact on audit quality. In research conducted by (Akhbar & Sebrina, 2024) audit capacity stress significantly and negatively affects audit quality. The large workload borne by auditors will make auditors experience pressure, which can reduce audit quality. However, these findings are different from (Zunita et al., 2022) which shows that audit capacity stress can improve audit quality. (Rahmadani & Halmawati, 2024) However, found no significant relationship. On audit tenure (Jessica et al., 2021) suggest that prolonged auditor-client relationships improve quality through accumulated expertise. While (Azmiawan & Srimindarti, 2024) found tenure does not affect audit quality. Considering the importance of knowing the factors that influence audit quality until now and the fact that research findings differ, the formulation of the problems to be answered in this research are as follows:

1. Does audit rotation influence audit quality?
2. Does audit committee oversight influence audit quality?
3. Does the length of audit tenure influence audit quality?
4. Does audit workload pressure influence audit quality?

1.2 Literature Review and Hypothesis Development

1.2.1. Audit Quality Theories

Audit quality issues have become a major concern in accounting and finance literature, in line with the increasing need for transparency and accountability in financial reporting. This has led to numerous examining the factors that influence audit quality. DeAngelo (1981) defines audit quality as the ability of auditors to detect and report errors in clients' financial statements, meaning that auditors can detect manipulation or violations committed by clients (Sukirman & Asih, 2021). According to auditors, high audit quality can be achieved when

auditors adhere to professional standards, effectively access business risk to mitigate litigation risks, and uphold their professional reputation (Effendi & Ulhaq, 2021). In addition to complying with applicable professional auditing standards, auditors must also be able to collect sufficient audit evidence and determine the appropriate opinion. In an effort to understand the concept of audit quality conceptually, there are several main theories that are commonly used in research, namely agency theory and signalling theory.

a. Agency Theory

Agency theory explains the contractual relationship between owners (principals) who delegate decision-making authority to managers (agents), expecting them to act in the owners' best interests (Rahmadani & Halmawati, 2024). This relationship often leads to conflicts of interest and information asymmetry, where agents may possess more information about the company's financial status than principals, potentially compromising the transparency of financial reporting (Handoyo & Putri, 2022). According to Akhbar and Sebrina (2024), the theory posits that high-quality audits serve as a mechanism to mitigate these conflicts. Independent auditors are tasked with evaluating financial statements to ensure accuracy, detect material misstatements, and prevent fraud. Thus increasing the trust of stakeholders that the financial statements have validity and reliability (Akhbar & Sebrina, 2024).

b. Signalling Theory

Signalling theory describes how parties who have the availability of information provide signals or information to signal recipients (Eleन्द्रa & Helmayunita, 2021). In a company, the signals sent by managers can be positive or negative signals for investors (Eleन्द्रa & Helmayunita, 2021). Quality financial statements are characterized by the existence of relevant and reliable information that has also been validated by an independent party, in this case, the auditor, who can provide positive signals that can influence stakeholder decisions (Mayangsari & Sazangka, 2023). When management possesses unfavorable information, it may postpone its disclosure to external parties, heightening information asymmetry risks. In such scenarios, auditors play a critical role in mitigating these risks by verifying the accuracy and completeness of financial disclosures (Yasmin, 2023).

1.3. Hypothesis Development

1.3.1 The Relationship Between Audit Rotation and Audit Quality

According to (Fadhilah & Halmawati, 2021) Audit rotation is defined rotation of auditors or KAP, The practice is carried out to ensure that the auditor remains unbiased and objective or independent, thereby minimizing potential conflicts of interest. POJK No.9/POJK.07/2023 states that companies in the form of commercial banks must limit the use of the same auditor services with a maximum limit of 7 years (OJK, 2023). The audit rotation regulation is enforced to maintain auditor independence so that auditors can continue to prioritize the principles of integrity and objectivity in examining financial statements, as required by the code of ethics (IAP, 2021). Academics and the accounting profession have advocated for audit rotation because audit rotation is considered to help maintain auditor independence, objectivity, and professional skepticism (Sari & Rahmi, 2021). Companies are advised to implement regular audit rotations that support auditors in maintaining independence and objectivity during the audit process and give external parties trust in the accuracy of financial disclosures. Auditors, as a check on the credibility of financial

statements, are expected to find material misstatements and disclosure errors in financial reports (Oktavia et al., 2023). This is supported by research (Winda & Hadiwibowo, 2023; Martani et al., 2021; Nursiam et al., 2021), that audit rotation can improve audit quality. The preceding discussion leads to the formulation of the study's initial hypothesis, which states that:

Ha1: Audit rotation has a significant positive effect on audit quality

1.3.2 The Relationship between Audit Committee Oversight and Audit Quality

According to POJK No 55/POJK.04/2015, The audit committee was formed by the board of commissioners and is accountable to the board for assisting in the execution of the board's responsibilities and functions. This committee, mandated to be led by an independent commissioner (OJK, 2015). According to POJK No.9/POJK.04/2023, The audit committee has the responsibility to appoint auditors and KAPs who will audit the company and evaluate the provision of audit services provided by the auditors and KAPs (OJK, 2023). The audit committee as an independent party is expected to help overcome information asymmetry that occurs in financial statements by re-examining, ensuring the suitability of audit procedures performed by auditors, ensuring the company carries out good corporate governance and assessing whether the opinion issued by the external auditor is appropriate or not (Effendi & Ulhaq, 2021). According to SA 260 auditors will be invited regularly to attend committee audit meetings to discuss the scope of the audit, audit planning, key audit matters, information from the audit committee regarding fraud that occurs, and audit results, with these meetings the audit committee can assist auditors in identifying fraud that occurs, obtaining information needed during the audit process, developing audit procedures to obtain sufficient audit evidence and helping auditors overcome difficulties encountered so that the audit committee can help auditors to produce quality audits. This is supported by research (Lailatul & Yanthi, 2021; Triyanto & Putri, 2023; Sari & Nurhidayat, 2023). The previous discussion leads to the formulation of the second hypothesis of the study, which states that:

Ha2: The audit committee oversight has a significant positive effect on audit quality

1.3.2 The Relationship Between Audit Capacity Stress and Audit Quality

Audit capacity stress is the pressure experienced by auditors due to the large workload borne by auditors when serving multiple clients at the same time (Akhbar & Sebrina, 2024). The high workload borne by auditors is generally caused by the busy season at the beginning of the year. This is related to the fact that most companies have a fiscal year-end in December, so at the beginning of the following year, an external auditor's audited financial reports must be prepared and submitted by the business, these conditions cause auditors to examine the financial statements of many clients that must be handled in a short time and simultaneously (Fadhilah & Halmawati, 2021). The high number of clients handled with limited time causes auditors to experience pressure to complete work quickly so that auditor skepticism will be disrupted so that the resulting audit quality will decrease, because auditors will immediately accept the evidence provided by the company without conducting a thorough audit procedure to obtain sufficient evidence and provide the right opinion (Winoto & Harindahyani, 2021). This is supported by research (Akhbar & Sebrina, 2024; Pertiwi & Erinos, 2020; Winoto & Harindahyani, 2021). The previous discussion leads to the formulation of the third hypothesis of the study, which states that:

Ha3: Audit capacity stress has a significant negative effect on audit quality

1.3.3 The Relationship Between Audit Tenure and Audit Quality

Audit tenure refers to the contractual relationship established between KAP and the audited entity for auditing services within a certain period (Zahra & Hermanto, 2024). Auditors who have experienced a long engagement period will have more adequate knowledge of the characteristics of the company, so that auditors can provide better judgment when conducting the audit procedure (Andriani et al., 2020). An auditor will be able to re-evaluate the previous findings in the following year. Such a short duration limits their ability to analyze and cross-reference prior audit findings in subsequent evaluations, undermining the continuity and depth of the auditing process. An extended engagement timeline between auditors and clients enables auditors to gain deeper insights into the organization's financial and operational workflows. This will allow the auditors to plan and execute audit procedures appropriately that align with the ethical guidelines of the auditing profession, resulting in high-quality audits (Sari & Rahmi, 2021). This is supported by research (Salman & Setyaningrum, 2023; Jessica et al., 2021; Andriani et al., 2020). The previous discussion leads to the formulation of the fourth research hypothesis, which states that:

Ha4: Audit tenure has a significant positive effect on audit quality

The following is a conceptual framework of this research

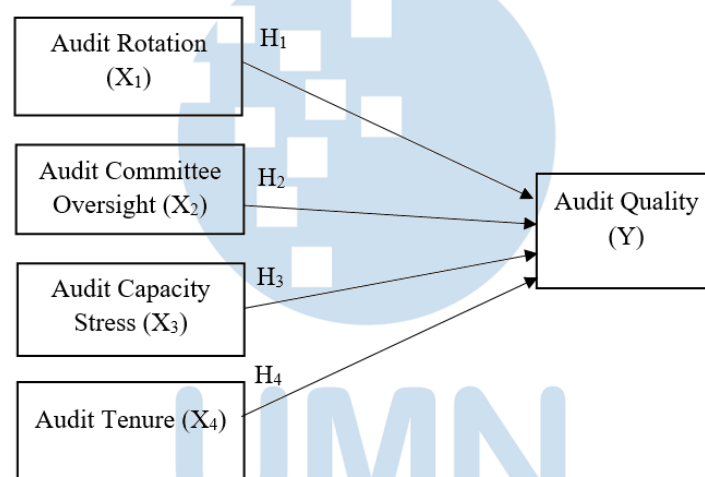


Figure 1. Research Framework

2. RESEARCH METHODOLOGY

2.1. Population and Sample

This research examines conventional banking subsector companies listed on the Indonesia Stock Exchange (IDX) over five years (2019 – 2023). Based on a purposive sampling technique, 34 companies were selected as the study sample based on the following criteria:

1. Banking subsector companies, especially conventional banks, which are consistently listed on the IDX during 2019 - 2023.
2. Banking subsector companies, especially conventional banks, publish annual financial statements audited by accounting firms registered with OJK during 2019 - 2023.
3. Banking subsector companies, especially conventional banks, present audit rotation information, audit committees meeting frequencies, and other information related in an annual report for the period 2019 – 2023.

4. Banking subsector companies, especially conventional banks, which publish annual reports and financial reports with Rupiah currency during 2019 – 2023.

2.2. Data Analysis Method

Data for this study were sourced from annual reports available on corporate websites and the IDX platform www.idx.co.id, and collected from the list of public accountants and KAP registered at www.ojk.go.id. The logistic regression analysis method was used in this study because a method suited for binary-dependent variables. In conducting logistic regression analysis, researchers used the EViews 10 program to analyze the data.

2.3. Research Model

The equation employed to test the hypothesis is:

$$\text{LN} \frac{AQ}{1-AQ} = \alpha + \beta_1 AR + \beta_2 AC + \beta_3 ACS + \beta_4 AT + e$$

Symbol information:

α	= Constant
AQ	= Audit Quality
$\beta_1, \beta_2, \beta_3, \beta_4$	= Regression Coefficient
AR	= Audit Rotation
AC	= Audit Committee
ACS	= Audit Capacity Stress
AT	= Audit Tenure
e	= Error

2.4. Operational Variables

2.4.1. Dependent Variables

Audit Quality

DeAngelo (1981) defines audit quality (AQ) as the auditor's ability to detect and report misstatements in the client's financial statements, meaning that the auditor can detect manipulation or violations committed by the client (Sukirman & Asih, 2021). A dummy scale is used in this study to quantify audit quality (Y), with a value of 1 for businesses audited by Big Four KAP and a value of 0 for businesses audited by non-Big Four KAP (Akhbar & Sebrina, 2024).

2.4.2. Independent Variables

Audit Rotation

Audit rotation (AR) is the rotation of auditors or KAP, which is carried out to maintain the independence of an auditor (Fadhilah & Halmawati, 2021). A dummy scale was used to measure audit rotation (X_1); organizations that rotate auditors had a value of 1, and those that do not had a value of 0 (Jessica et al., 2021).

Audit Committee

According to POJK No 55/POJK.04/2015, Audit Committee (AC) was formed by the board of commissioners and is accountable to the board for assisting in the execution of the board's responsibilities and functions. This committee, mandated to be led by an independent

commissioner (OJK, 2015). A ratio scale was used to measure the audit committee (X₂) (Lailatul dan Yanthi, 2021).

$$AC = \frac{\text{Number of audit committee meetings}}{4}$$

Audit Capacity Stress

Audit capacity stress (ACS) is the pressure experienced by auditors due to the large workload borne by auditors when serving multiple clients at the same time (Akhbar & Sebrina, 2024). In this study, audit capacity stress (X₃) was measured using a ratio scale by dividing the number of KAP clients in the industry by the number of auditors at KAP in the industry (Pertiwi & Erinos, 2020).

$$ACS = \frac{\text{Number of KAP clients}}{\text{Number of auditors in KAP}}$$

Audit Tenure

Audit tenure (AT) refers to the contractual relationship established between KAP and the audited entity for auditing services within a certain period (Zahra & Hermanto, 2024)). In this study, audit tenure (X₄) was measured using an interval scale, the first year of KAP's engagement with the company starts with number 1 and each subsequent year of continued engagement is reflected by an incremental increase of one (Pamungkas et al, 2022).

3. RESULT AND DISCUSSION

3.1. Descriptive Statistical Analysis

Table 1. Descriptive Statistical Analysis Results

	AQ	AR	AC	ACS	AT
Mean	0.5647	0.4471	3.1706	0.6851	5.2118
Maximum	1.0000	1.0000	10.250	1.2222	16.000
Minimum	0.0000	0.0000	1.0000	0.0833	1.0000
Observations	170	170	170	170	170

Source: E-views, 2025

Table 1. shows that, the audit quality (AQ) has a mean score of 0.5647, suggesting no significant difference between the number of firms audited by KAP Big Four and KAP non-Big Four. Audit rotation (AR) has a mean score of 0.4471, which shows that audit turnover carried out in this research sample was relatively low. Audit committee (AC) shows an average score of 3.1706, which suggests that banking firms typically conduct around 12 audit committee meetings annually. This implies that several firms in the banking sector exceed the minimum required number of audit committee meetings. Audit capacity stress variable (ACS) has an average score of 0.6851, indicating that auditors in banking firms generally manage more clients than the standard capacity. This suggests that the burden borne by auditors at KAP in the banking subsector tends to be low due to the possibility of sharing workload between partner auditors when handling clients. Audit tenure (AT) has a mean value of 5.2118, The results show that the average banking subsector company listed on the IDX uses the same KAP more or less within 5 years.

Table 2. Distribution Frequency Audit Quality

Value	Count	Percent	Cumulative Count	Cumulative Percent
0	74	43.53	74	43.53
1	96	56.47	170	100.00
Total	170	100.00	170	100.00

Source: E-views, 2025

Based on table 2, describes audit quality variable is valid, indicating all the data observations can be analyzed. The total observation data that has good audit quality is 96 or 56.47% of the total sample studied. The observation data that has poor audit quality is 74 or 43.53% of the total sample. This indicates that the average audit quality data in this research has good audit quality because it has a value of more than 50%.

Table 3. Distribution Frequency Audit Rotation

Value	Count	Percent	Cumulative Count	Cumulative Percent
0	94	55.29	94	55.29
1	76	44.71	170	100.00
Total	170	100.00	170	100.00

Source: E-views, 2025

Referring to Table 3, it describes the audit rotation has a valid value because all of its data can be processed. The total observation data that did not perform audit rotation was 94 or 55.29% of all samples studied. While the number of data points that performed audit rotation was 76, or 44.71% of the total samples. So, in conclusion, the average data in this study did not perform audit rotation.

3.2. Logistic Regression Analysis

3.2.1 Goodness of Fit Test

Fit test of this model was evaluated through the Hosmer and Lemeshow Goodness of Fit Test, by examining the H-L statistic. If the resulting p-value exceeds 0.05, it indicates that the model appropriately fits the observed data and can be considered reliable for further interpretation.

Table 4. Hosmer and Lemeshow Test

H-L Statistic	9.0925		Prob. Chi-Sq(8)	0.3346	
Andrews Statistic	79.6610		Prob. Chi-Sq(10)	0.0000	

Source: E-views, 2025

Referring to the table above, the H-L statistic result is 9.0925 with a p-value of 0.3346, which exceeds the 0.05 threshold. This indicates that the proposed regression model is suitable for further examination, as it aligns well with the actual data.

3.2.2 Expectation Prediction Evaluation Test

Table 5. Expectation Prediction Evaluation

	Estimated Equation			Constant Probability		
	Dep=0	Dep=1	Total	Dep=0	Dep=1	Total
% Correct	79.73	89.58	85.29	0.00	100.00	56.47
% Incorrect	20.27	10.42	14.71	100.00	0.00	43.53

Source: E-views, 2025

Referring to the table above, finding the model demonstrates a correct prediction rate of 79.73%. Therefore, it can be inferred that the model performs adequately and is considered reliable with a prediction accuracy of 79.73%.

3.2.3 Hypothesis Testing

Table 6. Logistic Regression Analysis Results

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-5.952306	1.013792	-5.871326	0.0000
X1 RA	0.241279	0.488422	0.493998	0.6213
X2 KA	0.714422	0.186293	3.834937	0.0001
X3 ACS	5.046195	0.770202	6.551779	0.0000
X4 AT	0.149804	0.062882	2.382297	0.0172
McFadden R-squared	0.515444	Mean dependent var		0.564706
LR statistic	120.0032	Avg. log likelihood		-0.331799
Prob(LR statistic)	0.000000			

Source: E-views, 2025

The results in Table 6 reveal that the McFadden R-squared value is 0.5154. This indicates that the independent variables, which include audit rotation, audit committee, audit capacity stress, and audit tenure, account for 51.54% of the variation in audit quality. The remaining 48.46% is attributed to other factors not examined in this research. For the F test, the LR statistic is 120.0032 with a p-value of 0.000, and since 0.000 is less than the significance level of 0.05, this means that all independent variables together have a significant influence on the dependent variable.

3.3. Hypothesis Discussion

3.3.1 The Effect of Audit Rotation on Audit Quality

Referring to Table 6, Audit Rotation (AR) shows a positive coefficient of 0.2413 with a significance level of 0.6213, where the value of $0.6213 > 0.05$. Since the p-value exceeds the 0.05 threshold, the first hypothesis is rejected, indicating that audit rotation does not have a significant effect on audit quality. This suggests that when auditors uphold a high degree of professionalism and maintain their independence, the implementation or its absence of audit rotation does not materially affect the independence of external auditors in auditing the company's financial statements. These findings are consistent with prior studies by (Fauziyah & Praptiningsih, 2020; Tahun et al., 2024; Jessica et al., 2021), which also show that audit rotation has no significant effect on audit quality. Audit rotation may neither increase nor decrease auditor independence. As long as the auditors remain committed to adhering to the public accountant's code of ethics and motivated to maintain their professional reputation, they are likely to execute audit procedures effectively and issue accurate audit opinion, regardless of the familiarity with the client. Furthermore, the auditor rotation observed in this study is relative limited. Because auditor rotation is mandatory, in practice it often become a formality. In many cases, auditor rotation involves only replacement of the signing audit partner, while most of the audit team – such as managers, senior auditors, supervisors – as well as the audit procedures and working system, remain unchanged. As result, the overall quality of the audit is likely remain constant, which may explain why this study does not find a significant effect of audit rotation on audit quality.

3.3.2 The Effect of Audit Committee Oversight on Audit Quality

Referring to Table 6, the variable audit committee (AC) shows a positive coefficient score of 0.7144 with a significance level of 0.0001, where the value of $0.0001 < 0.05$. This supports the acceptance of the second hypothesis, indicating that audit committee oversight

has a significant positive influence on audit quality. An increased frequency of audit committee meetings enhances their supervision over both internal operations and external auditors. By coordinating with the section that reports the financial statements and then also discussing the weaknesses in the financial statements, so that the results of this discussion can become insights for external auditors. Insight received from the audit committee, as an independent party that has a lot of information about the company's internal affairs, will help external auditors who have weaknesses in knowing all the company's internal conditions during the audit process. Additionally, more frequent meetings allow the audit committee to more effectively monitor and support external auditors, so that it can provide more effective support to auditors, especially when dealing with difficulties in the audit process (Elmashtawy et al., 2023). These findings align with the results of prior studies conducted by (Sari & Nurhidayat, 2024; Triyanto & Putri, 2023; Lailatul & Yanthi, 2021), which shows that the audit committee oversight has a positive effect on audit quality.

3.3.3 The Effect of Audit Capacity Stress on Audit Quality

Referring to Table 6, the variable audit capacity stress (ACS) shows a positive coefficient value of 5.0462 with a significance level of 0.0000, which is $0.0000 < 0.05$. The findings indicate that audit capacity stress has a significant and positive relationship with audit quality, thereby leading to the rejection of the third hypothesis, as it contradicts the initial assumption that audit capacity stress would negatively influence audit quality. This means that when the workload borne by auditors is higher, they are encouraged to adopt a smarter working method by emphasizing efficiency and effectiveness during the audit process. External auditors can streamline their efforts by focusing on high-risk and material areas through their audit approach. Moreover, the integration of technology in the audit process can further enhance efficiency and outcomes. These findings are supported by prior research conducted by (Maong, 2022; Zunita et al., 2022; Triyanto & Putri, 2023), which also concluded that audit capacity stress has a positive effect on audit quality. With the large number of clients handled by the auditor, this will not make the performance of an auditor decrease because the auditor can manage the workload borne, besides that when an auditor has difficulty, the auditor can ask for help from partner auditors who can audit the same industry so that the workload borne will be lighter and the auditor can still produce good audit quality through the many new experiences the auditor gets when auditing a large number of clients.

3.3.4 The Effect of Audit Tenure on Audit Quality

Referring to table 6, the variable audit tenure (AT) reveals a positive coefficient of 0.1498 with a significance level of 0.0172. Since this value is less than 0.05, the fourth hypothesis is accepted. Therefore, it can be inferred that audit tenure positively influences audit quality. This means that A longer duration of engagement between the public accounting firm (KAP) and the client allows the auditors to gain understanding of the client's business, including business risks, organizational structure, products or services offered and regulations relevant to the client company so that if there is a change of auditors at the same KAP, the new auditor auditing the company will have an overview of the client company's business information that has been obtained by KAP so that it will help external auditors to plan and perform appropriate audit procedures to generate audit quality. This conclusion is consistent with prior research by (Pamungkas et al, 2022; Jessica et al., 2021; Andriani et al., 2020), who found that longer audit tenure contributes positively to audit quality. Extended auditor-client relationships allow the auditor to have more time to further examine the

evidence obtained in the previous year, so that the audit results provided provide better audit quality than the audit results provided by KAP, which has just audited the client company.

4. CONCLUSION

This study's results indicate that oversight by the audit committee, stress related to audit capacity, and the duration of audit engagements are all positively linked to an enhancement in audit quality. This implies that supervision by the audit committee contribute to improve audit quality. Moreover, when auditors produce high-quality audits, a greater workload for them will motivate external auditors to work intelligently by enhancing their efficiency and effectiveness during the audit process. Additionally, an extended collaboration duration between public accounting firm and the client leads to improved audit quality, as the external auditor gains a better understanding of the client and can create more suitable audit procedures. This familiarity enables the audit firm to utilize knowledge gained from past engagements.

The findings of this research aim to offer useful insights for auditors in enhancing audit quality by broadening their client portfolio and adopting efficient workload management techniques. Moreover, the study's results could provide direction for regulatory agencies in assisting external auditors by formulating suitable policies that maintain auditor independence. Organizations can strengthen the oversight function of the audit committee by holding more regular meetings and promoting improved communication between the committee and external auditors, which in turn enhance audit quality. This collaborative approach ensures that supervision of management and external auditors is more effective, ultimately contribute to delivering higher-quality audit.

Future research on the determinants of audit quality is encouraged to incorporate additional variables - such as audit fees and industry-specific expertise - in order to broaden the scope of analysis, and improve the robustness of the findings. Based on the current study's results, audit rotation does not appear to have a significant effect on audit quality. This finding may be attributed to the limitations in the measurement of audit rotation, which in this study was confined to the change of the external auditor responsible for signing the audit report within a single year, which may not fully capture potential impact on audit quality To provide a more accurate and comprehensive understanding of the effect of audit rotation, future studies are recommended to consider broader measures, including rotation of multiple engagement partners involved in audit process, not limited to the signing auditor. Such an approach would better capture variations in audit procedures and findings resulting from auditor rotation. Furthermore, subsequent research is advised to employ more comprehensive proxies for audit quality. For example, the use of discretionary accruals – which indicate the auditor's effectiveness in detecting earnings management-may offer a more precise and informative measure of audit quality compared to traditional proxies based solely on audit reputation.

5. LIMITATION

Like any study, this research has certain limitations. The measurement of audit rotation is limited to auditor changes occurring within a one-year period, which may not fully capture its long-term impact on audit quality. Additionally, the proxy used to measure audit quality is relatively general, as it is based solely on the reputation of the audit firm (i.e., whether it is a Big 4 or non-Big 4 firm). This approach may not adequately reflect the comprehensive nature of audit quality, which encompasses qualitative and quantitative dimensions.

6. REFERENCES

- Akhbar, R. A., & Sebrina, N. (2024). Pengaruh Audit Firm Rotation, Komite Audit, dan Audit Capacity Stress Terhadap Kualitas Audit: Studi Empiris pada Perusahaan Sub Sektor Bank yang Terdaftar di BEI Periode 2018-2022. *Jurnal Eksplorasi Akuntansi*, 6(3), 932–945. <https://doi.org/10.24036/jea.v6i3.1558>
- Andriani, F., Meilani, R., Pardede, C. E., & Ginting, W. A. (2020). Pengaruh Audit Tenure, Ukuran KAP, Ukuran Perusahaan Klien Terhadap Kualitas Audit Perusahaan di Bursa Efek Indonesia. *Journal of Economic, Bussines and Accounting (COSTING)*, 4(1), 116–126. <https://doi.org/10.31539/costing.v4i1.1432>
- Azmiawan, P. M. N., & Srimindarti, C. (2024). Pengaruh Audit Tenure, Rotasi Audit, Dan Ukuran Perusahaan Terhadap Kualitas Audit Pada Perusahaan Badan Usaha Milik Negara (Bumn) Yang Terdaftar Di Bursa Efek Indonesia (BEI) Periode 2020 - 2022. *COSTING: Journal of Economic, Business and Accounting*, 7(3), 2478–2487. www.satutumbuhseribu.valbury.co.id
- Cahyati, W. N., Hariyanto, E., Setyadi, E. J., & Inayati, N. I. (2021). Pengaruh Rotasi Audit, Audit Tenure, Fee Audit, Dan Komite Audit Terhadap Kualitas Audit (Studi Pada Perusahaan Food And Beverage Yang Terdaftar Di Bursa Efek Indonesia Tahun 2014-2019). *Ratio: Reviu Akuntansi Kontemporer Indonesia*, 2(1), 51–62. <https://doi.org/10.30595/ratio.v2i1.10372>
- Effendi, E., & Ulhaq, R. D. (2021). Pengaruh Audit Tenure, Reputasi Auditor, Ukuran Perusahaan Dan Komite Audit Terhadap Kualitas Audit (Studi Empiris pada Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2018). *Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi)*, 5(2), 1457–1504.
- Elevendra, D., & Helmayunita, N. (2021). Pengaruh Audit Tenure dan Auditor Switching Terhadap Kualitas Audit pada Perusahaan Manufaktur Di Indonesia dengan Financial Distress Sebagai Pemoderasi. *Jurnal Eksplorasi Akuntansi*, 3(1), 82–97. <https://doi.org/10.24036/jea.v3i1.344>
- Elmashtawy, A., Che Haat, M. H., Ismail, S., & Almaqtari, F. A. (2023). Audit committee effectiveness and audit quality: the moderating effect of joint audit. *Arab Gulf Journal of Scientific Research*. <https://doi.org/10.1108/AGJSR-09-2022-0202>
- Fadhilah, R., & Halmawati. (2021). Pengaruh Workload, Spesialisasi Auditor, Rotasi Auditor, dan Komite Audit terhadap Kualitas Audit (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2019). *Jurnal Eksplorasi Akuntansi*, 3(2), 279–301. <https://jea.ppj.unp.ac.id/index.php/jea/index>
- Fauziyah, Z. I., & Praptiningsih. (2020). Pengaruh Audit Fee, Audit Tenure, Dan Rotasi Audit Terhadap Kualitas Audit. *Monex Journal Research Accounting Politeknik Tegal*, 9(1), 1–17. <https://doi.org/10.30591/monex.v9i1.1232>
- Ghabye Apriyani Maong. (2022). Pengaruh Audit Tenure, Komite Audit dan Audit Capacity Stress Terhadap Kualitas Audit. *Bongaya Journal of Research in Management*, 5(2), 36–44.
- Handoyo, S., & Putri, A. S. (2022). Factors Influencing Audit Quality of Banking Business Sector in Indonesia. *Humanities and Social Sciences Letters*, 10(4), 463–481. <https://doi.org/10.18488/73.v10i4.3115>
- IDX. (2024). *Sukses Tutup Tahun 2024, Pertumbuhan Positif Mendorong Kepercayaan Pasar Modal Indonesia*. <https://www.idx.co.id/id/berita/siaran-pers/2288>
- Jessica, Belinda, E., Lorencia, M., Tannitri, S., & Afiezan, H. A. (2021). Pengaruh Audit Fee,

- Masa Kerja Audit, Rotasi Audit, Dan Komite Audit Terhadap Kualitas Audit. *Jurnal Akuntansi Trisakti*, 8(2), 173–188. <https://doi.org/10.25105/jat.v8i2.9381>
- Kurniawan, S., & Kurniawati. (2024). Pengaruh Skeptisisme Profesional, Analisis Big Data, Pengalaman Auditor terhadap Pendeteksian Kecurangan. *Monex - Journal of Accounting Research*, 13(02). <https://doi.org/10.30591/monex.v13i02.6828>
- Lailatul, U., & Yanthi, M. D. (2021). Pengaruh Fee Audit, Komite Audit, Rotasi Audit Terhadap Kualitas Audit. *AKUNESA: Jurnal Akuntansi Unesa*. Vol 10, No 1. *Jurnal Akuntansi Unesa (AKUNESA)*, 10(1). <http://journal.unesa.ac.id/index.php/akunesa/>
- Mannuela, C., & Kurniawati. (2024). Komite Audit Memoderasi Pengaruh Asimetri Informasi, Leverage Dan Kinerja Keuangan Terhadap Manajemen Laba. *Jurnal Aplikasi Akuntansi*, 8(2), 17–33. <https://doi.org/10.29303/jaa.v9i1.414>
- Mayangsari, R. D., & Sazangka, A. Y. (2023). Pengaruh Ukuran Kantor Akuntan Publik, Audit Tenure dan Spesialisasi Kantor Akuntan Publik Terhadap Kualitas Audit. *Owner*, 7(3), 2598–2611. <https://doi.org/10.33395/owner.v7i3.1455>
- OJK. (2015). *POJK No. 55/POJK.04/2015 Tentang Pembentukan dan Pedoman Pelaksanaan Kerja Komite Audit*. <https://ojk.go.id/id/kanal/pasar-modal/regulasi/peraturan-ojk/pages/POJK-Nomor-55.POJK.04.2015.aspx>
- OJK. (2022). *POJK No. 14/04/2022 Tentang Penyampaian Laporan Keuangan Berkala Emiten atau Perusahaan Publik*. <https://ojk.go.id/id/regulasi/Pages/Penyampaian-Laporan-Kuangan-Berkala-Emiten-atau-Perusahaan-Publik.aspx>
- OJK. (2023). *POJK No. 09/POJK/2023 Tentang Peraturan Penggunaan Jasa Akuntan Publik dan Kantor Akuntan Publik dalam Kegiatan Jasa Keuangan*. <https://ojk.go.id/id/regulasi/Pages/Peraturan-Penggunaan-Jasa-Akuntan-Publik-dan-Kantor-Akuntan-Publik-dalam-Kegiatan-Jasa-Kuangan.aspx>
- Olivia, T., & Setiawan, T. (2019). Analisis Faktor-Faktor Yang Mempengaruhi Kualitas Audit. *Journal Of Business and Applied Management*, 12(2), 187–201. <https://doi.org/10.32492/eba.v5i1.712>
- Pamungkas et al. (2022). Pengaruh Audit Tenure, Fee Audit, Komite Audit, Dan Ukuran Perusahaan Terhadap Kualitas Audit. *CURRENT: Jurnal Kajian Akuntansi Dan Bisnis Terkini*, 3(2), 166–175. <https://current.ejournal.unri.ac.id>
- Rahmadani, D., & Halmawati. (2024). *Pengaruh Audit Tenure, Audit Capacity Stress, dan Entrenchment Effect Terhadap Kualitas Audit: Studi Empiris pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia (BEI) 2019-2022*. 6(2), 610–624.
- Salman, K. R., & Setyaningrum, B. (2023). The Effects of Audit Firm Size, Audit Tenure, and Audit Rotation on Audit Quality. *Ilomata International Journal of Tax and Accounting*, 4(1), 92–103. <https://doi.org/10.52728/ijtc.v4i1.636>
- Sari, Q. arifatma, & Nurhidayat. (2024). The effect of Audit Tenure, Audit Committee, and Audit Rotation on Audit Quality. *Jurnal Ilmu Keuangan Dan Perbankan (JIKA)*, 14(1), 19–30.
- Sari, R., & Rahmi, M. (2021). Analisis Pengaruh Rotasi Auditor, Audit Tenure dan Reputasi KAP terhadap Kualitas Audit. *Journal Equity*, 24(1), 123–140. <https://doi.org/10.34209/equ.v24i1.2415>
- Sari, Y., & Kurniawati. (2021). Apakah Skeptisme Profesional, Kompleksitas Tugas Dan Teknik Audit Berbantuan Komputer Berdampak Terhadap Kualitas Audit? *ULTIMA Accounting Journal*, 13(2), 238–256. <https://doi.org/10.31937/akuntansi.v13i2.2221>

- Sukirman, & Asih, P. (2021). Influence of Auditor Switching, Public Accounting Firm's Reputation, and Workload on The Audit Quality with The Audit Committee's Effectiveness as The Moderating Variable. *JDA Jurnal Dinamika Akuntansi*, 13(1), 25–36. <http://dx.doi.org/10.15294/jda.v13i1.28925><http://journal.unnes.ac.id/nju/index.php/jdaauthor>
- Utari, P. H. (2023). *KPMG hingga Goldman Sachs Digugat Terkait Kebangkrutan Silicon Valley Bank*. Bisnis. <https://finansial.bisnis.com/read/20230409/90/1644984/kpmg-hingga-goldman-sachs-digugat-terkait-kebangkrutan-silicon-valley-bank>
- Winda, W., & Hadiwibowo, I. (2023). Pengaruh Reputasi Kap, Audit Tenure, Ukuran Perusahaan, Dan Rotasi Auditor Terhadap Kualitas Audit. *Jurnal Proaksi*, 10(1), 70–84. <https://doi.org/10.32534/jpk.v10i1.3734>
- Winoto, C. O., & Harindahyani, S. (2021). The Effect of Auditor's Work Stress on Audit Quality of Listed Companies in Indonesia. *Journal of Economics, Business, & Accountancy Ventura*, 23(3), 361–374. <https://doi.org/10.14414/jebav.v23i3.2416>
- Yasmin, E. P. (2023). Pengaruh Rotasi KAP, Tenure Audit dan Ukuran Perusahaan Terhadap Kualitas Audit Pada Perusahaan Manufaktur. *Journal of Culture Accounting and Auditing*, 2(1), 13–22. <https://doi.org/10.30587/jcaa.v2i1.4839>
- Zahra, Q. F., & Hermanto. (2024). Pengaruh Ukuran Perusahaan , Leverage , Biaya Audit , Audit Tenure , Dan Cash Flow Operation (CFO) Terhadap Kualitas Audit. *Jurnal Ilmiah Komputerisasi Akuntansi*, 17(2), 208–225.
- Zunita, L., Khikmah, S. N., & Mranani, M. (2022). Pengaruh Audit Capacity Stress, Auditor Spesialisasi Industri, Komite Audit, dan Alignment Effect terhadap Kualitas Audit. *Borobudur Accounting Review*, 2(1), 58–69. <https://doi.org/10.31603/bacr.7025>

UMN

THE EFFECT OF FISCAL COMPETENCE, TAX SOCIALIZATION AND TAX JUSTICE ON TAXPAYER COMPLIANCE

Andreas Bambang Daryatno^{1*}

Professional Accountant Education, Tarumanagara University

andreasb@fe.untar.ac.id

Linda Santioso²

Faculty of Economics and Business, Tarumanagara University

lindas@fe.untar.ac.id

*Corresponding Author

Received on 15 May 2025

Accepted on 29 June 2025

Abstract— The tax ratio in Indonesia refers to the comparison between tax revenues and a country's Gross Domestic Product (GDP), indicating the size of the tax portion of the national economy. In recent years, Indonesia's tax ratio has tended to stagnate. The development of Indonesia's Tax Ratio in 2021 was 9.1%, in 2022 was 10.4%, in 2023 was 10.21% and in 2024 was 10.31%, lower than in 2023. This study aims to find empirical evidence of the influence of tax competence, tax socialization and tax fairness on taxpayer compliance. The sample selection technique in this study uses convenience sampling. Data processing using the Smart PLS program. The results of this study provide empirical evidence that tax competence and tax justice have no influence on taxpayer compliance, while tax socialization has an influence on taxpayer compliance. The implications of this research, tax officials can no longer act oppressively or arbitrarily against taxpayers. The digitalization of the tax system allows taxpayers to better understand and fulfill their tax obligations. The tax authorities' competence is no longer dominant, as taxpayers are given greater access compared to the old tax system. Through continuous tax outreach and easy access to tax information, taxpayers can access tax information via various platforms, which provides a sense of trust for taxpayers. Although there is a perception of injustice that triggers psychological impacts, such as dissatisfaction or an inability to see the correlation between tax payments and benefits received. Tax money is not used to save government companies, where there is a lot of mega-corruption that hurts the public as taxpayers.

Keywords: Taxpayer Compliance, Tax Competence, Tax Socialization, Tax Justice.

1. INTRODUCTION

1.1 Background

Indonesia is a developing country with significant foreign debt. The Indonesian government requires significant funding for development to improve the welfare of its people and strives to reduce its dependence on foreign loans. Managing state revenues is one of the government's efforts. State revenues come from both tax and non-tax sectors. According to *CNN Indonesia* (2022), the source of income from taxes has a higher percentage compared to sources of state income from other sectors, namely around 80% of total income, so in tax management, maximum attention and ability are needed by the government. The tax sector is

the best alternative for development financing to avoid dependence on foreign loans because it comes from state independence.

Increasing a country's revenue is influenced by a crucial factor: tax compliance. The government continues to strive to maximize tax revenue potential, which is accompanied by increasing tax revenues over time. The largest source of state revenue comes from the tax sector. The percentage of compliance with tax obligations in Indonesia remains low, and this problem contributes to low tax compliance (Nurani, 2020).

Many factors contribute to the suboptimal Personal Income Tax (IIT) performance. One of these factors is the role of the tax authority (Fiscus) as the government organization responsible for individual tax revenue. As a state institution, the government has made various efforts to explore potential state revenues in the tax sector. One of these efforts is improving internal aspects through human resource development, specifically the quality of service and competence of tax officials. Human resources are a crucial factor within any organization. The quality of human resources in carrying out their work is crucial to the successful achievement of organizational goals. Tax officials, or Fiscus, provide tax services to taxpayers in fulfilling their tax obligations, both directly and indirectly. The competence of the Fiscus plays a crucial role in supporting the implementation of strategies to achieve these goals. Therefore, the Directorate General of Taxes needs to improve the quality of its tax officials. Research by Fauziah (2019) and Aini et al. (2020) shows that tax compliance can be positively and significantly influenced by the competence of the Fiscus. Meanwhile, the results of Margaretha's (2020) research show that tax compliance cannot be influenced by the competence of the tax authorities.

Tax compliance occurs due to coercion or lack thereof. The level of taxpayer compliance can be seen by comparing the number of taxpayers who have filed their tax returns to the number of registered taxpayers. Based on the data, the tax revenue target is estimated to be lower than last year, but still growing positively. This is due to several possible causes, namely, the lack of taxpayer compliance in paying their taxes and the lack of public awareness of taxation, as people still perceive they do not see the tangible benefits for the state and society. Poor taxpayer compliance remains an unresolved issue. One factor that can influence taxpayer compliance, especially among prospective taxpayers, is tax awareness. The more extensive and frequent tax awareness campaigns are conducted, the higher the level of taxpayer compliance.

A crucial component in determining compliance is the concept of tax fairness. Tax fairness encompasses the extent to which taxation provides equal opportunities to taxpayers and the fair distribution of the tax burden across all levels of society. The decline in taxpayer enthusiasm in fulfilling their tax obligations may be due to their perception of unfairness in the tax system. Tax fairness significantly influences taxpayer compliance, as highlighted by (Gulo, 2021). Tax fairness, according to (Mukoffi et al., 2023), makes people more likely to comply with regulations, while (Mu'arif & Lestasi, 2023) finds that tax fairness has no effect on people's willingness to comply. The assertion that tax fairness has a negligible negative impact on taxpayer compliance contradicts the findings of (Christyanto & Hermanto, 2022).

Previous research has shown inconsistencies between studies. The purpose of this study, based on the phenomena occurring in society, is to implement digital taxation through the Coretax system to obtain empirical evidence regarding the influence of tax competence, tax socialization, and tax fairness on taxpayer compliance.

Based on the background of previous research and the phenomena that occurred, the formulation of the research problem is as follows:

1. Does Tax Competence Have a Positive Influence on Taxpayer Compliance?

2. Does Tax Socialization Have a Positive Influence on Taxpayer Compliance?
3. Does Tax Justice Have a Positive Influence on Taxpayer Compliance?

1.2 LITERATURE REVIEW AND HYPOTHESIS

1.2.1 Theory of Planned Behaviour

Theory of Planned Behavior is a theory that examines the relationship between a person's attitudes and behavior. According to Bonsjak et al. (2020), Theory of Planned Behaviour, namely, tax compliant behavior begins with intention. Theory of Planned Behaviour states that an individual's behavioral intention to perform an individual action is influenced by several internal and external factors. This theory is also influenced by the relationship between attitudes, subjective norms, and perceptions. There are three factors that indicate an individual's willingness to act, namely: belief in the individual's behavior in making decisions (behavioral belief), belief in normative expectations by others and providing motivation (normative belief), and beliefs about individual perceptions (control belief) (Triana et al. 2022). Theory of Planned Behaviour is related to the current research, as taxpayers' behavior tends to lead to tax avoidance. The taxpayer's intentions will determine whether or not they comply with their tax obligations. This is related to tax knowledge; when taxpayers possess a high level of tax knowledge, they will also have high confidence in taxation, which will motivate them to comply with tax regulations (Cahyasari and Michael, 2023).

1.2.2 Attribution Theory

Attribution theory is a method for analyzing or assessing a person's behavior based on internal and external factors within that individual. Behavior caused by internal factors is under the individual's own control, while behavior caused by external factors is influenced by external factors, such as the environment or the situation (Triana et al. 2022). The biggest factor driving taxpayers to tax evasion is friends, coworkers, or superiors who have already committed tax evasion. When those around them engage in tax evasion and don't get in trouble, taxpayers are emboldened to try and do the same.

1.2.3 Compliance Theory

Stanley Milgram, in 1963, introduced the Compliance Theory. Compliance with the law is viewed from two different perspectives: the normative and instrumental perspectives. The instrumental perspective states that individual motivation arises from their subjective perceptions of the potential consequences of actions and personal interests. In contrast, the normative perspective is based on the idea that individuals comply with legal regulations. People who obey the law are considered in line and consistent with the internal regulations they follow. This is called the normative perspective. Normative commitment can be built through personal morality, where compliance with the law is considered obligatory; in contrast, legitimacy-based commitment is motivated by compliance with regulations that stems from the belief that the governing body has the legitimate authority to regulate behavior (Marlina, 2018 in Wijayanti et al, 2022).

1.2.4 Taxpayer Compliance

According to research conducted by Susyanti & Anwar (2020), tax compliance is crucial in tax collection because it represents adherence to all existing tax regulations. Tax compliance is defined as a state in which taxpayers fulfill their obligations and rights as taxpayers and comply with existing tax laws. Based on the Decree of the Minister of Finance (KMK) Number 554/KMK.04/2000, taxpayer compliance is the actions of taxpayers in

fulfilling their tax obligations in accordance with the provisions of laws and regulations and tax implementation regulations that apply generally in a country.

Thus, compliance in this study can be concluded as a state where taxpayers carry out their responsibilities in taxation and do so in accordance with existing provisions.

1.2.5 Fiscal Competence

According to Government Regulation Number 101 of 2000, competence is the ability and characteristics possessed by a civil servant (including the tax officer) in the form of knowledge and behavioral attitudes required in their duties and positions. The concept of competence in this study is the extent of the tax officer's knowledge in understanding matters related to taxation, the tax officer's attitude in behavior, and the skills that support their work.

In a study conducted by Aini et al. (2020), it was stated that achieving taxpayer compliance requires strong tax authorities' competencies. The results of Aini et al.'s study indicate that better tax authorities' competencies will lead to increased taxpayer compliance. This is because the competencies provided by the tax office are not optimal due to a lack of taxpayer enthusiasm for participation. Further improvements and training are needed to achieve the desired results.

Research conducted by Margaretha (2020) showed that tax authorities' competence had no effect on taxpayer compliance. This suggests that higher competence does not necessarily increase taxpayer awareness.

1.2.6 Tax Socialization

Tax socialization is an effort made to provide understanding, information, and guidance regarding taxation and tax legislation to the public. Through tax socialization, prospective taxpayers can obtain information and changes related to taxation. (Ainul, 2021). Tax socialization is an effort by the tax institution, namely the Directorate General of Taxes (DGT), to provide information and guidance regarding taxation. Therefore, the Directorate General of Taxes (DGT) always strives to share information about taxes through socialization so that the public can better understand and comprehend taxation. The tax socialization variable refers to attribution theory because a person's perception in analyzing someone can be influenced by both internal and external conditions. Tax socialization is included in external factors because taxpayer compliance behavior can be influenced by their external circumstances and environment (Darsana & Ariwangsa, 2022). Tax socialization is carried out to provide information about taxation so that taxpayers will have knowledge of the importance of taxes.

With tax socialization, taxpayers will be more aware of the importance of paying taxes, enabling them to exercise their tax rights and obligations in compliance. This is supported by research conducted by Wardani et al (2022) and Ainul and Susanti (2021), which found that tax socialization has a positive effect on taxpayer compliance. This contrasts with research conducted by Diningsih et al. (2023), which found that tax socialization had no significant effect on taxpayer compliance because the public considered the dissemination of information by tax officials to be suboptimal and needed to be improved. Although the socialization conducted by officials was less than optimal, it did not reduce taxpayer compliance levels because taxpayers must still pay and report their taxes.

1.2.7 Tax Justice

Christyanto and Hermanto (2022) argue that tax fairness operates as a vertical dimension, meaning that the wealthy bear a greater financial burden than the poor. How

satisfied people are with paying taxes and how likely they are to avoid paying them are influenced by how fair they perceive the tax system to be.

Fair taxation is the amount of tax collected in accordance with how taxpayers pay their taxes and receive the benefits obtained (Haerudin et al, 2022). According to the concept of fairness and justice in tax policy, taxpayers in the same situation should be required to pay the same amount of tax.

An explanation regarding the relationship between tax justice and taxpayer compliance is provided by theory of planned behaviour. According to the TPB, motivated intentions impact individual behavior, which in this context is taxpayer compliance. Increased tax compliance, the consolidation of social norms that support compliance, and improved taxpayer perceptions of their own compliance behavior can all be influenced by a commitment to tax fairness. Individuals who perceive a fair tax system tend to be more prepared to comply with tax regulations, due to positive interactions with tax officials and the belief that regional development is progressing commensurate with individual capabilities. Contrary to this assumption, research by Mu'arif and Lestari (2023) found that taxpayer compliance was not affected by tax fairness. This contrasts with the findings of Gulo (2021) and Mukoffi et al. (2023), which support this idea. This study concluded that tax fairness has a significant impact on the level of public tax compliance.

1.2.8 Conceptual Framework of the Research

The research framework is shown with the following description:

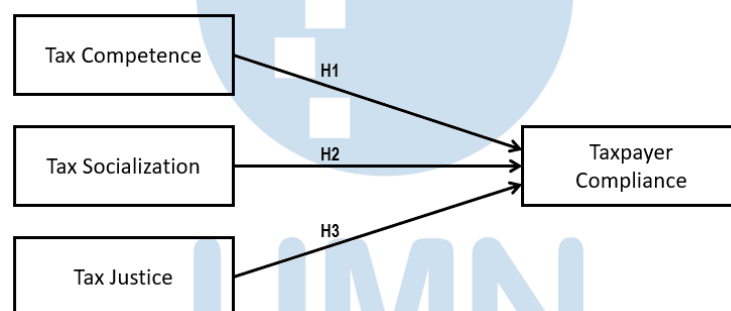


Figure 1. Research Model

1.2.9 Relationship between Variables

The Relationship between Tax Competence and Individual Taxpayer Compliance

Fauziah (2019) demonstrated that tax authority competence significantly influences individual taxpayers, demonstrating a positive trend with a calculated t-value > t-table. Lestari et al. (2020) conducted research on the application of tax authority competence to individual taxpayer satisfaction. The results showed that tax authority competence simultaneously influences taxpayer satisfaction.

In contrast to the research results above, Margaretha (2020) concluded that the competence of the tax authorities does not affect the satisfaction of OP taxpayers. Thus, it can be hypothesized that tax authority competence has a positive effect on individual taxpayer compliance. Therefore, based on the relationship between tax authority competence and taxpayer compliance, one hypothesis is proposed:

H_{a1}: Tax Competence has a positive effect on Taxpayer Compliance

The Relationship Between Tax Socialization and Individual Taxpayer Compliance

The tax socialization variable refers to attribution theory because a person's perception when analyzing someone can be influenced by both internal and external conditions. Tax socialization is included in external factors because taxpayer compliance behavior can be influenced by their external circumstances and environment (Darsana & Ariwangsa 2022). Tax socialization is conducted to provide information about taxation so that taxpayers will understand its importance. Ineffective socialization will result in difficulties in understanding taxation. To fulfill their obligations as taxpayers, prospective taxpayers are required to understand and comprehend the tax knowledge that has been socialized. Through tax socialization, it is hoped that tax compliance will be increased, especially among students as prospective taxpayers who will eventually become compliant taxpayers.

With tax socialization, taxpayers, especially the younger generation, will be more aware of the importance of paying taxes, enabling them to exercise their tax rights and obligations in a compliant manner. This is supported by research conducted by Wardani et al (2022) and Ainul and Susanti (2021), which found that tax socialization had a positive effect on taxpayer compliance. This contrasts with research conducted by Diningsih et al. (2023), which found that tax socialization had no significant effect on taxpayer compliance because the public considered the delivery of information by tax officials to be suboptimal and needed to be improved. Although the socialization conducted by officials was less than optimal, it did not reduce taxpayer compliance levels because taxpayers must still pay and report their taxes. Therefore, based on the relationship between the Tax Socialization variable and Taxpayer Compliance, one hypothesis is proposed, namely:

H_{a2}: Tax socialization has a positive effect on taxpayer compliance.

The Relationship between Tax Justice and Individual Taxpayer Compliance

When the principle of equality, which dictates fair treatment of all individuals or groups, is legally enforced, then justice will be realized. An explanation of the relationship between tax justice and taxpayer compliance is provided by theory of planned behaviour. According to the TPB, motivated intentions impact individual behavior, which in this context is taxpayer compliance. Increased tax compliance, the consolidation of social norms that support compliance, and improved taxpayer perceptions of their own compliance behavior can all be influenced by a commitment to tax fairness. Individuals who perceive a fair tax system tend to be more prepared to comply with tax regulations, due to positive interactions with tax officials and the belief that regional development is progressing commensurate with individual capabilities. Contrary to this assumption, research by Mu'arif and Lestari (2023) found that taxpayer compliance was not affected by tax fairness. This contrasts with the findings of Gulo (2021) and Mukoffi et al. (2023), which support this idea. The study concluded that tax fairness has a significant impact on the level of public tax compliance. Therefore, based on the relationship between the variables of Tax Socialization and Taxpayer Compliance, one hypothesis is proposed:

H_{a3} : Tax justice has a positive effect on the level of Taxpayer Compliance.

2. RESEARCH METHODS AND DATA ANALYSIS

2.1 Population and Sample

A population is the sum of all data sources required during a study (Saryono, 2011). A population can also be described as a general area formed by the objects or subjects studied and the conclusions the author draws from them (Sugiyono, 2016). In this study, the author used a population or subject of individual taxpayers who directly use the new taxation system, the Coretax system. They are familiar with the advantages and disadvantages, even the

impacts, of the digitalization system implemented by the government. The sample was taken using a Google form distributed to colleagues and relatives living in West Jakarta.

2.2 Sample Collection Techniques

A sample is defined as a portion or representative of a population that can be studied (Arikunto, 2010). Quantitative research is another term for sampling (Sugiyono, 2018). The sampling technique used is nonprobability sampling. Nonprobability sampling is a sample selection method in which each individual in the entire population does not have an equal chance of being selected as a sample, but rather is based on the researcher's judgment or decision. In this study, the chosen method was convenience sampling. This method is used to obtain information quickly and at a relatively low cost.

2.3 Sample Size

As a determinant of representative size, the author uses statistical calculations with the Slovin formula which is used to determine the number of samples as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Slovin's Formula

Information:

n = Sample

N = Population Size

E = Error Tolerance

In this study, the author determined error tolerance. The accuracy of the sample taken was 10%, with a 90% accuracy rate. Based on the Slovin formula, the number of respondents in this study was 152. The sample consisted of individuals residing in West Jakarta and directly using the government's tax system.

2.4 Operationalization of Variables and Instruments

2.4.1 Dependent Variable

The dependent variable can also be referred to as the result or consequence of the influence of the independent variable (Creswell, 2013). In this study, the dependent variable or dependent variable is identified as: **Taxpayer Compliance (Y)**. Tax compliance can be defined as an individual's willingness to comply with tax obligations in accordance with applicable regulations without the need for audits, investigations, warnings or threats, or the imposition of legal or administrative sanctions (Gunadi, 2013). Tax compliance can be identified from an individual's decision regarding their tax obligations, whether they fulfill or avoid their tax obligations (Widodo, 2010). A taxpayer is someone who complies with their tax obligations (Rahayu, 2017).

2.4.2 Independent Variables

An independent variable is a variable that causes, influences, or affects an outcome (Creswell, 2013), where the variable used: **Tax Competence, Tax Socialization and Tax Justice**. Instrumental measurement uses a Likert scale to determine the attitudes or opinions of individuals and the general public toward a social phenomenon (Sugiyono, 2014). The format used in Likert scale measurement depends on the research objectives. The author uses the following measurement criteria:

Table 1. Criteria of Likert Scale

Number	Information
1	Strongly disagree
2	Disagree
3	Somewhat disagree
4	Agree
5	Strongly agree

2.5 Data Processing Method

Data processing in this study was conducted using smartPLS SEM (Partial Least Squares – Structural Equation Modeling) software. PLS has the ability to describe relationships between variables and perform analysis in testing. The purpose of PLS is to help researchers confirm theories and explain the existence or absence of relationships between latent variables. The PLS method can describe latent variables (which cannot be measured directly), which are measured using indicators. The author used Partial Least Squares because this study is a latent variable that can be measured using indicators and can be analyzed with clear and detailed calculations (Ghozali, 2016).

2.6 Validity and Reliability Analysis

Data must meet two main requirements: validity and reliability. This study uses a structural equation model (SEM), which consists of two types of analysis: the inner model and the outer model. The inner model, or structural model, discusses the relationships between the constructs being measured. The outer model, also known as the measurement model, is used to evaluate the relationship between the indicators on the variables and the constructs being used (Hair, Sarstedt, Hopkins, and Kuppelwieser, 2014). The outer model is crucial because it involves validity and reliability analysis. Before conducting the inner model analysis, it is necessary to first ensure that the indicators for the variables are valid and reliable.

Validity testing aims to determine the extent to which the developed instrument is capable of describing the specific concept to be measured. Therefore, validity testing focuses more on whether the researcher is actually measuring the concept being studied accurately. This test aims to determine whether the instrument used in the research is valid or not in a questionnaire. A questionnaire is considered valid if the statements in the questionnaire clearly explain what it is intended to measure (Ghozali, 2016, p. 52).

To evaluate the validity of each question in the questionnaire, convergent validity and discriminant validity methods are used. A question in the questionnaire can be said to be valid if the convergent validity meets the standard with an outer loading value above 0.70.

Meanwhile, to test discriminant validity, it can be seen from the cross loadings. Data is considered valid if the cross loading value on each related indicator must be higher than the indicator loading value of other variables (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). Reliability testing shows the level of reliability of a measurement, namely the extent to which the instrument does not have bias or error, and ensures consistent and accurate measurement results so that it can be used as a reference in measuring the research concept itself (Sekaran & Bougie, 2017, p. 288). To evaluate the reliability of a construct or variable, statistical tests can be carried out, namely composite reliability and Cronbach's alpha. A construct or variable can be considered reliable if its composite reliability reaches more than 0.70 (Garson, 2016) and its Cronbach's alpha exceeds 0.60 (Hussein, 2015). Validity testing in this study was conducted using convergent validity and discriminant validity methods. Meanwhile, the

reliability test used composite reliability and Cronbach's alpha. The conditions applied are if the composite reliability reaches a value above 0.70 and Cronbach's alpha above 0.60, then the variable is considered reliable and can be used in research.

2.7 Statistical Analysis of Data

Statistical analysis of data using the SEM-PLS method with the PLS analysis method is as follows:

2.7.1 Outer Model Analysis

Outer model analysis ensures that the measurements used are suitable (valid and appropriate) for use as implemented measurements or are reliable. This analysis involves several calculations:

- 1) Convergent validity is a factor that loads indicators into latent variables. The expected value is > 0.7 .
- 2) Discriminant validity is the factor cross-loading value that helps determine whether a construct has sufficient discriminant power. This is done by comparing the values in the target configuration. This value should be greater than the values in the other configurations.
- 3) Composite reliability is a measure that shows that a construct value has a high reliability value if its reliability value is greater than 0.7.
- 4) The average variance extracted (AVE) is the average variance of at least 0.5.
- 5) Cronbach's alpha is a calculation that produces composite reliability with a minimum value of 0.6.

2.7.2 Inner Model Analysis

Inner Model or specification of relationships between variables (structural model) is also called internal relationship. Describes the relationship between variables based on the theory of substance research. Location parameters (constant parameters) can be omitted from the model because the variables and indicators or manifests are assumed to be scaled to mean zero and unit variance equal to 1, without losing its general character. This model analysis is used to test the relationships between latent constructs. R-squared is the coefficient of determination of the endogenous construct. A value of 0.33 is considered moderate and 0.19 is considered weak (Garson, 2017).

2.7.3 Hypothesis Testing

Hypothesis testing can be done using t-statistics and probability values. To test the hypothesis, the author used bootstrapping by examining the t-statistic values. Testing is done using a t-test and if p- is obtained value 0.05 (alpha 5%) then it is concluded that it is significant and vice versa. If the results of the hypothesis test outer model is significant, this shows that the indicator can be used as a tool to measure variables. Conversely, if the test results of the inner model are significant, it can be interpreted that the variable has a significant influence on other latent variables. PLS hypothesis testing is related to the procedure bootstrap non-parametric to test the significance of the coefficients (Natalia et al., 2017).

3. RESEARCH RESULTS AND DISCUSSION

3.1 Research Description

Primary data generated in the field is processed and analyzed using software PLS. The author successfully collected 152 respondents who met the criteria for individual taxpayers aged 25 to 55 years and resided in West Jakarta. The questionnaire was distributed through google form.

3.2 Respondent Characteristics

The description of the research subjects used is individual taxpayers. Respondent descriptions are grouped by gender, education level and age.

Table 2. Sample Criteria

No	Sample Criteria	Amount
1	Man	99
2	Women	53
Number of Respondents by Gender		152
1	High School / Equivalent	43
2	D3	52
3	D4/S1	49
4	S2	8
Number of Respondents by Education Level		152
1	Age 25-35	78
2	Age 36-45	38
3	Age 46-55	36
Number of Respondents by Age		152

Source: Processed by researchers in 2025

3.3 Inner Model Analysis

3.3.1 Coefficient of Determination (R^2)

R^2 used in research to determine how much Taxpayer Compliance can be explained by Tax Competence, Tax Socialization, and Tax Justice. The results of the R^2 analysis from the output of smart pls 3 is:

Table 3. Coefficient of Determination

	R Square	R Square Adjusted
Taxpayer Compliance (Y)	0.442	0.431

Source: Smart PLS 3 Output

R^2 analysis results is 43.1% of the Taxpayer Compliance variable, meaning the tax authority competency variable, tax socialization, tax justice and the remaining 56.9% is explained by other variables.

3.3.2 Path Coefficients

Path Coefficients used to explain the relationship between tax competence variables, tax socialization, tax justice, and hypothesized taxpayer compliance. The following image shows the output of Smart Pls 3 which shows the results of algorithm and bootstrapping that is:

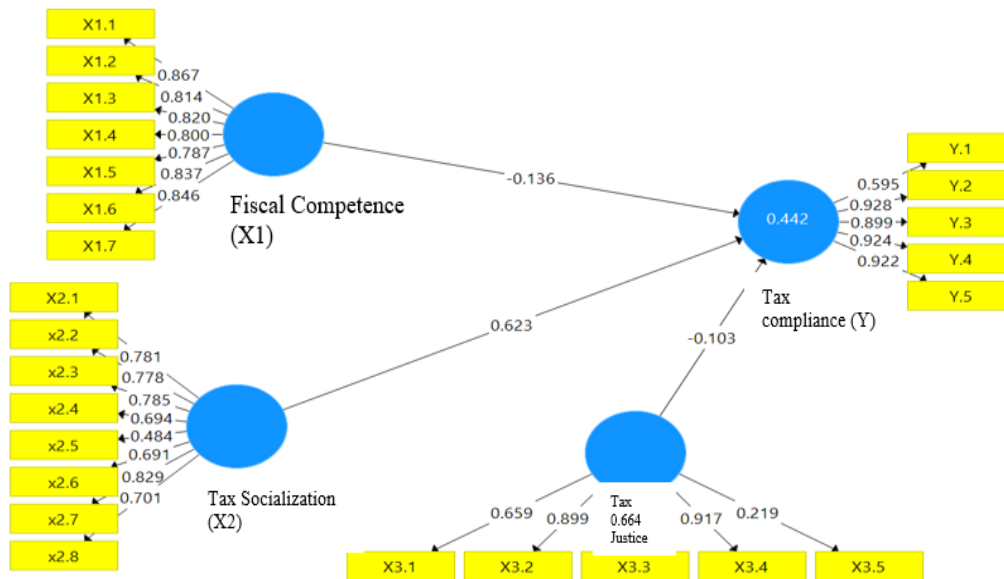


Figure 2. PLS Results of Algorithm

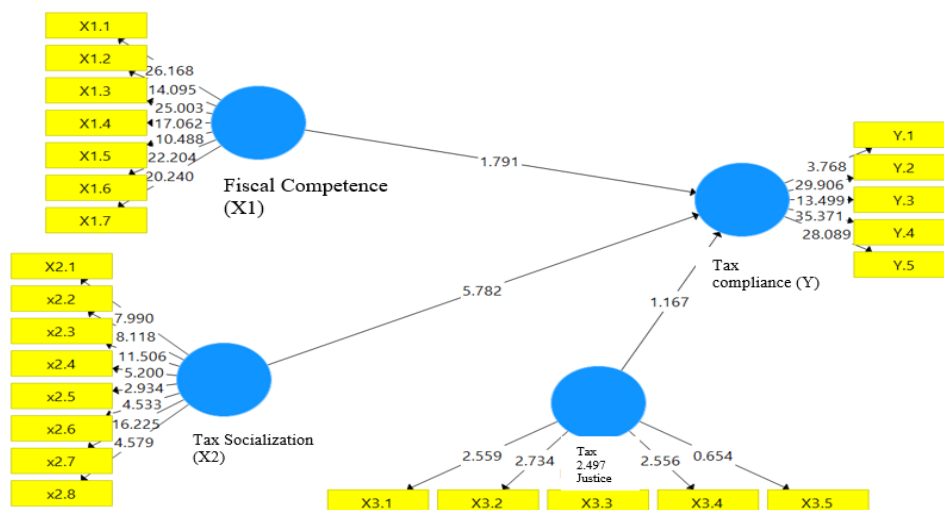


Figure 3. Results of Bootstrapping

The following table explains the results of Bootstrapping

Table 3. Results of Bootstrapping

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Tax Justice (X3) -> Taxpayer Compliance (Y)	-0.103	-0.085	0.088	1.167	0.244
Tax Competence (X1) -> Taxpayer Compliance (Y)	-0.136	-0.137	0.076	1.791	0.074
Tax Socialization (X2) -> Taxpayer Compliance (Y)	0.623	0.632	0.108	5.782	0.000

Source: Smart PLS 3 Output

From the data results of bootstrapping, an equation can be made, namely $KP = a - 0.136X_1 + 0.623X_2 - 0.103X_3 + \text{error}$. On the taxpayer compliance variable, the tax competence variable contributes to path coefficients amounting to -0.136, tax socialization contributes with path coefficients of 0.623 and tax justice contributes with path coefficients of -0.103. Thus, it can be concluded that the variables of tax competence and tax fairness have a negative relationship with taxpayer compliance, while the variable of tax socialization has a positive relationship.

3.3.3 Effect Size (f^2)

Effect size used to see how much power the variables of Tax Competence, Tax Socialization and Tax Justice have on Taxpayer Compliance.

Table 4. Test Results of Effect Size

Variables	Effect Size
Tax Justice (X3) -> Taxpayer Compliance (Y)	-1.103
Tax Competence (X1) -> Taxpayer Compliance (Y)	-0.136
Tax Socialization (X2) -> Taxpayer Compliance (Y)	0.623

Source: Smart PLS 3 Output

Based on table 3.4 above, the tax competence variable has a value of f^2 -0.136, tax socialization of f^2 0.623 (large) and tax fairness has a value of f^2 -1.103. From the results of the f^2 value which resulted in only the tax socialization variable providing a large explanation of taxpayer compliance because it was above 0.15 (Hair and al., 2014), while the variables of competence and tax fairness provide the effect size is negative, meaning that the independent variable has a negative influence on the dependent variable.

3.4 Hypothesis Testing

Hypothesis testing was conducted to determine whether the variables of Tax Competence, Tax Socialization, and Tax Justice partially explain the variable of Taxpayer Compliance significantly. This test has the criteria that if the value of t statistics above 1.96 and the value of p value below 0.05 then the hypothesis is not rejected. In testing this hypothesis, it can be seen in Figure 3.2, namely the results of bootstrapping or table 3.2 where:

1. Fiscal competence variable where the value of t statistics as big as 1,791 and value of p value is 0.074, this means the value of t statistics below 1.96 and the value of p value above 0.05 which can be concluded that H_1 is rejected, tax competence has a negative and insignificant relationship with taxpayer compliance.
2. Tax socialization variable where the value of t statistics as big as 5.782 and value of p value is 0.000, this means the value of t statistics above 1.96 and the value of p value below 0.05, it can be concluded that H_2 is not rejected, tax socialization has a positive and significant relationship with taxpayer compliance.
3. Tax justice variable where the value of t statistics as big as 1.167 and value of p value is 0.244, this means the value of t statistics below 1.96 and the value of p value above 0.05, it can be concluded that H_3 is rejected, tax justice has a negative and insignificant relationship with taxpayer compliance.

3.5 Hypothesis Testing and Discussion

Based on the resulting equation, $KP = a - 0.136X_1 + 0.623X_2 - 0.103X_3 + \text{error}$, then the hypothesis test is obtained as follows:

1. **First hypothesis testing:** The research results are contained in table 3.3 where the test results of p value is 0.074 and effect size is -0.136, this means the value of p value above 0.05, so it can be concluded that the tax competence variable has a negative and insignificant influence on taxpayer compliance, so that H_1 : The competence of the tax authorities has a negative and insignificant effect on taxpayer compliance, which is rejected. The results of this study are in line with Margaretha's (2020) conclusion that the competence of the tax authorities does not affect the satisfaction of individual taxpayers, but does not in line with research by Fauziah (2019) and Aini et al. (2020), which demonstrated that tax authorities' competence positively impacts taxpayer compliance. The digitalization of the tax system and technological advancements significantly assist taxpayers in seeking information. It is highly likely that tax authorities' competence will no longer be as dominant as in the past, when the tax system was run in a closed manner and relied heavily on tax officials/tax authorities. Digitalization of the current tax system significantly enhances the ability of taxpayers to effectively fulfill their tax obligations. Taxpayers have sufficient knowledge of the tax administration process, their obligations as taxpayers, the timeliness of tax reporting, and an understanding of sanctions, rates, and the latest tax regulations. With the transparency of tax system information, the openness of the financial system, data integration between agencies, and even the exchange of information between countries, taxpayer compliance will naturally be created, meaning that tax compliance is achieved through a systems or technological approach, rather than through direct human intervention/tax authorities, although such interventions as tax supervision and audits still exist.
2. **Testing the second hypothesis:** The results of the research on the tax socialization variable are contained in table 3.3 where the test results of p value is 0.000 and effect size 0.623, this means the value of p value below 0.05, it can be concluded that the tax socialization variable has a positive and significant influence on taxpayer compliance so that H_2 : Tax socialization has a significant positive effect on taxpayer compliance and is not rejected. The results show that increasing tax outreach conducted by tax officers, either directly or through social media, YouTube podcasts, or Instagram, on taxation, will increase taxpayer understanding and knowledge. This outreach approach is highly appropriate in the reform era, especially through the digitalization of the tax system using Coretax. Tax outreach, based on the transparency of tax system information that can be accessed or implemented independently by taxpayers, is expected to increase taxpayer compliance, especially among the younger generation as prospective taxpayers. Tax outreach is crucial for communicating the importance of taxation. This research aligns with research conducted by Wardani et al (2022) and Ainul and Susanti (2021), which states that tax outreach has a positive effect on taxpayer compliance. The results of this study are not in line with research conducted by Diningsih et al. (2023), which states that tax outreach has an insignificant effect on taxpayer compliance because outreach conducted by tax officers is not optimal and needs to be further improved.

3. **Third hypothesis testing:** The results of the research on the Tax Justice variable are contained in table 3.3 where the test results of p value is 0.244 and effect size is -0.103, this means the value of p value is above 0.05, so it can be concluded that tax fairness has a negative and insignificant effect on taxpayer compliance, so H3: Tax Fairness has a significant positive effect on taxpayer compliance is rejected. Taxpayers have different perceptions of what is considered fair. If the tax system is perceived as unfair by taxpayers, they may feel less motivated to comply with tax obligations. According to attribution theory, taxpayers are currently waiting to see whether the implementation of Coretax is successful or not. The perception of tax unfairness can trigger psychological impacts, such as dissatisfaction or an inability to see the correlation between tax payments and benefits received. The results of this study are in line with Christyanto and Hemanto (2022) who stated that tax fairness has a negative but insignificant effect on taxpayer compliance. However, this is not in line with research by Gulo (2021) who found that tax fairness has a significant effect on taxpayer compliance, and Mukoffi et al. (2022) who stated that tax fairness has a positive effect on taxpayer compliance. Meanwhile, research by Mu'arif and Lestari (2023) stated that tax fairness has no effect on taxpayer compliance.

4. CONCLUSIONS AND SUGGESTIONS

4.1 Conclusion

The results of the research that has been conducted provide empirical evidence as follows:

1. H1: Tax Competence has no effect on taxpayer compliance. This means that the digitalization of the tax system and technological advancements have significantly assisted taxpayers in seeking information. It is highly likely that the tax authorities' competence will no longer be as dominant as in the past, when the tax system was run in a closed manner and relied heavily on tax officials. The results of this study align with Margaretha's (2020) conclusion that the competence of the tax authorities does not affect the satisfaction of OP taxpayers, but does not. This is in line with research by Fauziah (2019) and Aini et al. (2020) which proves that tax authority competence has a positive effect on taxpayer compliance.
2. H2: Tax socialization has an influence on taxpayer compliance. It means, the greater the level of tax outreach conducted by tax officers, either directly or through social media, YouTube podcasts, or Instagram, the greater the taxpayer's understanding and knowledge. This outreach approach is highly appropriate in the reform era, especially through the digitalization of the tax system using Coretax. This research aligns with research conducted by Wardani et al (2022) and Ainul and Susanti (2021), but disagrees with Diningsih et al. (2023), who stated that tax outreach has no significant effect on taxpayer compliance because outreach conducted by tax officers is not optimal and needs to be further improved.
3. H3: Tax justice has no effect on taxpayer compliance. It means taxpayers have different perceptions of what constitutes fairness. If a tax system is perceived as unfair by taxpayers, they may feel less motivated to comply with their tax obligations. According to attribution theory, taxpayers are currently awaiting the success or failure of Coretax implementation. The results of this study align with Christyanto and Hemanto (2022), Mu'arif and Lestari (2023), but not with Gulo (2021), and Mukoffi et al. (2022) who stated that tax fairness has a positive effect on taxpayer compliance.

4.2 Limitations

This study has inherent limitations that should be modified or further developed in further research. The limitations of this study are:

1. Conducting a more in-depth analysis related to determining variables that can explain taxpayer compliance, such as Modernization of the Tax System, Tax Sanctions, Taxpayer Knowledge
2. The distribution of the questionnaire was via Google Form, so there is a possibility that several limitations may be found, such as misunderstanding the meaning of the questionnaire contents.

4.3 Suggestion

Based on the conclusions and limitations of this study, suggestions for further research can be put forward, namely:

1. Taking into account some other variables used such as tax competence, tax sanctions, transparency of tax use
2. The research involved tax officers, so that research results can provide input and improvements to taxpayer compliance.
3. The research results show that there is a discrepancy with previous research, indicating that further research is needed, adding deeper into the variables above.

4.4 Implications

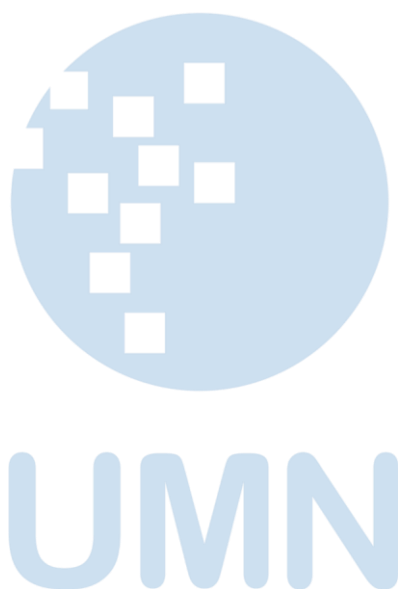
1. Tax officers can no longer act oppressively or arbitrarily towards taxpayers. The era of digitalization of the tax system allows taxpayers to better understand and carry out their tax obligations. The competence of the tax authorities is no longer dominant, because taxpayers are given greater access compared to the old tax system.
2. Continuous tax socialization carried out by tax officers through direct methods and through social media, podcasts via YouTube and Instagram about taxation provide a certain level of trust for taxpayers. Taxpayers feel that there is a transparency of the tax system that allows Taxpayers to access tax applications when paying taxes, reporting taxes, and making corrections to deposit errors independently.
3. The perception of tax injustice can trigger psychological impacts, such as a sense of dissatisfaction or inability to see the correlation between tax payments and benefits received. Transparency in the use of funds obtained from taxes must be a top priority for the government. Tax money is not used to save government companies, where there is a lot of mega corruption that hurts the feelings of the community as taxpayers.
- 4.

5. REFERENCES

- Ainul, N. K. I. K. (2021). Pengaruh pengetahuan perpajakan, sosialisasi perpajakan, dan penerapan sistem e-filing terhadap kepatuhan wajib pajak orang pribadi pada kantor pelayanan pajak pratama surabaya wonocolo. *JURNAL PENDIDIKAN EKONOMI: Jurnal Ilmiah Ilmu Pendidikan, Ilmu Ekonomi Dan Ilmu Sosial*, 15(1), 9-19.
- Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's journal of psychology*, 16(3), 352.
- Cahyasari, D., & Michael, M. (2023). Faktor penentu kepatuan wajib pajak orang pribadi pada generasi milenial di Indonesia. *Jurnal Lentera Akuntansi*, 8(1).

- Christyanto, A. R. S., & Hermanto, S. B. (2022). Pengaruh perencanaan, kepercayaan dan keadilan terhadap kepatuhan wajib pajak. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, 11(4).
- Darsana, N. M. L. A. P., & Ariwangsa, I. G. O. (2022). Pengaruh Penerapan E-Samsat, Kualitas Pelayanan Fiskus Dan Sosialisasi Perpajakan Terhadap Kepatuhan Wajib Pajak Di Kota Denpasar. *Jurnal Ilmiah Akuntansi dan Bisnis*, 7(1), 150-157.
- Diningsih, A. R., Dimiyati, M., & Sari, N. K. (2023). PENGARUH PERSEPSI KORUPSI PAJAK, KEADILAN PAJAK, SOSIALISASI PERPAJAKAN, PENERAPAN E-BILLING DAN KEWAJIBAN MORAL TERHADAP KEPATUHAN WAJIB PAJAK ORANG PRIBADI. *Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 1(1), 34-47.
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European business review*, 26(2), 106-121.
- Fauziah, A. (2019). *Pengaruh Kompetensi Fiskus dan Kualitas Pelayanan Fiskus terhadap Kepuasan Wajib Pajak Orang Pribadi pada Kantor Pelayanan Pajak Pratama Medan Timur* (Doctoral dissertation, Universitas Medan Area).
- Gulo, O. B. (2021). Pengaruh Kesadaran Wajib Pajak, Modernisasi Administrasi Perpajakan, Sanksi Pajak dan Keadilan Perpajakan Terhadap Kepatuhan Wajib Pajak (Studi Empiris Pada Pemilik Umkm di Kelurahan Cimone, Kecamatan Karawaci, Kota Tangerang). *ECo-Fin*, 3(3), 350-364.
- Ghozali, I. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 23*. Semarang: Badan Penerbit Universitas Diponegoro
- Haerudin, J., Bulutoding, L., & Jannah, R. (2022). PENGARUH LOVE OF MONEY DAN KEADILAN PAJAK TERHADAP TAX EVASION DENGAN BUDAYA SIRI'NA PACCE SEBAGAI PEMODERASI. *ISAFIR: Islamic Accounting and Finance Review*, 3(1), 1-20.
- Margaretha, M. (2020). *PENGARUH KOMPETENSI FISKUS, PENYULUHAN PAJAK, DAN MEDIA SOSIAL TERHADAP KEPUASAN WAJIB PAJAK ORANG PRIBADI (STUDI PADA KPP PRATAMA PALEMBANG ILIR TIMUR)* (Doctoral dissertation, STIE Multi Data Palembang).
- Mu'arif, S., & Lestari, S. (2023). Pengaruh pengetahuan Perpajakan, Ketegasan Sanksi Perpajakan dan Keadilan Perpajakan terhadap Kepatuhan Wajib Pajak Usaha Mikro Kecil dan Menengah (UMKM). *Jurnal Ilmiah Manajemen, Bisnis dan Kewirausahaan*, 3(2), 159-170.
- Mukoffi, A., Sulistiyowati, Y., Himawan, S., & Kontesa, K. (2023). Korupsi pajak dan keadilan perpajakan pada kepatuhan wajib pajak (studi kasus pada kantor pelayanan pajak (KPP) Batu. *Jurnal Paradigma Ekonomika*, 17(1), 85-94.
- Nurani, M., & Islami, I. N. (2020). The role of tax morale as mediator in the relationship between religiosity and tax compliance in South Sumatra. *ACCRUALS (Accounting Research Journal of Sutaatmadja)*, 4(01), 120-134.
- Sugiyono. (2021). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (3rd ed.). Alfabeta.
- Susyanti, J., & Anwar, S. A. (2020). Efek Sikap Wajib Pajak, Kesadaran Wajib Pajak, Pengetahuan Perpajakan Terhadap Kepatuhan Pajak Di Masa Covid 19. *Sebatik*, 24(2), 171-177.

- Triana, D. H., Delsi, D. M. H., Dhelniati, F., Ardiansyah, F., Suriyanti, L. H., & Fionasari, D. (2022). Kepatuhan Pajak Generasi Muda di Kota Pekanbaru: Semu atau Potensial?. *Reviu Akuntansi dan Bisnis Indonesia*, 6(2), 99-113.
- Wardani, D. K., Prihatni, Y., & Wulandari, A. (2022). Pengaruh tax morale terhadap niat untuk patuh calon Wajib Pajak dengan kesadaran pajak sebagai variabel moderasi:(Studi kasus pada mahasiswa UST sebagai calon Wajib Pajak). *AKUA: Jurnal Akuntansi dan Keuangan*, 1(1), 77-85.
- Wijayanti, L. E., Kristianto, P., Damar, P., & Wawan, S. (2022). Faktor-faktor yang Mempengaruhi Kepatuhan Terhadap Pengendalian Intern. *Jurnal Riset Akuntansi Dan Auditing*, 9(3), 15-28.



KEBIJAKAN EDITORIAL DAN PEDOMAN PENULISAN ARTIKEL ULTIMA MANAGEMENT DAN ULTIMA ACCOUNTING

Pedoman Penulisan Artikel

1. Naskah merupakan hasil penelitian atau kajian pustaka dan belum pernah dipublikasikan.
2. Jumlah halaman 15-25.
3. Nama penulis dicantumkan tanpa gelar akademis dan diikuti dengan nama lembaga tempat kegiatan penelitian dilakukan.
4. Artikel menggunakan jenis huruf Times New Roman, ukuran font 12, dan spasi 1.
5. Ukuran kertas A4.

Sistematika penulisan meliputi:

1. Abstrak, ditulis dalam bahasa Inggris, tidak melebihi 200 kata. Abstrak merupakan ringkasan dari artikel yang terdiri dari 3 paragraf, yaitu :
 - a. Paragraf 1 berisikan tujuan dan target khusus yang ingin dicapai dalam penelitian.
 - b. Paragraf 2 berisi metodologi penelitian yang digunakan dan unit analisis.
 - c. Paragraf 3 berisi hasil uji hipotesis. Abstrak diikuti dengan kata kunci (*keywords*) terdiri dari 3-5 kata.
2. Naskah disusun dengan sistematika:
 - a. Pendahuluan.
 - b. Tinjauan Literatur dan Hipotesis.
 - c. Metode Penelitian.
 - d. Hasil dan Pembahasan.
 - e. Kesimpulan, Keterbatasan dan Saran.
 - f. Referensi.
 - g. Lampiran.
3. Tabel dan Gambar (grafik).
 - a. Tabel dan gambar disajikan bersama dengan naskah, namun diperbolehkan disajikan terpisah dari naskah sebagai lampiran.
 - b. Tabel dan gambar diberi nomor urut dan judul lengkap serta disebutkan sumbernya jika merupakan kutipan.
4. Kutipan, dalam teks ditulis diantara tanda kurung, yang menyebutkan nama akhir penulis, tahun tanpa koma dan nomor halaman jika dipandang perlu.
 - a. Satu sumber kutipan dengan satu penulis, contoh: (Hartono, 2005); dua penulis, contoh: (Aris dan Hartono, 2006); lebih dari dua penulis, contoh: (Hartono et.al., 2007); lebih dari dua sumber diacu bersamaan, contoh: (Ghozali, 2006; Sylvia, 2008); dua tulisan atau lebih oleh satu penulis, contoh: (Ghozali, 2006; 2008).
 - b. Kutipan disertai nomor halaman, contoh: (Sylvia 2008,102).
 - c. Pencantuman halaman karya yang diacu menggunakan tanda titik dua sebelum penomoran halaman, contoh: (Thomas, 2003:3).



- d. Jika pada referensi terdapat penulis dengan lebih dari satu artikel pada tahun penerbitan yang sama, maka pada kutipan gunakan huruf a, b... setelah tahun, contoh: (Kusuma, 2005a) atau (Kusuma, 2004b; Utama et al., 2005a).
 - e. Jika nama penulis disebutkan pada teks, maka nama tidak perlu disebutkan pada kutipan, contoh: Kusuma (2004) menyatakan
 - f. Sumber kutipan yang berasal dari pekerjaan suatu institusi sebaiknya menyebutkan akronim institusi yang bersangkutan misalnya: (IAPI 2008)
5. Referensi, yang dicantumkan dalam daftar referensi hanya yang benar-benar disebutkan dalam artikel. Sebaliknya, semua referensi yang telah dicantumkan dalam artikel harus dicatat dalam daftar referensi. Referensi disusun alfabetis sesuai dengan nama belakang penulis atau nama institusi.

Contoh:

Buku

Satu penulis

Hurt, R. L. (2008). *Accounting Information Systems*. New York: McGraw-Hill.

Dua penulis

Doupnik, T., & Perera, H. (2007). *International Accounting*. New York: McGraw-Hill.

Tiga penulis

Weygandt, J. J., Kieso, D. E., & Kimmel, P. D. (2008). *Accounting Principles*. Danvers: John Wiley & Sons.

Penulis Institusi

Ikatan Akuntan Indonesia. (2007). *Standar Akuntansi Keuangan*. Jakarta: Divisi Penerbitan IAI.

Jurnal

Cohen, L. J., W, P., & David, J. S. (1996). *Measuring the Ethical Awareness and Ethical Orientation of Canadian Auditors*. *Behavioral Research in Accounting*, 98-199.

Website

Burgstahler, D., W.B. Elliott, and M. Hanlon. (2002). "How Firms Avoid Losses: Evidence of Use The Net Deferred Tax Asset Account".

Workshop/Seminar

Wainwright, S. P. (2000). *For Bordieu in Realist Social Science*. Cambridge Realist Workshop 10th Anniversary Reunion Conference.

Tesis/Disertasi

Millet, P. (2005). *Locus Of Control and Its Relation to Working Life: Studies from The Fields of Vocational Rehabilitation and Small Firm in Sweden*. Doctoral Thesis, Department of Human Work Science. Sweden: Lulea University of Technology Sweden.

6. Catatan Kaki, dipergunakan untuk memberi penjelasan/analisis tambahan yang jika dimasukkan dalam naskah akan mengganggu kontinuitas naskah. Catatan kaki tidak digunakan untuk acuan/ referensi. Catatan kaki diketik dua spasi dan diberi nomor urut dan dicetak superscript. Catatan kaki ditempatkan pada akhir artikel.
7. Penyerahan Artikel, yang dikirimkan ke jurnal Ultima Management memenuhi kriteria berikut:
 - a. Artikel yang sedang dipertimbangkan untuk dipublikasikan di jurnal lain atau di penerbit lain tidak dapat dikirim ke jurnal Ultima Management. Penulis harus membuat pernyataan bahwa artikel tidak dikirim atau dipublikasikan dimanapun.
 - b. Jika artikel menggunakan pendekatan survei atau eksperimen, maka instrument (kuesioner, kasus dll) disertakan.
 - c. Artikel dikirim ke:

Fakultas Bisnis

Universitas Multimedia Nusantara

Scientia Garden, Jl. Boulevard Gading Serpong, Tangerang

Telp (+6221) 5422 0808

Fax (+6221) 5422 0800

E-mail: ultimabisnis@umn.ac.id

