Analysis of the Environmental, Social, and Governance (ESG), Retention Ratio, and Leverage Impacts on Stock Returns with Company Value as a Moderation Variable

Dimas Umbara Pratama, Robinson

Universitas Bengkulu, Indonesia

ABSTRACT

Efforts to enhance company performance through adherence to corporate governance principles are demonstrated in the company's comprehensive ESG (Environmental, Social, and Governance) disclosures. In evaluating these disclosures, it is imperative to weigh the impact of leverage and retention ratio. The survey conducted by Globescan and the Global Reporting Initiative (GRI) has revealed a significant lack of awareness regarding the importance of these factors among typical companies in Indonesia. Hence, this study examined the ESG, retention ratio, and leverage impacts on stock returns with company value as a moderation variable. The samples of this study comprised 14 financial companies listed on the Indonesia Stock Exchange within the timeframe of 2018-2022. Data for the analysis were extracted from the IDX website and the official websites of the respective companies. Employing Eviews 9 software, multiple linear regression analysis was conducted to unravel insights into the relationships under scrutiny. The discerned outcomes unveiled that neither ESG nor leverage significantly impacted stock returns. In contrast, the retention ratio emerged as a potent factor with a noteworthy influence. The company value could moderate the ESG and the retention ratio impacts on stock returns, yet it proved ineffective in moderating the leverage impact on stock returns.

This is an open access article under the CC-BY-SA 4.0

1. INTRODUCTION

The Indonesian capital market has recently gained significant popularity among investors, especially in stocks, bonds, and mutual funds. The primary objective of these investments is to attain profitability, leveraging the post-pandemic economic recovery to fortify the financial
industry, consequently eliciting heightened interest from investors. Even though it is based on low inflation, share prices in the financial industry are still maintained with a relatively good level of stability, thereby increasing investor confidence (source: https://www.bi.go.id/). These financial dynamics emerge a trend in investment practices characterized by an emphasis on sustainable investment. This shift is primarily driven by increasing global awareness of pressing issues such as global warming and environmental degradation (Frindos, 2020). Investors are increasingly interested in environmentally responsible choices, focusing on companies that align themselves with ESG (Environmental, Social, and Governance) principles, recognized as an essential metric for measuring sustainability (Noviarianti, 2020). ESG includes considerations regarding environmental, social responsibility, and corporate governance impacts—all essential elements that influence public policy and business strategy. This global paradigm shift faces challenges related to environmental preservation, social welfare, and effective governance, especially in overcoming urgent problems resulting from climate change (Aditama, 2022).

The ESG impact consideration is not limited to the social and environmental fields; it extends its influence to the financial industry, especially in the investment decision-making process. Financial industry increasingly integrates transparent and sustainable practices, reflecting a commitment to responsible business behavior through ESG performance reporting. ESG Indices, such as the Sri-KEHATI Index inspired other listed companies to prioritize sustainability, thereby offering investors a comprehensive decision-making framework (source: https://esg.idx.co.id/). In the contemporary era of digitalization and fintech advances, financial companies strategically align themselves with efficiency and innovation to reduce operational costs and manage risks through wise leverage strategies. Apart from that, public awareness of ESG-based investments is also increasing, with investors showing high sensitivity to the environmental and social impacts contained in their investment portfolios (Qodary & Tambun, 2021).

The dividend distribution practices within financial companies exhibit a nuanced spectrum, with some choosing to retain profits for business expansion or augment capital (Ariyanti, 2021). The decision-making process surrounding dividend distribution entails a strategic dialogue with shareholders, and the resultant alterations in share value play a pivotal role in influencing overall investment returns. In light of this scenario, it is imperative to recognize that debt within a company does not necessarily signify a precarious financial condition; it is often a deliberate measure adopted to ensure seamless operational continuity (Hidayat, 2019). Consequently, the leverage metric assumes considerable significance when evaluating the financial robustness of a company. The high level of leverage can significantly impact various facets, including company value, share prices, and stock returns (Ariyanti, 2021; Purba & Marlina, 2019).

The Stakeholder Theory posits that each party can access information on company activities, facilitating informed decision-making (Al Umar et al., 2020). The evaluation of companies' sustainability commitments typically transpires through stakeholders, utilizing metrics encompassing economic, environmental, and social performance gleaned from sustainability reports (Melinda & Wardhani, 2020). The disclosure of Environmental, Social, and Governance (ESG) is a transformative measure applicable across diverse sectors. The dissemination of company information assumes a pivotal role, not merely for transparency but also for nurturing and fortifying relationships, thereby enhancing the corporate reputation within the purview of stakeholders (Safriani & Utomo, 2020). The expected positive outcomes from stakeholder support may materialize through investments, capital participation, heightened operational efficiency, and a favorable disposition toward the company's products.
Signaling Theory elucidates the strategic actions undertaken by corporate management to convey prospective outlooks to investors (Ekadjaja, 2021). This conceptual framework emphasizes companies' need to provide information, particularly financial reports, to external entities. This theory underscores companies' need to provide information, specifically financial reports, to external entities. Additionally, it elucidates the motivations that propel companies to divulge financial information to external parties (Mujati & Dzulqodah, 2016). The central tenet of this theory is to mitigate the information asymmetry between internal and external stakeholders of the company. When this information is conveyed, market stakeholders interpret the information to discern whether the news is favorable or unfavorable for investors and other relevant parties. Through the disclosure of ESG-related information, alongside the announcement of financial reports encapsulating parameters such as leverage (an indicator of the company's adeptness in managing debt for operational support) and considerations from the General Meeting of Shareholders (GMS) reflecting decisions on dividend distribution or retention ratio, a company effectively signals to investors that its focus extends beyond shareholder profits. It communicates a commitment to societal welfare within its operational milieu.

The stock returns pertain to the financial gains derived from stock investments. It encompasses the computation of profits by deducting the purchase price of shares from the sale price, augmented by dividends. Stock returns function as a barometer of investor financial gains and serve as indicators of a company's acumen in managing investments within the stock market. As delineated by Simorangkir (2019), stock returns epitomize the financial gains accruing to investors as returns on their investments. This metric allows investors to discern and evaluate the actual or anticipated returns from diverse investments against a desired rate of return. Stock returns encompass dividends and capital gains (or losses). Dividends represent the distribution of profits earned by the company, whereas capital gains (or losses) occur when selling shares, influenced by the disparity between the purchase and selling prices. Stock returns offer a comprehensive assessment of stock investment performance, amalgamating periodic income and capital gains.

Environmental, Social, and Governance (ESG) encompass the green economy, corporate social responsibility, and responsible investment strategies (Li et al., 2022). Within the domain of investment practices, companies adhere to ESG standards to align with principles related to environmental sustainability, social responsibility, and effective governance (Noviarianti, 2020). The company's sustainability reports adhere to the Global Reporting Initiative (GRI) standards. Established in 1997 in Boston, USA, GRI is an independent institution boasting a diverse membership, including accountants, entrepreneurs, investors, environmental organizations, human rights organizations, research institutions, and labor organizations from various countries (Initiative, 2012). The establishment of GRI stemmed from responses addressing the pressing demand for transparency regarding corporate business activities' economic, environmental, and social impact. GRI is pivotal in assisting companies across diverse business sizes and sectors globally, facilitating the meticulous preparation of sustainability reports.

The Retention Ratio signifies the percentage of profits companies undistributed to shareholders as dividends (Ariyanti, 2021). It is pivotal in the decision-making process related to dividends, where profits can be distributed to shareholders or reinvested. It is a metric, comparing changes in retained earnings with net profit after interest and taxes. It quantifies the percentage of profits retained within the company rather than being distributed to shareholders as dividends, thereby augmenting the company's capital.

Leverage represents a comparison between the capital injected by company owners and the funds secured from creditors (Zoraya et al., 2022). It delineates the financial risk associated
with the utilization of debt. While leveraging capital can yield profits for owners, it also incurs the cost of debt. Elevated debt levels in a company can pose significant obligations to creditors, potentially diminishing profits. Such reductions in profits can subsequently lead to a decrease in the company's share price, impacting investors' returns.

The company value is manifested in its share prices, shaped through the intricate interplay of supply and demand in the capital market. Share prices reflect the public evaluation of company performance (Harmono, 2022). The significance of company value lies in its profound influence on investors' perceptions of the company. Investors gauge a company's success through its value, intertwined with share valuation (Pasaribu et al., 2019). The high-level price of a stock instills market confidence towards the company's performance and prospects. The company values are measured using Price Earnings Ratio (PER), Price to Book Value (PBV), and TobinsQ (Pekerti, 2020; Putra & Adrianto, 2020; Rahmadi & Mutasowifin, 2021).

Against this backdrop, this research thoroughly examined the interplay between Environmental, Social, and Governance (ESG), retention ratio, and leverage impacts concerning stock returns in the Indonesian financial sector. The burgeoning interest in ESG factors as critical components in investment decision-making and the imperative to comprehend the factors exerting influence on company value underpins the rationale for this research endeavor. Prior research has set noteworthy precedents, revealing multifaceted relationships between ESG, retention ratio, pricing dynamics, and stock returns (Ardiyansyah & Paramita, 2020; Ketaren, 2023; Ningsih & Maharani, 2022; Pangestu & Wijayanto, 2020; Pekerti, 2020; Putra & Adrianto, 2020; Qodary & Tambun, 2021; Rahmadi & Mutasowifin, 2021; Safira & Dillak, 2021; Warisman & Amwila, 2022).

In pursuit of new insights within the Indonesian financial sector, this research introduces a novel variable: leverage. The research comprehensively explored the intricate dynamics between ESG, retention ratio, and leverage, providing investors with discerning perspectives to facilitate well-informed decision-making. Simultaneously, the findings aspire to serve as a guiding compass for financial companies, fostering opportunities to enhance sustainability practices and governance frameworks in alignment with global developments.

2. METHOD

2.1 Research Design

This study adopted a quantitative research design utilizing numerical data collection to rigorously examine and assess the research hypotheses (Sugiyono, 2018). The researchers employed statistical analysis to scrutinize the relationships between three independent variables, ESG (Environmental, Social, and Governance), Retention Ratio, and Leverage, towards their impact on the dependent variable, Stock Return. The moderating role of the Company Values variable was also incorporated into the analysis. Multiple linear regression analysis was employed to model the intricate relationships between these independent and dependent variables simultaneously. This method offers a comprehensive and quantitative descriptive overview of the relationships between variables, accompanied by statistical tests to ascertain the significance of these associations.

2.2 The Impact of Environmental, Social, and Governance (ESG) on Stock Returns

Before embarking in investment, investors seek information regarding company conditions to construct a decision-making process. Among the myriad factors scrutinized, applying ESG (Environmental, Social, and Governance) principles in a company's operations assumes...
considerable significance (Qodary & Sihar, 2021). ESG, a standard investment practice, intertwines company policies with environmental, social, and governance principles, elucidating a commitment to responsible business practices (Noviarianti, 2020). The decision to invest is often swayed by a company's embrace of ESG principles, underpinned by the positive impacts it imparts. These include exemplary sustainability practices and a robust corporate reputation in the eyes of both investors and consumers. Extensive research conducted by Torre et al. (2020) corroborates this notion, establishing a significant correlation between active engagement in ESG practices and a company's profitability. When ESG positively influences a company's profitability, it invariably piques the interest of investors, amplifying the potential for enhanced stock returns. The hypothesis pertaining to the impact of Environmental, Social, and Governance (ESG) on stock returns is elucidated herein.

Hypothesis 1 (H1): ESG Affects Stock Returns

According to Noviarianti (2020), ESG represents three critical criteria within companies' investment practices: environmental, social, and governance. The measurement of ESG is conducted through content analysis, as determined by the Global Reporting Initiative (GRI), serving as an indicator in the environmental, social, and governance spheres. The sustainability report, disclosed based on GRI guidelines, comprised 91 disclosure items categorized into three segments tailored to the company: environmental, social, and governance. The company Y sustainability report disclosure index (SRDIy) is formulated as follows:

\[
SRDI_y = \frac{\sum X_Y}{n}
\]

Note:
- \( SRDI_y \) = the sustainability report disclosure index for company Y
- \( \sum X_Y \) = the total number of disclosure items for company Y
- \( n \) = the total number of disclosure items according to GRI guidelines, \( n = 91 \)

2.3 The Impact of Retention Ratio on Stock Return

The retention ratio delineates the portion of a company's profits retained and not distributed as dividends to shareholders. A positive retention ratio signifies a strategic choice by companies to reinvest profits into the business, augmenting retained earnings and influencing overall growth (Aryanti, 2021). Notably, a high retention ratio indicates a company's preference for utilizing profits in business development rather than distributing dividends to shareholders. In such instances, share prices may experience a decline, affecting returns as investor interest wanes due to reduced capital injection. Existing research substantiates the significant effect of the retention ratio on share prices (Ketaren, 2023; Ningsih & Maharani, 2022; Safira & Dillak, 2021; Warisman & Amwila, 2022). The hypothesis pertaining to the impact of retention ratio on stock returns is elucidated herein.

Hypothesis 2 (H2): Retention Ratio Affects Stock Returns

The retention ratio is the percentage of profits undeclared as dividends to shareholders. The formula for calculating the retention ratio is as follows (Brigham & Houston, 2006):

\[
\text{Retention ratio} = 1 - \text{DPR}
\]

Note:
2.4 The Impact of Leverage on Stock Returns

The leverage ratio is a comparative metric that evaluates the ratio between a company owner's capital and funds secured from creditors (Zoraya et al., 2022). Elevated debt levels pose a heightened risk for investors, as reflected in the Debt-to-Equity Ratio (DER). A high debt ratio, where debt surpasses capital, impacts a company's obligations to lenders and diminishes profits, subsequently influencing stock prices and investor returns. This phenomenon finds empirical support in studies by Agustami and Syahida (2019), Auliya and Yahya (2020), and Pradanimas and Sucipto (2022), which establish the significant influence of leverage on returns and stock prices. The hypothesis pertaining to the impact of leverage on stock returns is elucidated herein.

Hypothesis 3 (H3): Leverage Affects Stock Returns

2.5 The Moderating Role of Company Value in ESG, Retention Ratio, and Leverage Impacts on Stock Returns

Companies integrating ESG principles witness an augmented value in the market (Eccles et al., 2012; Putra & Adrianto, 2020). Large companies adopted ESG concepts and exhibited leadership in global markets, boasting high sustainability capabilities and significant market growth. Moreover, they demonstrate superior financial performance and heightened profitability, as evidenced by metrics such as Return on Equity (ROE) and overall company growth (Putra & Adrianto, 2020). Pekerti (2020), in her research, used Tobin's Q proxy, and Ardifyansyah and Paramita (2020), in their research, used Price to Book Value (PBV) proxy, elucidated that company value significantly influences stock returns. The hypothesis pertaining to the moderating role of company value in ESG impact on stock returns is elucidated herein.

Hypothesis 4 (H4): Company Value Strengthens the ESG Impact on Stock Returns

Large companies, with easy access to capital markets, often raise substantial funds, frequently directed towards dividend payments to company owners. However, while accessing large capital, these companies also tend to bear significant debt, potentially delaying or reducing dividend disbursements to shareholders (Lismawati & Suryanto, 2017). Such scenarios can diminish investor interest, subsequently impacting company value. In this context, the retention ratio also modulates company value (Sandra & Sulaksono, 2022; Taba et al., 2022).
hypothesis pertaining to the moderating role of company value in retention ratio impact on stock returns is elucidated herein.

Hypothesis 5 (H5): Company Value Strengthens the Retention Ratio Impact on Stock Returns

Leverage, denoting how much a company relies on loans to finance operations, impacts stock returns and investor confidence (Lestari et al., 2016). Prudent debt management becomes imperative for companies, ensuring efficient use of investments. To bolster value and share prices, companies must judiciously employ debt-financed assets. Recognizing that companies utilizing debt must fulfill interest and principal repayments is essential. Empirical research underscores the influence of leverage on company value (Supitriyani et al., 2020; Wisra et al., 2023). The hypothesis pertaining to the moderating role of company value in leverage impact on stock returns is elucidated herein.

Hypothesis 6 (H6): Company Value Strengthens the Leverage Impact on Stock Returns

A company's value is intricately linked to its share price, a metric determined by the delicate equilibrium of supply and demand within the capital market. The public's collective judgment regarding a company's performance finds expression in its prevailing share price (Harmono, 2014). This present research employed Tobin's Q proxy to measure company value. Tobin's Q, defined as the ratio of a company's market value to the value of its assets, serves as an instrumental gauge in this context. The score of Tobin's Q > 1 signifies an elevated market estimation, indicating that the market attributes a higher value to the company in the stock market than its tangible assets. Such a scenario reflects affirmative market confidence in the company's performance and prospects. Companies distinguished by robust business practices and a stellar reputation invariably become alluring prospects for investors. The Tobin's Q formula is delineated as follows:

\[
\text{Tobin's Q} = \frac{(\text{Price per stock} \times \text{Number of stocks}) + \text{The total of debt.}}{\text{The total of asset}}
\]

Note:
- Tobin’s Q = Company value
- Price per stock = Offered stock price on the stock market per stock.
- Number of stocks = The total outstanding stocks

2.6 Stock Returns

Stock returns represent the rate of return on investment, calculated by contrasting the amount received with the initial investment and dividing it by the initial investment. The computation of stock returns adheres to the formula proposed by Brigham and Houston (2006):

\[
R_i = \frac{P_t - P(t-1)}{P(t-1) \times 100%}
\]

Note:
- \(R_i\) = Stock return
- \(P_t\) = Company stock price in t period
- \(P(t-1)\) = Company stock price in t-1 period
2.7 Research Population and Sample

This research focused on 14 financial sector companies listed on the Indonesia Stock Exchange (BEI) from 2018-2022. The research sample was purposefully selected based on the following criteria:

a. Financial sector companies listed on the IDX from 2018 to 2022.
b. Companies that publish comprehensive financial and annual reports for the 2018-2022 period on the IDX website or the company's official website.
c. Companies that disclose ESG (Environmental, Social, and Governance) performance in annual or sustainability reports.
d. Companies are utilizing GRI standards in preparing sustainability reports.

The sample selection process identified 14 companies meeting the research criteria, resulting in 70 observations over the 5-year research duration.

2.8 Data Collection Method

The data employed in this research was secondary data obtained from annual financial reports and sustainability reports spanning 2018 to 2022. The data was sourced from the Indonesia Stock Exchange website (https://www.idx.co.id/) and the companies' official websites. The information disclosed in these reports is considered relevant and reliable, making secondary data suitable for analysis. The Indonesian Stock Exchange website serves as the primary source for accessing data, ensuring accessibility through the official websites of the relevant companies.

2.9 Data Analysis Method

This study conducted multiple linear regression tests on panel data using Eviews 9 software to explore the relationships between variables. The analytical procedures encompass descriptive statistics, classical assumption tests (multicollinearity and heteroscedasticity), multiple linear regression, and hypothesis testing.

2.10 Regression Analysis

This study adopted the multiple linear regression method with Eviews 9 software. Multiple linear regression analysis was employed to forecast the relationship between the dependent and independent variables. There were four regression equation models utilized in this research:

\[
\text{Model 1} \\
RS = ESG + RT + L
\]

\[
\text{Model 2} \\
RS = ESG + NP + ESG*NP
\]

\[
\text{Model 3} \\
RS = RT + NP + RT*NP
\]

\[
\text{Model 4} \\
RS = L + NP + L*NP
\]

Note:
RS = Return Stock
ESG = Environmental, Social and Governance
RT = Retention Ratio  
L = Leverage  
NP = Company Value  

2.11 Moderated Regression Analysis (MRA)

Moderated Regression Analysis (MRA) represents a specialized technique within multiple linear regression that incorporates interaction elements among independent variables (Liana, 2009). The primary objective is to ascertain whether the moderating variable amplifies or diminishes the relationship between the independent and dependent variables. Three regression testing models incorporating moderating variables include the interaction test (MRA), the absolute difference value test, and the residual test. For this investigation, the MRA test was employed. The moderating hypothesis is deemed acceptable if the firm value variable significantly influences stock returns. The Interaction Test or Moderated Regression Analysis (MRA) can be calculated using the following equation:

\[ Y = a + b_1 \text{ESG}_1 + b_2 \text{RT}_2 + b_3 L_3 + b_4 \text{NP}_4 + b_5 \text{ESG}_1 \text{NP}_4 + b_6 \text{RT}_2 \text{NP}_4 + b_7 L_3 \text{NP}_4 + e \]

Note:

\( Y \) = Stock Return  
\( \text{ESG}_1 \) = Environmental, Social, and Governance  
\( \text{RT}_2 \) = Retention Ratio  
\( L_3 \) = Leverage  
\( \text{NP}_4 \) = Company Value  
\( \text{ESG}_1 \text{NP}_4 \) = Interaction between \( X_1 \) and \( X_4 \)  
\( \text{RT}_2 \text{NP}_4 \) = Interaction between \( X_2 \) and \( X_4 \)  
\( L_3 \text{NP}_4 \) = Interaction between \( X_3 \) and \( X_4 \)  
\( a \) = Constant (Intercept)  
\( b_1 b_2 b_3 b_4 b_5 b_6 b_7 \) = Regression coefficient  
\( e \) = Error term

3. RESULTS AND DISCUSSION

3.1 Results

3.1.1 Descriptive Statistics

Descriptive statistics have been employed in this study to present comprehensive details and an overarching view of the research data, encompassing the mean, median, maximum, and minimum values of the variables under examination. The subsequent section provides an overview of the distinctive features of several variables (ESG, retention ratio, leverage, and stock returns) within financial sector companies listed on the Indonesia Stock Exchange from 2018 to 2022. The data incorporates critical metrics such as the number of observations, sample average, median, maximum value, minimum value, and standard deviation for each variable.

<table>
<thead>
<tr>
<th></th>
<th>STOCK RETURN</th>
<th>ESG</th>
<th>RETENTION RATIO</th>
<th>LEVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.099292</td>
<td>0.246075</td>
<td>0.653254</td>
<td>0.768759</td>
</tr>
<tr>
<td>Median</td>
<td>-0.025114</td>
<td>0.199176</td>
<td>0.718900</td>
<td>0.837293</td>
</tr>
<tr>
<td>Maximum</td>
<td>5.813665</td>
<td>0.604396</td>
<td>1.000000</td>
<td>0.891678</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.576860</td>
<td>0.032967</td>
<td>0.000000</td>
<td>0.000855</td>
</tr>
</tbody>
</table>
Based on the table, there are 70 observations data. Below are the summary statistics for each variable:

a. STOCK RETURN mean = 0.099292, maximum = 5.813665, minimum = -0.576860, median = -0.025114, and standard deviation = 0.796511.

b. ESG: mean = 0.246075, median = 0.199176, maximum = 0.604396, minimum = 0.032967, and standard deviation = 0.140544.

c. RETENTION RATIO: mean = 0.653254, median = 0.718900, maximum = 1, minimum = 0, and standard deviation = 0.336523.

d. LEVERAGE: mean = 0.768759, median = 0.837293, maximum = 0.891678, minimum = 0.000855, and standard deviation = 0.184275.

### 3.1.2 Autocorrelation Test

The autocorrelation test (Durbin Watson test) was used to check the autocorrelation scores between independent variables. The d value ranged from 0 to 4, and the results were determined as follows:

a. If the d value is between 0 - 1.3357, Ho is rejected (positive autocorrelation).

b. If the d value is between 1.3357 - 1.7200, it cannot be decided.

c. If the d value is between 1.7200 - 2.6643, Ho is accepted (no autocorrelation).

d. If the d value is between 2.6643 - 2.800, it cannot be decided.

e. If the d value is between 2.800 - 4.00, Ho is rejected (negative autocorrelation).

### Table 2. Autocorrelation Test Results

<table>
<thead>
<tr>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.106360</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.036545</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.724748</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>33.61661</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-73.65408</td>
</tr>
<tr>
<td>F-statistic</td>
<td>1.523449</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.195041</td>
</tr>
</tbody>
</table>

**Source: Research data processed with Eviews 9**

Based on the examination of the table, the Durbin-Watson value obtained was 2.124393, falling within the acceptable range of 1.7200 - 2.6643. Consequently, it could be deduced that the dataset utilized in this study was devoid of autocorrelation.

### 3.1.3 Multicollinearity test

Within regression analysis, validating several assumptions is imperative, with one such criterion being the classical assumption. Identifying multicollinearity within a regression model
when a robust correlation exists between independent variables is critical. The ensuing section outlines the outcomes of the correlation analysis conducted on the ESG, Retention Ratio, and Leverage variables:

**Table 3. Multicollinearity Test Results**

<table>
<thead>
<tr>
<th></th>
<th>ESG</th>
<th>RETENTION RATIO</th>
<th>LEVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG</td>
<td>1.000000</td>
<td>-0.134587</td>
<td>0.204358</td>
</tr>
<tr>
<td>RETENTION RATIO</td>
<td>-0.134587</td>
<td>1.000000</td>
<td>0.173956</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>0.204358</td>
<td>0.173956</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

*Source: Research data processed with Eviews 9*

Based on the examination of the table, all of the independent variable values of absolute correlation were less than 0.800. Consequently, it could be inferred that there was no multicollinearity between independent variables.

### 3.1.4 Heteroscedasticity Test

The Glejser Test is employed in the research domain to validate the homoscedasticity assumption, necessitating a correlation coefficient between variables and residuals exceeding 0.05. In the context of this study, the outcomes of the heteroscedasticity test were outlined as follows:

**Table 4. Heteroscedasticity Test Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.576740</td>
<td>0.110463</td>
<td>5.221137</td>
<td>0.0000</td>
</tr>
<tr>
<td>D(ESG)</td>
<td>0.098827</td>
<td>0.630986</td>
<td>0.156623</td>
<td>0.8760</td>
</tr>
<tr>
<td>D(RETENTION RATIO)</td>
<td>-0.107063</td>
<td>0.299228</td>
<td>-0.357797</td>
<td>0.7217</td>
</tr>
<tr>
<td>D(LEVERAGE)</td>
<td>-0.251783</td>
<td>0.692259</td>
<td>-0.363712</td>
<td>0.7173</td>
</tr>
</tbody>
</table>

*Source: Research data processed with Eviews 9*

Based on the examination of the table, the output displays results for the ESG, RETENTION RATIO, and LEVERAGE variables, indicating that the probability value for these variables exceeds 0.05. This suggests the absence of a heteroscedasticity problem.

### 3.1.5 Best Model Selection Test

For the selection of the optimal research model (fixed effect model, common effect model, or random effect model), three tests were conducted: Chow test, Hausman test, and Lagrange Multiplier test. While the Chow test concludes that the most suitable model is the common effect model, the Hausman test suggests that the random effect model is more appropriate. In light of the incongruence between these test outcomes, a Lagrange Multiplier test is performed to ascertain the superior model between the common and random effect models. The results of the Lagrange Multiplier test led to the conclusion that the random effect model was the most suitable for panel data regression in this research.

### 3.1.6 Regression Equation Test (Hypothesis Test)

The Regression Equation Test, or the Hypothesis Test, utilizes linear regression to assess the influence between variables. The objective is to determine whether the hypothesis is accepted or rejected. If the probability value is below 0.05 or the significance level is less than 5%, it can be inferred that there is an influence between the independent and dependent variables. The outcomes of the linear regression testing in this research are outlined as follows:
Table 5. Regression Equation Test (Hypothesis Test) Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.224307</td>
<td>0.450816</td>
<td>2.715758</td>
<td>0.0084</td>
</tr>
<tr>
<td>ESG</td>
<td>-0.168816</td>
<td>0.722277</td>
<td>-0.233727</td>
<td>0.8159</td>
</tr>
<tr>
<td>RETENTION_RATIO</td>
<td>-0.685650</td>
<td>0.299855</td>
<td>-2.86608</td>
<td>0.0254</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>-0.826748</td>
<td>0.554309</td>
<td>-1.491493</td>
<td>0.1406</td>
</tr>
</tbody>
</table>

Source: Research data processed with Eviews 9

The Multiple Linear Regression equation employed in this this study.

\[ Y = 1.22 - 0.17 X1 - 0.68 X2 - 0.83 X3 + e \]

Note:
Y = Stock Return
X1 = ESG
X2 = Retention Ratio
X3 = Leverage
e = Error term

The results of the multiple linear regression test are described in details below.

a. The ESG variable exhibits a t-statistic of -0.233727 with a Prob. (Significance) of 0.8159 (>0.05), leading to the conclusion that the ESG variable lacks a significant effect on variable Y (Hypothesis 1 Rejected).

b. The retention ratio variable demonstrates a t-statistic of -2.86608, accompanied by a Prob. (Significance) value of 0.0254 (<0.05), indicating a significant effect on variable Y (Hypothesis 2 Accepted).

c. The leverage variable records a t-statistic of -1.491493 and Prob. (Significance) stands at 0.1406 (>0.05), suggesting that the LEVERAGE variable does not wield a significant effect on variable Y (Hypothesis 3 Rejected).

3.1.7 Determination Coefficient Test

Table 6. Determination Coefficient Test Results

<table>
<thead>
<tr>
<th>Weighted Statistics</th>
<th>R-squared</th>
<th>Mean dependent var</th>
<th>Adjusted R-squared</th>
<th>S.D. dependent var</th>
<th>S.E. of regression</th>
<th>Durbin-Watson stat</th>
<th>Prob(F-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.140672</td>
<td>0.099292</td>
<td>0.101612</td>
<td>0.796511</td>
<td>37.61764</td>
<td>2.683913</td>
<td>0.017896</td>
</tr>
</tbody>
</table>

Source: Research data processed with Eviews 9

Based on the table above, the adjusted R-squared value is 0.101612, indicating that the ESG, retention ratio, and leverage variables contribute 10.16% to the Y variable.

3.1.8 Moderated Linear Regression Test

Table 7. Moderated Linear Regression Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.090950</td>
<td>0.142361</td>
<td>0.638689</td>
<td>0.5259</td>
</tr>
<tr>
<td>D(ESG)</td>
<td>-19.87048</td>
<td>8.272064</td>
<td>-2.402119</td>
<td>0.0202</td>
</tr>
<tr>
<td>D(RETENTION_RATIO)</td>
<td>-5.703313</td>
<td>0.999378</td>
<td>-5.706861</td>
<td>0.0000</td>
</tr>
<tr>
<td>D(LEVERAGE)</td>
<td>4.340445</td>
<td>2.291646</td>
<td>1.894030</td>
<td>0.0643</td>
</tr>
</tbody>
</table>

Analysis of the Environmental, Social, and Governance ... (Dimas Umbara Pratama)
The moderated linear regression test results are elucidated as follows:

a. The ESGTBSQ variable (X1 interaction with moderation) demonstrates a t-statistic value of 2.402722 with a Prob value (Significance) of 0.0202 (<0.05). This leads to the conclusion that the moderating variable significantly moderates the influence of variable X1 on variable Y (Hypothesis 4 Accepted).

b. The RTRTBSQ variable (X2 interaction with moderation) exhibits a t-statistic value of 4.541540 with a Prob value (Significance) of 0.0000 (<0.05). It can be inferred that the moderating variable significantly moderates the influence of variable X2 on variable Y (Hypothesis 5 Accepted).

c. The LTBSQ variable (X3 interaction with moderation) records a t-statistic value of -0.198098 with a Prob value (Significance) of 0.8438 (>0.05). This indicates that the moderating variable is not significant in moderating the influence of variable X3 on variable Y (Hypothesis 6 Rejected).

3.1.9 Determination Coefficient Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.090950</td>
<td>0.142361</td>
<td>0.638869</td>
<td>0.5259</td>
</tr>
<tr>
<td>D(ESG)</td>
<td>-19.87048</td>
<td>8.272064</td>
<td>-2.402119</td>
<td>0.0202</td>
</tr>
<tr>
<td>D(RETENTION_RATIO)</td>
<td>-5.703313</td>
<td>0.999378</td>
<td>-5.706861</td>
<td>0.0000</td>
</tr>
<tr>
<td>D(LEVERAGE)</td>
<td>4.340445</td>
<td>2.291646</td>
<td>1.894030</td>
<td>0.0643</td>
</tr>
<tr>
<td>D(TOBINS_Q)</td>
<td>-6.519261</td>
<td>3.326864</td>
<td>-1.959581</td>
<td>0.0559</td>
</tr>
<tr>
<td>D(ESGTBSQ)</td>
<td>20.36790</td>
<td>8.477012</td>
<td>2.402722</td>
<td>0.0202</td>
</tr>
<tr>
<td>D(RTRTBSQ)</td>
<td>5.532043</td>
<td>1.218098</td>
<td>4.541540</td>
<td>0.0000</td>
</tr>
<tr>
<td>D(LTBSQ)</td>
<td>-0.811390</td>
<td>4.095893</td>
<td>-0.198098</td>
<td>0.8438</td>
</tr>
</tbody>
</table>

Source: Research data processed with Eviews 9

Based on the aforementioned outcomes, the adjusted R-squared value stands at 0.528683, signifying that the combined impact of the variables ESG, RETENTION_RATIO, LEVERAGE, Tobins'Q, ESGTBSQ, RTRTBSQ, and LTBSQ on variable Y amounts to 52.86%. This suggests a substantial enhancement in the explanatory power of the independent variables on the dependent variable after including the moderating variable. Before introducing the moderating variable, this influence was merely 10.16%, illustrating a noteworthy escalation to 52.86% with incorporating the moderating variable.

3.2 Discussion

This study investigated financial sector companies listed on the Indonesia Stock Exchange during the period spanning 2018 to 2022. The primary focus was directed towards key variables, namely ESG (Environmental, Social, and Governance), retention ratio, leverage, and their consequential effects on stock returns. The examination of financial variables, such as ESG, retention ratio, and leverage, assumes significance in the broader financial landscape, as these factors can significantly influence the performance of companies in the stock market. In the
following discussion, each key finding is examined, incorporating relevant literature to provide context and insight into the implications of the study.

### 3.2.1 ESG and stock returns

The study’s first hypothesis, which posited a relationship between ESG and stock returns, yielded unexpected results. The lack of a significant impact of ESG on stock returns challenges conventional wisdom rooted in stakeholder theory, which suggests that incorporating ESG practices can lead to positive outcomes for various stakeholders, including shareholders. This deviation might be attributed to the relatively new integration of ESG considerations in recent years (Melinda & Wardhani, 2020). The study’s results underscore the hesitancy among investors to prioritize ESG factors in their decision-making process. Furthermore, the incomplete adoption of ESG practices within the financial sector companies listed on the Indonesian Stock Exchange may contribute to the observed lack of significance in the relationship. This finding is consistent with the literature that acknowledges the gradual adoption and integration of ESG practices within corporate strategies (Al Umar et al., 2020). As noted by Safriani and Utomo (2020), the impact of ESG practices on financial performance may take time to materialize, requiring a longer observation period for conclusive results. The inconclusive nature of the ESG-stock returns relationship also aligns with the argument that the market may not fully appreciate the value of ESG practices, leading to an absence of a significant correlation (Melinda & Wardhani, 2020).

### 3.2.2 Retention ratio on stock returns

Contrastingly, the second hypothesis, which asserted the significance of the retention ratio on stock returns, was supported by the findings. The study’s results align with stakeholder theory, suggesting that companies adhering to consistent dividend distribution practices, as indicated by the retention ratio, positively impact stock returns. This result resonates with the notion that stakeholders, including shareholders, are interested in a company’s profit allocation strategy (Al Umar et al., 2020). The dividend policy as a signal of company performance and prospects, as emphasized by signaling theory, is evident in the study’s findings. Retention ratio, reflecting the proportion of earnings retained rather than distributed as dividends, becomes a crucial signal for investors (Ekadjaja, 2021). The study’s outcome is consistent with the signaling theory’s premise that companies conveying positive signals through dividend policies influence investor interest and subsequently impact stock returns (Mujati & Dzlulqodah, 2016).

### 3.2.3 Leverage Impact on stock returns

The rejection of the third hypothesis, suggesting no significant impact of leverage on stock returns, challenges traditional perspectives that posit a relationship between a company’s debt policy and its stock performance. This result, contrary to expectations rooted in stakeholder theory and signaling theory, implies that the level of leverage might not significantly affect shareholder profits or serve as a robust signal for a company’s performance or intrinsic value. The absence of a significant relationship between leverage and stock returns aligns with Zoraya et al. (2022), emphasizing that stakeholder theory should be interpreted cautiously, especially in the context of financial policies. In signaling theory, the lack of significance suggests that debt policy, often considered a crucial signal of a company’s quality or prospects, may not hold the anticipated influence on stock returns in the examined dataset (Mujati & Dzlulqodah, 2016). The moderation effects of company value on the relationships between ESG, retention ratio, leverage, and stock returns add a layer of complexity to the study’s findings. While ESG and
retention ratio exhibit significant moderation effects, leverage does not show a statistically significant interaction with company value.

3.2.4 ESG Impact on Stock Returns

The acceptance of the fourth hypothesis, suggesting that company value significantly moderates the relationship between ESG and stock returns, aligns with previous research utilizing proxies like Tobin's Q (Pekerti, 2020) and Price to Book Value (PBV) (Ardiyansyah & Paramita, 2020). This supports the idea that the market's confidence in a company's future performance, as reflected in Tobin's Q, can significantly influence stock returns (Ardiyansyah & Paramita, 2020). These studies similarly found that company value significantly influences stock returns. Tobin's Q value reflects market confidence in a company's future performance and prospects and enhances investor interest (Ardiyansyah & Paramita, 2020; Pekerti, 2020), increases share prices, and impacts investment profitability (Simorangkir, 2019). The research results align with the principles of stakeholder theory, emphasizing companies delivering benefits to all stakeholders (Al Umar et al., 2020). Additionally, it resonates with signaling theory (Ekadjaja, 2021), suggesting that positive signals conveyed by companies through Tobin's Q can significantly influence shareholders' investment decisions (Mujati & Dzulqodah, 2016).

3.2.5 Retention Ratio Impact on Stock Returns

Similarly, the fifth hypothesis, which posited that company value moderates the relationship between the retention ratio and stock returns, finds support in literature indicating that dividend policies influence firm value (Sandra & Sulaksono, 2022; Taba et al., 2022). This finding aligns with research by Sandra and Sulaksono (2022) and Taba et al. (2022), indicating that company dividend policies influence firm value. Another study by Pekerti (2020), utilizing Tobin's Q proxy, also asserts that company value affects stock returns (Ardiyansyah & Paramita, 2020; Pekerti, 2020). Investors are inclined to invest in companies that regularly distribute dividends (with low retention ratios) and have a high market value, as it impacts stock prices and returns (Simorangkir, 2019).

In the stakeholder theory, this finding can be associated with the role of company value as a mediating or moderating factor in the relationship between the retention ratio and stock returns. Company stakeholders, including shareholders, hold interests in a company's profit allocation strategy (Al Umar et al., 2020). The retention ratio influences investment decisions and shareholder benefits (Ariyanti, 2021). With a significant moderation effect from company value, this finding reflects the complexity of the relationship involving stakeholder interests involving the retention ratio, company value, and stock returns.

Within the signaling theory, the increased significance of the retention ratio's influence on stock returns with the moderation of company value can be interpreted as a signal that retention ratio-related policies have a more measurable impact or are promised by the market in the context of company value (Ekadjaja, 2021; Harmono, 2022; Mujati & Dzulqodah, 2016; Pasaribu et al., 2019). In other words, company value strengthens positive signals or the influence of the retention ratio on stock returns, supporting the idea that financial policy practices provide crucial signals to shareholders and the market (Harmono, 2022; Pasaribu et al., 2019). The results of the moderated linear regression test indicate that the moderating variable (company value) significantly influences the relationship between the retention ratio and stock returns, in line with previous research (Pekerti, 2020; Sandra & Sulaksono, 2022; Taba et al., 2022), reinforcing the connection between the retention ratio, company value, and stock returns.
3.2.6 Leverage Impact on Stock Returns

However, the rejection of the sixth hypothesis, indicating that company value does not significantly moderate the effect of leverage on stock returns, deviates from previous findings highlighting the impact of leverage on firm value and stock prices (Pradanimas & Sucipto, 2022; Wisra et al., 2023). Within the framework of stakeholder theory, these findings suggest that the existing evidence needs to be more robust in influencing the relationship between leverage and stock returns through company value. Company stakeholders, including shareholders, are vested in financial policies affecting leverage (Al Umar et al., 2020; Zoraya et al., 2022). Nonetheless, these results indicate that company value does not significantly moderate the effect of leverage on stock returns. In signaling theory, the absence of a significant moderating influence of company value on the relationship between leverage and stock returns implies that company value is ineffective as a signal strengthening or diminishing the impact of debt policy on stock performance (Ekadja, 2021; Mujati & Dzulqodah, 2016). In the context of this study, the company value does not provide a solid or distinct signal regarding the financial repercussions of debt policy. Overall, these findings imply that company value does not play a significant role in moderating the effect of leverage on stock returns. They challenge conventional perspectives, highlighting the evolving nature of ESG (Environmental, Social, and Governance), retention ratio, leverage, and stock returns relationships. The incorporation of moderation effects by company value adds a layer of complexity, emphasizing the need for a comprehensive understanding of organizational factors. Investors and stakeholders must recognize the evolving nature of ESG practices and consider broader organizational factors, such as dividend policies and debt management, in decision-making processes. Policymakers may find insights into the gradual adoption of ESG practices and the potential impact of organizational factors on stock returns.

4. CONCLUSION

Based on the research findings and preceding discussions, the following conclusions can be drawn: 1) ESG does not significantly influence stock returns as investors have yet to embrace ESG as a pivotal factor for investment decisions. The comprehensive implementation of ESG-based business practices and disclosures still needs to be improved among financial sector companies listed on the Indonesian Stock Exchange; 2) The retention ratio significantly influences the stock returns of financial sector companies on the Indonesian Stock Exchange. Consistent dividend distributions by companies contribute benefits and positive signals to stakeholders, attracting investors and subsequently impacting stock returns; 3) Leverage demonstrates no significant impact on stock returns. Therefore, a company's leverage is not a crucial indicator guiding investor decisions. Companies with substantial debt loads can still provide benefits to stakeholders; 4) Company value effectively moderates the influence of ESG on stock returns. Positive business practices and a high market value prove instrumental in attracting investors, influencing stock prices, and enhancing profitability; 5) Company value moderates the retention ratio’s effect on stock returns. A high market value signifies market confidence in the company's future performance. Regularly distributed dividends (low retention ratio) coupled with a high market value entice investor interest, subsequently impacting share prices and returns; and 6) Company value fails to moderate the influence of leverage on stock returns. This can be attributed to the weak correlation between company value, leverage, and stock returns. In this context, investors do not consider company leverage a decisive factor in investment decisions, while a low market value indicates a lack of market confidence in the company's debt situation.
Future research endeavors should explore the evolving dynamics of financial variables and their implications in different economic contexts, contributing to a more comprehensive understanding of the intricate relationships within the financial landscape. It is advised to diversify the dataset by including companies from various sectors to yield more comprehensive insights. Adding new variables and indicators could enhance the overall research perspective, and extending the research timeframe may contribute to the acquisition of data with heightened accuracy.

REFERENCES


Li, C., Wu, M., Chen, X., & Huang, W. (2022). Environmental, social and governance performance, corporate transparency, and credit rating: Some evidence from Chinese A-


