



Market Risk, Financial Distress, Board Gender Diversity, Trade Credit and Performance of Indonesia Consumer Goods Companies

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Abstract. The company must pay attention to factors influencing its performance. Prolonged financial distress can lead to bankruptcy, especially when market risks increase. Good corporate governance such as considering gender diversity on the board, can impact company performance. Trade credit in working capital management is related to financing and company liquidity issues. This study aims to examine the influence of financial distress, market risk, gender diversity, and trade credit on the performance of Indonesian consumer goods companies. A total of 33 samples of companies were taken using secondary data and purposive sampling method on the Indonesia Stock Exchange for consumer goods companies in Indonesia from 2018 to 2022. Data processing was done using multiple regression and Eviews 9. The findings indicate that financial distress, market risk, and trade credit positively affect company performance. Board gender diversity negatively affects company performance. This study is beneficial for companies and investors, particularly in the consumer goods sector in Indonesia, and contributes to the fields of economics and finance.

Keywords: Firm Performance, Market Risk, Financial Distress, Gender Diversity, Trade Credit.

1 Introduction

The financial condition or financial performance of a company represents its efforts to generate profits, enabling it to assess prospects, future growth, and potential development beneficial to the company while fulfilling obligations to investors in achieving established goals and desires [1]. Companies must pay attention to various factors that can influence their performance to enhance overall effectiveness. In this research, we aim to highlight several factors capable of influencing company performance. The COVID-19 pandemic has undoubtedly affected company performance. Many companies across different countries struggled to survive during this pandemic, facing financial distress, commonly defined as a situation where a company has difficulty meeting its short-term financial obligations. Prolonged financial distress can lead to bankruptcy

for a company. Therefore, analyzing financial distress by examining company performance is crucial, especially during extreme events when market risks are heightened [2].

Researchers identify two main factors that may drive differences in business behaviour between men and women: attributes related to ethical stance and risk preferences. Consequently, women can bring new and diverse values, work ethics, perspectives, and experiences, thereby improving board performance and decision-making. These attributes can also increase revenue and the company's governance structure [3]. Working capital management is crucial as it can influence operational performance. One dimension of working capital is trade credit, which plays a vital role in shaping a company's operations and is considered a business channel related to credit arrangements between transacting parties, especially when a company faces financing issues from banks and other sources. Because consistent trade credit ensures company stability, it can be considered an element that enhances market transactions and simultaneously serves as an alternative source of short-term financing [4]. Based on the results of earlier studies [2], [3], and [4]; market risk, financial distress, board gender diversity, and trade credit have a significant effect on firm performance.

The manufacturing industry in the consumer goods sector plays a significant role in driving a country's economic growth because the products produced are daily necessities used for the survival of the population. It can be concluded that the consumer goods sector can endure various conditions [5]. Based on the above phenomena and background, this research aims to find the influence of market risk, financial distress, board gender diversity, and trade credit on the company's financial performance. The novelty of this research lies in the addition of the board gender diversity variable by [3] and the trade credit variable by [4].

2 Research Method

2.1 Population and Research Sample

This study used secondary data from the website www.idx.co.id and the websites of the respective companies chosen as samples. The research data consists of financial data from consumer goods companies listed on the Indonesia Stock Exchange during the period 2018-2022. A purposive sampling technique was used to select 33 consumer goods companies from a population of 52 companies. The selection of the population is based on the Factbook 2019 from the Indonesia Stock Exchange and the data processed using E-views.

2.2 Data Analysis Technique

The panel data regression method is the data analysis method used in this research. This method employs three models: the fixed effect, common effect, and random effect model. To determine the appropriate and reliable model for interpretation, researchers used the Chow test, and then the Hausman test. Chow test is used to choose between the common effect and fixed effect models. Then the Hausman test is used to choose

between the fixed effect and random effect models. Based on these two tests, Table 1 show fixed effect model is chosen for the research.

Table 1. Variable and Measurement

Variables	Variable Type	Measurement	Scale
Return on Asset [2]	Dependent	Net Income/Total Asset	Ratio
Return on Equity [2]	Dependent	Net Income/Total Equity	Ratio
Market Risk [6]	Independent	$\beta = \frac{n \sum (R_{it} + \bar{R}_{it})(R_{mt} + \bar{R}_{mt})}{n \sum (R_{mt} + \bar{R}_{mt})^2}$ Stock return: $R_{it} = \frac{P_1 - P_{t-1}}{P_{t-1}}$ Market return: $R_{mt} = \frac{IHSG_1 - IHSG_{t-1}}{IHSG_{t-1}}$ Description: β = market's beta R_{mt} = index's return $\bar{R}_{mt}$ = average index's return R_{it} = stock return $\bar{R}_{it}$ = average stock return n = total sample	Ratio
Interest Coverage Ratio [2]	Independent	$\frac{EBIT}{\text{Interest expense}}$	Ratio
High Interest Coverage Ratio [2]	Independent	Dummy variable, 1 if ICR is higher than the sample's median and 0 if otherwise	Nominal
Board Gender Diversity [7]	Independent	$1 - \sum_{i=1}^n (P_i^2)$ Description: P_i = percentage total women on boards/total all boards n = total category	Ratio
Trade Credit [4]	Independent	$\frac{\text{Trade Receivables}}{\text{Total Asset}}$	Ratio
Company Age [8]	Control	Natural logarithm of Firm Age	Ratio
Company Size [9]	Control	Natural logarithm of Total Assets	Ratio
Degree of Financial Leverage [2]	Control	$\frac{EBIT}{EBIT - \text{interest expense}}$	Ratio
Leverage Ratio [2]	Control	$\frac{\text{Total Debt}}{\text{Total Asset}}$	Ratio
Current Ratio [2]	Control	$\frac{\text{Current Asset}}{\text{Current liabilities}}$	Ratio

3 Results and Discussion

3.1 Operation Data

The result for Goodness of Fit (R2), F-test results, and descriptive analysis at Table 2.

Table 2. Goodness of Fit (R2) Test Results

Model	Dependent	R ²	Adjusted R ²
1	ROA	0.908760	0.877349
2	ROE	0.778913	0.702801

Based on the goodness of fit test results in model 1, it shows that the independent variables and control variables can explain variations in return on assets of 87.73%, and model 2 shows that the independent variables and control variables can explain variations in return on equity of 70.28% (Tabel 2). There is a strong relationship between the independent variables and the control variables on the dependent variables (ROA and ROE).

Table 3. F-test Results

Model	Dependent	F-Statistic	Prob.	Decision
1	ROA	28.93168	0.000000	Rejected H ₀
2	ROE	10.23379	0.000000	Rejected H ₀

Thus, the results of the f-test show that together the independent variables and control variables influence the dependent variable, so the regression model is suitable for use in this research (Table 3).

Table 4. Results of Descriptive Statistical Analysis

Variable	Mean	Median	Maximum	Minimum	Std. Dev
ROA	0.061437	0.056030	0.480780	-0.275070	0.108996
ROE	0.083586	0.101800	1.429220	-4.886.720	0.507154
MKT_Risk	0.473718	0.445320	1.928450	-0.863640	0.463786
ICR	618.6787	4.615410	56582.13	-2.631139	4924.052
HighICR	0.484848	0.000000	1.000000	0.000000	0.501292
BGENDIV	0.186077	0.166670	0.600000	0.000000	0.147743
TR	0.161677	0.124760	0.519760	0.000015	0.107241
AGE (Year)	3.497755	3.713570	4.532600	1.386290	0.529111
SIZE (Rupiah)	28.69659	28.59846	32.82638	25.35615	1.710240
DFL	1.773213	1.117690	32.00464	-2.230910	3.011796
LEV	0.449885	0.428280	0.944560	0.097910	0.186926
CUR	2.407707	1.859600	12.75718	0.034150	1.898144

3.2 Hypothesis Testing Result

Regression t-Test Results show at Table 5.

Table 5. Regression t-Test Results

Independent Variable	Dependent Variable			
	Return on Assets		Return on Equity	
	Coefficient	Prob.	Coefficient	Prob.
Constant	-0.700236	-	-6.398499	-
MKT_RISK	0.006094	0.3727	0.051082	0.0488
ICR	-0.000000515	0.2160	-0.00000161	0.2249
HIGHICR	0.051806	0.0000	0.064601	0.0292
BGENDIV	-0.202513	0.0039	-0.395020	0.0097
TR	0.020777	0.4584	0.486298	0.0329
AGE	0.009978	0.7193	-0.440422	0.0072
SIZE	0.029188	0.0170	0.299547	0.0000
DFL	-0.002417	0.0002	-0.001740	0.3425
LEV	-0.200114	0.0000	-1.270013	0.0001
CUR	-0.004099	0.0427	-0.024342	0.0219

Research Regression Model

$$\text{ROA} = -0.700236 + 0.006094\text{MKT_RISK} - 0.000000515\text{ICR} + 0.051806\text{HIGHICR} - 0.202513\text{BGENDIV} + 0.020777\text{TR} + 0.009978\text{AGE} + 0.029188\text{SIZE} - 0.002417\text{DFL} - 0.200114\text{LEV} - 0.004099\text{CUR}$$

$$\text{ROE} = -6.398499 + 0.051082\text{MKT_RISK} - 0.00000161\text{ICR} + 0.064601\text{HIGHICR} - 0.395020\text{BGENDIV} + 0.486298\text{TR} - 0.440422\text{AGE} + 0.299547\text{SIZE} - 0.001740\text{DFL} - 1.270013\text{LEV} - 0.024342\text{CUR}$$

Where: ROA = Return on Assets, ROE = Return on Equity, MKT_Risk = Market Risk, ICR = Interest Coverage Ratio, HIGHICR = High-Interest Coverage Ratio, BGENDIV = Board Gender Diversity, TR = Trade Credit, AGE = Firm's age, SIZE = Firm's size, DFL = Degree of Financial Leverage, LEV = Leverage Ratio, CUR = Current Ratio, μ = error item.

3.3 Discussion

Market risk has a significant positive effect on company performance. This result aligns with a study by [10]. However, the results of this study are at odds with research by [2] and [11]. If a high level of risk is difficult for the company to control, then this will disrupt the company's operation [12]. Risks usually harm the company if they cannot be handled, but with increasing market risk, the company faces higher risks, and opportunities for profit-seeking also increase. Moreover, with the rising risk conditions of a company, managers are compelled to pay more attention to company performance.

Interest Coverage Ratio does not have a significant effect on company performance. This result is consistent with the study by [13]. It can be said that if a company's ability

to pay its debts and interest payments increases or decreases, it will not affect the company's performance. This is because the interest expenses of the company's debt are more stable compared to the fluctuating costs of equity, so the ICR level cannot affect the company during a certain period. However, the results of this study are at odds with research by [2], [14], and [15]; where the interest coverage ratio has a positive effect on company performance. The interest coverage ratio is used to keep the company able to pay its interest expenses.

High-Interest Coverage Ratio has a significant positive effect on company performance. This result is in line with the study by [2]. It can be said that a high-interest coverage ratio implies good company performance, allowing it to generate more than enough money to cover interest expenses [14].

Board Gender Diversity has a significant negative effect on company performance. This result is consistent with the study by [16]. Female directors tend to avoid risk due to their cautious mindset, resulting in lower company performance. However, the results of this study are at odds with research by [3] and [17]. The presence of female directors can help put pressure on the board of directors to show management accountability to investors so that management will try hard to improve company performance [17].

Trade Credit has a positive effect on company performance. This result is consistent with the study by [4] and [18]. It can be said that consumers are more motivated to transact if the company provides credit, as they do not need to make immediate payments, thereby enhancing company performance. However, the results of this study are at odds with research by [19]. Companies must increase trade credit provisions if consumers are experiencing unfavourable business shocks, the higher the level of provisions recognized, the lower the company's performance will be.

Company Age, Degree of Financial Leverage, Leverage Ratio, and Current Ratio have a negative effect on company performance; while Company Size has a positive effect on company performance. This result is consistent with the study by [9], [14], [20], [21]. This explains that with the company's increasing age, the benefits of their accumulated knowledge in all critical aspects of the business (technology, supply chain, customer relations, human resources, and financing costs) become surpassed due to the inflexibility and rigidity of the accumulation of rules, routines, and organizational structures [20]. A larger company scale can impact the company's condition, mobilizing financial resources, expanding the market, and improving operational efficiency and profitability [9]. In financing using debt, the company has less risk. Therefore, company managers are expected to be able to optimize the company's degree of financial leverage [11]. Determining the debt of financial leverage can show the rate of capital structure the company should have. When the reliability of a company's profit, earnings per share, and company's operating income are all good it will result in the ability of the company to borrow a large amount of money safely. However, if a company's operational income cannot be predicted, it is best to keep the level of debt low for easy management [14]. The use of financial leverage is one of the company's procedures used for the trade-off consideration between risk and financial performance when the company chooses between debt and equity [9]. Placing too much money to pay short-term debt is a good thing. However, this indicates an excessive amount of current assets,

leading to idle cash. Idle cash should be used for investments that can generate profits. Thus, the likelihood of a safe liquidity level will increase, but the expectation of higher profits will decrease, affecting profitability [21].

4 Conclusions

Market Risk positively and significantly influences ROE but does not exert a notable impact on ROA. Financial Distress, as gauged by ICR, lacks a significant effect on either ROA or ROE. High ICR, as a measure of Financial Distress, significantly boosts both ROA and ROE. Board Gender Diversity significantly affects both ROA and ROE in a negative way. Trade Credit substantially enhances ROE but does not have a significant impact on ROA. Company Age significantly bolsters ROE but does not markedly influence ROA. Company Size markedly improves both ROA and ROE. The Degree of Financial Leverage negatively and significantly affects ROA but does not have a noteworthy effect on ROE. Leverage Ratio significantly dampens both ROA and ROE. The current ratio has a significantly adverse impact on both ROA and ROE.

Companies have to pay attention to factors that influence company performance to maintain or improve company performance, and it is hoped that managers can make decisions or solutions if a problem occurs regarding a factor related to this research. Companies should be able to increase their leverage so that using a lot of debt appropriately in financing can improve company performance. Companies also need to offer high levels of credit to attract customers. As the company ages, companies are advised to maintain flexibility in using existing resources. Companies are encouraged to reduce gender diversity in board members to improve their company performance. In other words, companies should elect board members with entirely or more male members. Companies are also advised to continue to maintain, or even increase, the size or valuation of their company to attract the attention of investors. The higher the market risk, the higher the company's opportunity to gain profits and improve company performance. Companies must also maintain financial distress indicators, such as the interest coverage ratio.

When making investment decisions, investors should look at the following factors. Leverage in the company, how the company uses its debts. Trade credit factor, which offers high levels of credit to attract customers. Investors should choose companies that are still young or not too old. Investors are advised to choose companies with boards that are less gender diverse, or you could say choose companies with more men on the board. Investors are also advised to choose companies with large sizes or valuations when investing.

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