Predictive Ability of Managerial Effectiveness and Credit Risk on Market Performance of Manufacturing Industry

Cry Cinta Putri Anjel1*, Hanna Gratia Kambey2, Fanny Soewignyo3
Universitas Klabat, Indonesia
Email: Crylaraga25@gmail.com1*, Hannagkambey@gmail.com2, f.soewignyo@unklab.ac.id3

*Correspondence

ABSTRACT

Keywords: Managerial Effectiveness, Market Performance, RNOA, Tobin's Q, DER.

This study aims to evaluate the managerial effectiveness and credit risk in predicting the market performance of non-cyclical sector companies listed on the Indonesia Stock Exchange for the period 2018-2022. The number of samples is 38 companies so the total observation data is 190 data on 38 companies. This study uses a causal descriptive design approach where the measurement of managerial effectiveness uses return on net operating assets and credit risk is measured by debt to equity ratio. While measuring market performance using Tobin's Q. The study used RNOA to measure managerial effectiveness, Tobin's Q to measure market performance and DER to measure credit risk. The results of the study show that 88.1% variation in the value of Tobin's Q in non-cyclical sector companies listed on the IDX can be explained by the return on net operating assets RNOA and debt to equity ratio DER. which indicates that managerial effectiveness and credit risk play a crucial role in determining the company's market performance. Partially, the return on net operating assets of RNOA had a significant negative effect on Tobin's Q and the debt-to-equity ratio DER had a significant positive effect on Tobin's Q.

Introduction

The value of a company is determined by its profitability and growth (Palepu & Healy, 2013) so companies must increase profitability and ensure their growth to be competitive in an increasingly competitive market. The main goals of a company are to obtain maximum revenue, sustainable business, provide goods and services to consumers, and create jobs. To pursue a sustainable business, companies need to pay attention to performance indicators that can affect investor perception (Aryasa, Fenisa, Astriana, Linanda, & Sumaryanti, 2024).

Company performance is the result of the manager's performance in managing and running a company and is a formal effort carried out by the company to evaluate the efficiency and effectiveness of company activities that have been carried out in a certain period (Sofyan, 2019). Company performance can be measured financially and non-
Predictive Ability of Managerial Effectiveness and Credit Risk on Market Performance of Manufacturing Industry

financially (or strategic or operational performance), both of which are very important for the company's sustainability (Aifuwa, 2020). Financial performance can be evaluated based on its management of financing, expenses, revenue, and overall profitability and can significantly affect its stock price.

Good financial management will also produce good financial performance, so it is necessary to pay attention that financial performance can be a good information signal for external parties who will become investors. The information signals obtained will determine the market reaction. Therefore, companies must ensure good financial performance because it can affect market performance (Aifuwa, 2020), and can significantly affect its stock price. Financial ratios can be used to measure and analyze a company's financial performance and predict the likelihood of bankruptcy.

Managerial effectiveness plays an important role in influencing company performance. Effective management can result in improved organizational performance, employee retention, increased efficiency, improved communication, and clear accountability. Managers with high strategic abilities are more focused on opportunities that lead to increased company innovation and better financial performance (Inam Bhutta, Sheikh, Munir, Naz, & Saif, 2021).

Previous research (Ting, Tebourbi, Lu, & Kweh, 2021) shows that managerial abilities help companies achieve their goals by improving credit ratings, access to financing, and overall company performance. High managerial skills make it easy to identify threats, opportunities, and competitive advantages that ultimately have a positive impact on the Company's performance. Furthermore, (Annisa & Asyik, 2019) stated that managers have a crucial role in shaping and supervising company policies so that their influence on financial performance becomes a very relevant and significant aspect. Ting further added that effective management practices are essential for the success of an organization and are often tailored to specific circumstances. Parameters such as company results, organizational environment, employee development, satisfaction, and financial indicators are commonly used to assess management's effectiveness in driving company performance.

Measurement of management effectiveness by Subramanyam (2014) using the Return on Net Operating Asset (RNOA) financial indicator measures the performance of company managers who separate operational and non-operational components, by calculating the company's profit on net operating assets. The measurement of managers' performance using operating activities is more relevant because it lasts a long time and is relevant in determining the stock price, the operating activities in question are all the activities necessary to bring the company's products or services to the market and to serve the needs of its customers. Operational activities are very important, and companies must carry them out effectively and efficiently to survive for a long time to ensure the sustainability of the company. Therefore, this study uses companies operating in the non-cyclical consumer sector according to the classification of the Indonesia Stock Exchange (IDX).
Manufacturing companies engaged in the non-cyclical consumer goods sector are companies that produce and distribute primary consumer goods, where the demand for goods and services is not affected by economic growth because their products are needed by consumers' daily needs (Dwicahyani et al., 2022). This sector is less dependent on changes in the economic and business cycle, where non-cyclical companies produce or distribute goods and services that are always needed so that their financial performance is relatively stable and not affected by fluctuations in economic activity (Dwicahyani et al., 2022; Ridhasyah, 2023; Zanubah et al., 2023). That is why this sector is often the focus of profitability analysis because it offers stability in financial performance, especially during periods of economic uncertainty (Dwicahyani et al., 2022; Ridhasyah, 2023). In the context of profitability analysis, non-cyclical consumer goods manufacturing companies tend to show reliable performance consistency in investment decisions (Ridhasyah, 2023).

A good company exercises full control over the profits achieved by each profit-generating part and rewards its managers for such achievements. In evaluating investment alternatives, management assesses performance relative to expected returns. This assessment then results in strategic decisions and action plans for the company. Therefore, managerial effectiveness is very important, especially in strategic decision-making, including investment decisions (Subramanyam, 2014).

This research is motivated by market performance shown by the IDX (2022) and the results of observations by stock movement observers (Investasi.com, 2022), especially in the non-cyclical sector in 2018-2022 which shows stable stock prices and their resilience to economic fluctuations in that period. This phenomenon has attracted the attention of researchers in this sector to find out how effectively managers can predict market performance. Such as (Ng & Daromes, 2016) stated that managerial effectiveness plays a crucial role in determining how a company performs in the market and directing the company towards sustainable success through appropriate decision-making, effective financial management with due regard to financial risks, and rapid adaptation to market changes (Ng & Daromes, 2016).

Thus, this study was conducted to test the ability of managers on the market performance of the non-cyclical sector listed on the IDX by adding another variable that affects the company's market performance, namely credit risk. Credit risk is measured using DER (Debt to Equity Ratio). According to (Bintara, 2020), a higher DER ratio indicates greater credit risk because the company has more debt than equity.

The researcher wanted to analyze the ability of managerial effectiveness in predicting the market performance of the consumer goods sector in the period before and during the COVID-19 pandemic by focusing on managerial effectiveness measured using RNOA and market performance using Tobin's Q measurement. The market will assess the managerial performance of the company. Thus, this study provides insight into how a company's managerial performance can be reflected in the market response for the research period that has had an impact on the spread of COVID-19.
Credit risk analysis measured by DER can affect investors' perception of the company's strategy in managing funding, especially credit, where if the DER is good, it can show the effectiveness of debt for the company's expansion and growth (Hulu, Nazmi, & Saragih, 2023). Previous research stated that DER hurt the value of Tobin's Q because investors rated a high DER as something bad for investors (Muliana & Ikhsani, 2019), while other studies conducted by Dwiastuti and Dillak (2019) and research conducted by Devianasari and Suryantini (2015) found different results, namely DER had a positive effect on the value of Tobin's Q, where the DER value of a company can affect how investors value the company. The signalling theory, explains that managers can use debt as a source of funding that provides more reliable information to investors because companies that increase debt are seen as companies that are confident in the company prospects. Based on the relevant literature, the researcher formulated the second hypothesis as follows:

\[
\text{Ha2: Credit risk has a significant effect on market performance}
\]

### Research Methods

This study uses a causal descriptive approach with multiple regression analysis. The population in this study is all non-cyclical sector companies listed on the Indonesia Stock Exchange (IDX) with a total of 129 companies in 2023. The criteria for selecting the sample used purposive sampling where the companies being studied were those that were consistently registered, and published annual reports during the observation year, namely 2018 to 2022 and data that had negative profit and negative equity values were excluded from observation so that the number of company samples obtained was 38 companies with a total of 190 data.

### Classical Assumption Test

In this study, a classical assumption test was carried out including testing multicollinearity and heteroscedasticity. The normality test was not carried out in this study because the data in the study exceeded 30 data, which amounted to 190 data. The results of the multicollinearity test showed that all the independent variables tested had a VIF value of 1,000 < 10, so this study was free from multicollinearity problems. The results of the heteroscedasticity test using the Park test, the significance values of RNOA and DER were 0.700 and 0.734 respectively greater than 0.050, so this study was free from heteroscedasticity problems.

### Research variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNOA</td>
<td>Return on Net Operating Asset</td>
<td>NO PART/NC</td>
</tr>
</tbody>
</table>
In this study, the effectiveness of managers is measured using RNOA (Return on Net Operating Asset) as an independent variable, following the formula of Subramanyam (2014) as follows:

$$RNOA = \frac{Net \ operating \ profit \ after \ tax (NOPAT)}{Average \ net \ operating \ asset (NOA)}$$

RNOA is defined as net operating income after tax (NOPAT) divided by average net operating assets (NOA). NOPAT is net income after tax, without considering the company's capital structure, i.e. debt and equity. Meanwhile, NOA is an operating asset consisting of total assets minus invested financial assets. So in data collection, the invested assets are not taken into account.

The credit risk used is a measurement of the debt-to-equity ratio as a control variable. The formula for calculating DER (Subramanyam, 2014) is:

$$DER \ (Debt \ to \ Equity \ Ratio) = \frac{Total \ debt}{Shareholders \ equity}$$

Total debt or total debt includes all obligations of the company, both short-term and long-term. Shareholders equity or total equity is the total equity of the owner or shareholder, which can include paid-up capital, retained earnings, and preferred stock.

Market performance was measured using Tobin's Q as a bound variable following the research (Muallifin & Priyadi, 2016) calculated by the following formula:

$$Q \ (Tobin's \ Q) = \frac{Market \ Equity + Total \ Debt}{Total \ Asset}$$

Tobin's Q is defined as market equity plus the company's debt and divided by the company's total assets. Market equity is calculated by multiplying the number of outstanding ordinary shares by the closing price of shares (Muallifin & Priyadi, 2016).

**Results and Discussion**

**Descriptive analysis**

Table 2 is a statistical descriptive result showing that the average RNOA value in non-cyclical sector companies throughout the 2018-2022 period is 7.91%, the average DER value is 91.57%, and the average Tobin's Q value is 41.99%.
Table 2
Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std.Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNOA</td>
<td>190</td>
<td>.00</td>
<td>.37</td>
<td>.0791</td>
<td>.0641</td>
</tr>
<tr>
<td>DER</td>
<td>190</td>
<td>.09</td>
<td>3.58</td>
<td>.9157</td>
<td>.7018</td>
</tr>
<tr>
<td>Q</td>
<td>190</td>
<td>.08</td>
<td>.79</td>
<td>.4199</td>
<td>.1835</td>
</tr>
</tbody>
</table>

Valid N (listwise) 190

Hypothesis Testing

Table 3

<table>
<thead>
<tr>
<th>Variabel Bebas</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. B</td>
<td>Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.237</td>
<td>.009</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>RNOA</td>
<td>-.484</td>
<td>.072</td>
<td>-.169</td>
<td>-6.743</td>
</tr>
<tr>
<td>DER</td>
<td>.241</td>
<td>.007</td>
<td>.923</td>
<td>36.800</td>
</tr>
</tbody>
</table>

Adj. R Square = .881
F - Value = 700.480
Prob. (F) = .000
Jumlah Data = 190

Table 3 shows the summary results of multiple regression analysis with a total of 190 research data. The results of this analysis show that simultaneously or together the variables RNOA and DER have a significant effect on Tobin's Q, with a prob value (F) is .000 or < 0.05. These findings show that RNOA and DER together play an important role in determining the market performance of a non-cyclical sector company, which is
measured by Tobin's Q. The value of the determination coefficient is obtained with an r-square adjusts R2 value of 0.881, which means that there is as much as 88.1% variation in the Tobin's Q value of non-cyclical sector companies listed on the IDX can be explained by the RNOA and DER variables. While the remaining 11.98% was influenced by other variables outside the study.

**Pengaruh RNOA (Return on Net Operating Asset) terhadap Tobin's Q**

The results of the analysis of the significance values of each independent variable found that the RNOA variable had a negative and significant effect on Tobin's Q ($\beta = -0.484$, $\rho = .000$). Thus, Ha1 is accepted. This result indicates that the higher the RNOA value, the lower the Tobin's Q value. This is not in line with the research conducted by Rahman and Sunarto (2019) which stated that a high RNOA is positively correlated with the value of Tobin's Q, a good company.

In theory, it is expected that the higher the profitability, the higher the market value of the company, but on the other hand, the stock price or company value can also be influenced by investors' views on the company's prospects. A high RNOA provides an overview of the effectiveness of managers in terms of the company's performance in generating profits, but the company's market performance is influenced by several factors that are not included in this study. According to research conducted by Veronica (Veronica & Pebriani, 2020) stock market performance is also influenced by external factors seen from a fundamental and macroeconomic perspective, not only influenced by the company's internal ability to manage risk and generate profits. This significant negative influence can also be caused by the evaluation by investors of the DER value indicated in the descriptive results with a maximum value of up to 3.56 and an average of 0.92. In addition, this result can also be caused because this study includes the COVID-19 period, namely 2020 to 2023 based on official information from the Cabinet Secretariat of the Republic of Indonesia (2023), which has an impact on the company's market performance.

**Effect of DER (Debt to Equity Ratio) on Tobin's Q**

The results of the significance value analysis found that the DER variable had a positive and significant effect on Tobin's Q ($\beta = 0.241.037$, $\rho = .000$). Thus, Ha2 is accepted. These results indicate that the company's capital structure affects the market against companies in the non-cyclical sector, companies with high DER have a good market value as well. The signalling theory states that when a company uses external funds (debt) to fund its business, then investors will see it as a positive signal because of the investor's perception that when the company uses debt, the company is trusted by investors. Investors assess the existence of creditor confidence in this sector by providing a relatively large amount of credit, which is certainly a big risk. The level of creditor trust by providing large credit has an impact on the level of investor confidence.

The results of this study are in line with research conducted by Dwiastuti and Dillak (2019) and Devianasari and Suryantini (2015) that DER has a positive and significant value on market performance because high debt in a company is not always considered bad if the company can pay its obligations, the company is considered to have a good
value, and companies that use a capital structure with increased debt can be seen as companies that are confident in the company's prospects. However, this result is not in line with research conducted by Rahman and Sunarto (2019) that DER is a factor that influences investors' decisions in making investment decisions, a high DER is a negative signal for investors about the company's financial condition.

**Conclusion**

The results of this study conclude that managerial effectiveness and credit risk play a crucial role in determining market performance and directing the company towards sustainable success, including running operations, generating profits, and managing credit risks that have an impact on the company's performance. Make an important contribution to understanding the relationship between managerial effectiveness as well as corporate capital structure and market performance in non-cyclical companies. These non-cyclical sector companies need to conduct an in-depth evaluation of the manager's performance and adjust strategies in order to improve the company's market performance even though the company's RNOA value is lower, it is also important to pay attention to the debt in the company's capital structure which provides benefits for the company's value, where the use of debt as a source of funding can improve the company's performance.

The limitation of the research is that it only considers two variables as independent variables and can only be concluded for the non-cyclical sector, the next research is expected to add other types of independent variables so that it covers a wider range because market performance as a picture of investors' perception of the company can be influenced by other factors such as external risks and market conditions, not only the company's internal ability to produce advantage. The use of RNOA as a variable to measure manager effectiveness is still relatively poorly researched, so other studies may be able to consider RNOA as a tool to measure manager effectiveness because it describes the returns generated from the use of operating assets that are the responsibility of management to generate profits from the company's asset capital. Further research may also be able to examine sectors other than the non-cyclical sector listed on the IDX and is recommended to use the period without the COVID-19 period or compare the COVID-19 period with the period of normal conditions.
Bibliography


Predictive Ability of Managerial Effectiveness and Credit Risk on Market Performance of Manufacturing Industry