The Effect of Profitability and Liquidity on Dividend Policy

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\textbf{Abstract}

This study examines the relationship between profitability projected by ROE and liquidity by CR to predict its effect on projected dividend policy with dividend payout ratio (DPR) in food and beverage sector manufacturing companies listed on the stock exchange market. Design and method of analysis, estimation of panel data regression models with CEM, FEM and REM approaches using the EViews v.12 program. Approach model selection with Chow test, Hausman test, and LM test. The classical assumption test refers to the results of the best panel data regression model selected. The feasibility evaluation of the model was carried out by regression analysis of panel data, and analysis of the coefficient of determination, as well as the t test and F test, at $\alpha = 0.05$. The results of the study, FEM as a regression model of selected panel data. Evaluation of the feasibility of the model, ROE and CR can predict changes in DPR behavior, although there is an inverse relationship of CR with DPR. The joint contribution of ROE and CR has a high ability to predict and influence the DPR. ROE has a significant negative effect on the DPR. CR has no influence on the DPR. Together, ROE and CR have proven to have a significant positive effect on the DPR.

\textbf{Keywords:} Return on Equity, Current Ratio, Dividend Payout Ratio, Agency Theory, Signal Theory

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INTRODUCTION

Profit is one of the company's main goals that accompany its sustainable survival (Firmansyah et al., 2020). Economically, profit is the net profit obtained from economic activities and events that occur in its operations (Susetyo et al., 2021; Firmansyah, Suryana, et al., 2021). Profit plays an important role because profit can measure financial performance, as well as being one of the indicators of the success of a company that is in a healthy condition (Grigoroudis et al., 2012). Profits can also lead to an increase in funds stored as reserve funds or distributed as dividends (Erenoglu, 2021). Although the size of the dividends to be distributed by the company depends on the policies and certain situations of each company. Because, dividend policy as a term that refers to the practice followed by management in making dividend payment decisions or the size and pattern of cash distribution over time to shareholders (Ahmed, 2015).

Dividends are company profits distributed to shareholders (Pattiruhu & Paais, 2020). Dividend policy is an integral part of a company's funding decisions, which will be distributed to shareholders and reinvested or held in the company (Hoang et al., 2020). However, there are indications of difficulty in considering dividend policy because management needs to determine whether the profits earned by the company at the end of the year will be distributed to shareholders as dividends or profits will be used as retained earnings to be reinvested in projects that benefit the company's growth. In fact, according to Miller & Modigliani (1961), mentions that investors should be indifferent to whether they receive dividends now or future capital appreciation, an idea known as the Dividend Irrelevance Theory (Griffin, 2010). Therefore, empirically at the practical level, such conditions are in line with agency theory, namely the theory of stewardship and the relationship between principals as stakeholders and management as agents (Van Puyvelde et al., 2012; Al-Malkawi et al., 2010). Meanwhile, good management performance is measured by the company's financial performance (Susetyo, 2023). On the other hand, it is assumed by the public that if a company has the ability to pay dividends, it is as a profitable company. Therefore, dividend policy can be known by looking at the Dividend Payout Ratio, and there are many factors that affect the Dividend Payout Ratio, including liquidity, profitability, asset size, and current liability levels (Grigoroudis et al., 2012).

Liquidity is one indicator that describes a company's ability to meet short-term obligations (Kasmir, 2019; Ningsi, 2021). Dividends are included in the category of short-term debt, because the repayment period is less than 1 year so that in this study liquidity is projected by the current ratio. Dividends use cash owned by the company, so the company must have enough cash to pay dividends. Companies that can pay all their short-term debts are said to be liquid companies. A good equity owned by a company has the potential to have a better ability to pay dividends. Apart from the impact that the current ratio can be used as a means of liquidity for dividend policy (e.g., Ahmed, 2015). The findings of Mazengo & Mwaifyusi (2021), concluded that there is a correlation between liquidity and profitability that affects dividend policy, companies that
are in good profitability and liquidity have a large opportunity to pay sufficient dividends.

Referring to the clarity of information and the occurrence of conflicts or not between management and shareholders, it was found that there is a relationship between liquidity and dividend payments where the current ratio affects the smooth payment of dividends (following, Jiang et al., 2017). However, it does not mean that companies will pay higher (Al-Najjar & Hussainey, 2009). The profitability measure is usually used ratio, which is a ratio to assess the company's ability to seek profits (Kasmir, 2019). Liquid conditions can potentially affect the level of profitability of the company, so profitability is needed by the company if it wants to pay dividends Ningsi (2021), findings, show that liquidity also affects profitability. Mehta (2012), also mentions a strong relationship between liquidity and profitability with dividend payments. But in contrast to Grigoroudis et al., (2012), who proved the relationship between the three is insignificant. Good liquidity and profitability are recognized to affect dividend payments, but it does not mean that more payments will be given to shareholders, only in line with high profitability achievements (Al-Najjar & Hussainey, 2009). In fact, liquidity seen from the current ratio (CR) of projected profitability with return on equity (ROE) was found to have no significant positive effect on dividend policy (e.g., Pattiruhu & Paais, 2020; Ahmed, 2015). Also in line with the hypothesis and research findings of Lee & Yoon (2017), which proves that there is a negative relationship between stock liquidity and dividend payment tendency.

The difference in the findings of several previous studies strengthens the basis for the reason for conducting this study which has the main purpose of determining the effect of profitability and liquidity on dividend policy. This research projects profitability with ROE and liquidity by CR in predicting its effect on dividend policy projected with dividend payout ratio (DPR). Differences in relevant research results indicate a gap in literature regardless of the geographical context and business sector of the company studied. Therefore, this study re-explores the impact of profitability and liquidity on dividend policy in manufacturing companies in the food and beverage industry sector. Informively, manufacturing companies in this sector have a major contribution to Indonesia's national economy. Also as a differentiator and novelty offered this research is carried out by expanding the subject and object studied, namely by using financial report data (ROE, CR and DPR) from ten companies in the same sector, but does not intend to conduct a comparative test.

LITERATURE REVIEW

Agency Theory

The main agent model is often known as agency theory which describes the relationship between two or more parties, where one party, appointed as principal, involves the other party, who is appointed as agent (Kivistö, 2008). The assumption of this theory is that when actors delegate authority to agents,
they often have problems controlling them, because the agent's goals often differ from theirs, and because agents are often better informed about their capacity and activities than principals. According to Kiser (1999) quoted from Kivistö (2008), states that agency theory focuses on the way actors try to mitigate this control problem by choosing certain types of agents and certain forms of monitoring of their actions, and with economic incentives. Meanwhile, agency relations are defined by Jensen & Meckling (2019), as a contract in which one or more people (principals) hire others (agents) to perform a service on their behalf, thus giving agents some of their decision-making power. Judging from its nature, agency relationships become problematic if the personal interests of principals and agents differ (Zogning, 2017).

**Signal Theory**

According to Ross (1977), stating that signalling theory is that company executives who have better information about their company will be encouraged to convey this information to potential investors so that their company's stock price increases (Nyagadza et al., 2021). This closely related to information asymmetry is essential to develop a strong signaling environment with signals flowing efficiently and effectively between the company and its stakeholders (Taj, 2016). Signaling theory talks about management actions and the flow of information to investors. Symmetric or asymmetric information under certain conditions may occur and reach investors (Firmansyah et al., 2020; Susetyo, 2023). This information then influences the considerations and decisions of investors to invest in the capital market, and the financial performance of a company as a measure of whether or not the management of the company concerned, becomes a comprehensive and prospective consideration for profitable investment.

**Profitability**

Profitability is a company's ability to generate profits in a certain period, profit is often a measure of a company's performance (Ningsi, 2021). According to Kasmir (2019), profitability is a ratio to assess a company's ability to seek profit. This ratio also provides a measure of the level of management effectiveness of a company. This is indicated by the profit generated from sales and investment income. ROE (Return on Equity) as a measuring tool in calculating profitability in this study, the percentage of profits obtained by the company when measured by equity will be illustrated by this ratio. It is generally known that this ratio describes the company's ability to generate profit after tax. Return on equity or Return on Equity or profitability of own capital, is a ratio to measure net profit after tax with own capital. This refers to With an industry average of 40% (Kasmir, 2019). The formula for calculating Return On Equity is:

\[
Return \text{ On Equity} = \frac{\text{Earning after taxes}}{\text{Capital}} \times 100\% \quad \ldots \ (1)
\]

The importance of profitability and growth opportunities in corporate decisions analyzed empirically relates to the ability to pay dividends (Fama &
French, 2001; Ahmed, 2015). The results of research by Adil et al., (2011), prove that return on equity (RoE) has a strong relationship with dividend payout. The findings of Oladipupo & Okafor (2013), also show that profitability affects the dividend payout ratio, but it is not significant.

\[ H_1 : \text{Return on equity has a positive effect on the dividend payout ratio} \]

**Liquidity**

The company's ability to pay short-term benefits will be reflected in the liquidity ratio (Suryana, 2023). Wild & Subramanyam (2011), stated that the measurement of liquidity levels uses current ratios. The measure of liquidity includes its ability to use current ratios in measuring in the perspective of traditional financial ratios continues to expand, this is the basis for reasoning. According to Kasmir (2019), stated that liquidity is a ratio that describes the company's ability to meet short-term obligations. This means that if the company is billed, it will be able to meet the debt (pay), especially the debt that is due. In other words, how much current assets are available to cover short-term liabilities that are soon due. In this study, the authors used the Current Ratio (CR), which is used to measure the company's ability to pay short-term obligations (1 year) or debt that will soon mature. In some literature it is often mentioned that CR is the level of security (margin of safety). From the results of the ratio measurement, the industry average of 200% (2: 1) is considered good enough or satisfactory for a company. The formula for calculating CR is:

\[
\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liability}} \times 100\% \quad .... (2)
\]

A liquid organization will rely on its ability to convert its assets into cash in an effort to meet debts or other obligations. Such conditions can be considered by investors who are interested in companies that have liquidity, both current and future mesa so as to allow a guarantee of smooth dividend payments (Ahmed, 2015). Dividend-paying companies have a more liquid market for their shares and the size of a stock's liquidity is positively related to its likelihood of becoming a dividend payer. Liquidity would be more closely related to dividends because managers would be more likely to pay dividends to satisfy shareholders' preference for liquidity, had more power been given to shareholders (Igan et al., 2006). This allows for a relationship between dividends and liquidity. Between the liquidity of stocks and the amount of dividends paid, shows the reciprocal relationship of the two (Griffin, 2010).

\[ H_2 : \text{Current ratio has a positive effect on dividend payout ratio} \]

**Dividend Policy**

As outlined earlier, dividend policy theory is closely related to Miller & Modigliani, 1961 (Ahmed, 2015) thesis. The assumption is that based on rational investors and perfect capital markets, the market value of a company does not depend on its dividend policy. However, the actual level of practice found dividend policy seems important. Therefore, companies that do not distribute dividends do not necessarily not earn profits (Ahmed, 2015). Companies that
manage their cash flow effectively tend to maintain and increase their dividend payments over time. Successful earnings growth usually rewards investors in the form of higher stock prices (Ahmed, 2013; Ahmed, 2015).

In literature, dividend policy is said to be an interesting issue from time to time. Following Frankfurter et al., (2003), dividends are defined as the distribution of income in real assets among the shareholders of a company in proportion to their holdings Frankfurter et al., (2003). Dividend policy is concerned with decisions regarding dividend payment and retention (Maladjian, 2013:p.12). Dividend policy relates to decisions regarding the payment and retention of dividends (Maladjian, 2013). According to Baker (2009), following from Maladjian (2013:p.14), dividend decisions are a type of funding decision that affects the amount of income a company distributes to shareholders versus the amount retained and reinvested.

Dividend policy refers to the payment policy that a company follows in determining the size and pattern of cash distribution to shareholders over time. Usually set by the company's board of directors, with input from senior management (Maladjian, 2013). Dividend policy is an integral part of a company's funding decisions, which will be distributed to shareholders and reinvested or held in the company (Hoang et al., 2020). Dividend payout ratio is one of the ratio calculations used to measure dividend policy in a company. Dividend Payout Ratio is because it can better describe opportunistic managerial behavior, namely by looking at how much profit is distributed to shareholders as dividends and how much is retained by the company (Garrett & Priestley, 2000; Pattiruhu & Paais, 2020). The formula for calculating the dividend payout ratio is:

\[
\text{Dividend Payout Ratio} = \frac{\text{Dividend}}{\text{Earning after taxes}} \times 100\% \quad \ldots (3)
\]

Corporate profitability and profitability are critical to a company's ability to pay dividends to stakeholders (Oladipupo & Okafor, 2013). Adil et al., (2011), his research re-evaluated the content of additional information on profitability and liquidity to dividend payments, his findings proved that return on equity (RoE) has a strong relationship with dividend payout. The results concluded that profitability is the most powerful factor influencing dividend payment decisions but the liquidity of a company is also important for dividend payments. Oladipupo & Okafor (2013), the results of their research show that profitability affects the dividend payout ratio, but it is not significant.

Meanwhile, Zhang et al., (2020), mentioned that one measuring tool in determining dividends based on the calculation of current liabilities is the current ratio. In general, liquidity and profitability have an impact on the company's dividend payment policy (Ahmed, 2015). Stock liquidity provides information and increases insider incentives to pay dividends, there is a positive relationship between stock liquidity and dividend payments (Jiang et al., 2017). There is a strong relationship between liquidity and profitability and dividend payments (Mehta, 2012). The findings of Mazengo & Mwaifyusi
(2021), conclude that profitability, liquidity and company size are the main determinants of dividend payments.

H₃: Return on equity and return on equity have a positive effect on the dividend payout ratio

METHODOLOGY

The research design in this study is non-experimental research, quantitative research methods (as conducted, Susetyo et al., 2021; Susetyo et al., 2021). Purposive sampling is selected for sampling. The purpose of the study was considered in choosing this technique (Firmansyah, 2022). Sampling considerations refer to the importance and purpose of the study, namely to determine the effect of profitability (ROE) and liquidity (CR) on dividend policy (DPR) in food and beverage sector manufacturing companies. According to these considerations, from the aspect of homogeneity, as many as ten companies that have gone public engaged in similar fields are included in the sampling criteria, with annual company financial statement data published from 2017-2021, n = 50 data.

Data collection techniques refer to documentation data, secondary data sources are used, namely financial statements from ten companies. Judging from the characteristics and time dimensions, the data used is panel data (Firmansyah et al., 2022), the collected data is analyzed using a panel data regression model following Firmansyah et al., (2022); (2023), using the Eviews v.12 program to be the design of this study.

\[
\ln Y_{it} = a + \beta_1 \ln X_{1it} + \beta_2 \ln X_{2it} + e 
\]

The analysis technique begins by estimating the panel data regression model using the Common Effect Model (CEM) approach on the p-value Cross-section F > α = 0,05, criteria, Fixed Effect Model (FEM) with p-value Cross-section random criteria < α = 0,05, and the Random Effect Model (REM) with CEM or FEM criteria. The panel regression model selection approach is carried out through a series of possible tests, namely the Chow test, the Hausman test, and the Lagrange Multiplier test (for example, Firmansyah et al., 2022). The classical assumption test is generally carried out with a normality test with the Kolmogorov Smirnov method (Sig. > α = 0,05), a multicollinearity test with a correlation cut off or r value < 0,80 (Firmansyah et al., 2023), a heteroscedasticity test with the Glejser method ( Sig. > α = 0,05). However, the conclusion for the classical assumption test in this study was carried out by referring to the results of estimating the parameters of the best panel data regression model selected (as done, Firmansyah et al., 2022).

The feasibility evaluation of the model was carried out by regression analysis of panel data according to the selected model, analysis of the coefficient of determination (Adj. R²), and hypothesis test with t test and F test, at α = 0,05.
RESEARCH RESULT

Model Selection

Model selection is done repeatedly through CEM, FEM or even REM. The decision can be taken on the basis of the selected model from the last test results either the Chow test, the Hausman test, or it may be continued by performing the Lagrange Multiplier test (LM test).

1. Chow Test

Table 1. Chow Test Results

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>10.378719</td>
<td>(9,38)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>62.036220</td>
<td>9</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Note: Approach with CEM and FEM

The test results showed a p-value cross-section F = 0.0000 < 0.05. Thus, the results of the Chow test concluded FEM as the chosen model.

2. Hausman Test

The results of the Hausman test (table 2) show that the p-value of random cross-section = 0.0000 < 0.05. Thus, the Fixed Effect Model was more appropriate to use in this study, and the LM test was not carried out.

Table 2. Hausman Test Results

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>54.444394</td>
<td>2</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Note: Approach with FEM and REM.

Classical Assumption Test

In this study, the classical assumption test was carried out referring to the selected panel data regression model approach.

1. Multicollinearity Test

Table 3. Multicollinearity Test Results

<table>
<thead>
<tr>
<th></th>
<th>ROE</th>
<th>CR</th>
<th>DPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>1.000000</td>
<td>-0.268700</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>-0.268700</td>
<td>1.000000</td>
<td></td>
</tr>
<tr>
<td>DPR</td>
<td>0.110930</td>
<td>-0.163473</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Note: Multicollinearity test: r ROE value; r CR at cut off < 0.80.

Based on the results of the correlation test (r) obtained a result of -0.268700 which means a value of -0.268700<0.80 (look at table 3), it can be concluded that there is no multicollinearity problem, so the relationship between independent variables is very low, even between ROE and CR has a negative correlation.
2. Heteroscedasticity Test

Table 4. Heteroscedasticity Test Results (Glejser)

<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>22.13870</td>
<td>7.681472</td>
<td>2.882091</td>
<td>0.0065</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.165621</td>
<td>0.148158</td>
<td>-1.117863</td>
<td>0.2706</td>
</tr>
<tr>
<td>CR</td>
<td>0.000269</td>
<td>0.029461</td>
<td>0.009116</td>
<td>0.9928</td>
</tr>
</tbody>
</table>

Note: p-value (prob.) ROE and CR at value > $\alpha = 0.05$.

From the results of the heteroscedasticity test, the ROE p-value was 0.2706 > 0.05, and the CR p-value was 0.9928 > 0.05. Thus, it can be concluded that there are no symptoms of heteroscedasticity in the regression model of this study.

Model Fit Evaluation

1. Regression Analysis of Selected Model Panel Data

Table 5. Panel Data Regression (FEM)

<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>93.89234</td>
<td>19.09598</td>
<td>4.916864</td>
<td>0.0000</td>
</tr>
<tr>
<td>ROE</td>
<td>-2.581557</td>
<td>0.368319</td>
<td>-7.00927</td>
<td>0.0000</td>
</tr>
<tr>
<td>CR</td>
<td>0.030785</td>
<td>0.073239</td>
<td>0.420345</td>
<td>0.6766</td>
</tr>
</tbody>
</table>

Note: Hausman test, last test; FEM, selected models.

The regression equation of panel data from the table above, expressed as follows:

$$\ln\text{DPR}_{it} = 93.89234 + 2.581557 \ln\text{ROE}_{it} + 0.030785 \ln\text{CR}_{it}$$

The equation can be interpreted that: the value of 93.89234 states that without the ROE variable and the CR variable, the DPR will still increase by 93.892344354. While the value of -2.581557, states that if the ROE variable increases by one percent assuming the CR variable is fixed, the DPR variable will decrease by -2.581557, Similarly, if the ROE variable decreases by one percent assuming the CR variable is fixed, the DPR variable will increase by -2.581557,. If ROE increases by 10 percent, the DPR will decrease by 25.8 percent. The value of 0.030785 states that if the CR variable increases by one percent assuming the ROE variable is fixed, the DPR variability will increase by
0.030785, Vice versa, if the CR variable decreases by one percent assuming the ROE variable is fixed, the DPR variable will decrease by 0.030785. For example, if CR increases by 10%, then the DPR will also experience an increase of 0.3 percent.

2. Analysis of the Coefficient of Determination (Adj. R²)

Table 6. Coefficient of Determination

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
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</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

Note: The value of Adj. R², used as an explanatory force in the model

The value of Adj. R² of 0.638886 = 63.89%, means that the joint contribution of ROE and CR in predicting and influencing DPR is 63.89% of the variance and the remaining 36.11% is very likely to be influenced by other variables outside the model. The FEM approach panel data regression model has an explanatory power close to +1, the proposed model has suitability for use. ROE and CR have a high ability to explain the DPR.

3. Test the hypothesis

In this study, a hypothesis test was conducted to determine the significance of the influence of ROE and CR on DPR. Tests are performed individually with the t test, and together with the F test.

Test t

Table 7. t 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>
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<td>0.420345</td>
<td>0.6766</td>
</tr>
</tbody>
</table>

Note: Significant, t stat > t table = 2.010 at α = 0.05; at n = 50; df1.

The results of the t test show that ROE has a value of t-Stat = -7.009 < 2.010 which means that ROE has a negative effect on DPR, and is significant at α = 0.05 (H₁ rejected). Almost similar results from CR which has a value of t-Stat = 0.420 < 2.010 which means that CR has no effect on DPR (H₂ rejected). The results of the study concluded that ROE does not have a positive influence on
the DPR, but ROE has a negative influence on the DPR. The CR was found to have no influence on the DPR at all.

Test F

<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>
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<td>19.09598</td>
<td>4.916864</td>
<td>0.0000</td>
</tr>
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<td>ROE</td>
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<td>0.368319</td>
<td>-7.009027</td>
<td>0.0000</td>
</tr>
<tr>
<td>CR</td>
<td>0.030785</td>
<td>0.073239</td>
<td>0.420345</td>
<td>0.6766</td>
</tr>
</tbody>
</table>

Effects Specification

Cross-section fixed (dummy variables)

R-squared 0.719952
Mean dependent var 50.41420
Adjusted R-squared 0.638886
S.D. dependent var 53.44809
S.E. of regression 32.11843
Akaike info criterion 9.982300
Schwarz criterion 10.44119
Sum squared resid 39200.56
Log likelihood -237.5575
Hannan-Quinn criter. 10.15705
F-statistic 8.881021
Durbin-Watson stat 2.075413
Prob(F-statistic) 0.000000

It is known that nili F-statistic = 8.881021 and p-value (F-stat) = 0.000000 (see table 8). The F value calculated > F of the table is 8.881 > 3.195, meaning that ROE and CR together have a positive effect on DPR, and are significant at \( \alpha = 0.05 \), df1; df2 (\( H_3 \) proved acceptable).

DISCUSSION

From the selection results, FEM as a regression model of panel data was selected in this study with the Hausman test as the estimation of the last test parameters. The results of the classical assumption test according to the selected model (FEM), the data are declared to meet the classical assumptions (there are no multcollinearity and heteroscedasticity problems) in the panel data regression model. Therefore, panel data regression data with FEM is feasible to use at the analysis stage. Judging from the correlation and the direction of correlation (see table 3), ROE has a correlation with DPR with the criterion of weak closeness level, although the direction of the relationship between the two is certainly positive. However, CR has an inverse correlation with DPR or is found to be the densest correlation that is confirmed to have a negative direction.

The results of the feasibility evaluation of the model show that changes in ROE and CR can predict changes in DPR behavior. However, the DPR's changing behavior responds differently to CR and moves away from the direction of CR change in food and beverage sector manufacturing companies. Meanwhile, it was found that there was a rhythmic relationship from the DPR along with changes in behavior or ups and downs in ROE in the same companies. CR has an inverse relationship with DPR. The magnitude of the joint ability of ROE and CR in explaining DPR is quite large close to +1 as seen from the value of Adj. R\(^2\) of 63.89\%, which means that the joint contribution of ROE and CR in influencing DPR is 68.89\% and the remaining 36.11\% is influenced by other variables outside the model. This result also confirms the panel data regression model with FEM as the selected model in this study has a high ability to explain the relationship of the independent variable to the variance of the dependent variable.
The findings of the t-test results of the significance of the influence, show that ROE has a significant negative effect on the DPR. This finding concludes that the proposed research hypothesis ($H_1$) is not proven and rejected. This finding is in line with the results of Pattiruhu & Paaïs (2020); Ahmed (2015). The finding in this research case, probability (ROE) has an inverse influence with the DPR. It is possible that sometimes dividends are used to replenish reserve funds or even to compensate for previous negative profitability. However, the existence of this reciprocal influence or increasing profitability but dividends paid decreased or even dividends were not raised in the relevant year period, does not mean that the company did not make a profit. It is quite possible for the company to keep its profits and reinvest them into the business. Companies that manage their cash flow effectively tend to maintain and increase their dividend payments over time (Ahmed, 2015).

The findings also showed that CR individually had no effect on the DPR, the hypothesis proposed ($H_2$) was not proven and rejected. This finding is in line with the results of Lee & Yoon (2017) research; Grigoroudis et al., (2012); Griffin (2010). Partially, the liquidity of manufacturing companies in the stock exchange market cannot explain dividend policy, and the strength of liquidity ratios is very limited in the context of companies in this sector. In addition, the company's policies and authorities have a greater proportion, where these provisions and policies can affect the company's liquidity related to dividend distribution. This goes back again to shareholder agreements and governance, manager agency with shareholders.

The findings of the F test of the significance of mutual influence show that ROE and CR have a significant positive impact on DPR in food and beverage sector manufacturing companies. The results of this study prove that the proposed hypothesis ($H_3$) is proven to be accepted. This finding is reinforced by the results of research by Mazengo & Mwaifyusi (2021); Ningsi (2021); Mehta (2012); and Al-Najjar & Hussainey (2009). The existence of a positive or negative correlation between profitability and liquidity can still affect the smooth and low level of dividend distribution. The implication is that good equity and profitability are recognized can indeed affect dividend payments, but it does not mean that there will be greater payments given to shareholders. Because, the governance of dividend payments, the size and pattern of cash distribution over time given to shareholders in practice clearly refers to the policy of the management of the company concerned who makes decisions.

CONCLUSIONS AND RECOMMENDATIONS

FEM as a panel data regression model was selected in this study with the Hausman test, all classical assumption tests so that the feasibility of research data is met and feasible to be used in panel data regression model analysis. The results of the feasibility evaluation of the model show that changes in ROE and CR can predict changes in DPR behavior in food and beverage sector manufacturing companies, although there is an inverse relationship between CR and DPR. The joint contribution of the ROE and CR relationship has a high ability to predict and influence the DPR. The panel data regression model with
FEM in this study has a high ability to explain. ROE individually had a significant negative effect on the DPR ($H_1$ rejected). CR has no influence on the DPR ($H_2$ rejected). Together, ROE and CR proved to have a significant positive impact on DPR in food and beverage sector manufacturing companies ($H_3$ proved acceptable).

This study implies that in an effort to meet shareholder preferences, there is a mutual correlation that complements the high and low profitability achievements seen from return on equity with the level of liquidity seen from the current ratio compared to current liabilities which are closely related to the tendency of smooth dividend payments. Individual return on equity in practice has an inverse relationship and does not even affect dividend payments, does not mean that the company does not make a profit and does not mean that management has poor financial performance in the stock market. Also hypothetical that the liquidity of the current ratio of food and beverage sector manufacturing companies in the stock exchange market is weak, empirical findings show no influence on dividend payments, but do not mean that the company is illiquid or has poor current ratios in the stock exchange market. By implication, management’s objectives and considerations internally influence dividend policy in meeting dividend payments to shareholders, including relating to cash flow, timing and distributions made now in the relevant period or possibly voting in the future. This confirma the important role of signal theory, intervening in the growing importance of disseminating and sharing information from companies to investors or other interested parties.

Basically, information released by the company contains information on financial data, records, or a picture of past, current or concurrent conditions or contains predictions of future conditions for the survival of a company and its impact on the capital invested. Relevant, accurate and appropriate information can be used as an analytical tool, risk disclosure of the authority and application of dividend policy by the company, both in favorable profitability conditions or not as well as good liquidity or otherwise, will have an impact on information service, governance and distribution of dividend payments that allow it to be paid now or in the next period in the future.

ADVANCED RESEARCH
The limitations of methodological research, this study does not explain which companies have good profitability and liquidity levels or vice versa so that they have a varied impact on dividend payments, referring to ten food and beverage sector manufacturing companies listed on the stock exchange, with five-year period financial data as the subject and subject of this study. Relevant research in the future can consider comparative tests carried out to complement it in order to find out a comprehensive picture and correlation in detail the effect of profitability and liquidity on the smooth payment of dividends per company, the breadth of research sample data has the potential to strengthen the accuracy of research results more guaranteed benefits and outcomes for interested parties now and in the future.
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We convey our gratitude to the parties involved in this research, until this research can be completed. The beneficial output of the results of this research for interested parties is our great hope as academics, practitioners and researchers who continue to learn.

REFERENCES


