The Effect of Current Ratio, Debt to Equity Ratio and Return in The Consumer Goods Industry Sector Listed in Indonesia Stock Exchange 2012-2017

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Abstract – This study aims to analyze the effect of current ratio (CR), debt to equity ratio (DER), and return on equity ratio (ROE) on dividend payout ratio (DPR) in the consumer goods industry sector listed in Indonesia Stock Exchange period of 2012-2017. The sample selection in this study using purposive sampling method and got 13 companies that match the criteria. From result of research got value of adjusted R-Square equal to 62.64%. It indicated that return on equity has a significant negative effect on dividend payout ratio with regression coefficient equal to -1.070932. However, the result of current ratio has insignificant negative effect on the dividend payout ratio with regression coefficient of -2.462612 and debt to equity ratio has insignificant positive effect on the dividend payout ratio with regression coefficient of 0.012540.

Keywords: current ratio; debt to equity ratio; return on equity; dividend payout ratio; consumer goods industry

INTRODUCTION

The current economic activity has experienced quite rapidly with the advancement of science and technology. The current sale and purchase transactions are not only the domestic market but also in the international market. Indonesia is one of the countries that participate actively in international trade. The capital market is one example of progress in science and technology that is more modern in the economic field. The consumer goods industry sector is one of the sectors of manufacturing companies that have an active role in the Indonesian capital market.

The Consumer goods industry is still the main choice of investors in investing their funds. Investment in the consumer goods industry is a promising investment in Indonesia. This is because the consumer goods industry provides products that are the primary needs of the community. Demand for consumer goods industry products tends to be stable which affects the company's ability to generate optimal profit. Indonesia has a high market share, especially in ASEAN.

The development of a good consumer goods industry attracts investors to invest in this industry. The current investment grows into one of the lifestyles in modern society. Both individuals and groups who have excess resources will do this activity. In the capital market activity, investors have expectations of the investments they make, which are capital gains and dividends. Keown 2005 said that Dividend payout ratio is the amount of dividends relative to the company’s net income or earnings per share.

The average dividend payout ratio in the consumer goods industry listed on the Indonesian Stock Exchange (BEI) in the period 2012-2017 experience up and down (fluctuations). The average dividend payout ratio in 2012 amounted to 46.50%, in the next year has a decreased to 39.20%, and in 2014 the dividend payout ratio increased significantly by 42.67%, but in 2015 again has a decreased by 38.33% and increased again in 2016 by 40.35 %, and in 2017 the dividend payout ratio increased significantly by 52.97%.

During 2013 dividend payout ratio decreased significantly caused by the decrease in net income one of them is PT. Gudang Garam Tbk (GGRM) continues to pay dividends to shareholders in 2013 despite the net income earned of Rp.4,068 trillion decreased 17.9% from the previous year Rp.4.95 trillion. The decline was due to the company facing severe business challenges ranging from weakening commodity prices, decreasing domestic consumption, increasing competition from the cigarette sales, and increasing tariffs on cigarette excise.
Indrawan, Sutanto, and Mulyadi (2017), Ano, Murni, and Rate (2014), Sarmento and Dana (2016) stated that current ratio variable have a positive and significant effect on dividend payout ratio. While Ekawati and Siswoyo (2015), Komala and Nugroho (2013), Laili, Darmawan, and Sinarwati (2015), Mardaleni (2014) found that has insignificant and negative effect on dividend payout ratio. Ekawati and Siswoyo (2015), Perpatih (2016) said that debt to equity ratio variable have a positive and significant effect on dividend payout ratio. While Mardaleni (2014), Sinabutar and Nugroho (2015), Ambarwati and Imsawati (2017) said that debt to Equity Ratio has a positive and insignificant effect on dividend payout ratio. Thafani and Abdullah (2014), Sarmento and Dana (2016) stated that return on equity have a positive and significant effect on dividend payout ratio. While Ano, Murni, and Rate (2014), Zulkifli, Endri, and Kurniasih (2017), and Iswara (2017) stated that variable of return on equity has a significant and negative effect on dividend payout ratio.

LITERATURE REVIEW

Financial Statements

Brigham and Houston (2016) financial statements describes how ratios are used to analyze the financial statement to identify weaknesses that need to be strengthened to maximize the stock price. Horne and Wachowicz (2009) said that the financial statement analysis is the art of transforming data from financial statements into information that is useful for informed decision making. K.R. Subramanyam (2014) found that the financial statement analysis can be defined as an application of analytical tools and techniques to general purpose financial statements and related data to derive estimates and inferences useful in business analysis. Financial statement analysis reduces reliance on hunches, guess and intuition for business decision.

Meanwhile, Brigham and Houston (2016) the financial statements consist of several types, namely: A balance sheet is a statement of a firm’s financial position at a specific point in time, the income statement is a report that summarizes revenues, expenses, and profit of a company during one accounting period, generally a quarter or one year, statement of cash flow is a reporting the impact of a firm’s operating, investing, and financing activities on cash flows over an accounting period.

K.R. Subramanyam (2014) ratio analysis is among the most popular and widely used tools of financial analysis. Analysis of ratio can reveal important relations and bases of comparison in uncovering conditions and trends difficult to detect by inspecting the individual components that make up the ratio also ratios often are most useful when they are future oriented. This means we often adjust the factors affecting ratio for their probable future trend and magnitude. The use of ratio will eliminate the size of a problem because the size will be effectively divided. A financial ratio is usually group into the following categories such as liquidity ratios, financial leverage, profitability ratios, turnover or asset management ratios, and market value ratios.

Dividend Payout Ratio

Dividend payout ratio is the ratio of the total amount of dividends paid out to shareholders relative to the net income of the company. K.R. Subramanyam (2014) stated that dividend payout ratio is refers to the proportion of earnings distributed. It is often expressed as a ratio or a percentage of net income. Keown, Martin, Petty, and Scott JR (2014) said that dividend payout ratio is the amount of dividends relative to the company’s net income or earnings per share. Added by Ross, Westerfield, Jaffe, Lim, Tan and Wong (2015) dividend payout ratio is amount of cash paid to shareholders expressed as a percentage of earnings.

\[
\text{Dividend Payout Ratio (DPR)} = \frac{\text{Cash Dividend}}{\text{Net Income}}
\]

Brigham and Houston (2016) stated that forms of financial ratios are as follows: Liquidity ratio is the ratio to measure the ability of the company to meet the obligations that must be paid immediately. In this research, the liquidity ratio used is Current Ratio. Laverage ratio describes the company’s ability to pay its long-term liabilities or obligations if the company is liquidated. This ratio can be calculated from long-term items such as fixed and long-term assets. In this research, the Laverage used is Debt to Equity Ratio. Profitability ratio is the ratio to assess the ability of companies in the search for profit.
This ratio also provides a measure of the level of management effectiveness of a company. In this research, the Profitability used is Return On Equity.

**Current Ratio**

Brigham and Houston (2016) said that current ratio is the ratio calculated by dividing current asset by current liabilities. It indicates the extent to which current liabilities are covered by those assets expected to be converted to cash in the near future. Subramanyam K.R (2014) said that current ratio is a relevant and useful measure of liquidity and short-term solvency, it is subject to certain limitations we must be aware of. Added by Ross, Westerfield, Jaffe, Lim, Tan and Wong (2015) current ratio is total current asset divided by total current liabilities is used to measure short-term solvency of a firm.

\[
\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}
\]

A high current ratio generally indicates a very strong, safe liquidity position, it might also indicate that the firm has too much old inventory that will have to be written off and too many old account receivable that may turn into bad debts. To a creditor, particularly a short-term creditor such as a supplier, the higher the current ratio is the better. To the firm, a high current ratio indicates liquidity, but it also may indicate an inefficient use of cash and other short-term assets.

**Debt to Equity Ratio**

Horne and Wachowicz (2012) Stated that debt to equity ratio is a ratios that show the extent to which the firm is financed by debt. The ratio tells us that creditors are providing the amount of financing for the company. While, Sugiarto (2015) said that Debt to Equity Ratio (DER) reflects the company's ability to meet all its obligations, which is shown by how much a part of their own capital is used to pay the debt.

\[
\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}
\]

The ratio tells us that creditors are providing the amount of financing for each money being provided by shareholders. Creditors would generally like this ratio to be low. The lower the ratio, the higher the level of the firm’s financing that is being provided by shareholders, and the larger the creditor cushion (margin of protection) in the event of shrinking asset values or outright losses. A comparison of the debt-to-equity ratio for a given company with those of similar firms gives us a general indication of the credit worthiness and financial risk of the firm.

**Return On Equity**

Brigham and Houston (2016) said that return on equity is the ratio of net income to common equity, measures the rate of return on common stockholders investment. Ross, Westerfield, Jaffe, Lim, Tan and Wong (2015) stated that return on equity is the probability ratio to measure the company ability to generate profit based on share capital owned by the company.

\[
\text{Return on equity} = \frac{\text{Net Income}}{\text{Common Equity}}
\]

The higher return on equity often reflects the firm’s acceptance of strong investment opportunities and effective expense management. The higher the ROE then the higher the level of profits obtained by the company will increase the company’s EPS. The higher the company’s EPS then the higher the company's ability to pay dividends.

**METHODS**

This study uses a survey to analyze the effect of Current Ratio, Debt to Equity Ratio, and Return On Equity on Dividend Payout Ratio. The type of data used in this study is secondary data. Secondary data is data that has been processed, obtained based on annual reports that have been audited and published. The analytical method used in this study is panel data regression analysis with the help of software Eviews 9.0 and SPSS.

Eviews and SPSS is a computer program used to process statistical data and econometric data, Eviews and SPSS can be used to solve problems in the form of time series, cross section, or data Panel. The survey was conducted in Indonesia. The population in this research is consumer goods
industry sector listed on the Indonesia Stock Exchange amounted to 40 companies and the research sample is 13 companies. Here is the framework of thinking of independent and dependent variable can be described as follows:

![Figure 1: Framework of thinking](image)

Hypothesis 1: Presumed current ratio has a significant positive effect on dividend payout ratio.
Hypothesis 2: Presumed debt to equity ratio has a significant positive effect on dividend payout ratio.
Hypothesis 3: Presumed return on equity ratio has a significant negative effect on dividend payout ratio.

RESULTS and DISCUSSION
Stationary test
The testing stationarity data is one of the important types of data used in the empirical analysis is time series data. The stationary test can be done by unit root test (Gujarati and Porter, 2012). There are two kinds of root test units that can be generally chosen include Augmented Dickey Fuller (ADF) and Philips Peron (PP). Here is the results of the stationary test:

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Unit Root Test in</th>
<th>ADF Test Statistic</th>
<th>Prob</th>
<th>Critical Value 5%</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DPR</td>
<td>1st difference</td>
<td>-14.31912</td>
<td>0.0001</td>
<td>-2.900137</td>
<td>Stationer</td>
</tr>
<tr>
<td>2</td>
<td>CR</td>
<td>1st difference</td>
<td>-8.588804</td>
<td>0.0000</td>
<td>-2.900137</td>
<td>Stationer</td>
</tr>
<tr>
<td>3</td>
<td>DER</td>
<td>1st difference</td>
<td>-9.124739</td>
<td>0.0000</td>
<td>-2.900137</td>
<td>Stationer</td>
</tr>
<tr>
<td>4</td>
<td>ROE</td>
<td>1st difference</td>
<td>-8.903181</td>
<td>0.0000</td>
<td>-2.900137</td>
<td>Stationer</td>
</tr>
</tbody>
</table>

Source: Secondary data processed, 2018.

Based on Table 1 the results of the ADF test above, if the probability is smaller or equal to 0.05 then the time series data is stationary, otherwise, if the probability greater than 0.05 then the time series data is not stationary. From the test results obtained that all variables in this study have been stationary on the degree of level integration. With the explanation as follows:

Probability DPR (0.0001) < Alpha (0,05), so the data is stationary.
Probability CR (0.0000) < Alpha (0,05), so the data is stationary.
Probability DER (0.0000) < Alpha (0,05), so the data is stationary.
Probability ROE (0.0000) < Alpha (0,05), so the data is stationary.

Panel data regression analysis model
The Common Effect or Ordinary Least Square (OLS) approach is the simplest approach to estimating panel data model parameters by combining cross-section and time series data as a whole and without regard to time and individual differences. From the Eviews 9.0 processing the following results are obtained:
By using the common effect in table 4.6, it can be seen that the adjusted R-squared is 0.472495 or 47%, so it can be interpreted that the independent variables in this study can describe the dependent variable, dividend policy 47% while the 53% percent accumulated value is explained by other studies.

Fixed effect model is a technique to estimate panel data by using a dummy variable to capture the difference of intercept. The fixed effect approach is assumed that the intercept of each individual is different while the slope between individuals remains the same between firms and between times. In fixed effect approach in Table 3, it can be seen that the adjusted R squared is higher than the common effect approach of 0.626448 or 63%, so it can be interpreted that the independent variables in this study can describe the dependent variable, that is dividend policy of 63% while the remaining 37% described by other studies. Based on these results, it can be seen that the variables whose probability value < α (0,05) stated significant is Return on Equity (ROE), while whose probability value > α (0,05) are not significant are Current Ratio (CR), and Debt to Equity Ratio (DER). From the Eviews 9.0 processing the following results are obtained:

<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>0.475589</td>
<td>0.044010</td>
<td>10.80633</td>
<td>0.0000</td>
</tr>
<tr>
<td>CR</td>
<td>1.175832</td>
<td>0.495107</td>
<td>2.374907</td>
<td>0.0201</td>
</tr>
<tr>
<td>DER</td>
<td>-0.183068</td>
<td>0.047124</td>
<td>-3.884800</td>
<td>0.0002</td>
</tr>
<tr>
<td>ROE</td>
<td>0.075579</td>
<td>0.281529</td>
<td>0.268457</td>
<td>0.7891</td>
</tr>
</tbody>
</table>

R-squared 0.493047 Mean dependent var 0.441423
Adjusted R-squared 0.472495 S.D. dependent var 0.240970
S.E. of regression 0.175016 Akaike info criterion -0.597964
Sum squared resid 2.266653 Schwarz criterion -0.477107
Log likelihood 27.32058 Hannan-Quinn criter. -0.549582
F-statistic 23.98603 Durbin-Watson stat 1.442859
Prob (F-statistic) 0.000000

Source: Secondary data processed, 2018

Model selection test of panel data
Chow test

Chow is a test to determine the common effect of the data panel. Chow test is done by looking at probability value F on output result. The basis of the decision is if the probability value F ≥ 0.05, then Ho is accepted and Ha is rejected, which means the more appropriate model is used is the common effect, but if the probability value F <0.05, then Ho is rejected Ha accepted, which is more appropriate to use is fixed effect.

Based on the results of chow test conducted in Table 4, it can be seen that the value of chi-square < alpha (0.05) that is equal to 0.0001, thus Ha accepted so the right model is to follow the fixed effect.
effect model. In other words, fixed effect model is better used in estimating panel data than the ordinary least square model (common effect). Then proceed with Hausman effect to choose whether to use fixed effect or random effect model to use in panel data regression. Here are the results of chow test with the help of software Eviews 9.0:

<table>
<thead>
<tr>
<th>Table-4: The Result of Chow Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects Test</td>
</tr>
<tr>
<td>Cross-section F</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
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<td>0.281529</td>
<td>0.268457</td>
<td>0.7891</td>
</tr>
</tbody>
</table>

Hausman test

Hausman test is used to select the most precise estimation between fixed effect approach and random effect approach in panel data regression. If the Chow test shows the result of selection in the common effect, the Hausman test is only used to select the fixed effect or random effect in panel data regression. Hausman test is an alternative to determine the regression of panel data to be used. Because in analyzing panel data regression there are 2 stages of panel data regression selection that is chow and hausman test. The research is enough to use the regression panel selection step in chow test result only. In this test is done with the following hypothesis:

H₀: Random effect model (REM)
Hₐ: Fixed effect model (FEM)

<table>
<thead>
<tr>
<th>Table-5: The Result of Chow Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Summary</td>
</tr>
<tr>
<td>Cross-section random</td>
</tr>
</tbody>
</table>

Based on Table 4 shows that the probability value of chi-square is 0.0007 < alpha (0.05). Then H₀ is rejected and Hₐ is accepted. So, in this research, fixed effect model is better used in estimating panel data compared with random effect model.

DISCUSSION

From the output in fixed model, the regression equation model as follows:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 \]

\[ DPR = 0.890558 - 2.462612 \text{CR} + 0.012540 \text{DER} - 1.070932 \text{ROE} \]
Analysis of coefficient panel data regression
H₀ = model is true
H₁ = model is not true
Criteria probability is less than 0.05.

The effect of current ratio on dividend payout ratio variable of current ratio obtained the t-count value of -1.615240 < t-table of 1.665 with a probability value of 0.1113 greater than the level of significance that is 0.05 then H₀ is accepted and H₁ is rejected. This shows that Current Ratio has insignificant negative effect on dividend payout ratio in the period 2012-2017.

The effect of debt to equity ratio on dividend payout ratio variable of debt to equity ratio obtained the t-count value of 0.119136 < t-table of 1.665 with a probability value of 0.9056 greater than the level of significance that is 0.05 then H₀ is accepted and H₁ is rejected. This shows that debt to equity ratio has insignificant positive effect on dividend payout ratio in the period 2012-2017.

The effect of return on equity ratio on Dividend Payout Ratio variable of return on equity ratio obtained the t-count value of -2.633163 > t-table of 1.665 with a probability value of 0.0107 smaller than the level of significance that is 0.05 then H₀ is rejected and H₁ is accepted. This shows that return on equity has a significant negative effect on dividend payout ratio in the period 2012-2017.

CONCLUSION
Based on the analysis of current ratio, debt to equity ratio and return on equity to dividend payout ratio in consumer goods industry sector listed in Indonesia Stock Exchange can be conclude as follows: 1) Current Ratio has an insignificant negative effect on dividend payout ratio in the consumer goods industry sector of period 2012-2017, 2) Debt to Equity Ratio has an insignificant positive effect on dividend payout ratio in the consumer goods industry sector of period 2012-2017, 3) Return on Equity has a significant negative effect on dividend payout ratio in the consumer goods industry sector of period 2012-2017.

REFERENCES