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Abstract

This research was conducted to examine the effect of earning per share, liquidity, investment opportunity set (IOS) on dividend payout ratio in consumer goods industry listed on the Indonesia stock exchange. The purpose of this study was to analyze the effect of earnings per share, liquidity, investment opportunity set (IOS) on the consumer goods industry listed on the Indonesia stock exchange in 2015-2017. The sample used was 12 consumer goods industry companies listed on the Indonesia stock exchange for the period 2015-2017. This study uses purposive sampling. The research data is taken from the Indonesia Stock Exchange (IDX). This study uses the panel regression. The results of this study are investment opportunity sets (IOS) that apply negatively to dividend payout ratio (DPR). While the EPS and CR variables do not affect dividend payout ratio. The author advises investors to pay attention to information taken by companies in making decisions.

Keywords: dividend payout ratio, earning per share, liquidity, current ratio, investment opportunity set (IOS).

INTRODUCTION

Investment is one of the supporters of economic progress in a country. The investment climate in Indonesia is still experiencing uncertainty which is difficult to predict by investors and activities that are faced with various risks. Investors often feel worried about the risks. This condition is influenced by uncertain legal and political situations.

From the data obtained from www.bps.go.id [1], Indonesia's economic growth in 2015 only grew 4.79 percent slowing compared to 2014 at 5.02 percent and in 2013 at 5.56 percent. Stocks of the consumer goods sector on the Indonesia Stock Exchange (IDX) again showed resilience to the weakening economy and the stock market. As of the end of May 2015, the consumption stock index rose 7.48% or recorded the highest growth compared to the other nine sectors, but was lower than the same period growth last year of 11.78%.

Research results of the influence of net income on dividend policy by [2] state that there is a significant positive effect between net income to dividend policy on Food and Beverage companies listed on the Indonesia Stock Exchange. However, the research conducted by Purba et al., Net income has no effect on dividend policy. Whereas in the study of [3] states that the variable net income has a negative influence on dividend policy.

Research Results the influence of liquidity on dividend payout ratio by [4] states that the Current Ratio has a significant positive effect on Dividend Payout Ratio (DPR). While in the research of [5] Liquidity does not affect dividend policy.

Dividend policy is the determination of the distribution of earnings (income) between users of income to be paid to shareholders as dividends or to be used within the company, which means that the income must be held in the company.
The manufacturing industry sector is a major component in national economic development (www.bps.go.id) [1]. The consumer goods industry sector is part of manufacturing companies in Indonesia. There are several sub-sectors of the consumer goods industry, namely the food and beverage sub-sector, the cigarette sub-sector, the pharmaceutical sub-sector, the cosmetic sub-sector and household goods, and the household sub-sector.

Table-1: Companies that Distribute Dividends from 3 Sectors Registered on the IDX in 2015-2017

<table>
<thead>
<tr>
<th>No</th>
<th>manufacturing industry</th>
<th>Dividen (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2015</td>
</tr>
<tr>
<td>1</td>
<td>Consumer goods industry sector</td>
<td>46</td>
</tr>
<tr>
<td>2</td>
<td>Various industry sectors</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>Chemical and basic industry sectors</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Data processed by author (www.idx.co.id)

In Table-1 the Industrial sector of consumer goods is in the first place in the number of companies that distribute dividends in 2015-2017. While the various industries sector is in the second place in distributing dividends, and the last in the third place is the basic & chemical industry sector.

According to Brigham and Houston [6] optimal corporate dividend policy is a policy that produces a balance between current dividends and future growth that maximizes stock prices.

Figure-1 shows the condition of the average dividend payout ratio of consumer goods industry companies from 2015-2017. In 2015 the dividend payout ratio in the consumer goods industry sector was 61.62% in 2016 the dividend payout ratio decreased to 57.95% or decreased by 3.67% from the previous year. And the year 2017 has decreased by 0.44% to 57.51%.

From various industrial sectors in Indonesia and seen from the development of the Indonesian economy, the growth of the domestic industry, especially the consumer goods industry, is influenced by security stability and guaranteed stability of decisions related to industry. The consumer goods industry sector is considered the most profitable object in the future, because the consumer goods industry sector shows its resilience to the weakening of the economy and the stock market, making it an investment target for investors.

Objective of the Study
The purpose of this study was to determine the effect of variables:

1. Analyze the effect of earning Per Share on Dividend Payment Ratios in the consumer goods industry sector listed on the IDX.
2. Analyze the effect of the Current Ratio on Dividend Payment Ratios in the consumer goods industry sector listed on the IDX.
3. Analyzing the influence of the Market on the Book Value Equity against the Dividend Payout Ratio in the consumer goods industry sector listed on the IDX.

Research Question

1. Does the Earning Per Share (EPS) affect the Dividend Payout ratio at consumer goods industry listed on the Indonesia stock exchange period 2015-2017?
2. Does the Current Ratio (CR) affect the Dividend Payout ratio at consumer goods industry listed on the Indonesia stock exchange period 2015-2017?
3. Does the Investment Opportunity Set (IOS) affect the Dividend Payout ratio at consumer goods industry listed on the Indonesia stock exchange period 2015-2017?
LITERATURE STUDY AND HYPOTHESIS DEVELOPMENT

Dividend

The financial statement analysis is the art of transforming data from financial statements into information that is useful for informed decision making [7]. According to K. R. Subramanyam [8], dividend payout ratio is referred 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 [9] said that dividend payout ratio is the number of dividends relative to the company’s net income or earnings per share.

In measuring dividend policy is a dividend payout ratio. The dividend payout ratio is measured by dividing the amount of dividends per share with net income per share. The dividend payout ratio is used in various situations. For example, the ratio is used in valuation as a way to estimate the amount of dividends in the coming year. Second, the size of the portion of net profit that is reinvested or held in the company is believed to be useful in estimating profit growth in the coming year [10].

Bird In Hand Theory

Main conclusions in the dividend theory presented by [11]. According to this theory, dividends (termed birds in hand) are preferred over retained earnings (birds in trees or in bushes) because birds in the bush do not contain elements material as an upcoming dividend (the bird can fly every time), which means there are no returns on the shares owned.

Signaling Theory

Signaling theory states that dividends will reduce asymmetric of information between management and shareholders by implying private information about the company's future prospects [12].

Factors Affecting Dividend Payout Ratio

According to Weston and Copeland [13] Identify at least 11 factors that can influence the company's dividend policy.

Following these factors:

1. Law
2. Position of Liquidity
3. Debt Repayment Needs
4. Limitations in the Debt Agreement
5. Potential Expansion of Assets
6. Earnings of Profit
7. Profit Stability
8. Opportunities for Issuance of Shares in the Capital Market
9. Ownership Control
10. Position of shareholders
11. Tax Accumulation Mistakes on Profit

Research Variable

Operational definition is the activity of measuring research variables based on specific characteristics reflected in dimensions or research variables [14].

Earning Per Share

Earnings and dividends per share are presented at the bottom of the income statement, earnings per share (earnings per share) shows that of all items in the income statement, EPS is usually the most important post for shareholders of [15].

\[
\text{EPS} = \frac{\text{EAT}}{\text{Number of Shares}}
\]

Current Ratio (CR)

Brigham and Houston [15] state that, liquid assets are assets that are traded in active markets so that they can be converted quickly into cash at prevailing market prices, while a company's liquidity position relates to the question, whether the company is able to pay off its debt when the debt due the following year. It can be concluded that the liquidity ratio is a measuring instrument used to project the integrity of liquidity. The liquidity measuring instruments used by companies and also banks are: 1. Cash Ratio 2. Current Ratio 3. Loan to Deposit Ratio 4. Quick Ratio.

\[
\text{CR} = \frac{\text{Current asset}}{\text{Current liabilities}}
\]

Investment Opportunity Set (IOS)

The company holds back profits to invest into the business, which means investing in factories and equipment, inventory, and so on, not to accumulate cash in bank accounts. Changes in retained earnings occur because ordinary shareholders allow management to reinvest funds that should be able to distributed as dividends [15].

\[
\text{MVEBVE} = \frac{\text{Number of Shares X Stock closing price}}{\text{Total Equity}}
\]

Framework

Based on the theoretical foundation and research there are several factors that are called to influence dividend payout ratio, namely Earning Per Share (EPS), Current Ratio (CR), Investment Opportunity Set (IOS). Therefore, a statistical test is needed to determine the extent of the independent variables on Dividend Payout ratio. The thinking of this research framework is presented in Figure-2.
Hypothesis

Sugiyono [16] states that the hypothesis is a temporary answer to the research problem formulation, while the formulation of the problem is expressed in the form of response sentences. It is said temporarily, because the answers given are only based on the relevant theory, not based on empirical facts obtained through data collection or questionnaires.

H1: Earning Per Share (EPS) affects the Dividend Payout Ratio.
H2: Current Ratio (CR) affects the Dividend Payout Ratio.

RESEARCH METHOD

Types of research

The type of research used is associative causal. Associative research is a research question that is asking about the relationship between two variables or more [16]. Based on associative research on causality, this study will test hypotheses on the variables Earning Per Share (EPS), Current Ratio (CR) and Investment Opportunity Set (IOS) on dividend payout ratio (DPR).

Data Collection

The data used in this research is secondary data. In the form of financial statements issued which are obtained from the Indonesia Stock Exchange (Indonesia Stock Exchange) by accessing the site www.idx.co.id [17], EPS secondary data, Current Ratio, MVEBVE in this study are sourced from published. There are several statistical techniques that can be used to analyze data. The purpose of data analysis is to get relevant information contained in the data and use the results to solve a problem [18].

Population and Sample

The population in this study is the consumer goods industry sector companies listed on the Indonesia Stock Exchange in 2015-2017 and which publishes annual financial reports that have been audited for the 2015-2017 period. From the information obtained by companies listed on the Indonesia Stock Exchange there are 42 companies. As for the sampling technique using the purposive sampling method, which is selected sampling in accordance with the criteria of the study, the sample is part of the unit / group obtained from the sampling process [19].

Analysis Method

The type of data for econometric research consists of three types of time series data, cross section data, and panel data. Panel data (pooled data) is a data set that contains individual sample data for a certain period of time. In this type of data we collect various observations according to individuals collected for a certain amount of time in the sample [20].

Panel data can be grouped based on number of observation among member panel data [21]:
- Balanced panel: If each cross-sectional subject has the same number of observations.
- Unbalanced panel: If each entity has a different number of observations.

The analytical method used is panel data regression analysis method because the panel data is a combination of cross section and time series.

\[ Y_{it} = a + b_1X_{1t} + b_2X_{2t} + b_3X_{3t} + e \]

Information:
- \( Y_{it} \) = dependent variable at time-\( t \)
- \( a \) = intercept constant
- \( b \) = regression coefficient for each independent variable
- \( X \) = independent variable at time-\( t \)
- \( e \) = error value
RESULT AND ANALYSIS RESEARCH

Results of Descriptive Statistics

Table 2: Descriptive Statistics EPS Test Results

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Mean</td>
<td>1741.893</td>
<td>522.422</td>
<td>595.225</td>
</tr>
<tr>
<td>Max</td>
<td>11895.11</td>
<td>3470.26</td>
<td>4029.78</td>
</tr>
<tr>
<td>Min</td>
<td>27.68</td>
<td>29.17</td>
<td>32.04</td>
</tr>
<tr>
<td>SD</td>
<td>3359.285</td>
<td>960.061</td>
<td>1116.56</td>
</tr>
</tbody>
</table>

Source: IDX Data is Processed by researchers

Based on Table 2, those who have the lowest score (minimum) in 2015 amounting to 27.68, namely the SIDO company. In 2016 it was 29.17 owned by SIDO companies and in 2017 32.04 was a SIDO company. In 2015-2017 the minimum value is owned by PT Industri Jamu dan Farmasi Sido Muncul Tbk, meaning that the company has the smallest earnings per share compared to other companies. While the maximum value of EPS in 2015 is owned by DLTA company of 11895.11, in 2016 amounted to 3470.26 owned by GGRM company, in 2017 amounted to 4029.78 owned by GGRM company. Whereas those with the highest score (maximum) of 11895.11 were DLTA companies in 2015.

Table 3: Descriptive Statistics CR Test Results

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Mean</td>
<td>326.347</td>
<td>322.427</td>
<td>330.833</td>
</tr>
<tr>
<td>Max</td>
<td>927.65</td>
<td>831.82</td>
<td>863.78</td>
</tr>
<tr>
<td>Min</td>
<td>58.42</td>
<td>65.4</td>
<td>60.56</td>
</tr>
<tr>
<td>SD</td>
<td>273.16</td>
<td>258.07</td>
<td>268.04</td>
</tr>
</tbody>
</table>

Source: IDX Data is Processed by researchers

Based on the results of descriptive analysis in Table 3 the value of the current ratio of sample companies during the observation period had the lowest value (minimum) in 2015 MLBI companies amounted to 58.42, in 2016 the UNVR Company 65.4 and in 2017 the UNVR company was 60.56. While the lowest value from 2015-2017 was 58.42, namely MLBI companies in 2015. While those with the highest value of CR in 2015 amounted to 927.65 in 2016 amounted to 831.82 and in 2017 amounted to 863.78. And in 2015-2017 the maximum score was 927.65, which was the SIDO company in 2015. This means that the company has the highest liquidity compared to other companies.

Table 4: Descriptive Statistics IOS Test Results

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Mean</td>
<td>6.7759</td>
<td>7.7067</td>
<td>8.2042</td>
</tr>
<tr>
<td>Max</td>
<td>20.54</td>
<td>30.16</td>
<td>27.05</td>
</tr>
<tr>
<td>Min</td>
<td>1.05</td>
<td>0.71</td>
<td>1.43</td>
</tr>
<tr>
<td>SD</td>
<td>6.7234</td>
<td>8.6265</td>
<td>8.715</td>
</tr>
</tbody>
</table>

Source: IDX Data is Processed by researchers

Based on the results of the descriptive analysis in 4, the investment opportunity set (IOS) value of the sample companies during the observation period had the lowest 2015 minimum of 1.05 INDF companies, in 2016 it was 0.71 SKLT companies and in 2017 was 1.43 INDF companies while the minimum value was 2015-2017 amounted to 0.71, namely the SKLT company in 2016 while those with the highest score (maximum) in 2015 amounted to 20.54 in MLBI companies, in 2016 amounted to 30.16 MLBI companies and in 2017 amounted to 27.05 in MLBI companies. Whereas in the observation period of 2015-2017 amounting to 30.16, namely MLBI companies
Based on the results of the descriptive analysis in Table-4, the value of the Dividend Payout Ratio of sample companies during the 2015-2017 observation period had the lowest value (minimum) in 2015 of 1.01 in DLTA companies, in 2016 amounted to 3.6 in DLTA companies and in 2017 at 5.66 in DLTA companies in the 2015-2017 period that had the lowest value of 1.01, namely DLTA companies in 2015 meant that the company paid the smallest dividend from other companies. While the highest value (maximum) dividend payout ratio is 145.92, which is the 2015 MLBI company. 100 in 2016 and 2017. The average DPR for the consumer goods industry in 2015-2017 is always above one with the lowest value in 2017 at 57.5.

### Stationary Test

Based on Table-6, the results of the stationary test show that the Dividend payout ratio, Earning Per Share, current ratio and investment opportunity set variables show that the probability value (level) is smaller than 0.05 which rapidly goes to zero. So that the data is said to be stationary.

### Result Panel Data Regression Model

The regression analysis used in this study is Panel Regression. The estimation results of the panel regression model are presented in Table-7.
Result Selection Panel Data Regression Model

Table 7: Result Panel Data Regression Model

<table>
<thead>
<tr>
<th>Keterangan</th>
<th>Koefisien</th>
<th>Probabilitas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chow Test</td>
<td>36.658088</td>
<td>0.0000</td>
</tr>
<tr>
<td>Hausman Test</td>
<td>27.267986</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Analysis results of E-Views 9.0

Chow Test
The results from Table 7 show the results of a probability of 0.0000 smaller than 0.05, H0 is rejected so that the right model is a Fixed Effect model.

Hausman Test
The results of Table 7 can be seen that the probability value of 0.0000 is smaller than 0.05 then H0 is rejected so that it can be concluded from the hausman test the model used is Fixed Effect.

Table 8: Result method fixed effect model

<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>84.70055</td>
<td>13.36402</td>
<td>6.337954</td>
<td>0.0000</td>
</tr>
<tr>
<td>EPS</td>
<td>-0.000300</td>
<td>0.000921</td>
<td>-0.354687</td>
<td>0.7188</td>
</tr>
<tr>
<td>CR</td>
<td>-0.005915</td>
<td>0.004898</td>
<td>-0.199353</td>
<td>0.8670</td>
</tr>
<tr>
<td>IOS</td>
<td>-3.101625</td>
<td>0.777734</td>
<td>-3.990023</td>
<td>0.007</td>
</tr>
</tbody>
</table>

Source: Analysis results of E-Views 9.0

F Test Result
The F test is used to test the effect of variables Earning Per Share (EPS), Current Ratio (CR), Investment Opportunity Set (IOS) simultaneous to the Dividend Payout Ratio (DPR). The F test is done by comparing Fstatistic and Ftable. The results of the F test are presented in Table 3.

Based on Table 8 obtained Fstatistic of 62.26488 with F table 2.89 so that it can be concluded variable Earning Per Share (EPS), Current Ratio (CR), Investment Opportunity Set (IOS) influence simultaneously and significantly on Dividend Payout Ratio (DPR).

Effect of EPS on DPR
Based on Table 8 the value of the EPS statistic -0.364887 < t-table (1.69236) with probability value 0.7188 > 0.05 with negative effect. EPS independent variable depends on regional income H0, which means it is not approved by the DPR of consumer goods companies listed on the Indonesia Stock Exchange in 2015-2017.

Effect of CR on DPR
Based on Table 8 the value of the CR statistic -0.169553 < t-table 1.69236 with probability value 0.8670 > 0.05 with negative effect. So that the CR variable is in the accepted area of H0, which means that it does not affect the DPR of the consumer goods.

Effect of IOS on DPR
Based on Table-8, the value of $t_{\text{stat}}$ for IOS is $-3.988032 < t_{\text{table}}$ while the table for the significance level of 5%. With probability value 0.0007 < 0.05 so the hypothesis is accepted. So it can be concluded that investment opportunity set (IOS) has a negative and significant on dividend payout ratio.

Coefficient of Determination ($R^2$)
The coefficient of determination test is conducted to find out how much influence all independent variables have on the dependent variable

Classic Assumption Test
Normality Test

The results of the JB Test normality test produce a Jarque-Bera value of 0.255840 (Less than 2) and a probability or p-value value of 0.879924 > 0.05 so that Ho is accepted or the residual value is normally distributed.

Multicollinearity Test
This multicollinearity test aims to test whether the panel regression model found a correlation between independent variables. A good model is a model that does not have a correlation between the independent variables. Multicollinearity arises if among independent variables have a high correlation and make it difficult for us to separate the effects of an independent variable on the dependent variable from the effects of other variables. This is because changes in a variable will cause changes in the pair variables because of the high correlation. Some indicators in detecting the presence of multicollinearity, including [21].

- The R2 value is too high, (more than 0.8) but there is no or a little significant t-statistic.
- The F-statistic value is significant, but the t-statistics of each independent variable are not significant.

So it can be concluded that multicollinearity was not found in the regression model in this research.

Heteroskedasticity Test
Based on the results of the Heteroscedasticity Test, heteroscedasticity is not expected in this study. Because the probability value is greater than the value of $\alpha$ 0.05.

Autocorrelation Test
The autoregression can be detected through the Durbin Watson (D-W) Test. The value of DW = 2.0145, where the lower limit value (dl) = 1.2953 and the upper limit value (du) = 1.6539. When viewed from the decision-making including du <(4 - du) or 1.6539 <2.0145 <(4 – 1.6539), it can be concluded that there was no autocorrelation between the independent variables.

DISCUSSION
The Based on the results of the analysis research described above. Then from these results a discussion will be conducted to prove the hypothesis. The discussion is done by describing the strong influence of the independent variables consisting of EPS, CR and IOS on the Dividend Payout Ratio

Effect of EPS on Dividen Payout Ratio
EPS has no effect on the consumer goods industry dividend payout ratio listed on the Indonesia Stock Exchange in 2015-2017. The results of this study are not effect with the hypothesis to one EPS influences DPR in the consumer goods industry. This is in line with the research. Which states that EPS has no effect on DPR.

Effect of CR on Dividen Payout Ratio
Liquidity does not affect the consumption goods industry on DPR listed on the Indonesia Stock Exchange in 2015-2017. The results of this study are not in line with the second hypothesis which states that liquidity affects DPR. Liquidity is the company's ability to fulfill its financial obligations that must be fulfilled.

In the results of this study, it shows that liquidity does not affect on DPR on the consumer goods industry, which is seen from insignificant research results. This research shows that companies cannot manage their current assets well in terms of increasing profitability. So that liquidity is still not optimal in the assessment by investors. The results of this study are supported by research by [23] Current Ratio has no effect on dividend payout ratio in sub sector automotive and component of period 2012-2016 [5]. Which states that liquidity has no effect on DPR.

Effect of IOS on Dividen Payout Ratio
Investment opportunity set (IOS) has a negative effect on DPR at the consumer goods industry listed on the IDX in 2015-2017. The results of this study are in line with the third hypothesis, namely the Investment opportunity set (IOS) influences dividend payout. The company holds back profits to invest in business again, which means investing in factories and equipment, in inventory, and so on, not to accumulate cash in bank accounts.

This shows that the higher the level of investment in a company, the company in the future will provide greater returns to shareholders, so that the dividend payment given by the company will be even greater.

CONCLUSION AND RECOMMENDATION
CONCLUSION
Based on the testing and analysis that has been done in this study, the conclusions that can be taken include the following:


RECOMMENDATION
- For investors who will invest in consumer goods industry companies, it is recommended that we pay attention to the composition of the Investment Opportunity Set (IOS) because this variable has a significant effect on the company's dividend payout ratio and investors are expected to value a company not affected by the company's profit and liquidity because the company is not necessarily able to manage the company's liquidity and gain in profit.
- For Companies, it is better for companies to manage funds better to invest their funds than to maintain company liquidity, because by investing funds will increase profit growth in the future
- For further research, should expand the research sample by increasing the number of research periods and covering other industries so that research is more accurate and reflects the actual situation.
- Further research should be able to develop other variables that can influence dividend policies such as debt policy, cash flow, company size, return on equity and others.

REFERENCES