

Measuring Liquidity as a Moderating Variable

Akhmadi*, Enok Nurhayati, Anisa Rahmawati

Department of Management, Faculty of Economics and Business, University of Sultan Ageng Tirtayasa,
Indonesia

Info Articles

Keywords:
NPM, DPS, CR

Abstract

This study aims at the liquidity ratio as a moderating factor in the relationship between profitability and dividend policy. The population of this study is all manufacturing companies listed on the Indonesia Stock Exchange for the period 2008-2017. While the number of samples as many as 12 companies determined through the purposive sampling method. The analytical methods used are descriptive statistics, Moderated Regression Analysis (MRA), and hypothesis testing. The results of this study indicate that profitability has a significant effect on dividend policy. Meanwhile, Liquidity does not moderate the relationship between Profitability and Dividend Policy. The results of the study cannot be generalized due to the limitations of the research object only in the manufacturing sub-sector. In addition, the observed variables only use one proxy each. Further research should expand the object of research to several sub-sectors, and use several proxies for each of the variables studied.

*Address Correspondence:
E-mail: akhmadi@untirta.ac.id

p-ISSN 2550-0368
e-ISSN 2549-0303

INTRODUCTION

The manufacturing industry is one of the main drivers of national economic growth. Based on information released by Kemenperin.go.id on March 22, 2018, the Secretary General of the Ministry of Industry, Haris Munandar, said that the existence of the manufacturing industry is still a supporter of national economic growth, which is supported by many investors to develop the sector. According to data from the Central Statistics Agency (BPS), throughout 2017 the Indonesian economy grew 5.07% with a GDP value based on current prices of IDR 13,588.8 trillion. Of this amount, the manufacturing sector contributed to GDP reaching IDR 2,739.4 trillion. This shows that the role of the manufacturing industry is very vital for the Indonesian economy. However, the manufacturing sector during the last 10 years experienced a trend in the form of fluctuations in performance in terms of dividend policy. This is certainly very influential on the decision-making process of investors in investing their funds in this sector. Investors need a lot of information that can help their investment decisions so that the industry can provide great opportunities in providing the maximum profit for investors in the future.

The following is the development of dividend policy performance in terms of dividend per share of manufacturing companies listed on the Indonesian stock exchange for the period 2008-2017.

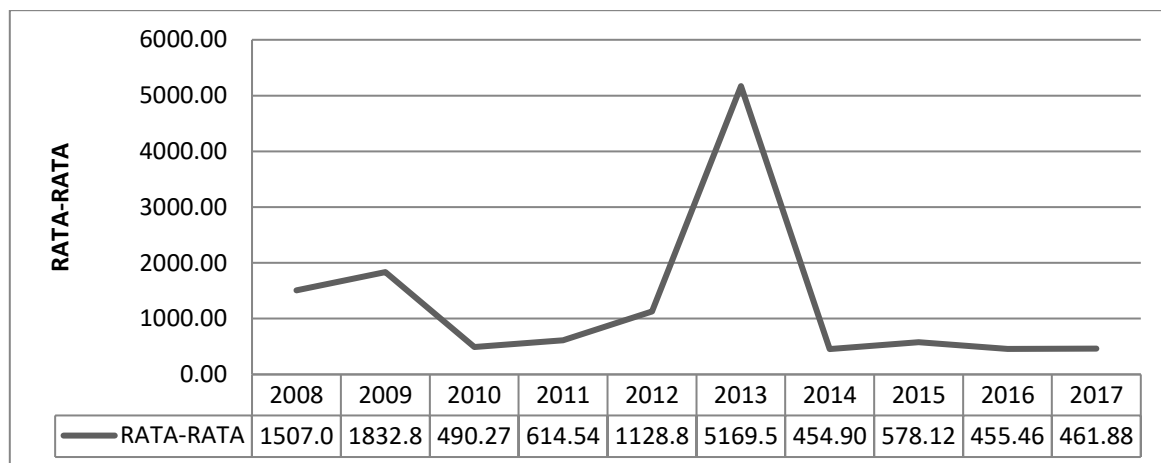


Figure 1. Dividend Per Share (DPS) Graph of Manufacturing Companies Listed on the IDX Period 2008 -2017

Source: www.idx.co.id (processed with Ms. Excel)

The figure shows fluctuations in instability, where the highest DPS value was in 2013 at 5169.59, but experienced a sharp decline in 2014 to only 454.90. Many factors can influence the rise and fall of a company's dividend policy. The factors that influence the dividend policy according to Bambang Riyanto (1995) are the company's liquidity position, the need for funds to pay debts, the company's growth rate, and supervision of the company.

Based on previous studies, dividend policy is often associated with profitability but there are still different results (research gap). Research conducted by Saher Aqel (2016), shows that profitability has a positive effect on dividend policy. However, this result contradicts the research conducted by Maldajian and El Khoury (2014) which shows that profitability hurts dividend policy. The different results were also stated by Rizqia et al (2013) which showed that profitability did not affect dividend policy.

The difference in research results (research gap) is believed that other variables affect the relationship between profitability and dividend policy. Several empirical findings prove that liquidity is a factor that can strengthen or weaken the relationship between profitability and dividend policy. The liquidity relationship that strengthens profitability is stated in Wahyuni's research (2018) which proves that liquidity has a positive effect on profitability. The results of this study are consistent with the research of Madushanka and Jathurika (2018) and Muslih (2019) which show that liquidity has a positive effect on profitability. Furthermore, the liquidity

relationship that weakens profitability is explained by Ziaur Rehman et al (2015) which proves that liquidity hurts company profitability. The results of this study are consistent with research by Dahiyat (2016) and Serwadda (2018), which show that liquidity hurts profitability. The liquidity relationship that strengthens dividend policy is stated in Józwiak's (2015) research which proves that liquidity has a positive effect on dividend policy. The results of this study are consistent with the research of Olang et al (2015) and Yusuf and Muhammed (2015), which show that liquidity has a positive effect on dividend policy. The relationship of liquidity that weakens dividend policy is explained by Devanadhen and Karthik (2015), which proves that liquidity hurts dividend policy. The results of this study are consistent with research by Odawo and Ntoiti (2015) and Sahaida Laily (2017), which show that liquidity hurts dividend policy. Based on the background, phenomena, and inconsistency of research results on the effect of profitability on dividend policy, the researcher wants to review again by adding liquidity as a moderating variable in the study of manufacturing companies listed on the IDX for the period 2008-2017. In detail, the research questions in this study include: (1) what does profitability have a significant effect on dividend policy? , (2) what does liquidity moderate the effect of profitability on dividend policy?

LITERATURE

Signaling Theory

A signal is an action taken by the management of a company that provides instructions to investors on how management assesses the company's prospects (Brigham and Houston, 2014: 214). Signaling theory is a theory that sees signs about the conditions that describe a company. Or signaling theory is a theory that discusses the rise and fall of market prices so that it will influence investor decisions (Fahmi, 2015). An increase in dividends above the expected amount is a signal that the company's management predicts good profits in the future, on the contrary, a decrease in dividends, or an increase in an amount that is smaller than expected, is a signal that management predicts a bad future (Brigham and Houston, 2014).

Dividend Policy

The definition of dividends according to Hanafi (2014), is the compensation received by shareholders, in addition to capital gains. Meanwhile, according to Sutrisno (2013), the definition of dividends is part of the net profit distributed to shareholders (owners of their capital). A dividend policy is a decision related to the use of profits that are the rights of shareholders and these profits can be divided as dividends or retained earnings to be reinvested (Sutrisno, 2013). Meanwhile, according to Setiawan et al (2013) in Puspaningtyas (2019), dividend policy is a decision regarding the profits earned by the company and will be distributed to shareholders as dividends or will be retained as retained earnings for investment financing in the future. The dividend policy ratio measured in this study is Dividend Per Share (DPS). According to Irawati (2006), (DPS) is the number of dividends to be distributed to shareholders after being compared with the weighted average of ordinary shares outstanding.

Profitability

Sartono (2012) reveals that profitability is the company's ability to earn profits from sales, total assets, and own capital. Meanwhile, according to Sudana (2011) profitability is the company's ability to generate profits by using the sources owned by the company, namely from assets, capital, and company sales. Profitability can be measured by Net Profit Margin (NPM). This ratio measures the extent to which the company's ability to earn a net profit at a certain level of sales (Hanafi, 2015).

Liquidity

According to Bambang Riyanto (1995), liquidity is a matter related to the problem of a company's ability to fulfill its financial obligations which must be fulfilled immediately. While the definition of liquidity according to Puspitaningtyas (2019), is the ability of a company to pay short-term obligations or obligations that will soon mature. Companies that can pay all their short-term debt are said to be liquid companies.

Liquidity can be measured by the Current Ratio (CR). This ratio measures the company's ability to meet its short-term debt (maturity of less than one year) using current assets (Hanafi, 2014).

Hypothesis Development

The Influence of Profitability on Dividend Policy

The profitability relationship strengthens its influence on dividend policy built with signaling theory, according to Al-Najjar (2009) and Al-Shubiri (2011) in Rizqia et al (2013) based on signaling theory explaining that companies that obtain high profitability will tend to distribute the profit share that in the form of dividends to shareholders. Empirically this argument is supported by Bassam Jaara et al (2018), which state that profitability has a significant positive impact on dividend policy, which means that more profitable companies will pay higher dividends.

The relationship of profitability that weakens its influence on dividend policy is built on the pecking order theory, that companies with high profitability that use retained earnings as a source of capital will pay fewer dividends (Józwiak, 2015). Companies that have high profitability tend to use most of the profits earned for company expansion and other needs so that the profits distributed to shareholders as dividends are smaller (Gusni, 2017). Based on the theory and the results of previous research, the following hypotheses can be formulated:

H1: Profitability has a significant effect on dividend policy

The Influence of Moderating Liquidity on the Relationship Between Profitability and Dividend Policy

Theoretically, liquidity strengthens the relationship between profitability and dividend policy built by signaling theory. Liquidity is predicted to have a positive relationship with profitability. According to Wahyuni (2018), based on signaling theory, it is explained that a high current ratio shows the company can meet its short-term obligations so that the company's profitability will also increase because investors believe that the company is in a stable and profitable financial condition.

Research on the effect of liquidity that strengthens dividend policy is based on signaling theory, that companies with higher cash accessibility can pay higher dividends than companies with insufficient cash (Ho, 2003 in Maldajian and El Khoury, 2014). Empirically the liquidity relationship that strengthens dividend policy is explained by Adekunle (2013), showing that strong liquidity will ensure investor confidence and keep shareholder funds stable because profits from daily business takeovers will lead to good dividend payments. Based on the theory and the results of previous research, the following hypotheses can be formulated:

H2: Liquidity moderates the relationship between profitability and dividend policy

METHODS

Population and Sample

The population in this study are all manufacturing sector companies listed on the Indonesia Stock Exchange for the period 2008-2017. While the research sample amounted to 12 companies. The sampling technique in this study used purposive sampling.

Variable Measurement

Dividend policy as the dependent variable is measured by Dividend Per Share, namely the ratio between cash dividends and the number of shares outstanding, Irawati (2006). Profitability as an independent variable is measured by net profit margin, namely the ratio between net profit and net sales, Akhamdi and Yeni (2021). Meanwhile, liquidity as a moderating variable is measured by the current ratio, namely the ratio between current assets and current debt, Hanafi (2014).

Data analysis technique

Data analysis in this study used descriptive statistical analysis using descriptive parameters to determine the distribution of observation data related to the maximum value, minimum value, average value, and

standard deviation. The analysis also uses inferential statistics including classical assumptions, Moderated Regression Analysis (MRA), and hypothesis testing on the following regression equations.

$$\text{NPM} = \beta_0 + \beta_1 \text{DPS} + e \quad (1)$$

$$\text{NPM} = \beta_0 + \beta_1 \text{DPS} + \beta_2 \text{DPS} * \text{CR} + e \quad (2)$$

DISCUSSION

Descriptive statistics

Based on table 2, it can be seen that the amount of data used in this study was 120 data. Based on the calculation results from the observation period, it can be seen that the lowest (minimum) DPS value is Rp. 5 occurred in the basic industry and chemical companies in the pulp & paper sub-sector, namely PT. Tjiwi Kimia Paper Factory Tbk. (TKIM) in 2015 and 2016. This decrease was due to the increase in gas prices for industry which reached USD 10 per Million British Thermal Unit (MMBTU) in 2015 and USD 9.15 to USD 11 per MMBTU in 2016, resulting in production costs increased and competitiveness decreased because in 2015 and 2016 imported paper products flooded Indonesia. The highest DPS value (maximum) is Rp. 55,576 at PT. Multi Bintang Indonesia Tbk. (MLBI) in 2013, wherein MLBI distributed final dividends with a total of Rp. 970.82 billion. This happens because of the net profit of PT. Multi Bintang Indonesia Tbk. (MLBI) in 2013 jumped 158.08% to Rp1.17 trillion. MLBI's revenue in 2013 skyrocketed by 126.75% to Rp3.56 trillion from the previous year's revenue of Rp1.57 trillion. The average value of DPS for manufacturing companies is Rp. 1269.3382 and the standard deviation of Rp. 5434.91959. These results show the mean (mean) is smaller than the standard deviation ($1269.3382 < 5434.91599$).

Table 1. Descriptive Statistical Results

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
DPS	120	1269.3382	5434.91959	5.00	55576.00
NPM	120	.14	39.00	12.7346	7.46550
CR	120	20.85	698.54	214.5437	136.38762

Source: SPSS 25 Output Results, data processed

Based on table 1, it can be seen that the amount of data used in this study was 120 data. Based on the calculation results from the observation period, it can be seen that the lowest (minimum) Net Profit Margin (NPM) is 0.14% in the basic industry and chemical companies in the pulp & paper sub-sector, namely PT. Tjiwi Kimia Paper Factory Tbk. (TKIM) in 2015, occurred because the performance of TKIM in Q3 2015 decreased due to a decrease in the company's basic sales by 12.64% to USD 819.58 million from the sales of goods in Q3 2014 which was USD 923.21 million.

The highest Net Profit Margin (NPM) value (maximum) is 39% at PT. Multi Bintang Indonesia Tbk. (MLBI) in 2017, occurred due to an increase in net profit of 34.83% from the previous Rp 979.22 billion to Rp 1.32 trillion throughout the company performance in 2017. The average NPM value is 12.7346% and the standard deviation value is 7.46550 %. An average value greater than the standard deviation value indicates that the average value can be used as a representation of the overall data.

Based on table 4 shows that the amount of data used in this study was 120 data. Based on the calculation results from the observation period, it can be seen that the lowest Current Ratio (CR) value (minimum) is 20.85% in the various industrial sector companies in the footwear sub-sector, namely PT. Shoes Bata Tbk. (BATA) in 2010, occurred because the brand image of Bata shoes experienced a decline in popularity among consumers, so this also had an impact on consumer loyalty to Bata shoes.

Nilai *Current Ratio* (CR) tertinggi (*maximum*) sebesar 698,54% pada perusahaan PT. Indocement Tunggal Prakasa Tbk. (INTP) tahun 2011, terjadi karena Indocement berhasil menjual semen 7 juta ton. Pencapaian itu ikut menaikkan pangsa pasar Indocement. Pada akhir bulan juni 2011, pangsa pasar Indocement tercatat 31,14% dari total industri semen nasional sebanyak 22,49 juta ton. Nilai rata-rata CR

sebesar 214.5437% serta nilai standar deviasi sebesar 136.38762%. Dengan nilai rata-rata lebih kecil dari nilai standar deviasi menunjukkan bahwa penyimpangan dari data variabel tersebut cukup besar, yang artinya tingginya resiko dan fluktuasi data DPS yang tidak stabil selama periode penelitian

Classic assumption test

Normality test

The normality test in this study used the Kolmogorov-Smirnov statistical test (K-S test) to test the normality of the residual value. The data is said to be normally distributed if the residuals are normally distributed, which has a significant level above 0.05 (Ghozali, 2018).

Table 2. Kolmogorov-Smirnov One Sample Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		120
Normal Parameters ^b	Mean	.0000000
	Std. Deviation	5082.20762110
Most Extreme Differences	Absolute	.306
	Positive	.306
	Negative	-.218
Test Statistic		.306
Asymp. Sig. (2-tailed)		.000 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: SPSS 25 Output Results, data processed

Based on the results of data processing above in table 3, it is obtained that the Kolmogorov-Smirnov significance value in this study is 0.00 less than 0.05 ($0.000 < 0.05$), this indicates that the data in this study is not normally distributed. After transforming the data and the data has not been normally distributed, the last step used is to perform data outliers by looking at the z-score for each research variable, and for those with a z-score > 3 then the data is an outlier data. The following are the results of the outlier test using the z-score in this study.

Table 3. Outlier Data

Observasi	ZlogNPM
91	3.33726
92	3.37756
96	3.0518

Source: SPSS 25 Output Results, data processed

From the outlier data in table 3, there are 3 outlier data, so the amount of data in the observation which was originally 120 ($N = 120$) became 117 ($N = 117$). The following are the results of the normality test after the outlier test which is processed in the following SPSS 25 program.

Table 4. Kolmogorov-Smirnov One Sample Test Results after being in Outlier

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		117
Normal Parameters,b	Mean	.0000000
	Std. Deviation	1.46556258
Most Extreme Differences	Absolute	.076
	Positive	.076
	Negative	-.040
Test Statistic		.076
Asymp. Sig. (2-tailed)		.095c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: SPSS 25 Output Results, data processed

Based on the results of data processing in table 8 above, the value of Asymp.Sig is obtained. (2-tailed) is 0.095. From these results, it can be concluded that a $0.095 > 0.05$ level of significance, indicates that the data in this study has been normally distributed and has met the requirements of the classical assumption test which in this case is the normality test of the data.

Multicollinearity Test

Multicollinearity can be seen from the tolerance value and variance inflation factor (VIF). If the tolerance value is > 0.1 and $VIF < 10$, it is concluded that there is no multicollinearity (Ghozali, 2018: 107). The results of the multicollinearity test are in the following table:

Table 5. Multicollinearity Test Results

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	5.782	1.235		4.684	.000		
Ln_NPM	.924	.164	.460	5.645	.000	1.000	1.000
Ln_CR	-.516	.225	-.187	-2.290	.024	1.000	1.000

a. Dependent Variable: Ln_DPS

Source: SPSS 25 Output Results, data processed

Based on table 5 of the multicollinearity test above, it can be seen that the tolerance value for the profitability (Net Profit Margin) and liquidity (Current Ratio) variables is 1, while the VIF (variance inflation factor) variable for profitability and liquidity is 1. Because the tolerance value of each is above 0.10 and each VIF value is below 10, it can be concluded that there is no multicollinearity between variables in the regression model.

Heteroscedasticity Test

The heteroscedasticity test in this study used the white test. The white test is a test carried out by regressing the squared residual (U2t) with independent variables, squared independent variables, and

multiplication (interaction) of independent variables (Ghozali, 2018:144). The test is where $c2 \text{ count } (c2 = n \times R^2) < c2 \text{ table}$, then the alternative hypothesis of heteroscedasticity in the model is rejected (Ghozali, 2018).

Table 6. Heteroscedasticity Test (White Test)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.237 ^a	.056	.040	3.18020

a. Predictors: (Constant), Ln_CR, Ln_NPM

Source: SPSS 25 Output Results, data processed

Based on table 10 heteroscedasticity test above, it can be seen that the value of $R^2 = 0.056$ with the number of observations $N = 117$, then the amount of $c2 \text{ count} = n \times R^2$, $c2 \text{ count} = 117 \times 0.056$, $c2 \text{ count} = 6.552$, $c2 \text{ table} = 117 - 3 = 114$ is 139.9207. Because the value of $c2 \text{ count} < c2 \text{ table}$, it can be concluded that there is no heteroscedasticity in this study and this regression is feasible to use.

Autocorrelation Test

Autocorrelation test using Durbin Watson test (DW-test). Based on table 11 above, it can be seen that the Durbin-Watson value based on the SPSS output is 0.832. This value will be compared with the 5% alpha table value, the number of samples (n) is 117 with the number of independent variables of 2 ($k=2$). It can be obtained that the lower limit value of dL is 1.6638 and the upper limit value of dU is 1.7332. Because the value of $dw < dL$ ($0.832 < 1.6638$), the Durbin-Watson value has a value that does not match the criteria for acceptance of autocorrelation. Thus, the data in this study have symptoms of autocorrelation.

Table 7. Autocorrelation Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.494 ^a	.244	.230	1.47836	.832

a. Predictors: (Constant), Ln_CR, Ln_NPM

b. Dependent Variable: Ln_DPS

Source: SPSS 25 Output Results, data processed

In this study, the solution to overcome the autocorrelation problem is carried out using the Cochrane-Orcutt method which uses the estimated residual value to obtain information on the value of . The following is the output of the Durbin-Watson test after the Cochrane-Orcutt test is carried out as follows::

Table 8. Cochrane Orcutt. Autocorrelation Test

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. An error of the Estimate	Durbin-Watson
1	.267 ^a	.071	.055	1.17407	1.884

a. Predictors: (Constant), Lag_LnCR, Lag_LnNPM

b. Dependent Variable: Lag_LnDPS

Source: SPSS 25 Output Results, data processed

The results of the Cochrane-Orcutt test in table 4.14 obtained the Durbin-Watson value of 1.884. While the value of dU is 1.7332, dL is 1.6638, $4-dU$ is 2.2668 and $4-dL$ is 2.3362. Thus the value of Durbin-Watson $dU < dw < 4-dU$ ($1.7332 < 1.884 < 2.2668$) can be concluded that in this study there is no positive or negative autocorrelation.

Linearity Test

The linearity test used in this study is by using the Lagrange multiplier method, which aims to get the calculated c_2 value or $(n \times R^2)$. If $c_2 \text{ count} > c_2 \text{ table}$, then the hypothesis which states the linear model is rejected (Ghozali, 2018).

Table 9. Lagrange Multiplier Linearity Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.161 ^a	.026	.009	1.15870729
a. Predictors: (Constant), CRX2, NPMX2				
b. Dependent Variable: Unstandardized Residual				

Source: SPSS 25 Output Results, data processed

Based on the results of table 13 above, it can be seen that the value of $R^2 = 0.026$ with the number of observations $N = 117$, then the value of $c_2 \text{ count} = n \times R^2$, $c_2 \text{ count} = 117 \times 0.026$, $c_2 \text{ count} = 3.042$, $c_2 \text{ table } df = 117 - 3 = 114$ is 139.9207. From the results above that the linearity test is obtained with the calculated c_2 value smaller than the table c_2 value ($3,042 < 139,9207$), it can be concluded that this regression model is a linear model.

Hypothesis test

The Effect of Profitability on Dividend Policy

Based on the output results in Table 14 above, it can be obtained that the regression coefficient value is 0.511 and the t value of the profitability variable (NPM) on dividend policy (DPS) is 2.732 while the t table is at a level of 2.5% with $df = 117 - 2 = 115$ which is equal to 1.98063. These results show that $t \text{ count} > t \text{ table}$ ($2.732 > 1.98063$) has a sig value. t statistic is smaller than the probability value ($0.007 < 0.025$) then H_0 is rejected meaning that profitability has a significant effect on dividend policy.

Table 10. Results of Equation 1

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.670	.210		7.962	.000
	Lag_LnNPM	.511	.187	.248	2.732	.007
a. Dependent Variable: Lag_LnDPS						

Source: SPSS 25 Output Results, data processed

The results of the study are in accordance with the expectations of researchers who prove that profitability has a significant positive effect on dividend policy. This research is in line with signaling theory, according to Al-Najjar (2009) and Al-Shubiri (2011) in Rizqia et al (2013), which explains that companies that obtain high profitability will tend to distribute a larger share of profits in the form of dividends to their shareholders. Profitable companies will tend to be willing to pay a higher amount of dividends to convey their good financial performance (Raphael and Mnyavanu, 2018). This study supports research conducted by Bassam Jaara et al (2018), Hung et al (2018) and Gunawan and Tobing (2018) which proves that profitability has a significant effect on dividend policy.

Based on the results of the study, it implies that for companies that have high profitability, the availability of funds is large enough so that in the AGM the company will tend to distribute large profits in the form of dividends to shareholders as a positive signal to convey good financial performance.

The Effect of Moderating Liquidity on the Relationship Between Profitability and Dividend Policy.

Based on Table 15 above, it can be obtained that the regression coefficient value is -0.538 and the t value of the moderating variable which is the interaction between NPM*CR is -1.037 while the t table is at a level of 2.5% with $df = 117 - 2 = 115$, namely of 1.98063. These results show that $t_{count} < t_{table}$ ($-1.037 < 1.98063$) has a sig value. greater than the probability value ($0.302 > 0.025$) then H_0 is accepted, meaning that liquidity is not able to moderate the effect of profitability on dividend policy.

Table 11. Test Results of Equation 2

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.107	1.285		.861	.391
	Lag_LnNPM	1.714	1.176	.831	1.457	.148
	Lag_LnCR	.245	.568	.087	.431	.667
	moderate	-.538	.519	-.618	-1.037	.302
a. Dependent Variable: Lag_LnDPS						

Source: SPSS 25 Output Results, data processed

The results showed that liquidity was not able to moderate the effect of profitability on dividend policy. This is presumably because companies that have high profitability tend to use most of the profits earned for company expansion and other needs so that the profits distributed to shareholders as dividends are smaller (Gusni, 2017). This shows that the results of the study are not by the proposed hypothesis and are not in line with previous supporting studies, namely the research conducted by Krishnamoorthi (2016), K. H. I. Madushanka, M. Jathurika (2018), Raphael and Mnyavanu (2018) and Stevanović et al (2019), whose results show that liquidity strengthens the relationship between profitability and dividend policy. However, the results of the study are in line with research conducted by Dahiyat (2016), Saher Aqel (2016), Sahaida Laily (2017), and Serwadda (2018), the results of which show that liquidity weakens the relationship between profitability and dividend policy.

The results of the study imply that a company with high liquidation does not guarantee that the company has high profitability, because the company has not been able to realize the efficient use of its current assets to meet its current obligations, including operating expenses. too much indicates that management is not able to manage current assets properly so it has an impact on losses due to assets that are not optimally used. Companies that have high liquidation do not guarantee that the company will distribute dividends to investors, because the company's management has not succeeded in realizing operational efficiency.

CONCLUSION

Based on the results of the research and discussion that have been stated previously, the conclusion; profitability has a significant effect on dividend policy in manufacturing companies listed on the IDX for the period 2008-2017. The results indicate that companies with high profitability will tend to distribute a larger share of profits in the form of dividends to shareholders. Liquidity is not able to moderate the relationship between profitability and dividend policy. The results indicate that companies with high liquidation do not guarantee that the company will distribute dividends to investors if the company's operational improvement needs to pay operational expenses are more urgent to do. High liquidity also does not guarantee that the company's profitability will not increase if operational efficiency is not successfully realized by the company's management.

The results of the study cannot be generalized due to the limitations of the research object only in the manufacturing sub-sector. In addition, the observed variables only use one proxy each. Further research

should expand the object of research to several sub-sectors, and use several proxies for each of the variables studied.

REFERENCES

- Anagnostopoulos, P., Parganas, R., & Liasko, C. (2017). Scoring goals in multiple fields. *Sport, Business and Management: An International Journal*, 7(2), 42.
- Ariyanto, K. (2014). Analyzing the Conflict between Football Organizations in Indonesia. *Procedia - Social and Behavioral Sciences*, 115(Icics 2013), 430–435. <https://doi.org/10.1016/j.sbspro.2014.02.450>
- Barros, C. P., de Barros, C., & Santos, A. (2012). Efficiency and sponsorship in portuguese premier league football. In *Marketing and Football: An International Perspective*. Routledge, Taylor & Francis Group. <https://doi.org/10.4324/9780080492865>
- Brown, M. T. (2021). Public sector sport. In *Financial Management in the Sport Industry*. Routledge, Taylor & Francis Group. <https://doi.org/10.4324/9780429316746-17>
- Clutterbuck, R., & Doherty, A. (2019). *Organizational capacity for domestic sport for development*. 7(12), 1–19.
- Delshab, V., Pyun, D. Y., Kerwin, S., & Cegarra-Navarro, J. G. (2021). The Impact of Unlearning Context on Organizational Performance Through Knowledge Management: A Case of Community Sport Clubs in Iran. *Sport Management Review*, 24(1), 156–178. <https://doi.org/10.1016/j.smr.2020.02.001>
- Di Simone, L., & Zanardi, D. (2020). On the relationship between sport and financial performances: an empirical investigation. *Managerial Finance*, 47(6), 812–824. <https://doi.org/10.1108/MF-09-2020-0478>
- Dima, T. (2015). Social Media Usage In European Clubs Football Industry . Is Digital Reach Better Correlated With Sports Or Financial Performane ? *The Romanian Economic Journal*, 55, 117–128.
- Dimitropoulos, P. (2010). The Financial Performance of the Greek Football Clubs. *Choregia*, 6(1), 5–28. <https://doi.org/10.4127/ch.2010.0042>
- Dimitropoulos, P. E., & Tsagkanos, A. (2012). Financial performance and corporate governance in the European football industry. *International Journal of Sport Finance*, 7(4), 280–308.
- Ghio, A., Ruberti, M., & Verona, R. (2019). Financial constraints on sport organizations' cost efficiency: the impact of financial fair play on Italian soccer clubs. *Applied Economics*, 51(24), 2623–2638. <https://doi.org/10.1080/00036846.2018.1558348>
- Gillett, A. G. (2018). Shadow Hybridity and the Institutional Logic of professional sport : Perpetuating a sporting business in times of rapid social and economic change. *Journal of Management History*, 24(2), 228–259. <https://doi.org/orcid.org/0000-0003-1952-5969>
- Grundy, T. (2004). Strategy and financial management in the football industry. *Strategic Change*, 13(8), 405–422. <https://doi.org/10.1002/jsc.696>
- Hammerschmidt, J., Durst, S., Kraus, S., & Puumalainen, K. (2021). Professional football clubs and empirical evidence from the COVID-19 crisis: Time for sport entrepreneurship? *Technological Forecasting and Social Change*, 165, 120572. <https://doi.org/10.1016/j.techfore.2021.120572>
- Hoye, R., Smith, A. C. T., Nicholson, M., & Stewart, B. (2018). Sport Management. In *Critical Essays in Sport Management* (Issue January). Routledge, Taylor & Francis Group. <https://doi.org/10.4324/9781351217422-11>
- Huth, C. (2020). Who invests in financial instruments of sport clubs? An empirical analysis of actual and potential individual investors of professional European football clubs. *European Sport Management Quarterly*, 20(4), 500–519. <https://doi.org/10.1080/16184742.2019.1684539>
- Jean-Loup Chappelet, & Mrkonjic, M. (2019). Assessing sport governance principles and indicators Jean-Loup. In *Research handbook on sport governance* (pp. 10–28). Routledge, Taylor & Francis Group. <https://doi.org/10.1037/0033-2909.126.1.78>
- Kennedy, P., & Kennedy, D. (2016). Football in neo-liberal Times: a Marxist perspective on the European football industry. In *Routledge Research in Sport, Culture and Society* (Issue 58). Routledge, Taylor & Francis Group.
- Kotler, P., & Armstrong, G. (2003). *Dasar-Dasar Pemasaran*. Indeks.
- Lardo, A., Dumay, J., Trequattrini, R., & Russo, G. (2017). Social media networks as drivers for intellectual capital disclosure: Evidence from professional football clubs. *Journal of Intellectual Capital*, 18(1), 63–80. <https://doi.org/10.1108/JIC-09-2016-0093>
- Lorensius Lengmani, P., Soegiyanto, S., & Wahyudi, A. (2022). Management of Coaching Football Achievement at the Football Association of Indonesia of Alor Regency. *Journal of Physical Education and Sports*, 11(1), 9–17. <https://journal.unnes.ac.id/sju/index.php/jpes>

- McCullough, B. P., Orr, M., & Kellison, T. (2020). Sport Ecology: Conceptualizing an Emerging Subdiscipline Within Sport Management. *Journal of Sport Management Brian*, 34(6), 50–51. <https://doi.org/https://doi.org/10.1123/jsm.2019-0294>
- Najafloo, A. (2019). Sport Club Management. *Managing Leisure*, 16(2), 182–188. <https://doi.org/10.1080/13606719.2010.522839>
- Pifer, N. D., Wang, Y., Scremin, G., Pitts, B. G., & Zhang, J. J. (2019). Contemporary global football industry. In *The Global Football Industry* (Issue July). Routledge, Taylor & Francis Group. <https://doi.org/10.4324/9781351117982-1>
- Pinnuck, M., & Potter, B. (2006). Impact of on-field football success on the off-field financial performance of AFL football clubs. *Accounting and Finance*, 46(3), 499–517. <https://doi.org/10.1111/j.1467-629x.2006.00179.x>
- Pitts, B. G., Piletic, D. R. S. C. K., & Zdroik, J. (2022). Examination of Disability - Related Content Across Sport Management Textbooks. *Sport Management Education Journal*, 16(1), 2022. <https://doi.org/https://doi.org/10.1123/smej.2020-0087>
- PSSI. (2021). *Regulasi Liga 1*. PSSI. <https://www.pssi.org>
- Rossiter, J., & Percy, L. (1987). *Advertising and promotion management*. McGraw-Hill.
- Şener, İ., & Karapolatgil, A. A. (2015). Rules of the Game: Strategy in Football Industry. *Procedia - Social and Behavioral Sciences*, 207, 10–19. <https://doi.org/10.1016/j.sbspro.2015.10.143>
- Singh, R. (2022). *Sports psychology*. KK Publications.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104(March), 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Sulistiyono. (2011). Upaya Membangun Industri Sepak bola di Indonesia. *Media Ilmu Keolahragaan Indonesia*, 1(1), 7.
- Szymanski, S., & Smith, R. (1997). The English football industry: Profit, performance and industrial structure. *International Review of Applied Economics*, 11(1), 135–153. <https://doi.org/10.1080/026921797000000008>
- Walters, G., & Tacon, R. (2010). Corporate social responsibility in sport: Stakeholder management in the UK football industry. *Journal of Management and Organization*, 16(4), 566–586. <https://doi.org/10.5172/jmo.2010.16.4.566>
- Wiltshire, H. D., Supriya, R., & Baker, J. S. (2022). COVID-19 Impact on the Sport Sector Economy and Athletic Performance. *Journal of Risk and Financial Management*, 15(4). <https://doi.org/10.3390/jrfm15040173>