The Effect of Liquidity, Solvency and Profitability on Dividend in the Manufacturing Listed Firms on the Indonesian Stock Exchange

by Abid Djazuli

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Abstract

This study aims to investigate the effect of liquidity, solvency and profitability on dividend in the manufacturing listed firms on the Indonesian Stock Exchange for the period of 2010 to 2018. The variables employed in this study are liquidity, solvency, profitability and dividend per share. The Ordinary Least Square (OLS) regression is used to analyze the data. The data is collected from the Indonesian Stock Exchange (IDX) website. The results reveal that liquidity, solvency and profitability have a significant effect on Dividend Per Share of Manufacturing Companies on the Indonesia Stock Exchange. Current Ratio, Cash Ratio, Debt to Equity Ratio, Debt to Asset Ratio, Net Profit Margin, and Earning per Share have a positive and significant effect on Dividend per Share. Therefore, manufacturing companies listed on the Indonesia Stock Exchange must maintain stability, liquidity, solvency and profitability in order to increase Dividend per Share.

Keywords: liquidity, solvency, profitability, dividend, manufacturing sector, Indonesia.

1. Introduction

The Indonesian capital market, which in this case is the Indonesia Stock Exchange, plays a very important role in raising funds from investors who want to invest in the long term as well as for buying and selling activities in the form of shares. Investment activity is an activity that is faced with various kinds of risks and uncertainties that will occur, investors need various kinds of other relevant information such as economic and political conditions in a country. Information obtained from companies is usually based on the company's performance which is reflected in the financial statements. Most of the activities of a company are investment activities. In investing a number of funds, the main thing an investor expects is that there will be benefits that will be obtained in the future. For this reason, investors need to carry out an analysis to determine the basis that can be used in assessing the feasibility of a company's shares to be used as an alternative investment (Parica, 2013).

Financial ratio analysis reveals the numerical financial relationship between reporting in financial statements and uses it to rationally compare the current period to the previous period. Ratio analysis can guide investors to make decisions or considerations about what the company will achieve and what prospects will be faced in the future. Every investor or shareholder expects results from the company either in the form of dividends or in the form of shares. For the sharing of the results, it is necessary to distribute policies. According to Sutrisno (2012), one of the policies that must be taken by management is to decide whether the profits earned by the company during one period will be divided all or partially for dividends and partially not divided in the form of retained earnings.

The higher the dividends distributed to shareholders, the less the company's chances of

obtaining internal sources of funds in order to make reinvestments, so that in the long run it will decrease the value of the company, because dividend growth will decrease. Therefore, it is the duty of the financial manager to be able to determine the optimal dividend policy in order to maintain firm value (Sutrisno, 2012). Managers as company management agents are expected to be able to generate profits which can ultimately be distributed to shareholders in the form of dividends. Investors generally want dividend distribution that is relatively stable or tends to increase from time to time because dividend stability can increase confidence in the company, thereby reducing the element of uncertainty in investment. Dividend payment in cash (cash dividend) is more desirable for investors than in other forms, because it helps reduce investors' uncertainty in their investment activities into the company.

Dividend policy is a decision to determine how much dividends should be distributed to shareholders. This policy stems from how the management treats the profits obtained by the company, which is generally part of the net income after tax (Earning after Tax-EAT) distributed to investors in the form of dividends and partially reinvested in the company in the form of retained earnings. The size of the dividend paid depends on the policies of each company, so management consideration is needed. The dividend policy is a policy that involves two interested parties and both of them contradict each other, namely the interests of the shareholders with their dividends and the interests of the company with their retained earnings.

Based on agency theory, it is known that the interests of managers as company managers will be different from those of shareholders, so that it will cause agency costs. Agency problems that occur are due to the possibility of management acting not in accordance with the principal's wishes, because management wishes to increase its prosperity. In addition, management can also choose the company's capital structure, ownership structure and dividend policy that can reduce agency costs that occur in such conflicts of interest. So that often the discussion about dividends refers to the agency theory framework.

According to Rodoni and Ali (2010), the factors that influence dividend payments are liquidity, solvency and profitability. The liquidity of a company is a major consideration in many dividend policies. Because dividends for the company are cash out, the greater the cash position and liquidity of the company as a whole, the greater the company's ability to pay dividends. The company's liquidity has a huge influence on company investment and policies to meet funding needs. In general, the main purpose of financial ratios is used to assess a company's ability to meet its obligations, its measuring instruments are the current ratio and the cash ratio.

Apart from these factors, company debt also needs to be considered when investing. The use of debt in the company can reduce company profits because the company has to pay a number of costs in the form of loan interest. Where the debt to equity ratio is a part of every rupiah of its own capital which is used as collateral for the entire debt, the higher the debt to equity ratio will result in unfavorable symptoms for the company and will result in a smaller dividend distribution, so Debt to Asset Ratio is part of every rupiah of assets pledged as collateral for the entire debt.

According to Horne and Wachowicz (2012), companies that have good news regarding profitability will want to inform investors about this. Instead of making a simple announcement, dividends might be raised to further reinforce the statement. When a company has a stable dividend payment over time, and the company increases the amount of its payment, investors will believe that the management will announce a positive change in the company's profitability (Frebumi, 2011). Profitability is the main attraction for company owners (shareholders) because

profitability is the result obtained through management efforts on the funds invested by shareholders and also reflects the profit sharing that is due to them, namely how much is reinvested and how much is paid out as cash dividends. or share dividends to them (Ades Marsela, 2016). Profit margin is a ratio or number that shows what percentage of net income you earn from each sale. Dividends will be distributed if the company experiences profits. Earnings per share (earnings per share) is the total profit earned by investors for each share. The total profit is measured by the ratio of the net profit after tax (EAT) to the number of outstanding shares. The calculated net income after deducting dividends for priority / minority shareholders (preferred stock). Based on the Indonesian Capital Market Directory 2010 to 2018, the average magnitude of the independent variables Cash Ratio, Current Ratio, Debt to Equity Ratio, Net Profit Margin and Earning Per Share and the dependent variable Devidend Per Share in manufacturing companies listed on the IDX during the 2010 period up to 2018 can be seen in the following graph:
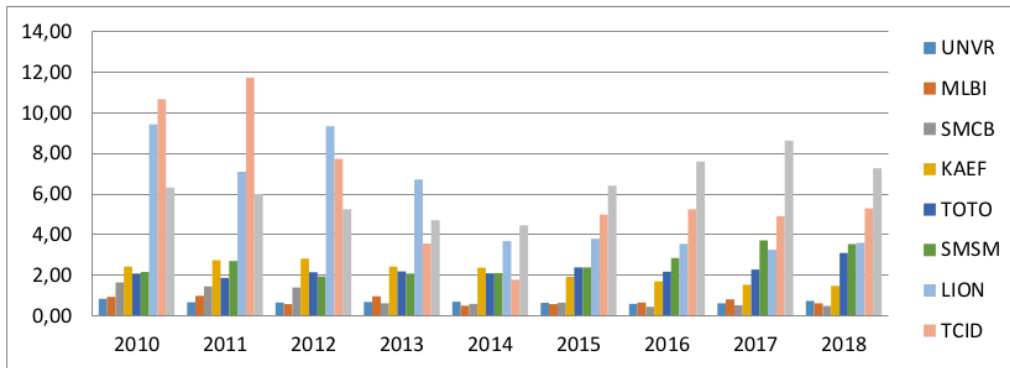

Figure 1. Current Ratio of Manufacturing Companies in the 2010 - 2018 Period

From the graph above, it can be seen that the Current ratio value every year has an up and down trend. PT Mandom Indonesia Tbk. (TCID) had the highest current ratio in 2011. However, for the last nine years PT. Delta Djakarta Tbk. (DLTA) has the highest average score. This is due to a significant decrease by PT Mandom Indonesia TBk. (TCID) in 2014. PT Unilever Indonesia Tbk. (UNVR) has the smallest average value.
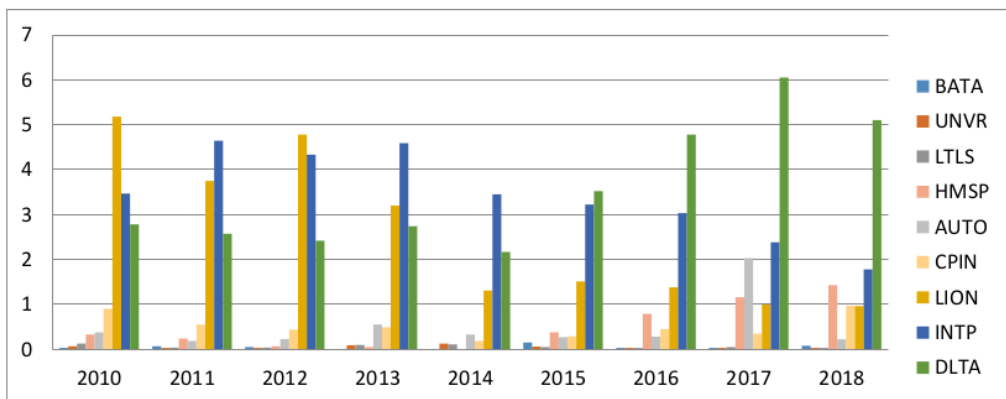

Figure 2.Cash Ratio of Manufacturing Companies in the 2010 - 2018 Period

The graph above shows the average cash ratio value per year experiencing an up and down trend. Bata Shoes Tbk. (BATA) has an average cash ratio value of at least 0.05. The quite high increase experienced by PT. Delta Djakarta. Tbk. (DLTA). This will affect the company's liquidity, which will also affect dividends paid so that the stronger the company's liquidity position is on the prospect of future funding needs, the higher the cash dividend paid.
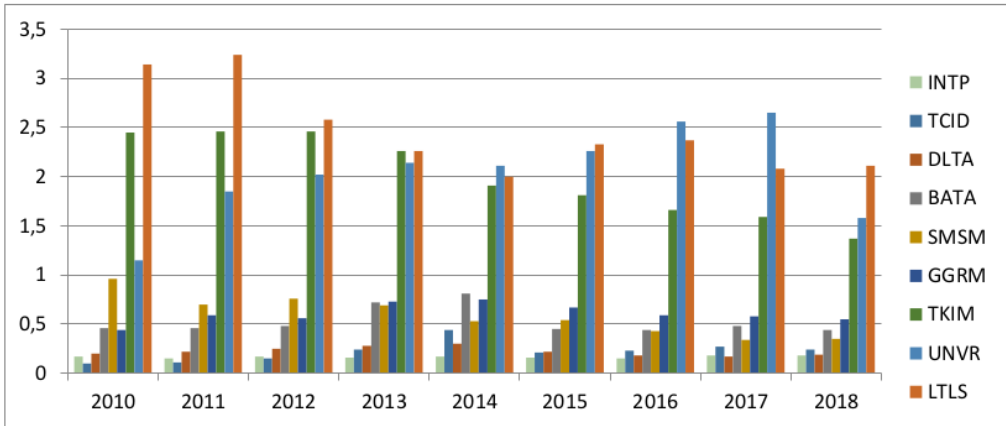

Figure 3.Debt to Equity Ratio for Manufacturing Companies in the 2010 - 2018 Period

Based on the graph above, it can be seen that the average DER value has an up and down trend. The high growth experienced by PT. Lautan Luas Tbk. (LTLS) While Indocement Tunggal Prakarsa Tbk. (INTP) has the smallest DER value. The higher the level of debt held, the greater the interest expense that must be borne. This will cause the profits to be smaller, thus affecting the lower dividends that can be paid to shareholders.
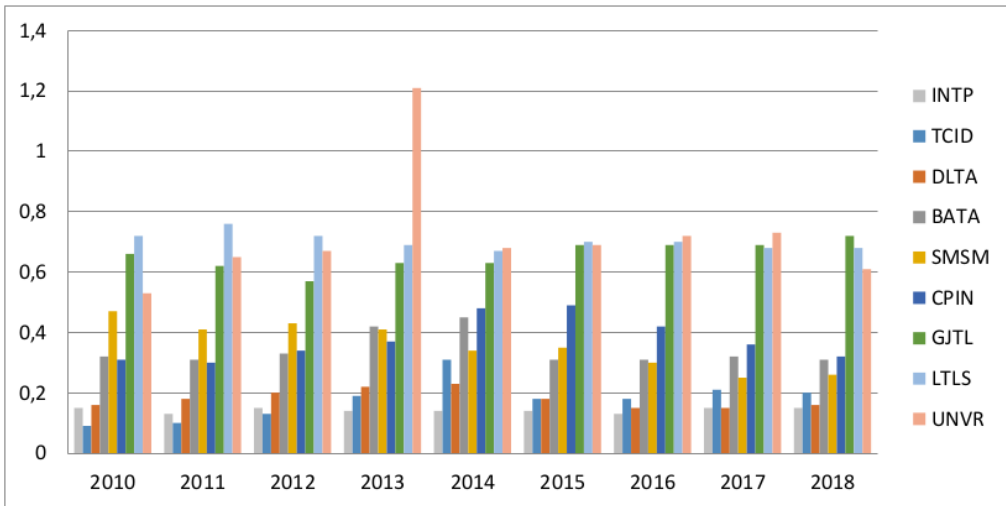

Figure 4. Debt to Asset Ratio for Manufacturing Companies in the 2010 - 2018 Period

The graph above shows that the average debt to asset ratio (DAR) value experienced an upward trend from 2010 to 2018. PT. Unilever Indonesia Tbk (UNVR) has the highest average DER

value of 0.72. Meanwhile, Indocement Tunggal Prakarsa Tbk. (INTP) has the smallest DAR value of 0.14. The higher the DAR, the higher the risk to debt. This will worsen the company's performance.
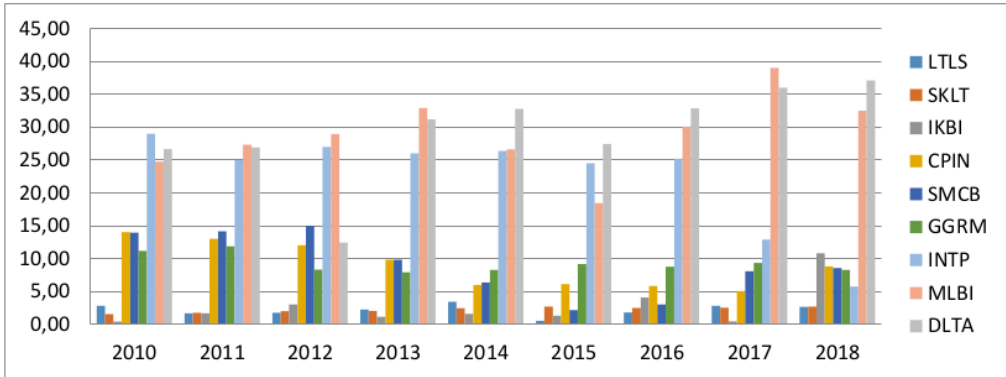

Figure 5. Net Profit Margin for Manufacturing Companies in the 2010 - 2018 Period

It can be seen that the average value of NPM has an up and down trend. Delta Jakarta Tbk. (DLTA), Multi Bintang Indonesia Tbk. (MLBI), Indocement Tunggal Prakarsa Tbk. (INTP) has a high and increasing average profit margin, while PT Lautan Luas Tbk. (LTLS) has quite a small Profit Margin.
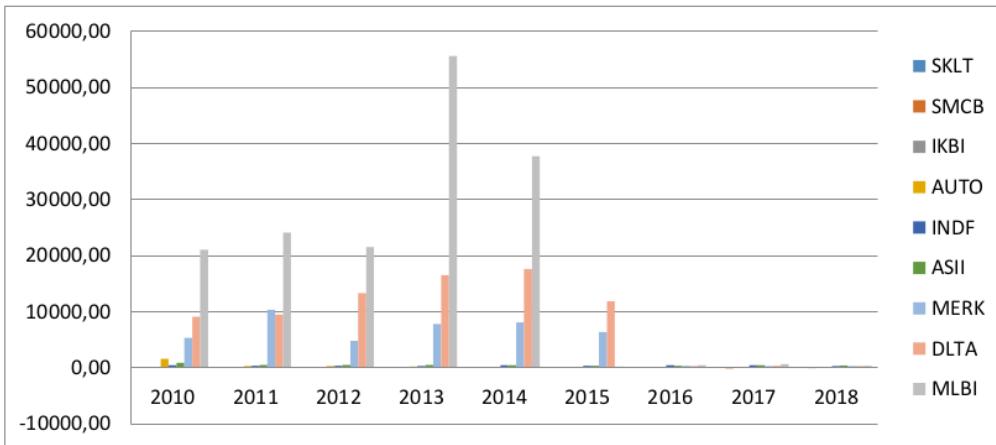

Figure 6. Earning Per Share of Manufacturing Companies for the Period of 2010 - 2018

Based on the graph above, it can be seen that the average EPS value has fluctuated, some have increased from 2010 to a very significant decrease until 2018. This is not consistent with changes in NPM which have decreased. PT Multi Bintang Indonesia Tbk. (MLBI) distributes substantial profits compared to other companies.
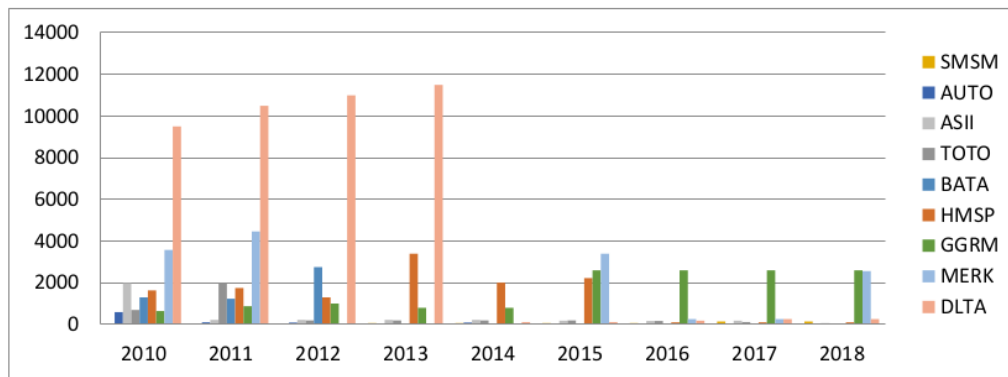
Figure 7. Dividend per share of manufacturing companies for the period 2010 - 2018

It can be seen that the average SSB experienced growth and decline from 2010 to 2018. In 2013 the DPS value decreased, this was not followed by an increase in the average value of the Cash Ratio (CR). Meanwhile, in 2012 the DPS value decreased. This change in DPS is not consistent with the change in DER value, which has decreased in the same year. PT Mandom Indonesia Tbk. has a relatively small DPS value compared to other similar companies, such as DLTA, HMSP, and MERK. This is inversely proportional to the company's liquidity. PT Mandom Indonesia Tbk had the highest CAR value, which was 11.74 in 2011. This condition was considered bad, as stated by Weaver and Weston. A current ratio that is too high indicates accumulated cash. This means that company managers do not utilize current assets properly and effectively, or in other words, the manager's creativity level is low.

2. Literature Review

2.1 Dividend Signaling Theory

The theory that can be used as a foundation in dividend policy is the signaling theory. Signaling theory was developed to take into account the fact that company insiders generally have better and faster information regarding the latest condition of the company, as well as the company's future prospects compared to outside investors. Dividend Signaling Theory was first coined by Bhattacharya in 1979. This theory underlies the assumption that changes in cash dividends contain information that results in stock price reactions.

This theory explains that information about cash dividends paid is considered by investors as a signal of the company's future prospects. This assumption is due to the occurrence of asymmetric information between managers and investors, so that investors use the dividend policy as a signal about the company's prospects. If there is an increase in dividends, it will be considered a positive signal, which means that the company has good prospects, causing a positive stock price reaction. Conversely, if there is a decrease in dividends, it will be considered a negative signal, which means that the company has not very good prospects, resulting in negative share prices (Pramastuti, 2017).

2.2 Agency theory

This theory was put forward by Michael C. Jensen and William H. Meckling (1976), agency relationships arise when one or more people (principal) employ other people (agents) to provide a service and then delegate authority in decision making to the agent. In practice, managers as

company managers certainly know more about the company's internal information and prospects in the future than capital owners or shareholders. So that as a manager, the manager has the obligation to provide information about the condition of the company to the owner.

The shareholders expect the agents to act in their best interests and thus delegate authority to the agents. To be able to perform its function properly, management must be given adequate incentives and supervision. Supervision can be carried out through means such as binding agents, checking financial statements and limiting decisions that management can take. Supervision activities, of course, require a fee called agency fee. Agency fees are costs associated with management supervision to ensure that management acts consistently in accordance with the company's contractual agreements with creditors and shareholders (Chasanah, 2018).

2.3 Dividend Policy

Mamduh (2010) states that dividends are compensation received by shareholders, in addition to capital gains. This dividend is to be distributed to shareholders as a profit from company profits. Dividends are determined based on the general meeting of shareholders and the type of payment depends on the policy of the leader. Irham (2015) states that dividend payments can be made in cash, but there are also dividend payments made in the form of giving out shares, even in the form of giving property. There are several types of dividends which are the realization of dividend payments, namely (1) cash dividends, namely dividends that are declared and paid at a certain time and the dividends come from legally obtained funds. This dividend can vary in amount depending on the company's profit, and (2) Property dividend, which is a distribution of company profits in the form of property or goods.

Liquidation dividend, namely the distribution of company assets to shareholders in the event that the company is liquidated.

2.4 Dividend per Share

Dividend is the right of common stockholders to get a share of the company's profits. If the company decides to share the profits in dividends, all shareholders can get the same rights. Dividend per Share is a measure used to show the amount of dividends when linked to shares.

Dividend per Share can be calculated using below formula:

$$DPS = \frac{Dividend}{Shares\ Outstanding}$$

2.5 Ratio and Cash Ratio

Cash ratio is a measure of the liquidity ratio, which is the company's ability to meet its current liabilities through the amount of cash (and cash equivalents, such as current accounts or other deposits in the bank that can be withdrawn at any time) owned by the company. The higher the cash ratio shows the company's cash ability to meet (pay) its short-term obligations. Cash Ratio or Cash Ratio is a tool used to measure how much cash is available to pay debts (Kasmir, 2018). The increasing cash ratio can also increase the confidence of investors to pay dividends (DPS) that are expected by investors. Mathematically the cash ratio can be formulated as follows:

$$Cash\ Ratio = \frac{Cash + Equivalent}{Current\ Liability}$$

Cash and its equivalents in the equation show the amount of cash and cash equivalents (demand deposits and other deposits which are not limited by time), which is reflected in the balance sheet (on the asset / current asset side). Meanwhile, current liability shows the number of short-term liabilities of the company which is reflected in the statement of financial position (on the side of liability / current liability). The current ratio is also a measure of the liquidity ratio (liquidity ratios) which is calculated by dividing current assets by current liabilities. The greater the current ratio, the higher the company's ability to meet its short-term obligations (including the obligation to pay outstanding DPS). Like the cash ratio, the high current ratio also shows investor confidence in the company's ability to pay the promised dividends. In other words, how many current assets are available to cover short-term obligations that are due soon, can also be said as a form of measuring the safety margin of a company (Kasmir, 2018)

Mathematically, the current ratio can be formulated as follows:

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

The two liquidity ratios show the company's ability to meet its short-term obligations. The separation of the two liquidity ratios into the cash ratio and the current ratio is intended to determine which one has more influence on dividend income per share (Dividend per share).

2.6 Debt to Equity Ratio and Debt to Asset Ratio

According to Kasmir (2018) Debt to equity ratio is a ratio used to assess debt to equity. This ratio serves to determine each rupiah of own capital that is used as collateral for debt. The formula for finding a debt to equity ratio can be used in a comparison between total debt and total equity as follows:

$$Debt\ to\ Equity\ Ratio = \frac{Total\ Liabilities}{Total\ Equity}$$

Debt to Asset Ratio is a debt ratio used to measure the ratio of total debt to total assets. In other words, how much the company's assets are financed by debt or how much the company's debt affect asset management does? The formula used to find the Debt to Asset Ratio is as follow:

$$Debt\ to\ Assets\ Ratio\ (DAR) = \frac{Total\ Liabilities}{Total\ Assets}$$

2.7 Net Profit Margin and Earning Per Share

According to Kasmir (2018) profit margin is a ratio or number that shows the percentage of net income obtained from each sale. Dividends will be distributed if the company experiences profits. Profits that deserve to be distributed to shareholders are profits after the company has fulfilled all interest and tax obligations. Therefore, dividends are taken from the net profit the company receives, so profits will of course affect the amount of dividends. Net profit margin is a measure of profit by comparing the profit after interest and taxes compared to sales. (Kasmir, 2018) This ratio is interpreted as the company's ability to reduce costs (a measure of efficiency) in the company in a certain period.

High Net Profit Margin indicates the company's ability to generate high profits at a certain sales level. Low Net Profit Margin indicates sales that are too low for a certain level of costs, or costs that are too high for a certain level of sales, or a combination of the two. In general, a low ratio can indicate management inefficiency. The formula used to find this number or ratio is to divide

the net income that the company generates by the sales the company makes in a certain period of time:

$$NPM = \frac{EAIT}{Net\ Sales}$$

Earnings per share (earnings per share) is the total profit earned by investors for each share. The total profit is measured by the ratio of the net profit after tax (earnings after tax-EAT) to the number of outstanding shares. The calculated net income after deducting dividends for priority / minority shareholders (preferred stock). Mathematically, EPS can be formulated as follows:

$$EPS = \frac{EAT}{Shares\ Outstanding}$$

Research conducted by Pasadena (2013) entitled The Effect of Liquidity, Leverage, Profitability and Company Size on Dividend Policy in Manufacturing companies listed on the Indonesia Stock Exchange. This research was conducted to determine how the effect of liquidity, leverage, profitability, company size on dividend policy. The data used is secondary data taken from financial reports and the Indonesian Capital Market Directory (ICMD) of manufacturing companies listed on the Indonesia Stock Exchange (BEI). The analysis technique used is multiple regression with the least squares equation and hypothesis testing using t-statistics to test the partial regression coefficients and f-statistics to test the significance of the effect simultaneously with a level of significance of 5%. In addition, a classic assumption test was also carried out which included normality test, multicolinearity test, heteroscedasticity test and auto correlation test. The results of his research analysis show that the variable Current Ratio, Debt To Equity Ratio, Company Size (Size) does not have a significant effect on the Dividend Pay Out Ratio (DPR), while return on investment has a positive and significant effect on the Dividend Pay Out Ratio (DPR). While simultaneously the variables of liquidity, leverage, profitability and company size have a significant effect on dividend policy. This is indicated by the value of F value greater than the significance value.

Research conducted by Marcia Julifarv Ardianto, M. Chabachib and Wisnu Mawardi (2016) with the title Effect of Institutional ownership, DER, ROA and Current Ratio on Firm Value with Dividend Policy as an Intervening Variable (study on Manufacturing companies on the IDX 2011 - 2015). This study uses multiple regression analysis to test the hypothesis. In addition, the coefficient of determination, the f statistical test and the t statistical test are used to assess the goodness of fit of the research model. Path analysis and sobel test are used to determine whether the DPR as an intervening variable has a mediating function. In this study, the company's value is proxied by Tobin's Q while dividend policy is proxied by the DPR. The results of the research conducted show that institutional ownership has a positive and significant effect on the DPR, but has a positive and insignificant effect on Tobins' Q. ROA has a positive and significant effect on Tobin's Q and DPR. Current Ratio has a negative but not significant effect on DPR, but has a significant and negative effect on Tobin's Q. DPR has a positive and significant effect on Tobin's Q. DPR as an intervening variable can mediate the effect of institutional ownership and ROA on Tobin's Q.

Research conducted by Frebumi (2012) entitled The Effect of Liquidity, Solvency, Profitability, Asset Growth, and Company Size against Dividend per Share in Manufacturing Companies on the Indonesia Stock Exchange. The data used in this research is secondary data obtained from

the Indonesian Capital Market Directory 2006, 2008 and www.idx.co.id (2009 and 2010). The analytical tool used is multiple regression analysis method and classical assumption test in the form of normality test, multicollinearity, heterocedasticity and auto correlation and is assisted by SPSS version 11.5. The results of his research show that liquidity (CR), Solvency (DER), Profitability (NPM, ROI, and EPS), Asset Growth and company size simultaneously have a significant effect on DPS and partially show that only DER and EPS variables have an significant effect to DPS. While the cash ratio, current ratio, net profit margin, ROI, asset growth and company size variables do not have a significant effect.

Research conducted by Sugiarti, Surachman and Siti Aisjah (2013) entitled The Effect of Corporate Financial Performance on Stock Returns (Study on Manufacturing Companies listed on the Indonesia Stock Exchange) aims to examine and analyze the effect of the current ratio, Debt to Equity Ratio, Return on Equity and Earning per Share on stock returns, using quantitative and regression analysis methods. The population of this research is manufacturing companies listed on the Indonesia Stock Exchange that pay dividends continuously for the period 2009-2012. The population number of 28 companies observed over a period of 3 years found observations of 84 companies. The results showed that the Debt to Equity Ratio variable did not have a significant negative effect on stock returns and the Return on Equity variable did not have a significant effect on stock returns and the Earning per Share variable did not have a significant negative effect on stock returns.

Okky Safitri, Sinarwati, Anantawikrama (2012) with a study entitled Analysis of the Effect of Profitability, Liquidity, and Leverage on Stock Returns in Manufacturing Companies Listed on the IDX 2009-2013. The results showed that, (1) profitability has a positive and significant effect on stock returns, (2) liquidity has a positive and significant effect on stock returns, (3) Leverage has a positive and significant effect on stock returns, (4) profitability, liquidity, and leverage have a positive and significant effect on stock returns.

Based on Puspita's research (2010), the cash ratio variable can be used as an indicator for investors in investing because if the cash ratio increases, the dividend payout ratio distributed will also increase. The positive sign in this cash ratio variable shows that an increase in the amount of cash from the company will also increase dividend payments by the company, so that the more liquid a company is, the greater the dividend payment from the company. The amount of cash the company receives has fulfilled its short-term obligations, so that the company can pay dividends each period it increases. This means that the dividends per share distributed will also increase. The results showed that the availability of cash showed the level of dividends distributed. The cash ratio (CR) position is an important variable considered by management in dividend policy. Cash ratio is a measure commonly used to measure liquidity, so the cash ratio is also thought to have an effect on dividend income. The higher the cash ratio of shareholders, the easier it will be to obtain cash funds.

Previous research did not implicitly include the current ratio variable as a variable that affects dividends. Because the current ratio is part of the liquidity ratio, previous research emphasizes the effect of liquidity on dividends. A high current ratio indicates an excess of current assets (high liquidity and low risk), but has an adverse effect on company profitability (Hanafi, 2014). The amount of the calculation of the current ratio shows the amount of current assets that can guarantee current liabilities. The greater the current ratio, the higher the company's liquidity. This ratio shows the extent to which current assets can cover current liabilities. The greater the current ratio, the higher the company's ability to meet its short-term obligations (including

paying dividends). The high current ratio also shows investor confidence in the company's ability to pay the promised dividends.

3. Research Method

The secondary data needed in this study from 2010 - 2018 were sourced from www.idx.co.id in 2019. The research variables were liquidity, solvency, profitability and dividend per share. Liquidity indicators are Current Ratio and Cash Ratio. Solvency indicators are Total Debt to Total Equity Ratio and Total Debt Ratio. Profitability indicators are the profit margin ratio and Earning per Share. The dividend indicator is the dividend per share. Manufacturing is a branch of industry that applies equipment and a process medium to transform raw materials into finished goods for sale. This effort involves all the intermediate processes required for the production and integration of the components of a product. Some industries, such as semiconductor and steel manufacturers, also use the term fabrication or fabrication. The manufacturing sector is closely related to engineering or engineering (http://id.wikipedia.org/wiki/Manufacturing).

The population in this study is the secondary sector (management / manufacturing sector) on the Indonesia Stock Exchange. www.idx.co.id (2019) shows that the number of manufacturing companies registered in the 2010-2018 period is 168 issuers which are divided into 3 industry categories, namely the basic industry and chemicals sector, the Miscellaneous Industry sector (miscellaneous industry) and the consumer goods industry sector. The sampling technique used was purposive sampling (Fauzi, Dencik & Asiati, 2019) based on the following criteria: (1) company shares that were always registered in the 2010-2018 period; and (2) Companies that always distribute dividends in the 2010-2018 period. Based on these criteria, 30 companies were obtained as research samples.

To determine the multiple regression equation, namely through the formula:

$$Yt = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + e$$

Yt   = *Dividend Per Share* (DPS)

a   = constant

b1.......b6 = coefficient

X1   = *Current Ratio* (CAR)

X2   = *Cash Ratio* (CR)

X3   = *Debt to Asset Ratio* (DAR)

X4   = *Debt to Equity Ratio* (DER)

X5   = *Net Profit Margin* (NPM)

X6   = *Earning Per Share* (EPS)

e   = error of term

4. Findings and Discussions

4.1 Redundant Test

To see a good research model in panel data regression, a redundant test is needed, here is a table of statistical test results:

Table 1. Redundant Test

Redundant Fixed Effects Tests
Equation: FIXED
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.265182	(29,233)	0.0000
Cross-section Chi-square	114.548112	29	0.0000

Based on Table 1, the redundant test is a statistical test to choose whether the model used is fixed or common effect, following the decision-making criteria (1) If the chi square count> the chi square table and the prob value. <0.05, better model is the fixed effect, (2) If chi square count <chi square table and prob value. > 0.05, then the better model is the common effect. Chi table is 42.55697, while the calculated chi value is 114.548112, the calculated chi value is greater than the chi table, meaning that the model used is the fixed effect

The classical assumption test of panel-shaped data uses autocorrelation test, heteroscedasticity and multicollinearity tests. Autocorrelation test (Durbin Watson test) is one of the tests used to check the presence or absence of autocorrelation between independent variables. Almost all statistical programs provide facilities for calculating d values. The value of d ranges from 0 to 4, with the determination if the value of d: (1) lies between 0 - 1.76292; it means that Ho rejects (there is positive autocorrelation); (2) Located between 1.76292 - 1.83831; then it means that it cannot be decided; (3) Located between 1,83831 - 2,23708; it means that Ho is accepted (no autocorrelation); (4) Located between 2.23708 - 2.16169; it means that it cannot be decided; (5) Located between 2.16169 - 4.00; it means that Ho is rejected (there is negative autocorrelation). The autocorrelation test in this study uses the Durbin Watson test, here is a table of statistical test results:

Table 2. Autocorrelation test with Durbin-Watson

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.409846	Mean dependent var	320.1384
Adjusted R-squared	0.321196	S.D. dependent var	758.8636
S.E. of regression	625.2244	Akaike info criterion	15.83808
Sum squared resid	91080990	Schwarz criterion	16.31916
Log likelihood	-2094.222	Hannan-Quinn criter.	16.03128
F-statistic	4.623202	Durbin-Watson stat	2.033326
Prob(F-statistic)	0.000000		

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Based on Table 2, it is known that the Durbin Watson value is 2.033326; means that it is still in the range 1.83831 - 2.23708, so it can be concluded that the data used in this study does not contain autocorrelation, and is feasible to be analyzed by multiple linear regression.

The heteroscedasticity test in this study uses the Glejser test, the following is the table of statistical test results:

Table 3. Heteroscedasticity Test with the Glejser Method

Dependent Variable: RESABS
Method: Panel Least Squares
Date: 07/04/19   Time: 21:13
Sample: 2010 2018
Periods included: 9
Cross-sections included: 30
Total panel (unbalanced) observations: 269

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-25.10863	227.2981	-0.110466	0.9121
CURRENT	-58.07120	81.66122	-0.711123	0.4777
CR	35.39774	44.54281	0.794690	0.4276
DAR	-315.8370	507.4950	-0.622345	0.5343
DER	278.7389	145.1433	1.920439	0.0560
NPM	16.15440	7.592858	2.127578	0.0344
EPS	0.042351	0.007799	5.430059	0.0000

Based on table 3, the output display shows the probability value of all variables above 0.05, except for the NPM variable and the EPS variable, the probability value is below 0.05, it can be concluded that the variable Current Ratio (CAR) (X1), Cash Ratio (CR) (X2), Debt to Asset Ratio (DAR) (X3), Debt to Equity Ratio (DER) (X4) are not heteroscedasticity in the model, while the Net Profit Margin (NPM) (X5) and Earning Per Share (EPS) variables (X6) there is heteroscedasticity in the model.

A good regression model should not have a correlation between independent variables (multicollinearity does not occur).

Table 4. Multicollinearity Test with Correlation

	CURRENT	CR	DAR	DER	NPM	EPS
CURRENT	1.000000	0.818681	-0.620282	-0.490370	0.471560	0.055879
CR	0.818681	1.000000	-0.749135	-0.618889	0.298138	-0.006682
DAR	-0.620282	-0.749135	1.000000	0.908319	-0.230264	0.032213
DER	-0.490370	-0.618889	0.908319	1.000000	-0.201418	0.064580
NPM	0.471560	0.298138	-0.230264	-0.201418	1.000000	0.433842
EPS	0.055879	-0.006682	0.032213	0.064580	0.433842	1.000000

Based on Table 4, it is known that the correlation value of all independent variables <0.800, there is no classic multicollinearity assumption error, while the correlation between the Current Ratio (X1) variable to the Cash Ratio (X2) and the DAR (X3) to DER (X4) variable is a classic multicollinearity assumption error.

Table 5. Value of t test

Dependent Variable: DPS
Method: Panel Least Squares
Date: 07/04/19   Time: 20:09
Sample: 2010 2018
Periods included: 9
Cross-sections included: 30
Total panel (unbalanced) observations: 269

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-157.2143	302.3614	-0.519955	0.6036
CURRENT	47.18766	108.6292	0.434392	0.6644
CR	14.22866	59.25271	0.240135	0.8104
DAR	-302.5679	675.0910	-0.448188	0.6544
DER	421.1131	193.0757	2.181078	0.0302
NPM	14.02434	10.10034	1.388502	0.1663
EPS	0.015569	0.010375	1.500604	0.1348
R-squared	0.409846	Mean dependent var		320.1384
Adjusted R-squared	0.321196	S.D. dependent var		758.8636
S.E. of regression	625.2244	Akaike info criterion		15.83808
Sum squared resid	91080990	Schwarz criterion		16.31916
Log likelihood	-2094.222	Hannan-Quinn criter.		16.03128
F-statistic	4.623202	Durbin-Watson stat		2.033326
Prob(F-statistic)	0.000000			

Based on Table 5 above, it can be seen that the t value of the effect of Current Ratio (X1) on Dividend Per Share (Y) is 0.434392 and the significance value (probability) is 0.6644, meaning the t-count value (0.434392 < t table 1.9689) and a significance value t (0.6644) > α (0.05), so that Ho is accepted and Ha is rejected, meaning that Current Ratio has no significant effect on Dividend Per Share in manufacturing companies on the Indonesia Stock Exchange (BEI) . The regression coefficient of the Current Ratio (X1) variable is 47.18766 and has a positive slope, meaning that when the Current Ratio increases in manufacturing companies, the Dividend Per Share of manufacturing companies increases.

The t value of the influence of Cash Ratio (X2) on Dividend Per Share (Y) is 0.240135; then t value (0.240135 < t table (1.9689) and a significant value (Sig. t) of 0.240135, meaning Sig-t (0.240135) > α (0.05), so that Ho is accepted and Ha is rejected, it means that Cash Ratio has no significant effect on Dividend Per Share in manufacturing companies on the Indonesia Stock Exchange (IDX). The regression coefficient of the Cash Ratio (X2) variable is 14.22866 and has a positive slope, meaning that when there is an increase in the Cash Ratio of the manufacturing company it causes the manufacturing company's Dividend per Share to increase.

The t value of the effect of Debt to Asset Ratio (X3) on Dividend Per Share (Y) is -0.448188; then t value (-0.448188) < t table (1.9689) and a significant value (Sig-t) of -0.448188, meaning Sig-t (0.6544) > α (0.05), so that Ho is accepted and Ha is rejected, meaning that the Debt to Asset Ratio has no significant effect on Dividend Per Share in manufacturing companies on the Indonesia Stock Exchange (IDX). The regression coefficient of the Debt to Asset Ratio (X3) variable is -302.5679 and has a negative slope, meaning that when there is an increase in the Debt to Asset Ratio of manufacturing companies, the Dividend Per Share of manufacturing

companies decreases.

The t value calculated for the effect of Debt to Equity Ratio (X4) on Dividend Per Share (Y) is 2.181078; then t value (2.181078) > t table (1.9689) and a significant value (Sig. t) of 0.0302, meaning Sig-t (0.0302) < α (0.05), so that Ha is accepted and Ho is rejected. This means that the Debt to Equity Ratio has a significant effect on Dividend Per Share in manufacturing companies on the Indonesia Stock Exchange (IDX). The regression coefficient of the Debt to Equity Ratio (X4) variable is 421,1131 and has a positive slope, meaning that when there is an increase in the Debt to Equity Ratio of manufacturing companies it causes the Dividend Per Share of manufacturing companies to increase.

The t value calculated for the effect of Net Profit Margin (X5) on Dividend Per Share (Y), is 1.388502; then t value (1.388502) < t table (1.9689) and a significant value (Sig-t) of 0.1663, meaning Sig-t (0.1663) > α (0.05), so that Ho is accepted and Ha is rejected , meaning that the Net Profit Margin does not have a significant effect on Dividend Per Share in manufacturing companies on the Indonesia Stock Exchange (IDX). The regression coefficient of the Net Profit Margin variable (X5) is 14.02434 and has a positive slope, meaning that when there is an increase in the Net Profit Margin of the manufacturing company, the Dividend per Share of the manufacturing company increases.

The t value of the effect of Earning Per Share (X6) on Dividend Per Share (Y) is 1.500604; then t value (1.500604) < t table (1.9689) and a significant value (Sig-t) of 0.1348, meaning Sig-t (0.1348) > α (0.05), so that Ho is accepted and Ha is rejected, meaning that Earning Per Share does not have a significant effect on Dividend Per Share in manufacturing companies on the Indonesia Stock Exchange (IDX). The regression coefficient for the variable earning per Share (X6) is 0.015569 and has a positive slope, meaning that when there is an increase in Earning per Share, manufacturing companies cause Dividend Per Share to decrease in manufacturing companies.

It can be concluded that based on the t test, Current Ratio (X1) has no significant effect on Dividend Per Share in manufacturing companies the Indonesia Stock Exchange (IDX). Cash Ratio (X2) has no significant effect on Dividend per Share in manufacturing companies on the Indonesia Stock Exchange (BEI). Debt to Asset Ratio (X3) has no significant effect on Dividend per Share in manufacturing companies on the Indonesia Stock Exchange (IDX). Debt to Equity Ratio (X4) has a significant effect on Dividend per Share in manufacturing companies on the Indonesia Stock Exchange (BEI). Net Profit Margin (X5) does not have a significant effect on Dividend per Share in manufacturing companies on the Indonesia Stock Exchange (BEI). Earnings per Share (X6) has no significant effect on Dividend per Share in manufacturing companies on the Indonesia Stock Exchange. (IDX). Research conducted by Pasadena (2013) entitled The Effect of Liquidity, Leverage, Profitability and Company Size on Dividend Policy in Manufacturing companies listed on the Indonesia Stock Exchange. The results of his research analysis indicate that the variable Current Ratio, Debt to Equity Ratio, Company Size (Size) partially does not have a significant effect on the dividend payout ratio (DPR). Meanwhile, return on investment partially has a positive and significant effect on the Devidend Payout Ratio (DPR). Research conducted by Marcia Julifarv Ardianto, M. Chabachib and Wisnu Mawardi (2016) with the title Effect of Institutional ownership, DER, ROA and Current Ratio on Firm Value with Dividend Policy as an Intervening Variable (study on Manufacturing companies on the IDX 2012 - 2015). This study uses multiple regression analysis to test the hypothesis. In addition, the coefficient of determination, the f statistical test and the t statistical test are used

to assess the goodness of fit of the research model. Path analysis and sobel test are used to determine whether the DPR as an intervening variable has a mediating function. In this study, the company's value is proxied by Tobin's Q while dividend policy is proxied by the DPR.

Research conducted by Frebumi (2012) entitled The Effect of Liquidity, Solvency, Profitability, Asset Growth, and Company Size against Dividend per Share in Manufacturing Companies on the Indonesia Stock Exchange. The results of his research show that liquidity (CR), Solvency (DER), Profitability (NPM, ROI, and EPS), Asset Growth and company size simultaneously have a significant effect on DPS and partially show that only DER and EPS variables have an significant effect to DPS. While the cash ratio, current ratio, net profit margin, ROI, asset growth and company size variables do not have a significant effect. Research conducted by Sugiarti, Surachman and Siti Aisjah (2013) entitled The Effect of Corporate Financial Performance on Stock Returns (Studies on Manufacturing Companies listed on the Indonesia Stock Exchange). The results showed that the Debt to Equity Ratio variable did not have a significant negative effect on stock returns and the Return Equity variable did not have a significant effect on stock returns and the Earning per Share variable did not have a significant negative effect on stock returns. Okky Safitri, Sinarwati, Anantawikrama (2012) with a study entitled Analysis of the Effect of Profitability, Liquidity, and Leverage on Stock Returns in Manufacturing Companies Listed on the IDX 2009-2013. The results showed that, (1) profitability has a positive and significant effect on stock returns, (2) liquidity has a positive and significant effect on stock returns, (3) Leverage has a positive and significant effect on stock returns, (4) profitability, liquidity, and leverage partially positive and significant effect on stock returns.

Then, based on the results of F count, the F-count is 4,623202> F-table of 2,1331 so that Ho is rejected and Ha is accepted. Thus, the regression model is feasible and correct. The conclusion is that Current Ratio, Cash Ratio, Debt to Equity Ratio, Debt To Asset Ratio, Net Profit Margin, Earning per Share collectively, positively and significantly affect Dividend Per Share (Y) in manufacturing companies on the Indonesia Stock Exchange (BEI). This research is in line with research conducted by Pasadena (2013) entitled The Effect of Liquidity, Leverage, Profitability and Company Size on Dividend Policy in manufacturing companies listed on the Indonesia Stock Exchange. The results of his research analysis show that jointly the variables of liquidity, leverage, profitability and company size have a significant effect on dividend policy. For example, research conducted by Frebumi (2012) entitled The Effect of Liquidity, Solvency, Profitability, Asset Growth, and Company Size against Dividend per Share in Manufacturing Companies on the Indonesia Stock Exchange. The results of his research show that liquidity (CR), Solvency (DER), Profitability (NPM, ROI, and EPS), Asset Growth and firm size simultaneously have a significant influence DPS. Okky Safitri, Sinarwati, Anantawikrama (2012) with a study entitled Analysis of the Effect of Profitability, Liquidity, and Leverage on Stock Returns in Manufacturing Companies Listed on the IDX 2009-2013. The results showed that, (1) profitability has a positive and significant effect on stock returns, (2) liquidity has a positive and significant effect on stock returns, (3) Leverage has a positive and significant effect on stock returns, (4) profitability, liquidity, and leverage have a positive and significant effect on stock returns.

5. Conclusion

Liquidity, solvency and profitability have a significant effect on Dividend Per Share of Manufacturing Companies on the Indonesia Stock Exchange. Current Ratio, Cash Ratio, Debt

to Equity Ratio, Debt To Asset Ratio, Net Profit Margin, Earning per Share collectively, positively and significantly affect Dividend Per Share (Y) in manufacturing companies on the Indonesia Stock Exchange (IDX). Therefore, manufacturing companies listed on the Indonesia Stock Exchange must maintain stability, liquidity, solvency and profitability in order to increase Dividend per Share. Then, the shareholders of Manufacturing Companies Listed on the Indonesian Stock Exchange do not immediately withdraw their shares when the share price drops, because it is expected that it will not take too long, and will be stable and return to increased liquidity, solvency and profitability. Dividend per Share and share prices rose again.

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