Working Capital Management on Dividend with Profitability as a Mediation Variable

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Abstract:
Working capital management is the management of a number of assets in the company's daily activities whose aim is to earn profit, therefore its management is very important in the company in order to provide the maximum rate of return in the form of dividends to investors. The purpose of this study is to analyze the effect of working capital management on dividends, to analyze the effect of working capital management on profitability, and to analyze the effect of working capital management on dividends through profitability. This study uses manufacturing companies listed on the Indonesia Stock Exchange for the 2015-2020 period as many as 55 companies so that the number of observation data is 110 data. The type of data in this research is quantitative research using purposive sampling technique and the instrument used in this research is financial statements. The results show that working capital management has a positive effect on dividend policy, working capital management as proxied by cash turnover cycles has a negative effect on profitability, but receivables turnover and inventory turnover cycles have a positive effect on profitability. In an indirect relationship, it was found that the cash turnover cycle had a negative effect on dividends through profitability, but the receivable turnover cycle and inventory turnover cycle had a positive effect on dividends through profitability. Therefore, the conclusion in this study is that working capital management has a positive effect on dividend policy and profitability, but indirectly working capital management which is proxied by the cash turnover cycle has a negative effect on dividend policy through profitability.

Keywords: Cash Turnover Cycle, Receivable Turnover Cycle, Inventory Turnover, Profitability, Dividend

Abstrak:
Pengelolaan modal kerja adalah pengelolaan sejumlah aset dalam aktivitas sehari-hari perusahaan yang tujuannya adalah untuk mendapatkan profit oleh karena itu pengelolaannya sangat penting dalam perusahaan agar memberikan tingkat pengembalian yang maksimum dalam bentuk dividen kepada investor. Tujuan penelitian ini adalah untuk menganalisis pengaruh pengelolaan modal kerja terhadap deviden, menganalisis pengaruh pengelolaan modal kerja terhadap profitabilitas, dan menganalisis pengaruh pengelolaan modal kerja terhadap deviden melalui profitabilitas. Penelitian ini menggunakan perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2017-2019 sebanyak 55 perusahaan sehingga jumlah data observasi sebanyak 110 data. Jenis data dalam penelitian ini adalah penelitian kuantitatif dengan teknik purposive sampling dan instrumen yang digunakan adalah laporan keuangan. Hasil penelitian menunjukkan bahwa manajemen modal kerja yang diproksikan dengan siklus perputaran kas berpengaruh negatif terhadap profitabilitas, tetapi siklus perputaran piutang dan perputaran persediaan berpengaruh positif terhadap profitabilitas. Dalam hubungan tidak langsung, ditemukan bahwa siklus perputaran kas berpengaruh negatif terhadap dividen melalui profitabilitas, tetapi siklus perputaran piutang dan siklus perputaran
persediaan berpengaruh positif terhadap dividen melalui profitabilitas. Oleh karena itu kesimpulan dalam penelitian ini adalah manajemen modal kerja berpengaruh positif terhadap kebijakan dividend dan profitabilitas akan tetapi secara tdk langsung manajemen modal kerja yang diproksi oleh siklus perputaran kas berpengaruh negative terhadap kebijakan dividend melalui profitabilitas.

Kata Kunci: Siklus Perputaran Kas, Siklus Perputaran Piutang, Siklus Perputaran Persediaan, Profitability, Dividen.

1. Introduction

Dividend policy is a policy carried out by management (agent) to determine how much dividends should be distributed to shareholders. This policy is determined based on the management's decision on the profits obtained by the company in one period. In general, some of the profit for the year (profit after tax) can be divided as dividends or capital gains to investors, and the rest is reinvested for the company's business continuity (Sartono, 2010). Dividends are the profits that investors get when they invest their funds by buying shares in a company. Meanwhile, capital gain is the investor's profit from the difference between the stock price when purchased and the stock price when sold.

Cash dividend payments are more desirable by investors than stocks, because it helps reduce investor uncertainty in their investment activities to the company. Companies that earn large profits will provide large dividends to shareholders because shareholders really hope that the funds invested will generate greater returns. Therefore, profitability is a determinant of how much dividends should be distributed to shareholders and how much should be retained for the next investment. Another reason is that dividend policy is related to firm value. Companies that pay dividends to shareholders, the value of the company will increase because with increasing dividend payments, the prosperity of shareholders will also increase.

In determining a company's dividend payment decision, many variables and indicators are used as benchmarks in influencing dividend payment decisions such as profitability, liquidity, company size and so on but the working capital management management factor which is the determinant of the decision on the amount of dividends is often ignored. Working capital management is the skill to manage its assets, both cash, receivables and inventories efficiently in order to generate profits as expected by the company so that it can provide the maximum rate of return in the form of dividends to its shareholders (Makori & Jagongo, 2013). In order for the implementation of working capital management to be optimal, it is necessary to supervise all elements so as to ensure the level of accuracy of liquidity which will affect its value (Raheman & Nasr, 2007). Its management must be handled by professional personnel because it requires expertise and perseverance, many large companies with large amounts of working capital cannot continue their operations due to errors in management (Afrifa, 2013).

Working Capital is related to the company's short-term financing which is a current asset and a current liability, therefore it is a measure of its liquidity. The goal of effective working capital management is to ensure that we have and are ready for the necessary funds for day-to-day operating expenses, while at the same time ensuring that the company's assets are invested in the most productive manner. Efficiency of working capital management is carried out through accurate planning and control in order to be able to complete urgent obligations and avoid excessive use of capital on these assets (Eljelly, 2004).

Manufacturing companies are one type of company whose shares are very popular with investors so that many manufacturing companies have current assets that exceed fixed assets (Raheman & Nasr, 2007). Various variables related to working capital management that affect the profitability of manufacturing companies have been widely carried out by several researchers, but from these studies there are still various controversies various controversies
where the results are influential and some have not effect research that connects working capital management with dividend distribution, especially cash dividends by using profitability as a mediating variable. Based on this, the researcher is interested in taking this problem as the title of the research with working capital variables being proxied by cash turnover, receivables turnover and inventory turnover, while profitability is proxied by net income and dividend policy is proxied by cash dividends. This research is expected to contribute to policy makers, especially those working in manufacturing companies.

Based on the description that has been put forward, the problems in this study are Does working Capital management affect on dividends?, Does working Capital management affect on profitability?, Does Profitability effect on dividends? and Does working Capital management affect on dividends through profitability? Based on the problems previously disclosed, the purpose of this study is to analyze the effect of working capital management on dividends, analyze the effect of working capital management on profitability, analyze the effect profitability on dividends and analyze the effect of working capital management on dividends through profitability.

2. Literature Review
2.1. Dividend Policy
The theory of dividend policy was first proposed by Modigliani & Miller in 1961. The theory shows that dividend policy has no impact on firm value because firm value is determined by the earning power of the firm's assets. If the company distributes dividends to shareholders, the company will issue new shares to replace the dividend payments so that the increase in income due to dividend payments will be offset by a decrease in share prices as a result of the sale of new company shares. Therefore, whether the profits earned will be distributed as dividends or will be retained in the form of retained earnings will not affect the prosperity of the company (Sartono, 2010). In contrast to the MM theory, the bird-in-hand dividend policy theory proposed by Myron Gordon and John Lintner in 1956 suggests that there is a relationship between firm value and dividend payments. Gordon-Lintner assumes that investors view one bird in hand as more valuable than a thousand birds in the air.

The results of research conducted by Yakubu, (2020) found that working capital management is proxied by cash conversion cycle (CCC) and days inventory outstanding (DIO) positively related to dividend policy but only DIO has a significant effect on dividend policy. Meanwhile, the control variables (profitability and company growth) also have a positive but not significant effect on dividend policy, so it can be concluded that working capital management as proxied by days inventory outstanding (DIO) is an important factor influencing the company's dividend policy decisions. In contrast to Yakubu, (2020) research, the results of Alsulayhim, (2019) and Gacheri, (2020) research found that there was no relationship between working capital management and payout ratios, dividends from companies registered in Kenya.

2.2. Working Capital Management
Working capital management is the management of a number of assets in the daily activities of the company whose purpose is to make a profit. The success or failure of the company depends on its ability to manage working capital, so how much profit is obtained depends on the management of working capital or what is commonly called working capital management. The company will make various short-term investments because these investments will generate a rate of return to increase the company's cash inflow. The faster and more precise the working capital turnover cycle it will increase the level of profitability received and vice versa if the turnover cycle slows down the lower the profit level (Alsulayhim, 2019; Hossain, 2020).
According to Houston & Brigham (2006), working capital is a company's investment in short-term assets such as cash, securities, trade receivables and inventories whose management is carried out continuously in company activities to produce goods and services within an accounting period. The management referred to here is the management of cash, receivables management and inventory management to generate benefits and profits. In essence, the need for capital is intended so that the company has sufficient funds in managing investment in current assets which are then immediately sold to customers to return the cash issued (cash turnover cycle, accounts receivable turnover cycle, and inventory turnover cycle).

In working capital, cash is a type of asset with the highest level of liquidity, where the rotation period begins when cash is invested in the working capital component until cash comes back into the company. In this case, the faster the working capital rotates, the more profitable the company will be because the incoming cash can be reinvested in various assets. According to Riyanto, (2001) the higher the cash turnover is better, because the higher the efficiency of cash use, the greater the profits.

The accounts receivable turnover cycle for companies is very important to know because the higher the receivables turnover, the more receivables that can be billed by the company, so that it will minimize the existence of uncollected receivables and facilitate cash flow, therefore the company's profitability is increasing. In addition, with the Receivable Turnover, it will be known how the performance of the marketing department is in finding customers who have the potential to buy but also have the potential to pay their receivables.

The inventory turnover cycle is one of the important factors in the working capital element because it is this inventory that ensures the continuity of the company. Managers must be able to control inventory levels so that company activities are not hampered and consumer needs are still properly met. Inventory is an element of working capital that is always rotating so that the amount will change in each period for that the existing inventory in the company must remain optimal. If the inventory is too small, it is possible that the turnover rate is low and cannot meet customer demand which results in customers being dissatisfied and will switch to another place. On the other hand, if the inventory is too large, it is likely that the inventory will be damaged.

2.3. Conceptual Framework

The following is a picture of the conceptual framework used to analyze the effect of working capital management on the dividend policy of companies listed on the Indonesia Stock Exchange (IDX):
2.4. Hypothesis

H1: CTC, RTC and ITC have a positive effect on dividends.
H2: CTC, RTC and ITC have a positive effect on Profitability.
H3: Profitability have a positive effect on Dividends.
H4: CTC, RTC and ITC have a positive effect on dividends without profitability.

3. Methods

This research was conducted on manufacturing companies listed on the Indonesia Stock Exchange for the period 2017-2019 and the object of the research is the financial statements of manufacturing companies which consist of income statements, balance sheet and dividend reports. Sampling was done by using a purposive sampling technique where the sample used was selected based on the criteria determined by the researcher. The sample criteria in this study are manufacturing companies listed on the Indonesia Stock Exchange, companies that have published their financial statements for the last 3 consecutive years, companies that always pay cash dividends, and companies that earn consecutive profits. The companies that were sampled in this study were:

<table>
<thead>
<tr>
<th>No</th>
<th>Company Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Consumer Goods Industry</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Basic and Chemical Industry</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Various Industries</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
</tr>
</tbody>
</table>

Source: https://www.invesnesia.com/perusahaan-manufaktur-di-bei

Based on the table above, the number of samples in this study were 56 samples of manufacturing companies so the total number of research data is 110 (2 x 55). The model used in this study is adapted to the conceptual framework so that to test the effect of the independent variable on the dependent variable, SEM-PLS is used. Here is the research equation model:

\[
Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4Z + \varepsilon \\
Z = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon
\] (1) (2)

4. Results and Discussion

4.1. Deskriptive Statistics

The first step that must be done before testing the hypothesis is to analyze the description of variables through the results of descriptive statistical tests of research by looking at the minimum, maximum, mean and standard deviation values as shown in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTC</td>
<td>1.73</td>
<td>525.04</td>
<td>28.2810</td>
<td>56.17830</td>
</tr>
<tr>
<td>RTC</td>
<td>36</td>
<td>61.37</td>
<td>8.917</td>
<td>8.59667</td>
</tr>
<tr>
<td>ITC</td>
<td>2.22</td>
<td>47.95</td>
<td>7.2451</td>
<td>6.60692</td>
</tr>
<tr>
<td>Profitability</td>
<td>925.00</td>
<td>2737200.00</td>
<td>1801273.5364</td>
<td>4344406.90941</td>
</tr>
<tr>
<td>Dividend</td>
<td>475.00</td>
<td>13632478.00</td>
<td>896255.5000</td>
<td>2359761.68483</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processing results
Table 2 shows that the average value and the highest maximum value for exogenous variables are in the cash turnover cycle (CTC) value of 28.28 and 525.04 with a standard deviation of 56.18 which means that in one accounting period cash is able to rotate as much as 28 times in generating sales. Cash turnover is the level of efficiency in the use of cash so that the higher the cash turnover rate, the more profitable the company will be because the rate of return of cash used in working capital is faster. While the lowest average is in the inventory turnover cycle (ITC) variable, which is 7.24 or 7 times with a standard deviation of 6.61. In the profitability variable, the average value is Rp. 1,801,273 while the maximum value of Rp. 27,372,000 comes from the automotive and component sub-sector, namely the Astra International Tbk (ASII) company and the minimum value of Rp. 926 comes from the sub-sector. The metal sector and the like are the company Lion Metal Works Tbk (LION). For dividend payments the average value is Rp. 896,255 while the maximum dividend payment is Rp. 13,632,478 from sub. The Cigarette sector is Handjaya Mandala Sampoerna Tbk (HMSP) and a minimum dividend payment of IDR 475 comes from sub. Textile and garment sector, namely Trisula textile and garment (BELL) company.

4.2. Construct Reliability and Validity

Construct reliability and validity testing was carried out to determine whether the data used had met the reliability and validity requirements. The test results are:

**Table 3. Construct Reliability**

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>X2</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>X3</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Y</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Z</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Data processing results

The reliability of the research can be seen from the Cronbach's Alpha (CA) value, if the CA value > 0.60 then the research is in the reliability category. Therefore, this research data is reliability because the value is 1.000 > 0.60.

**Table 4. Discriminant Validity**

<table>
<thead>
<tr>
<th></th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2</td>
<td>0.182</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3</td>
<td>-0.015</td>
<td>-0.080</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>-0.004</td>
<td>0.392</td>
<td>0.104</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>-0.052</td>
<td>0.271</td>
<td>0.060</td>
<td>0.819</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Data processing results

Table 4 above shows that all the data used in the study have met the valid requirements because the discriminant validity value for all variables is 1.00 (very good) greater than 0.50 (1.000 > 0.50) so it is feasible to proceed to the processing stage next.

4.3. Inner Model

Evaluation of the Inner Model is done by looking at the value of R Square (R2) the relationship between the constructs:
### Table 5. R Square

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>0.707</td>
<td>0.696</td>
</tr>
<tr>
<td>Z</td>
<td>0.091</td>
<td>0.065</td>
</tr>
</tbody>
</table>

Source: Data processing results

Based on the value of the termination coefficient (R2), the predictive relevance of the model (Q2) can be calculated as follows:

\[ Q_2 = 1 - (1-R^{2}_{12})(1-R^{2}_{22}) \]

\[ Q_2 = 1 - (1 - 0.707)(1 - 0.091) \]

\[ Q_2 = 0.73 \]

The results of these calculations indicate that the predictive relevance model (Q2) is 73%, which means that the accuracy or precision of this research model can explain the diversity of exogenous variables to endogenous variables. Therefore, the research model is quite good because it has a predictive relevance model (Q2) > 0.000 (Gozali & Latan, 2015), so the model can be used to test the hypothesis. The picture below is an image of the research model that has been tested using Structural Equation Modeling Partial Least Square (SEM-PLS) and the results are:

![Figure 2. Results of Data Processing with SEM-PLS](image)

From Figure 2 above, functional equations can be formed in the simultaneous Structural Equation Model (SEM) with reduced form as follows:

\[ Y = 0.02X_1 + 0.191X_2 + 0.074X_3 + 0.762Z + \varepsilon \quad (R^2 = 0.707) \]

\[ Z = -0.105X_1 + 0.297X_2 + 0.083X_3 + \varepsilon \quad (R^2 = 0.091) \]

#### 4.4. Hypothesis Testing

In the following table are the results of testing for direct and indirect effect of manufacturing companies listed on the Indonesia Stock Exchange (IDX):

| Table 6. Direct Effect with SEM-PLS |
|-----------------|-----------------|
| Variable        | Coefficients Beta | T Statistik |
| X1              |                  |             |
| X2              |                  |             |
| X3              |                  |             |
| Y               |                  |             |
| Z               |                  |             |

130 | Page
The results of testing working capital management on dividends found that cash turnover cycle (X1), receivable turnover cycle (X2), and inventory turnover cycle (X3) had a positive effect on dividends (Y) with beta coefficients of 0.002, 0.191, and 0.074 so that the hypothesis was accepted.

The results of testing working capital management on profitability found that cash turnover cycle (X1) had a negative effect on profitability (Z) with a beta coefficient of -0.105 so that the hypothesis was rejected while receivable turnover cycle (X2), and inventory turnover cycle (X3) had a positive effect on profitability (Z) with beta coefficients of 0.297 and 0.083 so that the hypothesis is accepted.

The results of profitability testing on dividends show that profitability (Z) has a positive effect on dividends (Y) with beta coefficients of 0.762 so that the hypothesis is accepted.

The result of testing the indirect effect of working capital management on dividends (Y) through profitability (Z) showing that cash turnover cycle (X1) has a negative effect on dividends (Y) through profitability (Z) with beta coefficients of -0.105 so the hypothesis is rejected. while receivable turnover cycle (X2), and inventory turnover cycle (X3) have a positive effect on dividends (Y) through profitability (Z) with beta coefficients of 0.226 and 0.063 so that the hypothesis is accepted.

4.5. Discussion

4.5.1. Working Capital Management On Dividends

The results of this study are in line with research conducted by Yakubu, (2020) which explains that working capital management is protected by cash flow, inventory turnover has a positive but not significant effect on dividends while accounts receivable turnover has a significant effect. Meanwhile Gacheri, (2020) which found that working capital management did not have a significant effect on dividends.

This shows that effective and efficient working capital management will increase the company's cash inflow thereby increasing the amount of dividends paid to investors, although the increase is not significant. This study reinforces the bird-in-hand dividend policy theory proposed by Myron Gordon and John Lintner in 1956 which suggests that there is a relationship between firm value and dividend payments. Proper and effective working capital management can increase the company's activities which include operating activities, financing activities and investment activities. The faster the working capital turnover, the greater the company's cash inflow so that the value of the company will also increase and will affect dividend payments.
4.5.2. Working Capital Management On Profitability

The results of this study are in line with research (Garg & Gumbochuma, 2015; Makori & Jagongo, 2013; Raheman & Nasr, 2007) which found that the cash turnover cycle had a negative effect on profitability while (Aguenaou, Farooq, Abrache, & Brahimi, 2015; Alsulayhim, 2019; Makori & Jagongo, 2013; Nguyen & Nguyen, 2018) found that the cycle receivables and inventory turnover has a positive effect on profitability. This shows that when the cash conversion cycle increases it will cause a decrease in the company's profitability, so managers can create positive value for shareholders by reducing the cash conversion cycle to a minimum level and increasing the accounts receivable turnover cycle and inventory turnover because if the receivables turnover and inventory turnover are fast then will increase the profitability of the company. Thus, if the cash turnover is high, the level of risk generated will also be greater so that the opportunity to get the level of profitability will decrease. On the other hand, if the receivables turnover and inventory turnover are fast, it will increase the company's profitability.

4.5.3. Dividends On Profitability

This means that the greater the company's profitability, the greater the dividends paid to shareholders. The results of this study are in line with research (Lohonauman & Budiarso, 2021; Rozi, 2020) which found that profitability has a positive and significant effect on dividends. Companies whose profitability has increased every period will gain the trust of investors so that they do not experience difficulties in obtaining working capital and the value of the company will increase.

4.5.4. Working Capital Management On Dividends Through Profitability

These results indicate that profitability (Z) cannot mediate the relationship between the cash turnover cycle (X1) and dividends, but profitability can mediate the relationship between the accounts receivable turnover cycle (X2), and the inventory turnover cycle (X3) on dividends although it is not significant. Thus, working capital turnover which is proxied by receivables turnover and inventory turnover will affect dividend policy if the company makes a profit (Yakubu, 2020).

5. Conclusion

Based on test research data on manufacturing companies listed on the Indonesia Stock Exchange (IDX) using SEM-PLS, it can be concluded that working capital management has a positive effect on dividends, working capital management affects profitability, and working capital management has a negative effect on dividend policy through profitability.

5.1. Recomendation

Companies must manage working capital management efficiently and effectively because working capital management has an effect with good management, it will increase profitability which has an impact on dividend payments.

Referensi


