The Effect of Working Capital Turnover, Debt to Asset Ratio and Times Interest Earned on Profitability

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Abstract

The purpose of this research is to identify and analyze the influence of variables on each property and real estate company listed on the Indonesia Stock Exchange (IDX) for the 2017-2021 period. The indicators used in this study are Working Capital Turnover (WCTO), Debt to Asset Ratio (DAR), Times Interest Earned (TIE) and Profitability (ROA). The population in this study were 80 companies and 44 companies as a sample with a total of 220 observations. This research uses purposive sampling method with five observation periods. This research uses descriptive quantitative method and associative method then multiple linear data analysis using SPSS 25 application assistance, this research uses independent variables, namely working capital turnover (WCTO), debt to assets ratio (DAR) and times interest earned (TIE) and the dependent variable is profitability (ROA). Based on data processing the results of this study show that partially working capital turnover (WCTO) has no significant effect on profitability, Debt to Asset Ratio (DAR) has no significant effect on profitability, times interest earned (TIE) has a positive and significant effect on profitability, Overall Simultaneous variables Working Capital Turnover (WCTO), Debt to Asset Ratio (DAR) and Times Interest Earned (TIE) have a significant effect on profitability (ROA).

Keywords:
Working Capital Turnover (WCTO), Debt to Asset Ratio (DAR), Times Interest Earned (TIE).

Introduction

The company must have goals, one of which is to maximize the value of the company through increasing profits. Increased profits can be obtained by reducing operational costs or by increasing production volume. The economic situation in Indonesia which continues to experience rising inflation makes it difficult for companies to reduce their operational costs, so the need for additional funds for companies is very important. Additional funds to run the company's operations can be obtained from various sources such as additional capital from shareholders or by borrowing from creditors (Utami & Manda, 2021).

At this time the Property and Real Estate sector companies are one Go Public companies that have maximized corporate value through increased profits. The company registers its name on the Indonesia Stock Exchange (Yunita et al., 2019). One of the purposes of the registration is to get media attention so that it can improve the company's image and increase company value as well as obtain funding.
sources that can assist in business development in the future. This can be seen from the number of developments and buyer interest which is increasing every year which will automatically increase the company's sales and profits in the property and real estate sector (Samosir, 2021).

Profits that continue to increase will attract investors to invest their capital because investors believe that this sector can promise profits that continue to increase every year. With a good profit rate and many investors will make developments in this sector more advanced and can improve the country's economy in a better direction. (Nguyen, 2020) Developments in this sector can be seen from several internal factors such as the company's ability to pay interest, the company's asset turnover rate.

A stable financial condition in meeting the financing needs of the company's activities is one of the benchmarks to see the condition of a company. Companies must know more about good and relevant financial conditions, so that management can measure whether the company has good quality financial reports or not. So that the company can manage net working capital properly and will benefit (Pujiasi & Suparno, 2020). In order to realize all these demands, companies in the property and real estate sector must know how efficiently the company is managing assets to generate profits, because to generate profits is of course related to total assets. Therefore the company must be able to maintain a minimum amount of assets.

A company when running a business certainly has certain goals. One of the main goals is to achieve or maximize profit (profit) for the survival of the company (Shalini et al., 2022). Assessment of financial performance can be used to find out how much the company's profits are and to compare profit results from previous years. According to (Pirmatua Sirait, 2018) ROA is a ratio of profit strength (Earning Power Ratio), describing the company's ability to generate profits from resources (assets) available.

Many property companies whose performance has dropped significantly in 2020, some even posted losses due to the corona pandemic. the majority of property companies recorded a decline in employment throughout 2020. The corona or covid-19 pandemic has been the reason for the decline in demand in this sector. Based on data compiled by katadata.co.id, the performance of property issuers has on average decreased their income and net profit by up to 60% on an annual basis or year on year (yoy) in the first six months of 2020 (Kata data.co.id).

Given the importance of working capital in a company, financial management must be able to plan well for the right amount of working capital and according to the needs of the company. This is because if there is excess or shortage of funds will affect the level of profitability of the company. (Veronica Reimeinda1, Sri Murni2, 2016). Company management must seek and maintain a balance in managing the
working capital turnover cycle, because in the management of working capital itself there are several contradictions experienced by companies, namely between working capital which focuses on efforts to maintain liquidity and working capital which focuses on efforts to gain profitability (Putria, 2021).

There are a number of influences that can cause profitability to decrease or increase, one of the factors is that Working Capital is a ratio to measure or assess the effectiveness of a company's working capital during a certain period. (Handayani, 20 C.E.) This means how much working capital rotates during one period or in a period the higher the turnover rate of working capital, the better the increase in sales within a company. In research (Hakim, 2020) working capital turnover has a positive and significant effect on profitability. According to (Kurnia & Gunawan, 2021) working capital turnover has a negative effect on profitability, working capital turnover has no effect on profitability (Karamina & Soekotjo, 2018).

Furthermore, there is a second variable that can affect profitability, namely the Debt to Asset Ratio, which is the debt ratio used to measure the ratio between total debt and total assets. the lower the value of the debt to Asset Ratio, the higher the level of security of the company and will affect the increasing sales. When the debt used by the company exceeds a certain amount, the company's ability to generate profits is smaller than the interest rates paid by the company (Astuti et al., 2019). According to (Pratama et al., 2021) in his research the debt to asset ratio has a significant effect on profitability and according to (Gunartin et al., 2021) the same debt to asset ratio has a positive effect on profitability while according to (Afifah, I., & Sopiany, 2017) debt to asset ratio has no significant effect on profitability.

The third variable that affects the Times Interest Earned is a measure of the company's ability to meet interest expenses, to find out the company's ability, which is done by comparing operating profit and interest expenses (Inayah et al., 2021). Therefore, the higher the Times Interest Earned, the greater the company's ability to pay interest, of course this will also be a measure for the company to be able to obtain additional new loans from creditors. According to research (Afifah, I., & Sopiany, 2017) and (Shalini et al., 2022) times interest earned has no significant effect on profitability while according to (Yunita et al., 2019) and (P. Utami & Welas, 2019) times interest earned has a significant effect on profitability.

Literature Review

Signaling Theory

Signaling Theory developed by Ross (1977), states that company executives who have better information about the company will be encouraged to convey this
information to potential investors so that the company's stock price increases. The positive thing in Signaling Theory when companies that provide good information will differentiate them from companies that do not have "good news" by informing the market about their condition. A good SIGNAL is one that cannot be imitated by other companies that have a low value due to the cost factor. (Pujiati & Suparno, 2020).

Signal theory explains how companies provide signals or information to users of financial statements. When a company has good financial reports and information, it can be concluded that the company can pay off its bonds properly and this can affect the company's bond rating. Providing signals or information to users of financial statements is a way of rating bonds that describe a company's ability to pay off its bonds, including the principal and interest on the bonds. (Manik et al., 2021)

**Profitability**

Profitability is a ratio or comparison to determine a company's ability to obtain profit from income related to sales, assets and equity based on certain measurements. Profitability is the company's ability to generate profits in relation to sales, total assets and own capital effectively and efficiently from its operating activities. (Nguyen., 2020) In this study, profitability is measured using ROA. ROA is the ratio used to measure management's ability to earn overall profits. The greater the ROA within the company, the greater the level of profit achieved by the company.

**Working Capital Turnover**

Working capital is total funds embedded in the form of current assets that are always rotating with the aim of earning income. (Amanda & Sahabuddin, 2023). This shows, if the company wants its working capital to increase, then the company must increase the amount of its income (Gultom et al., 2023). If the resulting turnover is high, the better. Because it means that the company has made good use of its working capital in generating sales so that the profit it gets is also high (Utami & Manda, 2021). the higher the turnover generated, the better, because the company has made good use of its working capital in generating sales so that the profits it gets are also high (Wahyuningsih et al., 2023).

Working capital turnover is one of the ratios used to measure and assess how effective a company's working capital is during a certain period (Wahyuningsih et al., 2023). The faster the turnover of working capital, the more effective the working capital will be which will have an impact on increasing the company's profitability (Ng et al., 2017). If the resulting turnover is high, the better (Sari & Brata, 2020). This means that the company has made good use of its working capital in generating sales so that the profits it earns are also high (Gultom et al., 2023).

**Debt to Asset Ratio**
According to (Kasmir, 2020) the Debt To Asset ratio is used to see or compare the total debt owned by the company with the total assets owned by the company, or in other words, to see how much of the company's assets are funded by debt. Creditors prefer a low Total Debt to total Assets Ratio or Debt Ratio because the level of security is getting better (Shahfira & Hasanuh, 2021). A high ratio value indicates an increase in risk to creditors in the form of the company's inability to pay all of its obligations (Muslichah, 2021). the lower the debt to asset ratio, the greater the security level of the company and creditors will believe in investing in the company (Hasnada Imani, 2020).

Debt to Total Assets Ratio according to Kasmir (2017: 156) This ratio is a debt ratio used to measure the ratio between total debt and total assets (Azwar et al., 2020). This ratio measures the percentage of funds originating from both short-term and long-term debt (Kurnia & Gunawan, 2021). Creditors prefer a low Total Debt to total Assets Ratio or Debt Ratio because the level of security is getting better (Hasnada Imani, 2020). The relatively low Debt to asset ratio value indicates that the total debt is smaller than the total assets themselves so that the company's income is greater to pay off its debts to parties outside the company and shows that the total assets used for the company's operations are able to provide profit for the company (Shahfira & Hasanuh, 2021).

**Times Interest Earned**

Time Interest Earned is an illustration of a company's ability to settle its interest expenses by using a ratio of profit before interest and tax to interest expense. If the company's ability to pay high interest expenses shows that the company's financial condition is in good condition or in other words the company has high profits (Shalini et al., 2022). higher the Times Interest Earned, the greater the company's ability to pay interest, of course this will also be a measure for the company to be able to obtain additional new loans from creditors (Afifah, I., & Sopiany, 2017). If the time interest earned continues to fall, this will cause problems and lead to failure to pay interest (Wahyudi, 2019).

Times Interest Earned Is a comparison between net income before interest and taxes with interest expense and is a ratio that reflects the amount of financial guarantees to pay long-term debt (Putria, 2021). The higher the times interest earned ratio, the greater the company's ability to pay interest, and of course this will also be a measure for the company to be able to obtain additional new loans from creditors (Fadrul & Pratama, 2017). Conversely, if the ratio is low, it means that the company's ability to pay loan interest is also reduced (Yunita et al., 2019).
Description:

H₁: Working Capital Turnover has a positive effect on Profitability
H₂: Debt to Asset Ratio has a positive effect on Profitability
H₃: Times Interest Earned has a positive effect on Profitability

Method

The type of data used in this research is quantitative data. Quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis is quantitative or statistical with the aim of testing established hypotheses (Sugiyono, 2022).

The population and sample in this study are companies engaged in the Property, Real Estate and Building Construction Sectors, the Property and Real Estate Sub Sector with a research sample of 44 companies listed on the Indonesia Stock Exchange for the 2017-2021 period.

In this study it has fulfilled all the requirements of the classic as r4sumption test used in hypothesis testing to determine the effect of each independent variable on the dependent variable. The F-test is used to determine whether the independent variable really has a joint effect on the dependent variable.

Variabel Operational

Working capital turnover

Working capital is total funds embedded in the form of current assets that are always rotating with the aim of earning income (Ng et al., 2017). This shows, if the company wants its working capital to increase, then the company must increase the amount of its income (Sinambela et al., 2021). Working Capital Turnover or working capital turnover is a ratio to measure or assess the effectiveness of a company's working capital during a certain period (Kasmir, 2016). Working capital turnover is
wealth or assets needed by the company to carry out daily activities and always rotate. Assets (Dahliani et al., 2019).

**Debt to Asset Ratio**

Debt to Assets Ratio is included in the solvency ratio. The solvency ratio is the ratio used to measure the extent to which a company's assets are financed from debt/liabilities (Inayah et al., 2021). In simple terms, the solvency ratio shows the company's ability to pay all of its obligations, both long-term and short-term obligations when the company is liquidated. Debt to Asset Ratio is a debt ratio used to measure the ratio between total debt and total assets. In other words, how much the company's assets are financed by debt or how much the company's debt affects asset management (Maulita & Tania, 2018)

**Times Interest Earned**

The Times Interest Earned Ratio is an illustration of a company's ability to settle its interest expense by using a comparison of earnings before interest and tax with interest expense. (Afifah, I., & Sopiany, 2017) There is a Time Interest Earned ratio that is used to measure the level of a company's ability to pay interest on its debts. The existence of this ratio that is waiting indicates that the company is increasingly able to pay its interest expense. (Dwigita & Laksmiwati, 2016). So that the company can avoid the risk of default or ending in bankruptcy. The existence of a time interest earned ratio will assist investors in assessing company information about how well the company is paying its annual interest expense (Wahyudi, 2019)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Concept</th>
<th>Indicator</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable (X1)</td>
<td>Working Capital Turnover or working capital turnover to measure the effectiveness of a company's working capital during a certain period by comparing sales and working capital or average working capital (Hakim, 2020)</td>
<td>WCTO = Net Sales Working Capital (Current Assets-Current Liabilities)</td>
<td>Ratio</td>
</tr>
<tr>
<td>Working Capital Turnover</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Variable (X2)</td>
<td>A ratio that can be called the Debt Ratio (Debt Ratio) is used to measure the percentage of the amount of funds originating from debt, both short-term and long-term debt (Muslichah, 2021)</td>
<td>DAR = Total debt x 100% Total Assets</td>
<td>Ratio</td>
</tr>
</tbody>
</table>
### Result and Discussion

**Table 2. Regression Test Results F**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5.414</td>
<td>3</td>
<td>1.805</td>
<td>3.892</td>
<td>.001b</td>
</tr>
<tr>
<td>Residual</td>
<td>71.406</td>
<td>158</td>
<td>.465</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76.820</td>
<td>157</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the test results in Table 2 above, it shows a significance level of 0.001. With a significance level of 0.001 which is smaller than the test level of 0.05, namely (0.001 < 0.05) it can be concluded that the model used is the variable working capital turnover, debt to asset ratio and times interest earnest simultaneously influencing profitability.

**Table 3. Regression t test results**

<table>
<thead>
<tr>
<th>Model</th>
<th>t</th>
<th>Sig.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.684</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>Working Capital Turnover</td>
<td>1.297</td>
<td>&gt;.197</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Debt to Asset Ratio</td>
<td>.275</td>
<td>&gt;.784</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Times Interest Earned</td>
<td>2.957</td>
<td>&lt;.004</td>
<td>Supported</td>
</tr>
</tbody>
</table>

**Effect of working capital turnover on profitability**

The results of testing the first hypothesis (H1) show that the results of the t test effect of working capital turnover = 1.297 < 1.684 or tcount > ttable and a significance value of 0.197 > 0.05 then H0 is accepted and Ha is rejected meaning that working capital turnover has no significant effect on profitability. This is due to the low sales.
obtained by the company so that the profit obtained from sales is also low, which results in a decrease in the increase in company profits. In this case the test results state that the turnover of working capital is not significant in increasing profitability.

Working capital turnover has no effect on profitability because working capital turnover fluctuates every year, one example is the PLIN company in 2017, the sales turnover was 11.68%, then in 2018 it fell to 6.10%, it fell back to 3.95% in 2019. fell in 2020 to 1.14% in 2021 rose to 1.21%

The results of this study are not in accordance with the theory put forward by Munawir (2017: 80) which states that the higher the working capital turnover ratio, the better the performance of a company where the percentage of existing working capital is able to generate a certain amount of sales.

The results of this study are in line with research (Karamina & Soekotjo, 2018) that working capital turnover has no significant effect on profitability. different from the research conducted (Judge, 2020) that working capital turnover has a positive and significant effect on profitability.

**Effect of Debt to Asset Ratio on Profitability**

The results of testing the third hypothesis (H2) show that the results of the t test influence the Debt to Asset Ratio = 0.275 < 1.684 or tcount > ttable and a significance value of 0.784 > 0.05 then H0 is accepted and Ha is rejected, which means that partially the independent variables have no significant effect on dependent variable. Therefore the hypothesis (H2) which states that the Debt to Asset Ratio has a significant effect on profitability is rejected. Because the test results state that the Debt to Asset Ratio is not significant in increasing profitability.

This is due to the company’s high debt and the company’s poor ability to manage the use of total assets in the use of company debt so that if the debt to asset ratio is low, the level of the company’s income capability will decrease, therefore the greater the risk that the company will have and have an impact on investors who don't trust the company.

The results of this study are inversely proportional to what was conducted (Putria, 2021) Debt to Assets has a significant effect on profitability and is in line with research conducted (Afifah, I., & Sopiany, 2017) that Debt to Assets Ratio has a significant effect on profitability.

**Effect of Times Interest Earned on Profitability**

The results of testing the third hypothesis (H3) show that the results of the t test influence times interest earned = 2.957 > 1.684 or tcount > ttable and a significance value of 0.004 < 0.05 then H0 is rejected and Ha is accepted which means that partially the independent variable has a significant effect on the dependent variable. Therefore the hypothesis (H3) which states that Times Interest Earned has a
significant effect on profitability is accepted. Because the test results state that Times Interest Earned has a significant effect on increasing profitability.

This causes the company to be more able to pay interest expenses on its debts and shows that the company's financial condition is in good condition so that the company is able to avoid the risk of default or ending in bankruptcy. In other words, the increase in sales and company income will be better, of course this will be a measure for the company to be able to obtain additional new loans from creditors. (Yunita et al., 2019)

The results of this study are in line with what was done (Shalini et al., 2022) that Times Interest Earned has a significant effect on profitability otherwise what is done (Afifah, I., & Sopiany, 2017) is not consistent that Times Interest Earned has no significant effect on profitability.

Conclusion

This study aims to see how much influence working capital turnover, debt to asset ratio and times interest earned have on profitability in property companies listed on the Indonesia Stock Exchange for the 2017-2021 period. Based on the data processing results from the study that partially working capital turnover and debt to asset ratio variables have no significant effect on profitability while Times Interest Earned has a positive and significant effect on profitability. Simultaneously working capital turnover, debt to asset ratio and Times Interest Earned have a significant effect on profitability. The results of this research are expected to be a motivation to conduct research in the future which is expected to improve the weaknesses and limitations that exist in this study.

1. For future researchers to be able to add variables and samples outside of those studied so that the results are more and it can be seen how much influence the variable will be studied.
2. The period of observation made is extended so that the results of further research can be much better.
3. Companies are expected to provide complete information regarding financial reports correctly and clearly.

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