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Working Capital Management and Capital Structure on Profitability: Evidence from Property and Real Estate Companies in Indonesia

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ABSTRACT
The purpose of this study is to provide literature on working capital and capital structure by analysing its relationship to profitability. This study used a sample of 26 real estate companies and real estate companies on the Indonesia Stock Exchange from 2015 to 2019. In this study, we used the panel's data regression technique. The results of this study show that there is a beneficial negative relationship between working capital and its components. The capital structure adversely affects profitability. The results also showed that the relationship between working capital and its components and capital structure and profitability depends on other factors such as economic growth, inflation, and company size.

Keywords: *working capital, inventory, receivables, debt, capital structure, profitability, property and real estate, Indonesia stock exchange*

1. INTRODUCTION

With the impact of the Covid-19 pandemic, the business sector in the country also declined, including the property and real estate sector (www.bi.go.id). The earnings of some large property issuers have declined significantly. This condition confirms that there has been a decrease in property sales that occurred in all types of homes in Indonesia. This phenomenon is supported by the results of the Indonesia Property Market Index-Supply survey which showed that the property supply index fell by 5% in the first quarter of 2020 or unlike the previous year's trend which tended to increase. To get the profit, many factors that affect the profitability of the company include Working Capital Management [1];[2];[3];[4] and Capital Structure [5];[6];[7];[8] Working capital is a fund used to finance the company's operational activities, especially those with a short period [9]. Considering that working capital is very important in the process or course of a business, the company must be able to supervise every working capital turnover to return by the time so that the company will be able to carry out its activities smoothly without being hampered by funds that have not returned [1]. Indications of good working capital management are the existence of working capital efficiency that can be seen from the turnover of working capital held from cash assets invested in the working capital turnover component, inventory turnover, and receivable turnover [1]. Previous research revealed that working capital negatively affects the profitability of the company [10];

The next factor that can affect profitability is the capital structure. A company's capital structure is the financial structure of how a company funds its operations, both from external and internal funds. According to pecking order theory, the use of external funds in the form of debt is more desirable than using capital. When managing the capital structure, the company must be able to combine its capital and profitable debt. Previous research reveals that the variable capital structure i.e., debt to equity has a negative and significant relationship with financial performance [5]; [7]; [11].

Furthermore, macroeconomic conditions and Firm-specific factors are expected to increase the profitability of the company. Macroeconomics consists of inflation and economic growth. Rising inflation can decrease the purchasing power of people, especially those with fixed incomes because the prices of goods need to increase. This has the potential to affect the company's performance. Previous research reveals that inflation has a positive influence on a company's profitability [12].

But pain research reveals that inflation negatively affects banking profitability [13]. Furthermore, Previous research reveals that economic growth has a positive impact on profitability [14];[5]. Other previous research reveals that macroeconomics such as economic growth, Inflation positively affects profitability [15], Firm-specific is a specific financial factor in the company. Previous research reveals that the size of life insurance companies is a significant factor in increasing profitability [14]. While other previous research reveals that the size of the company positively affects profitability [16]. Based on previous research gap research. Thus, the author considers working capital management and capital structure as factors that affect profitability.

The main contributions of this study are to identify the relationship between corporate profitability and its drivers, working capital management, and capital structure of real estate companies listed on the Indonesia Stock Exchange between 2015 and 2019. It is to introduce a simple framework to utilize. The purpose of this study is to "analyse the impact of the CCC and capital structure on the profitability of real estate and real estate companies listed on the Indonesia Stock Exchange".

2. LITERATURE REVIEW

CCC has three components: the business debt deferral period, the receivable conversion period, and the inventory conversion period. Enterprises can minimize CCC by optimizing three components. Delayed payments to corporate suppliers increase the debt cycle, effectively shorten the CCC period and make working capital more efficient. The higher the cash turnover, the higher the efficiency of cash use, so the profit will be greater. Excess inventory and receivable cycles will increase CCC, implying a decline in profitability [17]. Therefore, working capital efficiency is based on the principle of accelerating cash receipts and delaying cash expenditures. If the company operates with tight inventories and collects receivables quickly it has, it impacts the shorter CCC, resulting in increased profitability [1];[18]. Here, we propose a hypothesis that states that:

H1: positive relationship between CCC on profitability

According to pecking order theory, companies prefer to issue debt overstocks. The company will issue debt if the risk increases. Capital structure is measured through total debt to assets that have a negative and significant influence on the profitability of commercial banks (Fekadu Agmas, 2020). Capital structure variables as measured by debt-to-equity ratio (DER) have a negative and significant relationship with financial performance [5]; [8]. Here, we propose a hypothesis that states that:

H2: the negative relationship between capital structure and corporate profitability

3. METHOD

The This research is qualitative. The study used secondary data collected from the financial statements of property and real estate companies listed on the IDX for the period 2015-2019 amounting to 26 companies. The data collection used in this study is classified using panel data, which is a combination of time series and cross-section data.

Financial statements are available online on http://www.idx.co.id sites, www.bi.go.id, ok stocks, and other websites. The variables and measurements used in this study are seen in Table 1.

Table 1. Measurement of Variables

Variable	Symbol	Measurement	Source
Profitability	**ROA**	**Net income/Total Asset**	Brigham & Houston (2019
Working Capital Management	CCC	DIO + DSO - DPO	Wasiuzzaman (2015); Talonpoika, Kärri, Pirttilä, & Monto (2016)
	DIO	$\frac{\text{Inventories x 365}}{\text{Net Sales}}$	
	DSO	$\frac{\text{Acc Receiv x 365}}{\text{Net Sales}}$	
	DPO	$\frac{\text{Acc Pay x 365}}{\text{Net Sales}}$	
Capital Structure	DER	**Total Liabilities/ Total Equity**	Vuong, Quynh Vu, & Mitra (2017)
Macroeconomic			
Economic Growth	GDP	**Gross Domestic Growth**	Bank Indonesia
Inflation	INFLATION	**Percentage increase in the consumer price index**	Bank Indonesia
Firm-Specific			
Company Size	SIZE	**Ln Total Assets**	www.idx.co.id

It should be noted that most studies used to calculate inventory and debt investments divide the value by the total purchase or cost of goods sold. However, these numbers are not available to many companies, so sales are used instead. Similarly, NWC is calculated based on total sales [10].

The potential impact of performance indicators on profitability is as follows:

1. Low inflation is expected to increase profitability as companies adjust interest rates, resulting in earnings rising faster [15].
2. GDP is expected to have a positive impact on profitability, as rising GDP has traditionally been

an indicator of economic progress and prosperity. Therefore, in this situation, increased demand leads to increased sales. [10].

3. The size of the company is expected to have a positive relationship with profitability. This is because it makes it harder for large companies to access market capitalization, which reduces their liquidity needs and improves profitability. [12].

There are the-panel data regression models in the study as follows:

ROA = a + b1CCC + b2DER+ b3 INF + b4 GDP+ b5 Size+ e

Here:

Profitability (ROA), a (Constant), b1, b2, b3, b4 (Coefficient), Capital Structure (DER), Cash Conversion Cycle (CCC), Day Inventory Outstanding (DIO), Day Sales Outstanding (DSO), Day Payables Outstanding (DPO), Inflation (INF), Gross Domestic Growth (GDP), Company Size (SIZE) and error (e).

4. RESULT

Before analyzing the relationship between working capital management variables and profitable capital structures. Variables are examined by descriptive statistics. A summary of the statistics is shown in Table 2.

From Table 2 it can be seen that the average ROA of the company is 0.061. The company's average DER is 0.657, the average cash conversion cycle (CCC) achieved by the company is 314,610 days. These results reflect when the average inflation is 3.16, the average company size is 29.55 and the average Gross Domestic Product (GDP) is 5.03. Furthermore, a higher standard deviation can increase policy uncertainty and hinder managers from making long-term strategic decisions. Interestingly, all variables in this study tend to be positive.

Table 2. Statistical Description

Variable	Observations	Mean	Median	Maximum	Minimum	Std. Dev.
ROA	130	0.061	0.046	0.175	0.002	0.046
CCC	130	314.610	321.000	995.000	1.000	281.749
DER	130	0.657	0.515	2.200	0.020	0.502
INFLATION	130	3.160	3.100	3.600	2.700	0.314
GDP	130	5.034	5.030	5.170	4.880	0.089
SIZE	130	29.55	29.93	31.22	25.89	12.5

Table 3, it appears that the probability value of the cross-section F Test is 0.0000 or < 0.05, meaning the equation uses the Fixed Effect model approach. The Hausman test was conducted.

Table 3. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross section F	5.499941	(25,99)	0.0000
Cross section Chi-square	113.206869	25	0.0000

Based on Table 4, it is seen that the random cross-section probability value for equation 1 is 0.0270 or < 0.05, meaning the equation uses the Fixed Effect model approach. Furthermore, the probability value of cross-section random equations 2,3,4, and 5 is above 0.05 or >0.05, then the research model uses the Random Effect Model approach. So, it can be concluded that the REM model is the appropriate model. The Lagrange Multiplier (LM) test was conducted.

Table 4. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross section random	9.174687	5	0.1023

Based on Table 5, it is seen that the value of Both Breusch-Pagan is 0.000 which is smaller than 0.05 so the most appropriate method used is REM. Related to the most appropriate test used is the random effect model then it is necessary to test the classical assumption of normality and multicollinearity to see regression values.

Table 5. LM Test

	Test Hypothesis		
	Cross section	Time	Both
Breusch-Pagan	(0.0000)	(0.9397)	(0.0000)

CCC variables and DER variables are aggregated individually with control variables over ROA. “The hypothesis is supported by the statistically significant negative relationship between CCC and ROA”. “The hypothesis proposed in this study states that DER has a significant negative effect on company profitability, so this hypothesis is supported.”

The results of the analysis for each equation are presented in Table 6.

Table 6. Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.189273	0.178739	-1.058936	0.2917
CCC	-2.454405	1.273305	1.925783	0.0504

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	-0.038891	0.010414	-3.734492	0.0003
INFLASI	0.007075	0.008243	0.858257	0.3924
PDB	-0.091555	0.028996	-3.157452	0.0020
SIZE	0.020239	3.554405	6.738150	0.0000
R-squared	0.335512			
Adjusted R-squared	0.308718			
F-statistic	12.52196			
Prob(F-statistic)	0.000000			

*Note: ***Significance at the 5 percent level*

5. DISCUSSION

The results showed that control variables (SIZE, Inflation, and GDP) affect profitability. It was found that only DER and CCC were particularly significant in influencing ROA.

DER has a significant negative effect on the profitability of the company. This result means that the less der value, the more profitability value will increase. A capital structure is a combination of a form of financing (retained earnings, long-term debt, and equity) used by a company to finance its overall operations and assets [19]. According to pecking order theory, a company issues debt rather than equity, so unless the risk increases and the borrowing capacity is significantly limited, the company issues debt even if the risk increases. However, if a company is financially constrained, it can be difficult to access the bond market after the risk has increased.[6]. The results of this study are in line with the results of research conducted by [5];[8] revealed that capital as measured DER has an important negative relationship with financial performance. All CCC variables have been found to adversely affect ROA.[17].

The cash conversion cycle was also found to hurt ROA implying that reduced investment in CCC caused profitability to increase. A small CCC value indicates that the company's cash turnover is fast so that the company can use its cashback to produce products that will later be sold and get cashback to make a profit. The fast cash turnover makes the company's working capital investment low, so it can increase the company's profitability because the company has obtained cash from sales to make payments to suppliers without making loans. If the CCC value is large, it indicates that the company's cash turnover is slow, so the company's operational activities can be disrupted and can reduce the company's profitability. This is in line with expectations and supports the results of research by [10];[18];[1].

6. CONCLUSION

"This study investigated the impact of capital structure and working capital management and its components on the profitability of real estate and real estate companies on the Indonesia Stock Exchange". A total of 26 companies over five years (2015-2019) were selected for the study. Using the panel's data regression model, the research found that the structure of capital and working capital and its components harmed profitability.

There is a statistically significant negative relationship between CCC and profitability. This means that the smaller the CCC cycle, the greater the profitability value. The smaller the CCC value, the higher the efficiency of working capital management by the company in managing cash flow. The debt-To-Equity Ratio has a significant negative effect on company profitability. This result means that the less the DER value, the more profitability value will increase. Companies with low debt levels are used effectively to generate profitability.

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