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Working Capital Management and Sustainable Growth: the Mediating Role of Financial Performance

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Abstract

This paper purpose to test the effect of working capital management on Sustainable Growth and the indirect effect of financial Performance on Sustainable Growth. The model is advanced and tested using partial least-squares path modelling and data were collected from a sample of 156 manufacturing companies listed on the IDX during the period 2018 -2022. The finding demonstrate that working capital significantly affects financial Performance. Furthermore, working capital management exhibit a significant direct influence on sustainable growth and a significant indirect influence through financial Performance. Thus, this study suggests that firms need to manage their working capital to increase their profits and eventually to achieve sustainable growth. This research was only conducted on manufacturing companies listed on the Indonesian stock exchange which would limit the generalizability of the findings. This study supports the idea that companies can promote sustainable corporate growth through good working capital management. The study fills the lack of research on the relationship between Working Capital Management and Sustainable Growth mediated by financial performance.

Keywords: *Working Capital Management, Sustainable Growth, Financial Performance*

INTRODUCTION

The objective of the company's working capital management is to increase profitability and enable it to repay maturing debt by ensuring its liquidity (Pass & Pike, 1987). Therefore, companies need to balance these two goals in their activities (Gitman et al., 2015). Working capital management is closely related to the decision on the composition of the company's assets and current liabilities which has implications for the company's financial performance (EL-Ansary & Al-Gazzar, 2021). Furthermore, Misbah et al. (2015) in (Nastiti et al., 2019) shows that working capital management is an important element of the company's daily operating activities. Managerial inability to manage working capital has the potential to cause financial difficulties for the company (Smith, 1973). Conversely, companies with

well-managed working capital tend to show increased financial performance (Mandipa & Sibindi, 2022).

Their profits and growth will only be increased by the ability of a company to manage its working capital. In connection with the growth of the company, Higgins (1977) introduces the concept of a sustainable growth rate, which allows companies to achieve maximum sales growth with no change in their funding decisions. As the company relies solely on internal funding and does not seek additional financing from external sources other than new investors or long term commitments, its sustainable growth rate refers to a maximum annual growth rate (Ashta, 2008), It suggests that sustainable growth should be the basis for companies' activities. Because of too much financial leverage, firms that do not grow sustainably are in danger of financial difficulties or bankruptcy. In parallel, the risk that growth will be sluggish or stagnated is being faced by companies which have failed to achieve sustainable growth.

Working capital management is of key importance to sustained economic growth (Rădăşanu, 2015). For example, a company that manages its sales policies well will generate sufficient cash flow for its operating activities and ultimately improve financial performance. Moreover, financial performance has a crucial role to play in the sustainability of growth (Rahim, 2017). Several studies, such as (Phan et al., 2020), (Xu & Wang, 2018), and (Sunardi et al., 2021) To support that argument, demonstrate the effect of financial performance in terms of a company's sustained growth. For this reason, it can be assumed that the management of working capital will have a bearing on sustained growth by means of financial performance. It is therefore interesting to explore the role of financial performance as a mediator between working capital management and sustainable growth.

Specifically, this study aims to: (i) examine the effect of working capital management on financial performance, (ii) examine the effect of working capital management on sustainable growth, (iii) investigate the effect of financial performance on sustainable growth, and (iv) analyze the effect of management working capital on sustainable growth mediated by financial performance. We're focusing on the manufacturers because they have a fairly high proportion of their working capital, and it is not unusual that there are over 50 % of overall manufacturer assets to be derived from working capital (Ahmad et al., 2018). Moreover, the National Economy of a country is being strategically represented by manufacturers (Raheman et al., 2010). Specifically, manufacturing companies show the largest contribution to GDP (19.8%) and exports (76.49%) of the Indonesian economy (Kemenperin, 2022). As a developing country, Indonesia itself has a significant influence on economic growth in Southeast Asia because it records economic growth of 5.31% in 2022 according to (Badan Pusat Statistik Indonesia, 2023) and has the largest GDP in the region.

This study further expands a model of research on working capital management that is mainly concerned with financial performance, contributing to the literature. The effects of work capital management on financial performance have only been addressed in most previous research (Raheman et al., 2010), (Mandipa & Sibindi, 2022), (EL-Ansary & Al-Gazzar, 2021), (Le et al., 2018), and

(Niresh, 2012) Although the sustainability of growth is directly influenced by Financial Performance itself (Sunardi et al., 2021) and (Rahim, 2017). In addition, sustainability of growth is directly related to management of working capital (Rădășanu, 2015) and (Nastiti et al., 2019). However, the impact of working capital management on sustainable growth has so far not been addressed in any research. This research is expected to have a managerial impact as it suggests that managers should prepare for more specific working capital management in order to improve their financial performance and achieve sustainable growth.

METHOD

Research Methods

The quantitative approach is a research approach used by researchers in this study, where the quantitative approach aims to describe, confirm, and prove hypotheses about the observed phenomena.

Sample Data

Data was collected with a total sample of 289 manufacturing companies listed on the IDX during the 2018 -2022 period. The sampling method in this study used purposive sampling. The research sample used in the study must have the following criteria: 1) Manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) for the 2018 -2022 period were 289. 2) Manufacturing sector companies consistently publish annual financial reports (annual reports) that have been 109 were completely audited during the 2018 -2022 period. So the final sample used in this study was 545 company samples.

Conceptual Framework

A conceptual framework that serves as a reference and provides a flow of thought in solving research problems and formulating hypotheses. The conceptual framework can be seen in the image below:

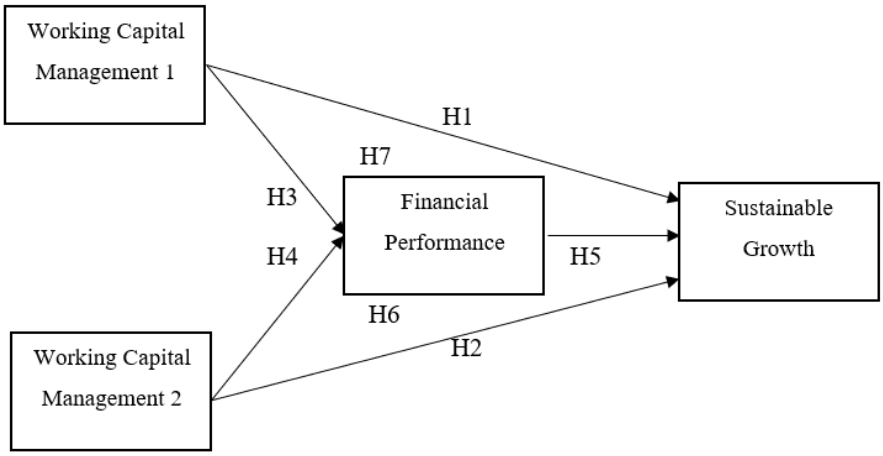

Figure 1. Conceptual Framework

Research Hypothesis

Hypothesis 1: Working Capital Management 1 has a significant effect on Sustainable Growth
Hypothesis 2: Working Capital Management 2 has a significant effect on Sustainable Growth
Hypothesis 3: Working Capital Management 1 has a significant effect on Financial Performance
Hypothesis 4: Working Capital Management 2 has a significant effect on Financial Performance
Hypothesis 5: Financial Performance has a significant effect on Sustainable Growth
Hypothesis 6: Financial Performance mediates the effect of Working Capital Management 1 on Sustainable Growth
Hypothesis 7: Financial Performance mediates the effect of Working Capital Management 2 on Sustainable Growth

Model

Model 1 direct test explains the effect of working capital on Sustainable Growth.

$$SGRit = \beta 0 + \beta 1CATAit + \beta 2CLTAit + \varepsilon it$$

Model 2 direct test explains the effect of working capital on financial performance.

$$FPit = \beta 0 + \beta 1CATAit + \beta 2CLTAit + \varepsilon it$$

Model 3 indirect test aims to analyze working capital effect on sustainable growth through financial performance

$$SGRit = \beta 0 + \beta 1CATAit + \beta 2CLTAit + \beta 3FPit + \varepsilon it$$

Measurement Variable

Dependent Variable

Sustainable growth is the maximum growth rate determined by the use of internal resources only, without accessing financial resources that are lent or derived from the issuance of new shares (Carp et al., 2020).

Sustainable company growth represents the extent to which an entity can grow using its own funds, without obtaining loans from banks or other financial institutions. This study proposes the following formula to calculate SGR (Xu & Wang, 2018) dan (Carp et al., 2020).

SGR = Profit Margin x Asset Turnover x Retention Ratio x Financial Leverage (Higgins, 2015); (Xu & Wang, 2018) dan (Carp et al., 2020); where:

1) Profit Margin = Net Income/Sales
2) Asset Turnover = Sales/Total Assets
3) Financial Leverage = Total Debts/Total Assets
4) Retention Rate = Retained earnings/Net income

Independent Variables

Working capital management/working capital policy concerns the proportion of investment in current assets and short-term financing chosen by the company (Gitman et al., 2015). The ratio of current assets to total assets which are likely to be higher is indicative of a conservative investment policy in working capital. While the policy of working capital financing is conservative, firms often have a low share of short term debt. In the view of (Sunardi et al., 2021), companies which have a very significant proportion of existing assets to overall assets are likely to be able to make substantial profits. From a financing point of view, high profitability is observed in companies whose share of short term finance or their reliance on longer term funding is small. Furthermore, SGR through profitability is shown to be affected by conservative working capital management policies.

This formula has been used by various researchers to calculate working capital management/working capital policies According to (Niresh, 2012) and (Sunardi et al., 2021):

CATA = Current Assets/Total Assets

CLTA = Current Liabilities/Total Assets

Mediation Variable

Performance is control and data analysis for the company. Performance is also used to improve the company's operational activities in order to compete with other companies (Husada et al., 2021). The company's financial performance is reflected in the financial statements issued by the company (Widiastoeti et al., 2021). Guided by the literature (Niresh, 2012), (Le et al., 2018), (Mandipa & Sibindi, 2022), dan (Xu & Wang, 2018), return on assets (ROA) is commonly used to measure financial performance. ROA is measured using (Carp et al., 2020) and (Bodhanwala & Bodhanwala, 2018):

ROA = Net income/Total equity

RESULTS AND DISCUSSION

Tabel 1. Statistik Deskriptif

Variabel	N	Min	Max	Mean
SGR (Y)	545	-14.527	11.655	1.000
FP (Z)	545	-3.999	11.243	1.000
CATA (X1)	545	-2.318	2.704	1.000
CLTA (X2)	545	-1.585	3.636	1.000

Sumber: Hasil Output WarpPLS, 2023

Based on table 1 above, it can be explained that from 545 observations it can be seen that the variable SGR (Y) shows a minimum answer value of -14,527, while the maximum answer value is 11,655 with an average answer value of 1,000. In the variable FP (Z) the minimum value of the respondent's answer is -3,999 and the maximum value is 11,243 with an average value of 1,000. For the CATA variable (X1) the minimum value of the respondent's answer is -2,318, the

maximum answer value is 2,704 with an average answer value of 1,000. Finally, for the CLTA variable (X2), the minimum value for the respondent's answer is -1,585, the maximum value is 3,636 with an average value of 1,000.

Tabel 2. Regresi Linier Berganda

Hubungan antar variabel	Koef. Jalur	*P-value*	Keterangan
CATA (X1) =>SGR (Y)	0.076	0.036	*high significant*
CLTA (X2) =>SGR (Y)	-0.176	<0.001	*high significant*

Sumber: Hasil Output WarpPLS, 2023

Hypothesis 1 is Working Capital Management 1 has a significant effect on Sustainable Growth, based on table 2. it shows a path coefficient value of 0.076 with a p-value of 0.036. This shows that hypothesis 1 is accepted where the variable Working Capital Management 1 (X1) has a significant effect on Sustainable Growth (Y). This is in line with research (Rădăşanu, 2015) and (Nastiti et al., 2019) which states that the ability to manage working capital has a significant effect on sustainable growth. Companies need to manage their working capital to increase their profits and ultimately play an important role in sustainable growth.

Hypothesis 2 is Working Capital Management 2 has a significant effect on Sustainable Growth, based on table 2. it shows a path coefficient value of -0.176 with a p-value of <0.001 this shows that hypothesis 2 is accepted where the variable Working Capital Management 2 (X2) has a significant effect towards Sustainable Growth (Y). This is in line with research (Rădăşanu, 2015) and (Nastiti et al., 2019) which states that the ability to manage working capital has a significant effect on sustainable growth. The sustainable growth rate refers to the company's maximum growth rate by relying only on internal financing, and not on additional financing.

Tabel 3. Path Analysis

Hubungan antar variabel	Koef. Jalur	*P-value*	Keterangan
CATA (X1) =>SGR (Y)	0.076	0.036	*high significant*
CLTA (X2) =>SGR (Y)	-0.176	<0.001	*high significant*
CATA (X1) =>FP (Z)	0.208	<0.001	*high significant*
CLTA (X2) =>FP (Z)	-0.183	<0.001	*high significant*
FP (Z) =>SGR (Y)	0.617	<0.001	*high significant*
CATA =>FP =>SGR	0.128	<0.001	*Complete mediation*
CLTA =>FP =>SGR	-0.113	<0.001	*Complete mediation*

Sumber: Hasil Output WarpPLS, 2023

Hypothesis 3 is Working Capital Management 1 has a significant effect on Financial Performance, based on table 3. it shows a path coefficient value of 0.208 with a p-value of <0.001 this shows that hypothesis 3 is accepted where the variable Working Capital Management 1 (X1) has a significant effect on Financial Performance (Z). This is in line with research (Raheman et al., 2010), (EL-Ansary

& Al-Gazzar, 2021), (Mandipa & Sibindi, 2022), (Le et al., 2018), and (Niresh, 2012) which states that working capital management has a significant effect on sustainable growth. Working capital management is closely related to the company's asset composition decisions which have implications for the company's financial performance.

Hypothesis 4 is Working Capital Management 2 has a significant effect on Financial Performance, based on table 3. shows that the path coefficient value is -0.183 with a p-value of <0.001 this shows that hypothesis 4 is accepted where the Working Capital Management 2 (X2) variable has an effect significant to Financial Performance (Z). This is in line with research (Raheman et al., 2010), (EL-Ansary & Al-Gazzar, 2021), (Mandipa & Sibindi, 2022), (Le et al., 2018), and (Niresh, 2012) which states that working capital management has a significant effect on sustainable growth. Working capital management is closely related to current liabilities which have implications for the company's financial performance.

Hypothesis 5 is that Financial Performance has a significant effect on Sustainable Growth, based on table 3. It shows that the path coefficient value is 0.617 with a p-value <0.001. This indicates that hypothesis 5 is accepted where the Financial Performance (Z) variable has a significant effect on Sustainable Growth (Y). This is in line with research (Sunardi et al., 2021) and (Rahim, 2017) which states that financial performance has a significant effect on sustainable growth. High Financial Performance will increase profitability thereby increasing sustainable growth rates.

Hypothesis 6 is that Financial Performance mediates the influence of Working Capital Management 1 on Sustainable Growth, based on table 3. It shows a path coefficient value of 0.128 with a p-value of <0.001. This indicates that hypothesis 6 is accepted which indicates that the relationship between Financial Performance (Z) complete mediation the effect of Working Capital Management 1 (X1) on Sustainable Growth (Y). Companies that manage their sales policies well will generate sufficient cash flow for their operating activities and ultimately improve financial performance. Furthermore, financial performance plays an important role in sustainable growth.

Hypothesis 7 is that Financial Performance mediates the effect of Working Capital Management 2 on Sustainable Growth, based on table 3. It shows a path coefficient value of -0.113 with a p-value of <0.001. This indicates that hypothesis 7 is accepted which indicates that the relationship between Financial Performance (Z) complete mediation the effect of Working Capital Management 2 (X2) on Sustainable Growth (Y). Working capital management is closely related to current liabilities which have implications for the company's financial performance. Furthermore, financial performance plays an important role in sustainable growth.

CONCLUSION

Based on the results of data analysis and discussion related to the effect of working capital management on sustainable growth with financial performance as a mediating variable described in the previous section, it can be concluded that working capital has a significant effect on financial performance. Furthermore,

working capital management shows a significant direct effect on sustainable growth and a significant indirect effect through financial performance. Thus, this study shows that companies need to manage their working capital to increase their profits and ultimately achieve sustainable growth.

This study contributes by including firm performance in the analysis of the relationship between working capital management and sustainable growth. In addition, this study is likely to contribute to managers in efforts to increase sustainable growth for their companies through working capital management.

Different industry characteristics lead to greater variability in a company's cash cycle. We then suggest future studies focus on cross-country analysis of firms in the same industry to generate a better understanding of firm working capital management.

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