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Working Capital Management and Profitability in Property Industry: Evidence from ASEAN Countries

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Abstract: We are investigating the role of working capital on the profitability of real estate companies. Working capital is at the core of profitability in the property business model. Existing literature has established a negative relationship between working capital and profitability. To verify this hypothesis, we propose a linear regression model that links measures of profitability (ROE and Profit Margin) with measures of working capital (Current Asset to Current Liability Ratio and Working Capital Days); Liquidity (Current Asset to Current Liability Ratio), Leverage (Debt to Total Asset Ratio), Size, and company dummies serving as control variables. The regression model is estimated using a panel data set consisting of 376 companies in the ASEAN region from 2013 to 2022 (3760 annual observations per company). Model selection procedures suggest the application of Feasible Generalized Least Squares (FGLS) due to unobserved heterogeneity and the presence of serial correlation and heteroskedasticity. As expected, we find that working capital has a significant negative relationship with profitability. Subsequent robustness tests indicate consistent findings across specifications and country samples.

Keyword: Working Capital Management, Profitability, Property Industry, Feasible Generalized Least Squares.

INTRODUCTION

Working capital encompasses a company's policies and practices in managing its short-term assets and liabilities, such as inventory, accounts receivable, and accounts payable. The main goal of working capital management is to ensure the availability of sufficient funds to support the company's day-to-day operations and minimize financial risks. (Rey-Ares et al., 2021). Property developers are responsible for the development of properties, including residential and commercial properties. They play a crucial role in designing, constructing, and marketing property projects. Properties are a focus because they have a significant influence on shaping sustainable practices in the construction industry, including addressing challenges such as the need for economically sustainable development (Abdin et al., 2024),

Company efforts in working capital management involve efficiently managing their working capital components. (Akbar et al., 2021).

Working capital consists of current assets and current liabilities. Current assets are assets expected to be converted into cash within one year or the normal operating cycle of the company. Current assets include cash, short-term investments, accounts receivable, and inventory. (Claassen et al., 2023).

Negative working capital occurs when current liabilities exceed current assets. Its significance in good working capital management in a company is based on several important reasons. First, working capital is an integral part of the company's operational activities, affecting overall financial liquidity and efficiency. By effectively managing working capital, a company can ensure sufficient funds to support day-to-day operations and address emerging financial issues (Bagh Tanveer, 2016). Delays in collecting business receivables can cause cash flow delays for the company. If a company allows receivables from customers to remain outstanding for an extended period, it can reduce the company's liquidity and hinder its ability to pay debts or take advantage of profitable investment opportunities (Meah et al., 2021).

Cash flow is a critical factor in working capital management (WCM) and company growth. Efficient cash flow is a key component of good working capital management. In this context, positive and stable cash flow allows a company to meet its daily financial obligations, such as paying bills and managing credit, while also providing flexibility to finance investments and growth (Rodeiro-Pazos et al., 2023). Increased investment in working capital is expected to have a positive impact, especially for companies with low levels of working capital. Sufficient working capital enables a company to expand sales and revenue. However, if a company has too much working capital, it can have negative effects and destroy value for shareholders because it requires additional costs to finance that working capital. Companies may face high interest costs and bankruptcy risks. If a company successfully manages its working capital efficiently and approaches the optimal level, its profitability can increase. However, excess working capital can also burden profitability (Nguyen et al., 2019).

Aggressive working capital management can lead to negative working capital. This occurs when short-term liabilities (such as debts or bills payable) exceed short-term assets (such as cash or accounts receivable). (Zheng et al., 2022).

According to (Opler et al. 1999, as cited in Hengsaputri & Bangun, 2020), the theory states that corporate management seeks to achieve a balance between the benefits and costs of holding cash. This means that management will strive to hold an adequate amount of cash to maximize the welfare of their shareholders. In this regard, management will consider the benefits of holding cash, which may include the ability to seize sudden investment opportunities or the ability to weather potential tough times..

The theory by Jensen & Meckling (1976) explains that within a company, owners (shareholders) and management have different interests. Shareholders tend to prefer high-risk investments that yield high returns, while management prefers low-risk investments. Conflict of interest may arise because excess cash flow is often invested in unrelated activities to the core business, causing a mismatch between shareholders' preferences for high-risk, high-return investments and management's tendency to avoid risk. This can affect the achievement of optimal company value in the long term.

(Hussain et al., 2021) found that high working capital can have a negative impact on company profits due to the allocation of funds to manage inventory and receivables, which increases the cost of capital and hinders the company's ability to reinvest. In addition, inefficient management of inventory, receivables, and liabilities can also reduce profits.

Michel et al. (2020) highlighted the negative impact of working capital management on the profitability of wine companies in France. Companies with a high Cash Conversion Cycle (CCC) require more working capital, which can increase costs and suppress profitability.

Ratnasari et al. (2021) also demonstrated a negative relationship between Working Capital Turnover (WCTO) and Return on Equity (ROE), emphasizing the importance of efficient working capital management to achieve optimal levels of profitability.

(Wang et al. 2020) It asserts that high working capital can result in additional financial costs such as loan interest, which reduces the net profit of the company.

Shaik (2021) It also states that the negative relationship between working capital and company profitability is due to the use of working capital for unproductive assets and a tendency to engage in overtrading..

Zimon & Tarighi (2021) highlight several factors that can lead to a negative relationship between working capital and profitability, including company policies that are aggressive in extending credit to customers and inefficient inventory management.

Boisjoly et al. (2020) also indicate that uncontrolled increases in working capital can have a negative impact on company profitability. An increase in Days Payable Outstanding (DPO), indicating delays in payments to suppliers, can increase available cash flow, but excessive increases can damage relationships with suppliers and negatively impact the company's credibility. Therefore, efficient working capital management plays a crucial role in enhancing company profitability, while excessive or uncontrolled increases can have negative consequences.

Based on the review of these studies, it can be concluded that inefficient working capital management can lead to a decrease in company profitability. Therefore, efficient management of working capital is crucial for maintaining or improving profitability.

Hypothesis 1: Working capital is negatively related to profitability.

There is variation among countries in ASEAN due to the impact of unique economic, regulatory, and business factors on working capital management and profitability in the property industry. This highlights the challenges posed by stringent property licensing regulations and disparities in infrastructure and market liquidity. Additionally, the report mentions cross-country studies analyzing labor market characteristics such as industrial structure, employment policies, education levels, macroeconomic conditions, and demographics (Gurvich & Vakulenko, 2017). The diverse economic dynamics and regulations among ASEAN member countries, while also considering similarities such as infrastructure growth and property markets, are emphasized in this report. This underscores the importance of understanding these dynamics for effective working capital management and profitability within the ASEAN context. Furthermore, the report mentions opportunities for cross-border expansion in the integrated ASEAN property market, despite challenges such as managing foreign exchange rate risks and complying with regulations in various countries. Overall, this highlights the importance of considering opportunities and challenges in working capital management for property company profitability in ASEAN (Rostami et al., 2016).

Our control variables, LEV, SIZE, and LIQ, are commonly used in various analyses. Leverage refers to the proportion or level of debt usage in a company's capital structure. It indicates that leverage plays an important role in explaining a company's financial behavior and stock price dynamics. Leverage can be measured by the debt-to-equity ratio or other ratios indicating the proportion of debt to equity in a company (Dang et al., 2018). The coefficient between company size and Return on Equity (ROE) is 0.05, indicating a positive relationship between the two. This means that the larger the company, the higher the likelihood of its ROE. Controlling for company size is necessary for a better understanding of factors influencing company performance (Akbar et al., 2012). Indikator likuiditas utama

adalah kas dan modal kerja bersih (NWC). Key liquidity indicators include cash and net working capital (NWC). These indicators are important for evaluating a company's ability to meet its short-term financial obligations (Apak et al., 2016).

One of the significant novelties of our study is the utilization of an extensive dataset. In this study, we employ a panel dataset with annual frequency comprising 376 companies in the ASEAN region from 2013 to 2022 (3760 annual company observations). This extensive dataset enables us to yield much stronger results compared to existing studies, owing to the reliability gained from a larger degree of freedom and higher variation. We acknowledge that estimations exhibit specifications such as fixed-effect type and the presence of serial correlation and heteroskedasticity. Therefore, we employ the Feasible Generalized Least Squares (FGLS) method as our primary approach. Subsequent reliability checks further support the consistency of our findings.

METHOD

Following our research objectives, we propose the following linear model.

$$Profit_{it} = \alpha_0 + \alpha_1 Work_{cap_{it}} + \alpha_2 Current_{it} + \alpha_3 LEV_{it} + \alpha_4 SIZE_{it} + \mu_i + v_{it}$$

Where profitability (Profit) is the dependent variable; working capital is our focus variable; Current, Lev, and Size are control variables. The index indicates panel data structure elements. μ_i represents the unobserved heterogeneity vector among firms; in this case, our regression is a one-way fixed effects model. Lastly, v_{it} is the regression residual vector assumed to be independently and identically distributed.

The detailed description of the variables and measurements used in our study is provided in Table 1 below.

Table 1. Detailed Description of Variables and Measurements

Variabel	Measurement (Proxies)	Description	Measure
Profitability (PROFIT)	ROE	Return on Equity	Net Profit/Total Equity
	PROFIT M	Profit Margin	Net Loss / Revenue
Working Capital	WORK CAP1	Working Capital Measure 1	(Current Assets - Current Liabilities / Revenue)
	WORK CAP2	Working Capital Measure 2	Days Working Capital=COGS / (Inventory/365)+ SALES/(Account Receivable/365)- Sales/(Account Payable/365)
Likuiditas	CURRENT	Current Ratio	Current assets/current liabilities
LEVERAGE	LEV	Leverage Ratio	Total Liabilities/ Total equities
SIZE	SIZE	Size of the Company	market capitalization, total assets (LN)

Return on Equity (ROE) is a financial ratio that measures a company's profitability by comparing its net income to shareholder equity (Arshad, 2021). Profit margin is a measure of efficiency and profitability of a business calculated as the ratio of net income to total revenue. In this context, profit margin reflects the percentage of revenue successfully converted into net income after considering all costs and expenses. The higher the profit margin, the more efficient and profitable the business (Johansyah et al., 2024). Profitability is evaluated using several financial ratios, including Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). ROA measures the company's ability to generate profits from the

assets available for use in its operations (Endris & Kassegn, 2023). Working capital refers to net working capital, which includes policies and actions taken by management to manage the company's cash flow and current assets with the goal of improving financial performance and maximizing profits (Othuon et al., 2021). Current assets generally include cash, accounts receivable, inventory, and other current assets expected to be converted into cash within one year or the company's operational cycle (Kasiran et al., 2016). Leverage has a very significant negative effect on company profitability. Leverage refers to the debt-to-equity ratio of the company (Vukovic et al., 2023). Leverage is a debt ratio, calculated as total debt divided by the sum of total debt and equity (Yilmaz, 2022). Company size can influence the company's capital structure policy, where larger companies may tend to have better access to external sources of funds and may be more capable of bearing higher leverage risk (Bazhair, (Bazhair, 2023). Company size (firm size) is an important attribute reflecting the company's resources (Gao et al., 2024).

We obtained the above data from the Osiris database. Our panel data consists of 376 companies from six ASEAN countries: the Philippines, Indonesia, Vietnam, Singapore, Thailand, and Malaysia from 2013 to 2022. There are 3760 annual observations per company. The steps of the analysis can be explained as follows. First, we conduct descriptive statistics (including pairwise correlations) of the variables to understand the basic characteristics of the data. Second, we estimate equation 1 using OLS, Fixed Effects (FE) model, and Random Effects (RE) model. Third, we perform model selection to obtain the most appropriate specification using Wald, Breusch-Pagan, and Hausman statistics. Fourth, we conduct serial correlation tests and heteroskedasticity tests on the selected specification. As will be seen later (see section 3); Feasible Generalized Least Squares (FGLS) is chosen as the base method. Finally, using FGLS, we perform a series of reliability checks involving: (a) alternative estimators (Panel Corrected Standard Error; PCSE); robust estimator (VCE), (b) alternative dependent variables and interesting variable measurements, (b) country samples, and (c) sequential inclusion.

RESULTS AND DISCUSSION

Descriptive statistics

Table 2 presents the description of our variables and statistics. The average values of ROE and PROFIT are 5.75% and 16.65%, respectively. Meanwhile, the average profit of 16.65% indicates that real estate companies, on average, have a relatively high profit margin from their total revenue.

Tabel 2. Descriptive statistic

VARIABLE	Obs	Mean	St.dev.	Min	Max	P5	P95
ROE	3.760	5.066	8.379	-14.399	21.424	-14.357	21.414
WORKCAP1	3.760	1.484	2.194	-1.277	8.258	-1.275	8.257
CURRENT	3.760	2.978	3.145	.285	13.274	0.286	13.259
SIZE	3.760	16.617	3.392	11.906	23.215	11.906	23.210
LEV	3.760	.92	.776	.026	2.937	0.263	2.933
PROFIT M	3.760	16.654	38.219	-81.908	91.474	-14.357	91.470
WORKCAP 2	3.760	.812	2.491	-4.827	7.559	-1.112	0.662

To cope with outliers which pervasive in the data; we do winsorization at 5% and 95% cut off.

The average value of the ROE variable is 0.051 with a standard deviation of 0.084. For the ROE variable, the standard deviation can be considered not significantly different from its mean.

The average value of the WORKING CAP 1 variable is 1.484 with a standard deviation of 2.194. For the WORKING CAP 1 variable, the standard deviation can be considered larger

than its mean, but not significantly different. The data variability is still relatively large compared to its mean.

For the ROE variable, the standard deviation is 0.25921, while the mean is 0.19878. This indicates that the data variation (standard deviation) is slightly larger than its mean, but the difference is not very significant. The average of the WC variable is 0.058. The standard deviation of the WC variable is 0.279. The difference is not very significant.

Tabel 3. Data Statistik Deskriptif

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) ROE	1.000						
(2) WORK_CAP1	-0.199	1.000					
(3) CURRENT	-0.040	0.609	1.000				
(4) SIZE	0.206	0.034	-0.059	1.000			
(5) LEV	0.036	-0.113	-0.323	0.160	1.000		
(6) PROFIT_M	0.640	-0.144	0.017	0.075	-0.209	1.000	
(7) WORKCAP_2	0.011	0.011	0.015	0.040	0.013	-0.015	1.000

There is a negative correlation between ROE (Return on Equity) and WORK_CAP1 (Working Capital), with a correlation coefficient of -0.199. This indicates the tendency for ROE to decrease as Working Capital increases, or vice versa. The correlation between CURRENT and WORK_CAP1 is 0.6090, indicating a high positive correlation between the two variables. The correlation between all other variables is around 0.6, except for CURRENT, which has a lower correlation.

From the descriptive statistical data, it can be observed that the average profitability of real estate companies, measured through PROFIT_M and ROE, is approximately 16.65% and 5.07% respectively. This indicates that the majority of companies are generating relatively good profits. However, the significance of these figures lies in the wide variation in profitability performance within this industry, with some companies recording negative values and others achieving very high profit levels. Meanwhile, the average working capital size of companies is around 1.48 for WORK_CAP1 and 0.22.

For WORK_CAP2, it indicates varying financial needs among companies. On the other hand, the average total asset value of companies is around 2.98, indicating that real estate companies generally have a fairly large asset portfolio. The average leverage ratio is about 0.92.

This indicates that most companies utilize debt capital to support their operations. The average company size is around 16.62, indicating that the real estate industry in the ASEAN region has a fairly large scale of operations. Overall, this data provides an overview of the financial condition and company size in the real estate industry, while highlighting significant variations among them.

Baseline Regressions

After conducting the Chow test, Breusch-Pagan test, and Hausman test, the most suitable model selected was the fixed effects (FE) model. However, it turned out that the fixed effects model violated assumptions regarding autocorrelation and heteroscedasticity. Therefore, to ensure consistency and efficiency in estimation, a more robust model against these violations was chosen, known as Feasible Generalized Least Squares (FGLS). The FGLS model allows us to address assumption violations, such as autocorrelation and heteroscedasticity, by applying certain adjustments in the estimation process. By using this model, we can obtain more consistent and efficient parameter estimates, thereby enhancing the reliability and accuracy of our analysis results.

The FGLS model allows us to address assumption violations, such as autocorrelation and heteroscedasticity, by taking certain steps in the estimation process. By using this model,

we can obtain parameter estimates that are more consistent and efficient, making our analysis results more reliable and accurate. In testing, we reject the null hypothesis regarding the absence of cointegration.

For the regression results using FGLS, you can refer to Table 4 in column 6. The Working Capital variable has a negative impact on Return on Equity (ROE) with a coefficient of -0.913. This implies that if Working Capital increases by one unit, ROE will decrease by 0.913. This finding supports the hypothesis that Working Capital is negatively correlated with Profitability (ROE). Negative Working Capital can arise due to the company's capital structure, where total short-term liabilities (such as debt) exceed total short-term assets (such as cash).

The study conducted by Afrifa explains that Working Capital Efficiency is evaluated negatively when factors such as industry competition, export intensity, and sales growth increase. This indicates that when competition within the industry increases, there is a greater likelihood of inefficiency in working capital management.

Table 4. regression results using various estimation methods to evaluate the relationship between the independent variables (WORK_CAP1, CURRENT, LEV, SIZE) and the dependent variable.

Variable	Ols	FE	RE	VCE	PCSE	FGLS
WORK_CA P1	-1.166*** (0.075)	-1.144*** (0.083)	-1.154*** (0.078)	-1.144*** (0.116)	-1.166*** (0.082)	-0.913*** (0.042)
CURRENT	0.441*** (0.055)	0.396*** (0.069)	0.408*** (0.062)	0.396*** (0.086)	0.441*** (0.057)	0.0249*** (0.029)
LEV	0.207 (0.180)	-1.675*** (0.278)	-0.930*** (0.233)	-1.675*** (0.651)	0.207 (0.207)	-0.454*** (0.152)
SIZE	0.552*** (0.039)	0.220 (0.259)	0.556*** (0.076)	0.220 (0.452)	0.552*** (0.042)	0.483*** (0.035)
Constant	3.873*** (0.679)	3.475 (4.293)	-2.817*** (1.308)	3.475 (7.447)	-3.873*** (0.727)	-1.716*** (0.679)
F-test	105.31	58.55***				
Wald						
Breusch			2099,86***			
Pagan						
Hausman			30.21***			
Serial		663.48***				
Correlation						
Heterocedasticity		9.8e+05***				
Observations	3.760	3.760	3.760	3.760	3.760	3.760
R-squared	0.101	0.065		0.06	0.101	
Number of companies	376	376	376	5	376	376
Cashreserves	17.72%	8.71%	2.42%	25.31%	21.25%	140,490

Note Standard errors in parentheses,*** p<0.01, ** p<0.05, * p<0.1

The negative relationship between working capital and profitability was found in the context of companies listed on the KMI-30 index, which comprises companies that adhere to Islamic financial guidelines. Research indicates that increasing investment in working capital, such as accounts receivable, inventory, and accounts payable, does not always have a positive impact on company profitability. Instead, the research emphasizes the importance of efficiently managing working capital to ensure that the company does not tie up too much

capital in unproductive assets or low liquidity (Akbar et al., 2021b). The study concludes that there is a negative relationship between excessive investment in working capital and company profitability at various stages of the company's lifecycle. This suggests that

Allocating too many resources to working capital can reduce profitability. Conversely, efficient working capital management, which involves the right balance between current assets (such as accounts receivable and inventory) and current liabilities (such as accounts payable), can enhance profitability by maximizing the use of available working capital (Wang et al., 2020). The quadratic variable for the working capital ratio is negative in all three models (OLS, FE, and PCSE). This indicates a negative relationship between working capital and company profitability. Beyond the optimal level, working capital can harm profitability due to opportunity costs, financial costs, and refinancing uncertainty (Anton & Afloarei Nucu, 2021).

On the other hand, there is a positive relationship between Working Capital Management and company profitability, such as reducing cash conversion cycles, increasing inventory turnover, speeding up accounts receivable turnover, and extending the payment period to suppliers, all of which are related to improving company profitability. This suggests that efficiency in working capital management can positively contribute to a company's financial performance (Boisjoly et al., 2020). There is evidence indicating that an increase in positive working capital can contribute to better company performance in several scenarios. For example, in the asymmetric model used in the research, it was found that reducing excessive working capital in the previous year is positively associated with stock performance only for companies that have excess working capital. Additionally, the results of investment analysis also indicate that reducing excessive working capital in the previous year contributes to increased corporate investment for companies with excess working capital, which may have a positive impact on company performance (Aktas et al., 2015).

Robustness Checks

The first reliability check is reported in Table 4; here, we can see that the FGLS estimates are qualitatively similar to those obtained using PCSE, VCE, FE, RE, and OLS. This is remarkable consistency, indicating robust findings regarding the relationship between profitability and working capital.

The analysis results from Table 5 using the sample of ASEAN countries (Philippines, Indonesia, Malaysia, Thailand, and Vietnam) show consistency in the influence of the Working Capital (WORK_CAP1) variable on Return on Equity (ROE). The negative coefficients for the Working Capital (WORK_CAP1) variable in each country indicate that an increase in working capital has a significant negative impact on ROE in the ASEAN region as a whole.

Table 5. Presents Regression Coefficients For Different Countries (Philippines, Indonesia, Malaysia, Singapore, Thailand, Vietnam) In Evaluating The Relationship Between Independent Variables

Variable	Philippines	Indonesia	Malaysia	Singapura	Thailand	Vietnam
WORK_CAP1	-1.137***	-1.545***	-1.026***	-1.045***	-1.168***	-
	(0.087)	(0.187)	(0.097)	(0.161)	(0.116)	0.431***
CURRENT	0.310***	0.407***	0.413***	0.568***	0.168***	0.117
	(0.073)	(0.122)	(0.069)	(0.116)	(0.047)	***
LEV	1.265***	0.295	-2.253	0.854***	-0.870***	(0.066)
	(0.435)	(0.690)	(0.436)	(0.548)	(0.273)	0.165***
SIZE	0.153	0.475***	1.270***	1.303***	0.822***	(0.371)
	(0.148)	(0.137)	(0.194)	(0.222)	(0.137)	0.589

Constant	5.020 (2.633)	-2.652 (2.863)	-11.55*** (2.793)	-14.11*** (3.452)	-5.592*** (2.086)	- 5.853*** (3.762)
Observations	410	450	910	550	870	570
Number of comp	41	45	91	55	87	57

Standard errors in parentheses*** p<0.01, ** p<0.05, * p<0

In Table 6, the regression results using alternative variables as substitutes for the dependent and independent variables to address hypothesis 2, namely work cap2 and profit margin, are presented. The results show a positive impact of Work Cap2 on ROE. Each increase of 1 unit in work cap 2 results in an increase in ROE by 0.0254 percentage points. According to (Vukovic et al., 2023), working capital management has a positive effect on company profitability, indicating that efficient working capital investment management can enhance company profitability..

When profitability is represented using profit margin, a negative relationship between working capital 1 and profit is found. Leverage refers to the debt-to-equity ratio of the company (Vukovic et al., 2023). The leverage ratio is calculated as total debt divided by the sum of total debt and total equity (Yilmaz, 2022). Company size can influence the company's capital structure policy, with larger companies having the potential for better access to external sources of funds and being more capable of bearing higher leverage risks (Bazhair, 2023). Company size (firm size) is an important attribute reflecting the company's resources (Gao et al., 2024).

Tabel 6. Regression Results

VARIABLES	BASELINE	ROE	PROFIT_M1	PROFIT M
WORK_CAP1	-0.913*** (0.0422)		-0.216*** (0.166)	
CURRENT	0.249*** (0.029)	-346 (0.016)	0.463*** (0.098)	-0.200*** (0.0756)
LEV	- 0.454***(0.15 2)	-0.392*** (0.147)	-0.917*** (0.281)	-8.447*** (0.333)
SIZE	0.483*** (0.0346)	0.445*** (0.0389)	1.435*** (0.101)	1.342*** ((0.0970)
WORK_CAP2		0.0254* (0.0138)		0.0364 (0.0387)
Constant	0 (0.539)	0 (0.633)	1.995 (1.772)	1.682 (1.744)
Observations	3,760	3,760	3,760	3,760
Number of Comp	376	376	376	376

In Table 7, using a sequential inclusion approach by introducing control variables gradually, the working capital variable continues to show a significant negative coefficient on Return on Equity (ROE) in every tested model. We can conclude that these findings are quite robust or consistent.

The consistency of these findings indicates that, regardless of the addition of control variables or changes in model specifications, the negative relationship between working capital and ROE remains stable.

Table 7. sequential inclusion

VARIABLES	FULL	FULL 2	FULL2	FULL3	FULL 4
WORK_CAP1	-0.913 (0.042)	-0.819*** (0.022)	-1.026*** (0.971)	-0.770*** (0.243)	-0.705*** (0.319)
CURRENT	0.249*** (0.293)		0.413*** (0.695)		
LEV	-0.454 (0.152)	-0.596*** (0.139)	-2.253*** (0.436)		
SIZE	0.483*** (0.035)	0.529*** (0.032)	1.270*** (0.194)	0.493*** (0.031)	
Constant	-1.716 (0.579)	-1.921*** (0.510)	-11.55*** (2.793)	-1.819*** (0.518)	6.190*** (0.114)
Observations	3760	3,760	910	3,760	3,760
Number of Comp	376	376	91	376	376

The use of Return on Equity (ROE) as a proxy aims to test whether the results obtained from the influence of WORKCAP show a negative impact on profitability.

By using ROE as the dependent variable, we can evaluate whether the relationship between working capital (both WORKCAP and WORKCAP2) and company performance in terms of ROE remains consistent with previous findings. If the results indicate that the negative impact of WORKCAP on ROE is similar to the negative impact of WORKCAP2, it will strengthen the conclusion that working capital has a detrimental effect on company performance. Therefore, the use of ROE as an alternative proxy provides a holistic approach in evaluating the impact of working capital on profitability and overall company performance.

CONCLUSION

This study investigates the relationship between working capital and profitability of property companies in the ASEAN region, using the FGLS model due to violations in correlation tests. The main finding is a significant negative relationship between working capital and Return on Equity (ROE), highlighting the importance of efficient working capital management in supporting the financial performance of property companies. These analysis results provide valuable insights into the factors influencing profitability in the context of the property industry in ASEAN.

However, this study also identifies violations in the selected regression model, indicating non-compliance with the assumptions of basic correlation tests and potential multicollinearity issues. This emphasizes the need for caution in interpreting regression analysis results and underscores the importance of considering the underlying assumptions of the regression model.

For further development, future research could consider adding more observations with a wider time range and utilizing more relevant variables, such as property market conditions, interest rates, or government regulations. Consequently, it is expected that future research can provide a more comprehensive understanding of the factors influencing the relationship between working capital and property company performance, which will support more effective managerial decision-making in the future.

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