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The Study on Efficiencies of Working Capital Management, Asset Management of Listed Companies in Stock Exchange of Thailand, Construction Industry

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Abstract

A study the affect operation of the working capital management for the company listed on the construction industry in Stock Exchange of Thailand. The working capital management is an important to liquidity profitability of the company for company manage suitability of financing policy and manage of working capital. The cost of lose opportunity in treating damage of profitability and the payment to compensate profits, profitability and ability to pay off future liabilities.

Keywords: Working Capital Management, Asset Management, Construction Industry

1. Introduction

The industry has been developed continuously to support the development of the country's successful industry. Financial and labor sectors continued to expand, with characteristics different from foreign countries. And we have to work in relief areas in unstable weather conditions, with changes in operations that are constantly being received, such as unpredictable rainfall such as rain, construction materials Foreign countries that require moving equipment and personnel at all times. With this, the construction business is a job with personnel working Capital management at a high level provides the knowledge and understanding of the capital management business that is needed to fund management with working capital management. Parliament is money management. The rest of the money will be converted into income within a full year. Secure marketing and sales of goods for trade, with the ability to make payments and payment with obligations such as salaries, payments under finance leases, working capital management will involve investments At rest and financing Capital management and personnel management Capital management for investment in short-term capital management and long-term capital management and capital management Compensation and working capital policies that are appropriate for the business.

Objectives

        1. To study the problem conditions Working capital management for construction business operations.

        2. To compare the problem solving abilities of grade 9 students at Wat Laem Fa Pha School using Enjoy Science and Problem Solving" program before and after learning.

        3. To find a form of working capital management that is suitable for business operations Construction.

Research Hypothesis

        1. Working capital influences the profitability of the construction services industry in the Stock Exchange of Thailand.

        2. The distribution of recipients influences the profitability of the construction services industry in the Stock Exchange of Thailand.

        3. Fast working capital influences the profitability of the construction services industry in the Stock Exchange of Thailand.

Conceptual Framework

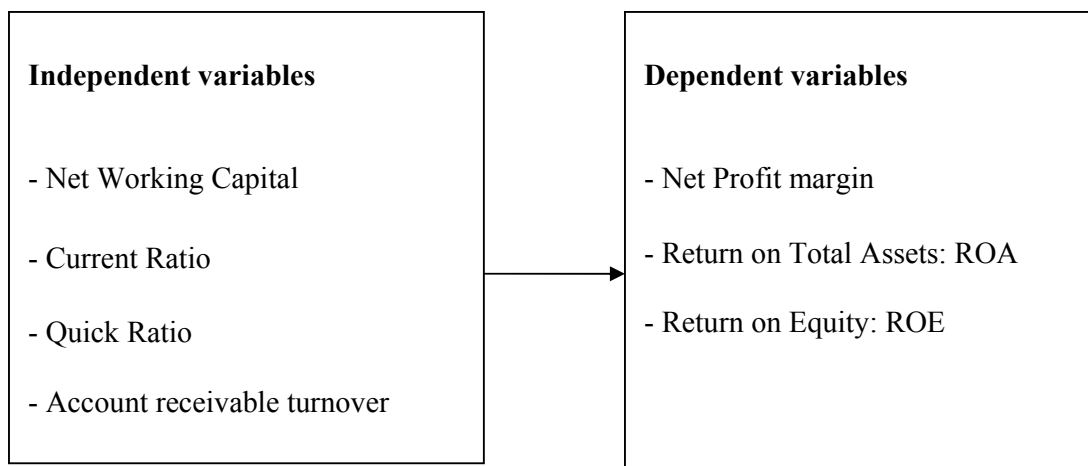| Independent variables	Dependent variables
- Net Working Capital	- Net Profit margin
- Current Ratio	- Return on Total Assets: ROA
- Quick Ratio	- Return on Equity: ROE
- Account receivable turnover	

Figure 1 The conceptual framework of working capital management asset management
of listed companies in Stock Exchange of Thailand construction industry

2. Literature Review

Somkeat Vorraprasittikun (2010) The study results indicated that the cash conversion cycle was the major factor affecting returns on total asset the most. In terms of profitability associated with firm sizes, the large firms were capable of making the highest profit. The second and third went to the medium and the small firms, respectively. In addition, sale, current assets, and total liability affected the firm's profitability in the same direction, while current liability released the opposite result. As a result, the working capital management by means of reducing cash conversion cycle and current liability including an increase in long term investment are the key strategies to raise the firm's profitability. Overall, the wood furniture industry in Thailand tends to associate with a declining trend in its profitability. Hence, a reduction in inventory period is a key factor to increase business's profitability by mean of applying the just-in-time inventory system. As such, the mid-size business should increase their fixed asset in order to reach its economics of scale. As such, the business's profitability can be raised in the future.

Chosita Pestonji and Sareeya Wichitsatian. (2019). This research is a quantitative study with an objective to 1) investigate the impacts of working capital on profitability and 2) develop and validate a structure equation model of working capital management and profitability. The main focus of this study included 43 agro and food industries in the Stock Exchange of Thailand. Secondary data for the past 3 years were analyzed using path analysis method. The results showed that 1) the model fitted the empirical data collected and 2) the company is able to increase its profitability by aiming at high liquidity in working capital management. In addition, shortening inventory conversion period and receivable collection period along with extending payable deferral period also help to gain higher profit.

3. Research Methodology

3.1 Population characteristics and The sample group selection

The population used in this study is a company registered in the Stock Exchange of Thailand, a total of 22 construction services industry, but because PAE (Thailand) Public Company Limited has notified its delisting on the day On 4 April 2016, therefore there is incomplete information during the Education wanted Therefore do not include this company information Leaving a total of 21 companies as follows

3.2 Sampling tools and methods

The instrument used in this study collected data from SETSMART. All characteristics of secondary data were annual financial reports disclosed in the Stock Exchange of Thailand 2014 to 2018.

3.3 Creating data collection tools

This study studies the working capital management that affects the operations of companies listed on the Stock Exchange of Thailand.
1. Financial data is the data from the accumulation of financial statements by using the information in the research as data of the Real Estate Development Division.
2. General information, such as information about financial performance, information about returns received from data collection from various relevant research sources

3.4 Data analysis methods

This study is to study the management of working capital that affects the operations of companies listed on the Stock Exchange of Thailand. Construction Service Group To analyze Such relationship Therefore data analysis is needed By using descriptive statistics which are

1. Initial data analysis The objective is to know the general characteristics of the variables collected. Presenting the study data also Calculation of percentage, mean, marimum and minimum to describe the characteristics of the sample Explanation of the use of working capital and explain the working capital usage behavior of the Thai Construction Services Industry Group

2. Data analysis to test the relationship between independent variables and dependent variables Which is a quantitative variable, will use the statistics for testing as follows

2.1 Pearson Correlation Coefficient Test to find the direction of relationship between 2 or more variables is a direct correlation test using the correlation coefficient (r) number which has the formula for calculating as follows:

$$r_{(X,Y)} = \frac{\frac{1}{n}\Sigma(X_i - \overline{X})(Y_i - \overline{Y})}{\sqrt{\frac{\Sigma(X_i - \overline{X})^2}{n} \cdot \frac{\Sigma(Y_i - \overline{Y})^2}{n}}}$$

By 1.) $r_{(X,Y)}$ Correlation coefficient between X and Y
2.) $r_{(X,Y)}$ between –1 to 1 or $-1 \leq r_{(X,Y)} \leq 1$
3.) $r_{(X,Y)}$ if $r_{(X,Y)} \geq 0.8$ is Multicollinearity

High relationship	$-0.03 > r_{(X,Y)} > 0.08$
Moderate relationship	$0.50 < r_{(X,Y)} < 0.08$ or $-0.08 < r_{(X,Y)} < -0.50$
Low relationship	$-0.50 < r_{(X,Y)} < 0.50$
Not related	$r_{(X,Y)} = 0$

$r_{(X,Y)}$ (+) means relationship in the same direction
$r_{(X,Y)}$ (-) means relationship in the opposite direction

2.2 Multiple regression analysis is to find the relationship between independent variables and dependent variables. That has relationships in linear By showing relationships In the regression model Regression analysis

From basic theoretical concepts Net profit ratio Return on total assets and return on equity Depends on the investment in both the term Short and long In this case, we mainly study the short-term investment. From current assets management and current liabilities With important independent variables which are Net working capital (NWC), working capital ratio (CR), quick working capital ratio (QR) and variable according to the debt turnover ratio (ART) .In addition, the net profit margin (NPM), return on total assets (ROA) and result rates. Return on equity (ROE) should be considered trends. Therefore, in the linear regression analysis of this study, there are 3 equations based on the analysis. Relationships of various variables Which are defined in the following model

$$NPM = f(NWC, CR, QR, ART) \quad \text{---(1)}$$
$$ROA = f(NWC, CR, QR, ART) \quad \text{---(2)}$$
$$ROE = f(NWC, CR, QR, ART) \quad \text{---(3)}$$

From the relation function above Can be defined as the econometric model as follows

$$NPM = \beta_0 + \beta_1 NWC + \beta_2 CR + \beta_3 QR + \beta_4 ART + \varepsilon \quad \text{---(1)}$$
$$ROA = \beta_0 + \beta_1 NWC + \beta_2 CR + \beta_3 QR + \beta_4 ART + \varepsilon \quad \text{---(2)}$$
$$ROE = \beta_0 + \beta_1 NWC + \beta_2 CR + \beta_3 QR + \beta_4 ART + \varepsilon \quad \text{---(3)}$$

Where the definition of methods for calculating units of variables and coefficients is shown in Table 1.

Table 1 Variables, definitions, calculation methods and units of translators used in the study

Variable / Coefficient	Meaning	Calculation method	Unit
NPM	Net Profit margin	Net income ÷ sales	%
ROA	Return on Total Assets	Net income ÷ Average total asset	%
ROE	Return on Equity	Net Income ÷ Shareholder's Equity	%
NWC	Net Working Capital	Current Assets - Current Liabilities	Million baht
CR	Current Ratio	Current Assets ÷ Current Liabilities	ratio
QR	Quick Ratio	(Current Assets – Inventories –Prepayment) ÷ Current Liabilities	ratio
ART	Account receivable turnover	Net credit sales Average ÷ accounts receivable	time
$\beta_0, \ldots \beta_3$	Coefficient	-	-
ε	Erorr	-	-

4. Research Results

The results of the multiple regression analysis between the net working capital ratio (NWC), working capital ratio (CR), quick turnover ratio (QR) and debt turnover ratio (ART) that influence Return on total assets (ROA) of construction services industry companies listed on the Stock Exchange of Thailand Found that there are 4 independent variables that influence Return on total assets (ROA) of construction services industry companies listed on the Stock Exchange of Thailand Significantly (Sig. < 0.05) are working capital ratios (CR), quick capital ratios (QR) and debt turnover ratios (ART).

Conclusion of multiple regression analysis, all 3 hypothesis equations found that the second equation is only one Between the net working capital ratio (NWC), working capital ratio (CR), quick

turnover ratio (QR) and debt turnover ratio (ART) that influence Significant return on total assets (ROA) (Sig. < 0.05) can create a multiple regression equation as follows

Multiple regression equation $\quad ROA = \beta_0 + \beta_1 NWC + \beta_2 CR + \beta_3 QR + \beta_4 ART$

$$ROA = -14.290 + 0.001NWC - 17.830CR + 18.848QR + 2.842ART$$

When   ROA   = Return on Total Assets (%)

NWC   = Net Working Capital (Million baht)

CR   = Current Ratio (ratio)

QR   = Quick Ratio (ratio)

ART   = Account receivable turnover (time)

5. Research Discussion

Independent study on the relationship between financial performance and profitability of Construction services industry group listed companies in the Stock Exchange of Thailand in 7 ratios which are Net Working Capital (NWC), Working Capital Ratio (CR), Rapid Capital Ratio (QR), Debt Turnover Ratio (ART), Net Profit Ratio (NPM)) Return on total assets (ROA) and return on equity (ROE). The research found that:

The working capital ratio (CR) has a direct relationship with the net profit ratio (NPM) of the construction services industry registered in the Stock Exchange of Thailand.

The working capital (CR) ratio is in the opposite direction to the return on total assets (ROA) of the construction services industry registered in the Stock Exchange of Thailand.

The quick working capital rate (QR) has a direct relationship with the return on total assets (ROA) of the construction services industry listed on the Stock Exchange of Thailand.

The net working capital (NWC) is in the opposite direction to the return on total assets (ROA) of the construction services industry registered in the Stock Exchange of Thailand.

The net working capital (NWC) has a direct relationship with the return on total assets (ROA) of the construction services industry group that is listed on the Stock Exchange of Thailand.

6. Recommendation

Independent study on Working capital management that affects the operations of listed companies and companies in the Stock Exchange of Thailand According to the Construction Services Industry Group, it is found that if using the hypothesis testing method, the ratio that has a relationship with the profitability of the Construction Services Industry Group is 4 ratios, Net Working Capital (NWC), Working Capital Ratio (CR), Financial Ratio Quick revolving capital (QR) and debt turnover ratio (ART). Analysts should focus on the analysis of equity. The title includes the decision together with the analysis of the economic situation, the political groups of the project construction.

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