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The Relationship between Working Capital Management and Business Performance in Publicly Listed Thai Automotive Companies

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Abstract

Thailand's automotive industry has a tendency to grow because it is a group of industries that the Thai government has continuously promoted and the main industry for the country's export products. Therefore, companies in the automotive industry should have good working capital management. This is because it is an industry that purchases raw materials to produce products, stores finished goods for sale, and sells them to both domestic and international markets. This process involves buying on credit, storing goods, selling on credit, and investing the money. These processes will affect business performance if the company spends too much or too little time collecting receivables, stocking up inventories, and paying creditors. Therefore, the purpose of this study is to investigate the relationship between working capital management (WCM) and business performance of 17 companies in the automotive industry listed in The Stock Exchange of Thailand (SET) by using the financial statements from 2016-2020. This study uses a quantitative method using Multiple Regression Analysis tools on panel data. Results of this study found that working capital management has a relationship with business performance in the automotive industry listed in the SET.

Keywords : Working Capital Management, Business Performance, Automotive industry

1. Introduction

Business is an organization established to profit from producing products or providing services to meet customer satisfaction. Moreover, the business plays a vital role in helping the country's economy progress and stabilize. People have a better living situation because of employment. Therefore, the enterprise must maintain the sustainability of their business by controlling a working capital management (Mulyono, Djumahir & Ratnawati, 2018).

Working capital management (WCM) refers to the activity of planning and controlling current assets and liabilities by exterminating the risk of being unable to meet short-term liabilities and avoiding excessive investment in asset flows. (Eljelly, 2004). In the past, companies paid no attention to working capital, but are concerned with raising and using debt and equity capital, selecting information and manufacturing technology to operate their businesses and endeavoring to develop national and global markets for selling the products.

Working capital is generally considered a positive component of business management, while the modern view is that working capital is unpleasing in that it constitutes financial performance because current assets do not provide capital returns, hinder company performance, hides obsolete inventory that may not be sold and accounts receivable that may not be recovered. (Working Capital Management, pg 26). Therefore, management should focus on WCM in accordance with the main business goals, whether it be financial planning, investment proportion and length of storage of inventories or the period of lending to the debtor that will not cause problems or interruption to the operations of the business. Business operations require planning for a reasonable amount of cash that is sufficient for the operation of the business and sufficient to pay off trade ayables. But if there is too much cash, the business will lose the opportunity to generate returns. In addition, the time to reserve the merchandise is also important because if the business reserves too little, it will cause the business to suffer from insufficient products to meet the needs of customers but if the company stocks the inventories too

much that makes the product become obsolete. Furthermore, the timing of lending to the debtor is another important factor. If the business does not have a debtor or credit sale that impacts the revenues of businesses and the ability to compete with competitors in the same industry (Sangbua, 2016).

The Thai economy is a mixed economy rather than a capitalist, giving the private sector a more productive role than the government. The private sector has the right to property and inputs. They have the freedom of economic activity and competition to improve the quality of their products. Thailand exports their products abroad in 2020 with agricultural products 9.14%, agricultural industry products 7.80%, industrial products 80.23% and mineral and fuel 2.83%. In 2020, the major export markets of Thailand are the United States with an export value of 1,065,922.29 million baht, China 924,857.88 million baht and Japan 709,388.89 million baht respectively (The Customs Department, 2020). Most exported products are computers, electrical machinery and equipment, vehicles, rubber and plastic. Hence, industrial businesses are important to the economy of Thailand. In the manufacturing industry, the company purchases raw materials by credit which generates trade account payables and uses raw materials to produce products and sell with credit that creates trade accounts receivable. After the receivables are paid, the company will get cash. This cycle known as working capital management (WCM), is an integral part of running a business (Utia, Sutisna & Dewi, 2018).

2. Literature Review

This chapter describes the work of various researchers who are studying the relationship between working capital management and business advantages. The most common way to investigate working capital management's efficiency is through the Cash Conversion Cycle (CCC) (Tobias, Victor & Martin, 2020).

Deloof (2003) studied the relationship between WCM and corporate profitability from a sample of 1,009 out of 1,637 large Belgian non-financial companies from 1992 to 1996, excluding energy, water, banking, and financial companies, insurance, business services and leasing companies, and companies with missing data. This study adopts the methods of correlation analysis and regression analysis. From the results of the two methods, there is a significant negative correlation between the Belgian company's total operating income and accounts receivable, accounts payable and inventory turnover days. Therefore, the company must reduce the number of days for accounts receivable and inventory to a reasonable number of days. In addition, there is an inverse relationship between accounts payable and profits.

Ponsian, Chrispina, Tago & Mkiibi (2014) collected data from 30 manufacturing companies listed on the Dar es Salaam Stock Exchange (DSE) from 2002 to 2012 to study the impact of working capital management (WCM) on profitability. This study uses regression analysis, especially Ordinary Least Squares (OLS), to discover the relationship and extent of the impact of WCM variables on profitability. Taking the gross operating profitability (GOP) as the dependent variable and the average collection period (ACP), inventory turnover days (ITD), average payment period (APP) and cash conversion cycle (CCC) as the independent variables, the regression results show that the ACP coefficient and the company's profitability are negative. Since APP's company profit coefficient is positive, the average payment cycle is positively correlated with the company's profitability. With the extension of the payment period, the company's profitability has increased. In addition, regression leads to a positive correlation between CCC and operating profitability, while ITD is also negatively correlated with profitabilityGhodrati, Ghanbari (2014) investigated a relationship between working capital and profitability for 68 firms of Tehran Stock Exchange whose financial performances were chosen during 2008 - 2013. This

research used linear regression to determine the relation between independent and dependent variables. In the part of the dependent variable, they used operational profit (NOP) for the model research while receivable accounts period (ACP), inventories flow (ITID), operation cycle (CCC) and debit payment period (APP) are used as independent variables. The aftermath obtained from this research is that NOP is incoherent with ACP, ITID and CCC. In other words, if ACP, ITID and CCC are increased the NOP will drop. On the other hand, the relationship between NOP and payable accounts

period is positive. If the payable accounts period is increased, the operation profit will be increased.

Iqbal, Ahmad & Riaz (2014) inspected the relationship between Working Capital Management and Profitability: Evidence from Pakistan, by selecting 50 financial reports of the companies listed in the Karachi Stock Exchange (KSE) that were public between 1 January 2009 and 31 December 2009. They used gross operating profit for the dependent variable and Number of days accounts receivable, Number of days accounts payable, Number of days inventory, Cash Conversion Cycle (CCC), debt ratio and fixed financial assets ratio for independent variables. Iqbal, Ahmad & Riaz found from a sample of Pakistani listed corporations on KSE, there is a significant negative correlation between net operating profitability and days of accounts receivable, days of accounts payable, days of inventory, and CCC. Therefore, they concluded that WCM has a significant impact on the profitability of the sample enterprises listed in KSE and plays a key role in creating shareholder value.

Toan, Nhan, Anh & Man (2017) studied the Relationship between Working Capital Management and Profitability: Evidence in Vietnam by choosing 34 of 53 construction companies listed in the Vietnam Stock Exchange. They selected from 306 financial reports that were announced to the public between 1 January 2007 to 31 December 2015. The research shows the empirical results that accounts receivable period (ARP), accounts inventory period (AIP), accounts payable period (APP) and cash conversion cycle (CCC) have significant negatives with profitability. In contrast, financial debt ratios (FD) have significant positives with the profitability of a company, which means that when leverage of the business increment, the company benefit will upturn too. In addition, the coefficient of sales growth (GROWTH) is significantly positive. In other words, when the revenue of an enterprise increases, it will increase the corporation's profit as well.

Mabandla, Makoni (2019) used 12 of the 18 food and beverage companies listed in the Johannesburg Stock Exchange (JSE) in South Africa from 2007 to 2016 as a sample to study the relationship between working capital management and company financial performance. This research used return on assets (ROA) as the dependent variable while the independent variables are inventory conversion period (ICP), average collection period (ACP), average payment period (APP) and control variables as the size of the company, the current ratio (CAR) and the GDP. The output implies that there is a positive correlation between return on assets (ROA) and inventory conversion period (ICP), which means that the sales turnover between assets and merchandise of the companies is very high. Furthermore, average payment period (APP) has significant positive return on assets (ROA), indicating the more time the companies take to pay bills that makes the business profitables are increased. There is a negative relationship between average collection period (ACP) and return on assets (ROA), implying that the corporations have a short time to collect cash from the customers.

Puriboriboon (2020) examines the relationship of the listed firms in the Stock Exchange of Thailand that are in the SET 50 Index by using a panel data of annual reports during 2014 to 2018 between working capital (Cash Conversion Cycle and Quick ratio) and profitability as measured by Return on Assets (ROA) and Return on Equity (ROE), and the relationship between working capital and market value as measured by Price Earnings ratio (P/E) and Price per Book Value ratio (P/BV) by applying multiple regression analysis method. The quick ratio has a positive significant relationship with ROA, meaning a business that has a high working capital is also highly liquid. In addition, the CCC has a significant relationship with ROE, which means the business has ashort CCC which will make the company more profitable. Furthermore, CCC has a negative significant

relationship to P/BV and CCC has an inverse relationship to P/E, which means that when a business has a shorter CCC, it makes the P/BV increase. As sales growth increases, it makes P/E increase too.

No	Variables	References
1	**Cash Conversion**	Ponsian, Chrispina, Tago & Mkiibi (2014)

	Cycle	Ghodrati, Ghanbari (2014) Toan, Nhan, Anh & Man (2017) Puriboriboon (2020) Iqbal, Ahmad & Riaz (2014)
2	**Quick Ratio**	Puriboriboon (2020)
3	**Accounts Receivable turnover in days** **Accounts Payable turnover in days** **Inventory turnover in days**	Deloof (2003) Ponsian, Chrispina, Tago & Mkiibi (2014) Ghodrati, Ghanbari (2014) Iqbal, Ahmad & Riaz (2014) Toan, Nhan, Anh & Man (2017) Mabandla, Makoni (2019)
4	**Debt ratio**	Toan, Nhan, Anh & Man (2017) Iqbal, Ahmad & Riaz (2014)
5	**P/E ratio**	Puriboriboon (2020)
6	**P/BV ratio**	Puriboriboon (2020)
7	**Fixed financial assets ratio**	Iqbal, Ahmad & Riaz (2014)
8	**Current ratio**	Mabandla, Makoni (2019)
9	**Sale growth**	Toan, Nhan, Anh & Man (2017)
10	**Size**	Mabandla, Makoni (2019)
11	**GDP**	Mabandla, Makoni (2019)

3.Research Methodology

3.1 Research Methodology

The study applied a multiple regression model to analyze panel data where net profit is the dependent variable and cash conversion cycle, quick ratio, accounts receivable turnover in days, accounts payable turnover in days and inventories turnover in days are the independent variables. Moreover, size and sales are used to control the variables.

Multiple Regression Model:

$$NP = \beta 0 + \beta 1\,(CCCit) + \beta 2\,(QRit) + \beta 3\,(ARDit) + \beta 4\,(APDit) + \beta 5\,(ITDit) + \beta 6\,(SIZEit) + \beta 7\,(SALESit) + Ɛij$$

NP = Net profit

CCC = Cash conversion cycle

QR = Quick ratio

ARD = Accounts receivable turnover in daysAPD = Accounts payable turnover in days

ITD = Inventories turnover in daysSIZE = Size (Total assets)

SALE = Sales

β = Constant term

Ɛ = Error

i = Target companies

j = Times

Hypothesis:

Hypothesis 1: Cash Conversion Cycle

Ho: There is no relationship between CCC and Net profit.

Ha: There is a relationship between CCC and Net profit.

Hypothesis 2: Quick ratio

Ho: There is no relationship between QR and Net profit.

Ha: There is a relationship between QR and Net profit.

Hypothesis 3: Accounts receivable turnover in days

Ho: There is no relationship between ARD and Net profit.

Ha: There is a relationship between ARD and Net profit.

Hypothesis 4: Accounts payable turnover in days

Ho: There is no relationship between APD and Net profit.

Ha: There is a relationship between APD and Net profit.

Hypothesis 5: Inventories turnover in days

Ho: There is no relationship between ITD and Net profit.

Ha: There is a relationship between ITD and Net profit.

Hypothesis 6: Size

Ho: There is no relationship between SIZE and Net profit.

Ha: There is a relationship between SIZE and Net profit.

Hypothesis 7: Sale

Ho: There is no relationship between Sale and Net profit.

Ha: There is a relationship between Sale and Net profit.

4. Results and Data Analyst

The intention of this research is to consider the connection between working capital management and business performance by using the financial report from 2016 to 2020 on 17 companies, with a total of 85 samples, applying Multiple Regression analysis to analyze the panel data. This study started with the Unit Root test by PP-Fisher Chi- Square and PP Choi Z-test. After which, the test for Multicollinearity by the Correlation Matrix Method was used. The dependent and independent variables in the model are used to estimate by using the Panel OLS method.

4.1 Descriptive statistics of variables

Statistics are used as a tool to characterize variables such as Mean, Standard Deviation, Minimum and Maximum expressed as description statistics.

Table 4.1 Descriptive Statistic

Variable	Mean	Std. Deviation	Maximum	Minimum
NP	290 MTHB	451 MTHB	2,000 MTHB	- 353 MTHB
CCC	81.51 Days	59.32 Days	280.19 Days	- 5.11 Days
QR	2.09 Times	2.12 Times	9.94 Times	0.12 Times
ARD	63.01 Days	21.86 Days	115.91 Days	6.08 Days
APD	65.14 Days	28.45 Days	143.03 Days	20.62 Days
ITD	83.64 Days	57.89 Days	306.64 Days	23.65 Days
SIZE	5,490 MTHB	4,920 MTHB	22,300 MTHB	895 MTHB
SALE	4,430 MTHB	4,280 MTHB	18,400 MTHB	490 MTHB

From Table 4.1 shows the mean of the dependent variable, independent variables and control variables from a sample of 85 groups of companies in the automotive industry which can be described as follows: the average of net profit is 290 million baht, the average of cash conversion cycle is 81.51 days, the average of quick ratio is 2.09 times, the average of accounts receivable turnover in days is 63.01 days while the average of accounts payable turnover in days and inventory turnover in days is 65.14 and 83.64 days respectively. In terms of size, the average is 5,490 million baht and the average of sale is 4,430 million baht.The automotive industry has a longer cash conversion cycle than other business groups. This is because it is a business group with a long inventory turnover period. The company purchases raw materials, which are then transformed to semi-finished goods and finished goods. Furthermore, some companies have original equipment manufacturers (OEM) that make the company procure more raw materials to produce products according to customer orders. For accounts receivable, there is a long period due to the automotive industry having many and diverse customers in both the automotive and other industries such as furniture with domestic and international customers.

4.2. Panel Unit Root Test

All variables are tested for stationary data to ensure that the qualification of time series does not change over time, which is an essential condition of times series data by testing Panel Unit Root test with PP-Fisher Chi-Square and PP Choi Z-Test.

Table 4.2 The results of testing stationary of data with Panel Unit Root

Variables	PP – Fisher Chi-Square	PP Choi Z-test	Result
NP	52.1529*	-2.16598*	Stationary
CCC	27.1758	0.45570	Non- Stationary
QR	35.1761	0.64260	Non- Stationary
ARD	17.0927	2.71687	Non- Stationary
APD	15.8554	2.97977	Non- Stationary
ITD	29.2311	1.86036	Non- Stationary
SIZE	17.4493	4.09955	Non- Stationary
SALE	35.6067	-0.68782	Non- Stationary

Sources: Calculation

Remark: *, ** Significant at the 0.05 and 0.01 level respectively.

Table 4.2 shows the stationary test of Net profit (NP) by PP-Fisher Chi-Square and PP Choi Z-test at level stage. The statistics that were received from the test of the net profit does not cause the Unit root. That means the net profit is stationary at level stage while cash conversion cycle (CCC), Quick ratio (QR), Accounts Receivable turnover in days (ARD), Accounts Payable turnover in days (APD), Inventory turnover in days (ITD), Size and Sale are non-stationary at level stage. Therefore, all variables have to be tested for unit root again by the 1st difference method so that all variables do not have unit root.

Table 4.3 The output of testing stationary of data at 1st difference with Panel Unit Root

Variables	PP – Fisher Chi-Square	PP Choi Z-test	Result
NP	60.8975**	-2.93853**	Stationary
CCC	65.6830**	-3.93551**	Stationary
QR	93.6434**	-5.43743**	Stationary
ARD	65.6912**	-3.22184**	Stationary
APD	89.1762**	-4.89842**	Stationary
ITD	76.1016**	-4.08901**	Stationary
SIZE	61.7833**	-3.47816**	Stationary
SALE	60.1274**	-2.78691**	Stationary

Sources: Calculation

Remark: *, ** Significant at the 0.05 and 0.01 level respectively.

From Table 4.2, as the researcher found that there are seven variables that are non-stationary at level stage I(0), all variables are tested at the order of integration 1 or I(1) using the first difference. All variables (CCC, QR, ARD, APD, ITD, SIZE and SALE) are found to have no unit root which shows the data are stationary at the first difference stage as shown in Table 4.3. When all the data are stationary, they are put into the regression equation to find the relationship between the variables.

4.3 Pearson Product Moment Correlation

Pearson Product Moment Correlation (r) is used to examine the direction of the relationship between the variables to find out if they are correlated or not, which is known as Multicollinearity. Multicollinearity is tested by considering the coefficient of correlation must be in a range of -1 to 1, where values which are closer to -1 or 1 means that the independent variables have relationships that make parameter problems. There is an error and no statistical significance, resulting in the conclusions obtained from the model to being inaccurate.

Table 4.4 The results of the analysis of the correlation coefficient of the independent variables.

Variables	D(CCC)	D(QR)	D(ARD)	D(APD)	D(ITD)	D(SIZE)	D(SALE)
D(CCC)	1.000	0.154	0.356	-0.255	0.756	-0.098	-0.382
D(QR)	0.154	1.000	0.231	-0.051	0.056	-0.166	-0.422
D(ARD)	0.356	0.231	1.000	0.294	0.183	-0.149	-0.563
D(APD)	-0.255	-0.051	0.294	1.000	0.165	0.133	-0.176
D(ITD)	0.756	0.056	0.183	0.165	1.000	0.022	-0.316
D(SIZE)	-0.098	-0.166	-0.149	0.133	0.022	1.000	0.586
D(SALE)	-0.382	-0.422	-0.563	-0.176	-0.316	0.586	1.000

Sources: Calculation

From the analysis using Pearson's correlation, it is found that there is no relationship between the variables. There are no pairs of variables that get close to -1 or 1 which means all independent variables are independent. Therefore it can be concluded that there is no multicollinearity.

4.4 Multiple Regression Analysis

Testing for the relationship between the independent and dependent variables with multiple regression from the model created with Panel OLS method as shown in Table 4.5

Table 4.5 The results of Multiple Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	212.0642	11.9649	17.7239	0.0000**
D(CCC)	306.8843	149.3708	2.0545	0.0459*
D(QR)	0.6933	17.5829	0.0394	0.9687
D(ARD)	-302.4474	148.8835	-2.0314	0.0483*
D(APD)	305.4824	148.2434	2.0607	0.0453*
D(ITD)	-307.5240	149.1615	-2.0617	0.0452*
D(SIZE)	0.2184	0.0550	3.9715	0.0003**
D(SALE)	0.0945	0.0215	4.3913	0.0001**
R-squared	0.9265			
Adjusted R-squared	0.8880			
F-statistic	24.1075			
Prob(F-statistic)	0.0000			
Durbin-Watson stat	2.0985			
Observation: 68				

Sources: Calculation

Remark: *, ** Significant at the 0.05 and 0.01 level respectively.

From Table 4.5, the equation can be written as

NP = 212.0642 + 306.8843CCC + 0.6933QR – 302.4474ARD + 305.4824APD - 307.5240ITD + 0.2184SIZE + 0.0945SALE

The R2 shows that Cash conversion cycle (CCC), Quick ratio (QR), Accounts receivable turnover in days (ARD), Accounts payable turnover in days (APD), Inventories turnover in days (ITD), Size and Sale can be described by the net profit (NP) variance which is 92.65% and the F-test is a statistic for testing the reliability of the whole equation. The result of F-statistics is 24.1075 and a Prob. is 0.0000. A calculated Prob. less than 0.01 indicates that at least one independent variable influences Net profit (NP). The Durbin-Watson value is 2.0985 and compared to the Durbin-Watson from the table at the significance level 0.01 with a sample size of 85 and independent variable 7 (k = 7, n = 85), dL = 1.337 and dU = 1.685.

The result from calculation is between dU and 4-dU or 1.6585 < 2.0985 < 2.315 which indicates that the model does not have a problem with Autocorrelation. Then the relationship between dependent and independent variables can be described as follows:

1. Cash Conversion Cycle's (CCC) coefficient value is 306.8843. If the cash conversion cycle increases 1 unit, it impacts net profit to increase by 306.8843 units. Cash conversion cycle has statistical significance at 95% because the t-Statistic is 2.0545 and Prob. is 0.0459. So it can be concluded that the cash conversion cycle correlates with net profit in the same direction.

2. Quick ratio's (QR) coefficient value is 0.6933. Thus, if the quick ratio rises to 1 unit, it affects net profit to increase by 0.6933 units. But the quick ratio does not have statistical significance at 95% because the t-Statistic is 0.0394 and Prob. is 0.9687. In conclusion, quick ratio does not correlate with net profit.

3. Accounts receivable turnover in days' (ARD) coefficient value is -302.4474. Therefore, if accounts receivable turnover in days increases 1 unit, it affects net profit to decrease by 302.4474 units. Moreover, Accounts receivable turnover in days has statistical significance at 95% because the t-Statistic is -2.0314 and Prob. is 0.0483. So it can be concluded that accounts receivable turnover in days correlate with net profit in the inverse direction.

4. Accounts payable turnover in days' (APD) coefficient value is 305.4824. Thus, if accounts payable turnover in days increases 1 unit, it impacts net profit to increase to 305.4824 units. Accounts payable turnover in days has statistical significance at 95% because the t-Statistic is 2.0607 and Prob. is 0.0453. So it can be concluded that accounts payable turnover in days correlate with net profit in the same direction.

5. Inventories turnover in days' (ITD) coefficient value is -307.5240. Therefore, if inventory turnover in days increases by 1 unit, it affects net profit to reduce to 307.5240 units. Inventories turnover in days has statistical significance at 95% because the t-Statistic is -2.0617 and Prob. is 0.0452. So it can be concluded that inventory turnover in days correlates with net profit in the inverse direction.

6. Size is found to have a coefficient value of 0.2184. Therefore, if size increases by 1 unit, it affects net profit to escalate by 0.2184 units. Size has statistical significance at 91% because the t-Statistic is 3.9715 and Prob. is 0.0003. So it can be concluded that size correlates with net profit in the same direction.

7. Sales is found to have a coefficient value of 0.0945. Therefore, if sales increases by 1 unit, it affects net profit to increase by 0.0945 units. Sales have statistical significance at 91% because the t-Statistic is 4.3913 and

Prob. is 0.0001. So it can be concluded that sales correlate with net profit in the same direction.

Table 4.6 Summary of directional hypothesis, relationship of independent variable to dependent variable

Variable	Directional Hypothesis	Test Statistic Results	Research Results
Cash conversion cycle (CCC)	+	Significant*	+
Quick ratio (QR)	+	Non - Significant	+
Accounts receivable turnover in days (ARD)	+	Significant*	-
Accounts payable turnover in days (APD)	+	Significant*	+
Inventories turnover in days (ITD)	+	Significant*	-
Size (Total assets) (SIZE)	+	Significant**	+
Sales (SALE)	+	Significant**	+

5. Conclusion, Discussion and Recommendation

5.1 Conclusion

The study investigates the relationship between working capital management and corporate performance of 17 companies in the automotive industry listed in the Stock Exchange of Thailand using the financial statement information disclosed in the Securities and Exchange Commission's website from the period 2016 - 2020 with a total of 85 observations. The data was analyzed to find the relationship of working capital management and net profit in any direction. From the output, it was found that the elements of working capital management, such as cash conversion cycle, accounts receivable turnover in days, accounts payable turnover in days, inventory turnover in days have correlation with net profit including the control variables: size and sales have relationship with net profit also. Therefore, the management should focus on working capital management because if working capital management has more liquidity, it will lose the opportunity for investment or inversely, if they lack liquidity it will impact on the operation of the business.

5.2 Discussion

1. The variables are significantly correlated with the dependent variable.

Cash conversion cycle (CCC) has a positive significant correlation with the net profit of companies in the same direction. It can be explained that when the cash conversion cycle increases the net profit of business also increases. Which is consistent with the research of Ponsian, Chrispina, Tago & Mkiibi (2014) who believed that the positive connection between corporate cash conversion cycle and profitability can be explained by the fact that increasing the investment in current assets can help in increasing the advantage.

Accounts Receivable turnover in days (ARD) has a negative significant relationship with net profit. If accounts receivable turnover either increases or decreases, it will have an opposite effect to the business profitability. Therefore, the management should reduce the number of days for accounts receivable to inflate the net profit of an enterprise in accordance with the research of Deloof (2003) and Toan, Nhan, Anh & Man (2017).

Accounts Payable turnover in days (APD) has a positive significant relationship with net profit. If accounts payable turnover in days increases or declines, the net profit will increase or decrease in the same direction. Thereby, managers should take more time to pay their bills for more profit that is consistent with the research of Mabandla & Makoni (2019).

Inventory turnover in days (ITD) has a negative significance with net profit. If inventory turnover in days increases or decreases, the net profit will increase or decrease in the opposite direction. Ponsian, Chrispina, Tago & Mkiibi (2014) stated that if the time required to convert raw materials into finished products and sell the products is reduced, profitability will increase. Although manufacturing companies have a lot of inventory, companies need to sell products quickly to make a profit.

Size (total assets) has a positive significant correlation with net profit. If size increases or decreases, the net profit will increase or decrease in the same direction. Bayyurt, (2007: 582) said that in areas where competition is required, large companies are more competitive than small companies. Because they have a larger market share, the large companies have the opportunity to make more profit. In addition, large companies can take advantage of opportunities to work in areas that require high capital rates because they have greater resources, a situation that gives them

opportunities to work in areas with less competition and higher profits.

Sales has a positive significant relationship with net profit. If sales increase or decrease, the net profit will increase or decrease in the same direction. For instance, a company's expenses exceed its revenue, then it experiences a loss rather than earning a profit (Infobloom: Nicole Madison, 2021).

2. The variable is not significantly correlated with the dependent variable.

Quick ratio (QR) has no significant relationship with net profit. This means that if the quick ratio increases or decreases, it does not affect the company performance. Because the quick ratio measures the ability of a company to pay all of the outstanding liabilities by using the current asset excluding inventory to convert to cash. Thus, quick ratio is a measure of a company's short term liquidity and cannot explain that if the business has high or low quick ratio will make their profitability high or low too.

5.3 Recommendations

The research findings can give recommendations for 2 groups. Firstly, the small companies should follow the large companies practice by controlling the number of days of payments, collection and storage inventory in a proper time and maintain the liquidity of the business appropriately because these things affect the company performance. Secondly, for the next study, the researcher should study working capital management for the automotive industry in comparison with the world's top automotive export countries. Moreover, the researcher should also study the relationship of working capital management to other variables such as local and global GDP, interest rate, exchange rate, productivity index, fix and variable cost. For independent and dependent variables having different unit counts, it may affect the use of multiple regression, causing discrepancies such as net profit. Therefore, in the next study, the financial ratio data should be used as variables.

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