
THE EFFECT OF RECEIVABLE TURNOVER ON WORKING CAPITAL OF AUTOMOTIVE COMPANIES DURING THE COVID-19 PANDEMIC, THROUGH LIQUIDITY AS AN INTERVENING VARIABLE

Anfas^{1)*}, Abdul Rahman Rahim²⁾, Djayani Nurdin³⁾, Hendrian⁴⁾, Julia Safitri⁵⁾,

¹⁾Student of Doctor of Management Science, Universitas Terbuka, Indonesia

^{2,4)}Doctor of Management Science, Universitas Terbuka, Indonesia

³⁾Faculty of Economics and Business, Universitas Tadulako, Indonesia

⁴⁾Lecturer in Faculty of Economics and Business, Universitas Terbuka, Indonesia

Corresponding author: anfas_st_mm@ecampus.ut.ac.id

Abstract

This study aims to determine the effect of accounts receivable turnover on working capital either directly or indirectly through liquidity as an intervening variable. The research was conducted on automotive companies on the Indonesia Stock Exchange (IDX) for the 2019-2022 period. The research data is secondary data taken from the company's financial statements. While data analysis using regression analysis. The results of the study show that receivables turnover, both directly and indirectly, has no significant effect on the company's working capital during the economic crisis due to the COVID-19 pandemic. Receivable turnover also has no significant effect on the liquidity of automotive companies on the IDX. Likewise, liquidity has no significant effect on the company's working capital.

Keywords: Liquidity, Working Capital, Receivable Turnover, COVID-19, Automotive Companies

Introduction

Since the COVID-19 pandemic hit the world in 2020, most major countries have suffered from its impact. Not only a health problem, but also an impact on the world's socio-economic aspects (Song et al, 2021). From an economic perspective, the crisis engendered by COVID-19 is very different from past financial crises, where reach and severity were evenly distributed across countries (Song et al, 2021; Ding et al, 2020). In a pandemic situation, the corona virus outbreak has created a massive wave of global economic and financial shocks that have driven the stock market down and commodity prices plummeted (Gomez, et al., 2021). The COVID-19 shock impacts all industries as buyers and suppliers influence each other. For example, in Indonesia, financing for the development sector has experienced a slowdown. Loans disbursed and net profit decreased, on the other hand the Non Performing Financing (NPF) ratio increased. Distribution loans only reached IDR 386.3 trillion, down from the position in September 2019 which reached IDR 45,112 trillion. The decline in distribution funding has caused people's purchasing power and consumer demand to decrease (Esomar, 2021). Loans between companies in the form of trading credit to reduce economic impacts also have little effect (Boissay et al, 2020). Puławska's study (2021) shows that the COVID-19 pandemic has had a negative impact on the functioning of the European insurance sector, as evidenced by the decrease in the average ROA of insurance companies.

Based on the statement above, Maliszewska (2020) claims that the pandemic affects the economy through:

- (1) The direct effect of reduced employment. Where reduced employment has led to lower demand for capital, resulting in a loss of output.
- (2) Increased international transaction costs. Because the rising cost of importing and exporting goods and services has resulted in a reduction in trade and loss of productivity.
- (3) Reduced number of people traveling. This condition causes international tourism to produce less income, thus causing a loss of productivity.
- (4) Decreased demand for services that require closeness between people. This condition causes a decrease in consumption of goods and services.

Therefore, Padhan (2021) suggests that conventional macroeconomic policies need to be structured into relief measures, recovery policies, and international coordination measures to get out of the crisis. Regarding the financial impact of the COVID-19 pandemic, it has attracted the attention of many financial and economic researchers around the world (Zimon and Tarighi, 2021). Beirne et al (2020) research shows that developing countries in Asia and Europe experienced the sharpest impact to stocks, bonds and exchange rates due to COVID-19, as well as sudden and substantial capital outflows. Daryanto et al's (2021) research on the financial performance of construction companies in Indonesia before and during the COVID-19 pandemic concluded that the pandemic greatly affected the company's financial performance. Based on liquidity ratios, solvency ratios, profitability ratios, activity ratios, and the Altman Z-Score, companies show lower financial

performance during the pandemic. Likewise, the results of Darjana et al's research (2022) show that during the COVID-19 period a credit crunch occurred due to economic exhaustion.

Didier (2020), suggests that in a crisis, companies can take advantage of "hibernation", incurring the minimum costs necessary to overcome the pandemic, while using credit if needed to stay alive until the crisis subsides. So regulations that focus on liquidity and capital adequacy are important to avoid failure during an economic crisis (Kanca et al, 2020; Kasni&Budiarta, 2021; Anastasia et al, 2022). Ncube and Chinjova (2022) stated that the company's main priorities in dealing with the prolonged economic crisis due to COVID-19 were maintaining liquidity, increasing cash visibility, maintaining balance sheets and increasing flexibility in line with environmental developments during the pandemic. Salehi (2019) argues that in conditions of a financial crisis, one of the right solutions to overcome financial problems is to make the right decisions regarding working capital management policies. The results of Musdalifah and Purnamawati's research (2021) show that working capital is related to the results of accounts receivable turnover, so that in a crisis situation like the current management of accounts receivable is very important in maintaining optimal availability of working capital.

Many studies have been conducted by academics related to working capital. Variables related to working capital that are the focus of researchers are profitability, company age, company characteristics, sales growth, tangibility, cash flow volatility, operating cycle, leverage and GDP growth. However, it should be noted that all research was conducted during normal economic growth, not during a crisis. Thus, during this crisis, of course all the variables above will not be in normal conditions. For example, the sales growth variable in a crisis condition will definitely experience a decrease so that it affects profits. Likewise with tangibility, cash flow volatility, the operating cycle, everything will be disrupted when the company's operations stop due to the co-19 pandemic. To become the company's liquidity, one of the ways that the company relies on is to manage the turnover of its receivables from external parties to be able to finance the company's operations. The size of the impact on working capital is an urgent matter to study in times of crisis like today.

This study follows up on what was stated by Didier (2020), Ncube and Chinjova (2022) and combines it with the research results of Musdalifah and Purnamawati (2021). From this research it is expected to be able to empirically prove the determinants of the adequacy of company working capital in the era of the economic crisis as a whole as stated by the experts above. The choice of automotive companies as research objects is because this sector is very interesting to study. At the start of the 2020 COVID-19 pandemic, many companies were forced to close their production facilities due to a drop in market demand. From Gaikindo data as of January 2020, sales figures still reached 81,063 units, but immediately fell in February 2020 to 77,847 units and a month later in March it fell again to 60,448 units. For April, sales figures fell sharply by 60% to only 24,276 units. From the export side, the figure also fell sharply to 55% month to month. If in March 2020 the export figures were still 6,547,902 units, then in March there were only 2,956,616 units left ([https://tirto.id, 25/5/2020](https://tirto.id/25/5/2020)). However, when the pandemic began to subside at the end of 2021, this sector was also one of the sectors that experienced a very fast recovery. Where from data on the growth of the transportation equipment industry as of the third quarter of 2021, this sector has again grown rapidly to reach 27.84%. In the January-September 2021 period, sales reached 600,344 units, an increase compared to the same period the previous year which was only 407,390 units (<https://kemenperin.go.id, 11/11/2021>).

Working capital

Working capital is a company's investment in short-term assets. This short-term investment is to fund the company's operations. Brigham, (2011) classifies working capital into two, namely working capital and net working capital. Working capital, also sometimes called gross working capital, refers to the current assets used in operations.

- (1) Permanent working capital, namely working capital that must be provided by the company, so it must still exist to be able to carry out its functions. In other words, this type of working capital will always be needed for the smooth running of the business.
- (2) Variable working capital, namely working capital whose amount is determined by the circumstances at any time faced by the company.

Riyanto (2010) suggests that to determine the adequacy of working capital turnover in a certain period can be calculated from the company's working capital turnover ratio. The shorter the cash period tied to each working capital component, the faster the working capital turnover. According to Hampton (1989) the working capital requirement of a company is determined by four factors, namely:

- 1) Sales Volume. Companies need working capital to support operational activities when there is an increase in sales.
- 2) Seasonal and Cyclical Factors. Sales fluctuations due to seasonal and cyclical factors will affect working capital requirements.
- 3) Technology changes. If there is a technological development, it will be correlated with the production process and can have an impact on working capital requirements.
- 4) Company policy

The policies implemented by the company will also have an impact on working capital requirements. Working capital obtained from outside funding can be in the form of loans, both short-term loans and long-term loans. This loan is made if the company's internal funding in the form of retained earnings has not been able to finance future projects, because the company has just started operating or may have been operating for a long time but has not yet generated a profit. For this reason, it is important to manage working capital effectively and efficiently, to ensure the company's long-term growth and sustainability. Because if the company experiences a shortage of working capital, it is likely that the company will lose revenue and profits. Likewise for companies that do not have sufficient working capital but are unable to pay their short-term obligations on time will experience liquidity difficulties (Bagiana, 2021).

Receivable Turnover

Receivables in principle are company claims for money, goods or services to other parties as a result of past transactions (Muhajir, 2020). According to Rudianto (2012), receipts include all money claimed against other entities, including individuals, companies and other organizations. These receivables usually constitute a significant portion of total current assets. The higher the turnover rate of a company's receivables, the faster these receivables turn into cash. Conversely, the lower the turnover, the slower it turns into cash (Ndomadkk, 2019). Thus, the higher the receivables turnover, the faster and more efficient the company is in turning its assets (Wajo, 2021). From the turnover of these assets can be used as a basis for measuring the prospects of a company.

Liquidity

The company's liquidity shows the company's ability to finance its operational activities and also to pay off its short-term obligations. To assess a company's liquidity ratio, it can be seen from financial ratios such as: current ratio, quick ratio and cash ratio (Ginting, 2018). According to Kasmir (2016) the current ratio is a liquidity ratio that can be used to measure a company's ability to pay its short-term obligations which will soon be due when billed as a whole. The quick ratio is a liquidity ratio that shows a company's ability to meet its short-term obligations with current assets without taking inventory into account. While the cash ratio is one of the liquidity ratios used to measure how much cash is available to pay debts.

Review of Previous Research

Some empirical evidence shows the factors that determine working capital, both related to working capital policies, working capital investment and those related to working capital management. Among them are research conducted by Nyeadi, J. D, Sare, Y. A. &Aawaar, G. (2018), Yakubu, I. N., Kapusuzoglu, A. &Ceylan, N. B. (2020), Muhammad, Samsuddin (2021) and Tjandra, C. K., Murhadi, W. R. &Herlambang, A. (2022) shows that profitability has a positive and significant effect on working capital. In addition to profitability, other factors that affect a company's working capital are leverage, liquidity, fixed investment, company age, sales growth, GDP growth, operating cycle, company characteristics, economic conditions and type of industry, growth opportunities (Nyeadi, J.D., Sare, Y. A. &Aawaar, G., 2018; Moussa, A. Ahmed, 2019; Yakubu, I. N., Kapusuzoglu, A. &Ceylan, N. B., 2020, and Tjandra, C. K., Murhadi, W. R. &Herlambang, A., 2022). The following is a summary of research related to working capital that has been carried out by several researchers:

Table 1. Working Capital Research Results

Researcher	Basic Theory / Concept	Findings
Fadli, Achmad A. Y. (2017)	<i>Pecking Order Theory</i>	Profitability (ROA and ROE) has no significant effect on working capital in food and beverage companies listed on the Indonesia Stock Exchange (IDX).
Nyeadi, J. D, Sare, Y. A. &Aawaar, G. (2018)	Combination of Agency theory, Pecking order and Modigliani and Miller Theory (MM)	Working capital in Ghanaian companies is determined by profitability, company age, sales growth, GDP growth, operating cycle and leverage.
Moussa, A. Ahmed (2019)		Working capital behavior is influenced by various factors related to company characteristics, economic conditions and type of industry
Yakubu, I. N., Kapusuzoglu, A. &Ceylan, N. B. (2020)	<i>Pecking Order Theory</i>	Manufacturing company working capital management is significantly driven by profitability, operating cycle, growth opportunities, leverage, and company size. On the other hand, firm age and GDP growth (proximate economic activity) do not affect working capital requirements.

Researcher	Basic Theory / Concept	Findings
Muhammad, Samsuddin (2021)	<i>Trade-off Theory</i>	Profit margin has a significant effect on cash as a component of working capital policy. While tangibility, sales growth, cash flow volatility, and real GDP growth have no significant effect on cash, inventories, receivables as components of Working Capital.
Tjandra, C. K., Murhadi, W. R. &Herlambang, A. (2022)	<i>Trade-off Theory</i>	The research was conducted in two countries, namely Indonesia and the Philippines. The results of research on Indonesian samples show that profitability and growth opportunities have a positive and significant effect on working capital. Tangible assets, company age, and leverage have a negative and significant effect on working capital. While operating cash flow and company size have no effect on working capital. As a comparison, the results of the Philippines sample show that profitability has a positive and significant effect on working capital. Tangible assets and leverage have a negative and significant effect on working capital. While operating cash flow, growth opportunities, age, and company size have no effect on working capital

If you look at the results of the research above, it appears that working capital is not only influenced by the company's financial performance, but also influenced by the company's environment and industry. For more details, see the following table:

Table 2. Internal and external factors that affect working capital

Researcher	Factors affecting working capital	
	From the Aspect of Financial Performance	From the Company's Environmental Aspect
Nyeadi, J. D, Sare, Y. A. &Aawaar, G. (2018)	Profitability, company age, sales growth, operating cycle and leverage	GDP growth
Moussa, A. Ahmed (2019)	Profitability, operating cycle, growth opportunities, leverage and company size	Company characteristics, economic conditions and type of industry
Muhammad, Samsuddin (2021)	Profit margins	-
Tjandra, C. K., Murhadi, W. R. &Herlambang, A. (2022)	Profitability and growth opportunities, Tangible assets, company age and leverage	-

Table 2 above shows that the company's financial performance is more dominant in influencing the company's working capital. The financial performance variables that most dominantly affect the company's working capital are profitability, leverage and company growth. While economic conditions, GDP and industry types/characteristics are aspects of the company's external environment that can determine the company's working capital policy. As an example; The risk of exchange rate movements or fluctuations in currency exchange rates in the country where the company's branches operate will certainly affect the composition of debt interest and taxes that must be borne by the company (Kennedy, 2019).

Hypothesis Development

- There are three hypotheses built in this study that will be tested, namely as follows:
- H1 =There is a significant effect of the receivables turnover ratio on the liquidity ratio in automotive companies during the economic crisis due to the co-19 pandemic
- H2=There is a significant influence of the liquidity ratio on the working capital adequacy of automotive companies during the economic crisis due to the COVID-19 pandemic
- H3=There is a significant effect of the receivables turnover ratio on the working capital adequacy of automotive companies during the economic crisis due to the co-19 pandemic

In accordance with the hypotheses built in this study, the research concept framework can be described as follows:

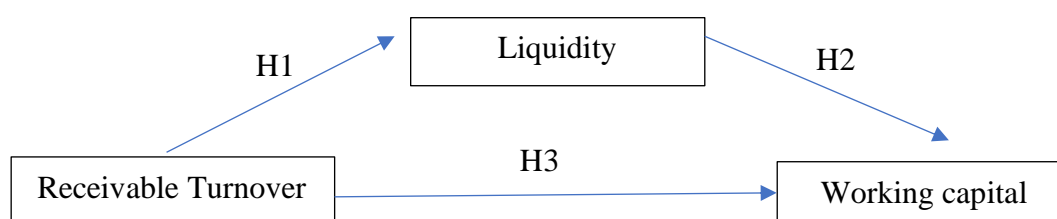


Figure 1. Research Concept Framework

Methods

Research design

This study uses a qualitative research method that measures the effect of accounts receivable turnover as the independent variable (X) on working capital as the dependent variable (Y), where liquidity becomes the intervening variable (Z). The research population is all companies that have been listed on the Indonesia Stock Exchange (IDX) for the 2019-2022 period. From the list of companies that became the research sample, only automotive companies had the following criteria:

- (1) Registered on the IDX in 2019-2022
- (2) Having the completeness of the data needed in the research
- (3) Published complete financial reports for 2019-2022

Data collection technique

The data used in this study is secondary data obtained from information collected from existing sources (Sekaran and Bougie, 2017). This data is reliable data, because it has been audited by independent auditors and has been published by automotive companies listed on the Indonesia Stock Exchange (IDX), in the form of financial reports and other data needed in research.

Model and Operational Definition of Variables

In this study, what is meant by accounts receivable turnover is the amount of receivables billed by the company in one period. The lower the number, the worse the billing efficiency during that period, due to the length of time billing lasts (Soemarso, 2009). The formula is as follows:

$$\text{Receivable turnover ratio} = \frac{\text{Net Credit Sales}}{\text{Average receivables}}$$

The liquidity ratio used in this study is the quick ratio. The reason is, if a company is able to manage its finances well, even in a crisis, the company still has funds available to pay its obligations when billed at any time (Husnan, 2020). The quick ratio formula is as follows:

$$\text{Quick ratio} = \frac{(\text{current assets} - \text{inventories})}{\text{current liabilities}} \times 100\%$$

What is meant by adequacy of working capital in this study is Working Capital Turnover (WCTO). The trick is to calculate the effectiveness of the company's working capital for a certain period by comparing sales with working capital or with average working capital, namely reducing current assets with current liabilities. With the following formula:

$$WCTO = \frac{\text{net sales}}{\text{current assets} - \text{current liabilities}}$$

Data analysis technique

The data analysis technique used in this study is multiple linear analysis. Path analysis testing was carried out using the SPSS program. Before carrying out multiple regression analysis, it must be tested first using the classical assumption test, to ascertain whether the regression model used has no problems with normality, multicollinearity, heteroscedasticity and autocorrelation. If this is fulfilled then the analytical model is suitable for use (Sugiyono, 2018).

Results and Discussion

Normality test

The normality test was carried out to find out whether in the regression model, the dependent variable and independent variable are both normally distributed or not. The testing technique used in this study is the P-Plot. If the dots follow the diagonal line, the data is said to be normal.

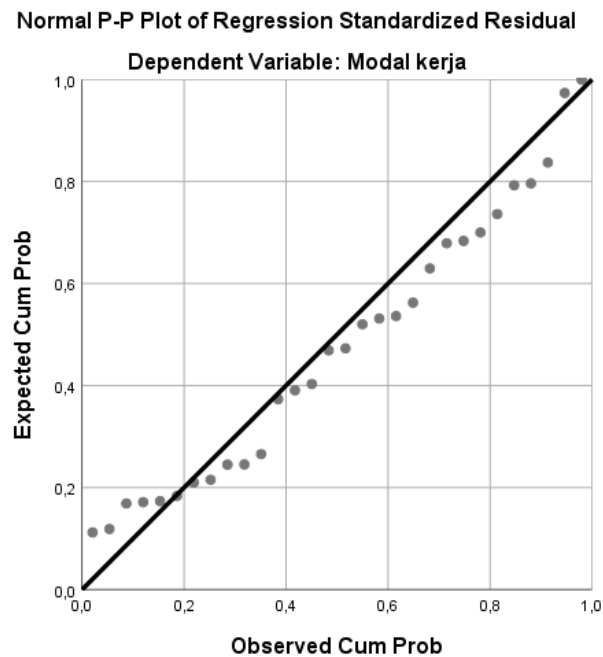


Figure 2. p-plot test for normality

Based on the picture above, it can be seen that the results of the data normality test show that the data points are spread around the diagonal line, so that it can be said that the data is normally distributed.

Multicollinearity Test

The multicollinearity test aims to see whether or not there is a high correlation between the independent variables in the multiple linear regression model. If there is a high correlation between the independent variables, then the relationship between the independent variables and the dependent variable is disrupted. To test multicollinearity, it can be seen from the tolerance value of the VIF (Variance Inflation Factor) value. If the VIF value is not more than 10 and the tolerance value is not less than 0.1, then the model can be said to be free from multicollinearity (Surjoyo et al, 2013). The results of the multicollinearity test can be seen in the following table:

Table3. Multicollinearity Test

Model	Collinearity Statistics		
		Tolerance	VIF
1	(Constant)		
	Receivable turnover	1,000	1,000
	Liquidity	1,000	1,000

a. Dependent Variable: Working capital

From table 3 it can be seen that all independent variables are not affected by multicollinearity problems. This can be seen from the VIF value < 10 and Tolerance > 0.10. For the receivables turnover variable, it has a tolerance value of 1,000 and a VIF of 1,000. The liquidity variable has a tolerance value of 1,000 and VIF of 1,000.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether the values in the regression model have a residual variance that is not the same from one observation to another. Heteroscedasticity can be detected with the Glejser test if there is an independent variable that has a significant effect at a significant level of 0.05 on the absolute residual, then heteroscedasticity occurs in this regression:

Table 4 Heteroscedasticity Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,357	1,346		1,008	,322
	Receivable turnover	,257	,264	,177	,971	,340
	Liquidity	,246	,164	,274	1,506	,144

Based on the table above, it can be seen that the receivables turnover variable (X) has a sig value. 0.340 and the liquidity value (Z) is sig. 144. This means that in the regression equation model there are symptoms of heteroscedasticity so that the data can be used in this study. After the results of the classical assumption test have been carried out and the overall results show that the regression model meets the classical assumptions, the next step is to evaluate and interpret the multiple regression model. The results of the linear regression analysis of each equation using the SPSS program are as follows:

$$\text{Equation I: } Y = a_1 + a_2X + e_i$$

Table 5. Linear Regression Output of Receivable Turnover (X) to Working Capital (Y)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,058	1,292		1,593	,122
	Receivable turnover	,261	,270	,179	,965	,343

a. Dependent Variable (Y), Source: Processed data

Based on the table, a simple linear regression equation is compiled, as follows:

$$Y = 2,058 + 0,261X + e_i$$

The meaning of the simple linear regression equation is as follows:

- (1) A constant of 2.058 indicates that without the receivables turnover variable (X) the value of working capital variable (Y) is 2.058
- (2) The regression coefficient of the receivables turnover variable (X) is 0.261 indicating that each change in receivables turnover (X) by one unit will result in an increase in working capital (Y) of 0.179 assuming other variables are constant.

Meanwhile, to find out how much influence the receivables turnover variable (X) has on working capital (Y) can be seen from the results of the analysis of the determinant coefficient (R²), with the following results:

Table 6 Determinant Coefficient of Receivable Turnover (X) on Working Capital (Y) Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,179 ^a	,032	-,002	2,10986	1,510

a. Predictors: (Constant), Receivable turnover

b. Dependent Variable: Working capital

Based on table 6, the value of Adjusted R Square (R²) is 0.032. This means that the variation in working capital (Y) is 32% influenced by accounts receivable turnover (X), the remaining 68% is influenced by other variables not included in this research model.

$$\text{Equation II: } Z = a_3 + a_4X + e_i$$

Table 7. Linear Regression Results of Receivable Turnover (X) on Liquidity (Z)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,843	1,459		1,949	,061
	X1	,016	,305	,010	,053	,958

a. Dependent Variable: Liquidity (Z)

Based on the table above, a simple linear regression equation is compiled as follows:

$$Z = 2,843 + 0,016X + e_i$$

The meaning of the simple linear regression equation is as follows:

- (1) The constant is 2.843, this shows that without the Receivables Turnover variable (X) the value of the Liquidity variable (Z) is 2.843.
- (2) Regression coefficient of Receivables Turnover (X) variable is 0.016, indicating that each change in Receivables Turnover (X) of one unit will result in a change in Liquidity (Z) of 0.016 assuming the other variables are constant. Determinant (R²) with the following results:

Table 8. Output Determinant Coefficient of Receivable Turnover (X) on Liquidity (Z)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,124 ^a	,373	-,067	2,3825864

a. Predictors: (Constant), Receivables Turnover (X)

b. Dependent Variable: Liquidity (Z)

From table 8 it is known that the Adjusted R Square (R²) value is 0.373. That is, 37.3% of the variation in Liquidity (Z) is influenced by Accounts Receivable Turnover (X), the remaining 62.7% is influenced by other variables not included in this model.

$$\text{Equation III: } Y = a_5 + a_6X + a_7Z + e_i$$

Table 9. Results of multiple linear regression tests between accounts receivable turnover (X) and liquidity (Z) on working capital (Y)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,357	1,346		1,008	,322
	Receivable turnover	,257	,264	,177	,971	,340
	Liquidity	,246	,164	,274	1,506	,144

a. Dependent Variable: Y, Sumber: Data diolah

Based on the table above, the multiple linear regression equation is compiled as follows:

$$Y = 1,357 + 0,257X + 0,246Z + e_i$$

The meaning of the multiple linear equation above is as follows:

- (1) The constant is 1.357, meaning that if there is no Accounts Receivable Turnover (X) and Liquidity (Z), then the value of Working Capital (Y) is 1.357.
- (2) Regression coefficient of Receivables Turnover (X) of 0.257 indicates that each change in receivables turnover (X) of one unit will result in a change in Working Capital (Y) of 0.257. Assuming other variables are constant.
- (3) The liquidity regression coefficient (Z) of 0.246 indicates that each change in liquidity (Z) of one unit will result in a change in working capital (Y) of 0.246. Assuming other variables are constant.

Meanwhile, to find out how much influence the receivables turnover variable (X) and liquidity (Z) have on Working Capital (Y) can be seen from the results of the analysis of the Determinant Coefficient (R2) as follows:

Table 10. Results of Receivable Turnover Coefficient (X) and Liquidity (Z) on Working Capital (Y)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,327 ^a	,107	,041	2,06368	1,850

- a. Predictors: (Constant), Turnover Coefficient, Liquidity
b. Dependent Variable: Working Capital

Based on table 10, the value of Adjusted R Square (R2) is 0.107. This means that 10.7% of the variation in Working Capital (Y) is influenced by Accounts Receivable Turnover (X) and Liquidity (Z). The remaining 89.3% is influenced by other variables not included in this research model.

Hypothesis Testing Results

Hypothesis testing (H1, H2, and H3) uses the t test. If the sig value <0.05 means that the independent variable has an effect on the dependent variable. Conversely, if the sig value > 0.05, it means that the independent variable has no effect on the dependent variable.

Hypothesis 1:

Based on table 5 it is known that the variable Receivable Turnover (X) obtained a value of t = 0.965 with a sig value of 0.343 so that H1 is rejected and H0 is accepted. Thus it is concluded that there is no significant effect of the variable Receivable Turnover (X) on Working Capital (Y).

Hypothesis 2:

Based on table 7 it is known that the variable Receivable Turnover (X) obtained a value of t = 0.053 with a sig value of 0.958 so that H2 is rejected and H0 is accepted. Thus it is concluded that there is no significant effect of the variable Receivable Turnover (X) on Liquidity (Z).

Hypothesis 3:

Based on table 9, it is known that the Liquidity variable (Z) obtained a value of t = 1.506 with a sig value of 0.144 so that H3 is rejected and H0 is accepted. Thus it is concluded that there is no significant effect of the Liquidity variable (Z) on Working Capital (Y).

Path Analysis

Based on table 8, the coefficient value of e1 = 1-0.373 = 0.627 is obtained. Whereas in table 10 the coefficient value of e2 = 1-0.107 = 0.893 is obtained. So the path diagram can be described as follows:

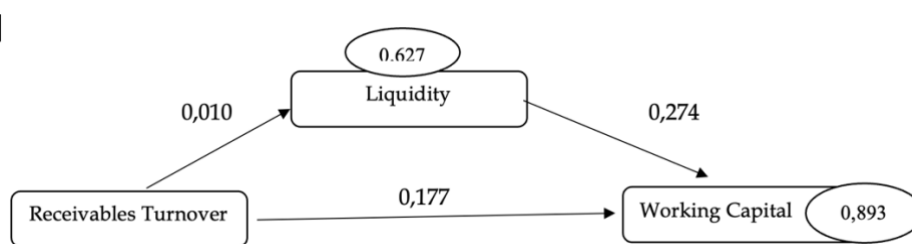


Figure 3. Path Analysis Model

Based on the path analysis model, the total effect can be calculated as follows:

$$\begin{aligned} \text{Indirect influence (0,010 x 0,274)} &= 0,003 \\ \text{Direct influence} &= \underline{0,177} \\ \text{total} &= \underline{0,18} \end{aligned}$$

Discussion

Effect of Accounts Receivable Turnover on Working Capital

The results of this study indicate that although accounts receivable turnover has a positive effect on working capital, the effect is not significant. Likewise, the indirect effect shows insignificant results. This means that for automotive companies, the company's receivables turnover path during the economic crisis during the COVID-19 pandemic is not bad.

This study supports the results of Wahyudi's (2015) and Ndoma et al (2019) studies which show that accounts receivable turnover has no significant effect on working capital. This means that although accounts

receivable turnover can increase working capital during the economic crisis, this impact does not have a significant effect on automotive companies. If we read the news that many other companies suffered losses during the economic crisis during the COVID-19 pandemic which caused them to have difficulty with working capital, this is not the case for companies in the automotive industry. The decline in sales of automotive companies' products was caused more by policies to reduce production due to declining public purchasing power. Not because of a lack of working capital.

Effect of Accounts Receivable Turnover on Liquidity

The results of this study indicate that although receivables turnover has a positive effect on company liquidity, the results are not significant. We know that in the midst of a crisis, for companies with low accounts receivable turnover, of course, it can cause the company's liquidity ratio to be small, so that it can cause the company to be unable to pay off its obligations. The company has the opportunity to experience difficulties in developing, and even has the potential to go bankrupt.

The results of this study are certainly contrary to the results of research by Debbianita (2012) and Runtulalo et al (2018) which show that there is a significant effect of receivables turnover on company liquidity. This means that the turnover of receivables will have an impact on the company's ability to pay its short-term debt. In a crisis situation, the impact will certainly be negative. However, this does not apply to automotive companies listed on the IDX.

The Effect of Liquidity on Working Capital

The results of this study indicate that although liquidity has a positive effect on company working capital amid the COVID-19 pandemic crisis. However, the effect is not significant. This research is different from the results of the research by Priandini and Lubis (2019) which shows otherwise that liquidity has a positive and significant effect on working capital.

Maintaining a good liquidity ratio in the midst of a crisis is certainly an achievement. Because we know that a company's inability to maintain liquidity ratios due to slow cash turnover makes it difficult for companies to finance their operations. This condition certainly has implications for the efforts of companies that inevitably only try to survive in the face of a crisis.

Conclusion

This research shows that accounts receivable turnover has no significant effect on a company's liquidity and working capital during the economic crisis due to the COVID-19 pandemic. Either directly or indirectly, there is no effect on working capital. Likewise, the effect of liquidity on working capital does not show a significant effect. So, from the results of this study we can also interpret that the phenomenon of the decline in sales of automotive companies during the COVID-19 pandemic was not caused by companies not being able to produce anymore due to working capital constraints, and the variables that influenced it. But more because people's purchasing power decreased, so the level of sales also decreased. In this condition, one of the strategic steps taken by the company is to reduce its product. After the economic situation returned to normal, sales were made and it was proven that the results had increased.

References

- Anastasia C, O., Blessing, A., & Oghenetega, O. E. (2022). COVID-19 Pandemic and the Performance of Financial Firms in Nigeria. *Linguistics and Culture Review*: 6(S1), 242-251. <https://doi.org/10.21744/lingcure.v6nS1.1996>
- Bagiana, I Kadek (2021). *Penganggaran Modal Internasional*. BukuAntalogiManajemenKeuanganInternasional. Bandung: Widina Bhakti Persada
- Beirne, J., Renzhi, N., Sugandi, E., & Volz, U. (2020). Financial Market and Capital Flow Dynamics During the COVID-19 Pandemic. *ADB Working Paper Series*, No. 1158: 1-36
- Boissay, F., Patel, N. & Shin, H. S. (2020). Trade Credit, Trade Finance, and the COVID-19 Crisis. *BIS Bulletin*, 24(1): 3-9
- Brigham, E. F. dan Houston, J. F. (2011). *Dasar-dasarManajemenKeuangan*. Jakarta: SalembaEmpat
- Darjana, D., Wiryono, S. K., &Koesrindartoto, D. P. (2022). The COVID-19 Pandemic Impact on Banking Sector. *Asian Economics Letters*, 3(Early View): 2-6. <https://doi.org/10.46557/001c.29955>
- Daryanto, W. M., Rizki, M. I., &Mahardhika (2021). Financial Performance Analysis of Construction Company Before and During COVID-19 Pandemic in Indonesia. *International Journal of Business, Economics and Law*, 24(4): 99-108.
- Debbianita (2012). *PengaruhPerputaranpiutang dan Perputaran Modal kerjaterhadapLikuiditasperusahaan (Studikasuk pada Perusahaan Manufaktur Sektor BarangIndustri)*. Skripsi. JurusanAkuntansi, Fakultas Ekonomi, Universitas Kristen Maranatha, Bandung
- Ding, Wenzhi, Ross Levine, Chen Lin, &WensiXie. (2020). *Corporate Immunity to the COVID-19 Pandemic*. Cambridge: National Bureau of Economic Research.

- Esomar, M. J.F. (2021). Analisa Dampak COVID-19 Terhadap Kinerja Keuangan Perusahaan Pembiayaan di Indonesia. *Jurnal Bisnis, Manajemen dan Ekonomi*, 2(2): 22-29
- Fadli, A. A. Y. (2017). Pengaruh Profitabilitas terhadap Modal Kerja pada Perusahaan Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia. *Jurnal Aplikasi Manajemen, Ekonomi dan Bisnis*, 1(2): 120-135
- Ginting, Suriani (2018). Pengaruh likuiditas, profitabilitas. Dan leverage terhadap kebijakan deviden pada perusahaan Iq45 yang terdaftar di bursa efek Indonesia periode 2012-2016. *JWEM STIE Mikroskil*, 8(2): 195-204
- Gomez, Conrado D. G., Demiro, E, Esteban, J. M. D., & Bilan, Yuriy (2021). The Impact of COVID-19 Outbreak on Hotels' Value Compared to Previous Diseases: The Role of ALFO Strategy. *Heliyon*, 7(8): 1-8. <https://doi.org/10.1016/j.heliyon.2021.e07836>
- Hampton, John J. Wagner, Cecilia L. (1989). *Working Capital Manajemen*. Canada: John Wiley dan Sons, inc.
- Husnan, Suad (2020). *Manajemen Keuangan*. Tangerang: Universitas Terbuka Press
- Kanca, I. N., Ginaya, G., & Sri Astuti, N. N. (2020). The Effectiveness of the Problem Solving Method on Learning Outcomes of the English Course for Room Division Operation During the COVID-19 Pandemic. *International Journal of Linguistics, Literature and Culture*, 7(1): 12-22. <https://doi.org/10.21744/ijllc.v7n1.1102>
- Kasmir (2016). *Analisis Laporan Keuangan*. Jakarta: PT. Raja Grafindo Persada
- Kasni, N. W., & Budiarta, I. W. (2021). The Multimodal Forms of Tourism Promotional Discourse in the Age COVID-19. *International Journal of Linguistics, Literature and Culture*, 7(6): 422-440. <https://doi.org/10.21744/ijllc.v7n6.1945>
- Kennedy, P. S. J. (2019). *Diktat Mata Kuliah Keuangan Internasional*. Fakultas Ekonomi, Universitas Kristen Indonesia
- Maliszewska, M., Mattoo, A., Van Der Mensbrugge, D., (2020). The Potential Impact of COVID-19 on GDP and Trade: A Preliminary Assessment. In: *World Bank Research Working Paper* (9211). <http://hdl.handle.net/10986/33605>.
- Moussa, A. Ahmed (2019). Determinants of Working Capital Behavior: Evidence From Egypt. *International Journal of Managerial Finance*, 15(1): 39-61
- Muhajir, Ahmad (2020). Modal Kerja, Perputaran Piutang, Persediaan Dan Penjualan Terhadap Laba Bersih. *Jurnal Wira Ekonomi Mikroskil*, 10(1): 33-44
- Muhammad, Samsuddin (2021). The Factors that Affect the Working Capital Policy of Manufacturing Companies that Go Public in Indonesia. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4): 13481-13489
- Munawir (2016). *Analisis Laporan Keuangan*. Yogyakarta: Liberty.
- Musdalifah dan Purnamawati (2021). Manajemen Modal Kerja, Piutang, dan Profitabilitas Dalam Masa Pandemi COVID-19 (Studi Pada PT. Benny Surabaya Trans). *Jurnal Kajian Ilmu Manajemen*, 1(1): 75-85
- Ncube, Lovejoy & Chinjova, Fainos (2022). The Effect of COVID-19 Pandemic on Working Capital Management of Companies in the Telecommunications Sector in Zimbabwe. *International Journal of Auditing and Accounting Studies*, 4(1): 75-106. <https://doi.org/10.46791/ijaas.2022.v04i01.04>
- Ndoma, Khosmasdkk. (2019). Pengaruh Perputaran Piutang Terhadap Modal Kerja Pada Koperasi Simpan Pinjam Cu Tirtadana Surabaya. *Publikasi Ilmiah Akuntansi*, 1(1): 420-425
- Nyeadi, J. D, Sare, Y. A. & Aawaar, G. (2018). Determinants of Working Capital Requirement in Listed Firms: Empirical Evidence Using a Dynamic System GMM. *Cogent Economics & Finance*, 6(1): 1-14
- Padhan, R., & Prabheesh, K.P., (2021). The Economics of COVID-19 Pandemic: A Survey. *Economic Analysis and Policy*, 70(June 2021): 220-237
- Priandini, Riyantini dan Iman (2019). Pengaruh profitabilitas dan likuiditas terhadap modal kerja pt. Indofood sukses makmur, Tbk. *Prosiding Seminar Nasional Dan Call for Papers, Fakultas Ekonomi Universitas Tidar*, 425-435, <https://jurnal.untidar.ac.id/index.php/semnasfe/article/viewFile/2100/1161>
- Puławska, Karolina. (2021). Financial Stability of European Insurance Companies During the COVID-19 Pandemic. *Journal of Risk and Financial Management* 14(6): 1-16. <https://doi.org/10.3390/jrfm14060266>
- Rudianto (2012). *Pengantar Akuntansi Konsep dan Teknik Penyusunan Laporan Keuangan*. Jakarta: Eirlangga
- Runtulalo, Raunadkk. (2018). Pengaruh Perputaran Kas Dan Piutang Terhadap Likuiditas Pada Perusahaan Finance Institution Yang Terdaftar di Bursa Efek Indonesia (Periode 2013 - 2017). *Jurnal EMBA*, 6(4): 2838-2847
- Riyanto, Bambang (2010). *Dasar-dasar Pembelian Perusahaan*. Yogyakarta: Gadjah Mada Press
- Sekaran, U., & Bougie, R. (2017). *Metode Penelitian untuk Bisnis: Pendekatan Pengembangan-Keahlian*, Edisi 6. Jakarta: Salemba Empat
- Salehi, M., Mahdavi, N., Zarif Agahi Dari, S. & Tarighi, H. (2019). Association Between The Availability of Financial Resources and Working Capital Management With Stock Surplus Returns in Iran. *International Journal of Emerging Markets*, 14(2): 343-361. <https://doi.org/10.1108/IJoEM-11-2017-0439>
- Soemarso S. R., (2009). *Akuntansi: Suatu Pengantar*. Jakarta: Salemba Empat

-
- Song, Hyoung Ju, Jihwan Yeon, & Seoki Lee. (2021). Impact of The COVID-19 Pandemic: Evidence From the U.S. Restaurant Industry. *International Journal of Hospitality Management*, 9(1): 1-7, <https://doi.org/10.1016/j.ijhm.2020.102702>
- Sugiyono (2018). *Metode Penelitian Evaluasi: Pendekatan Kuantitatif Kualitatif dan Kombinasi*. Bandung: Alfabeta
- Tjandra, C. K., Murhadi, W. R. & Herlambang, A. (2022). The Determinants of Working Capital Management in Indonesia and the Philippines. *Jurnal Siasat Bisnis*, 26(1): 110-120
- Wahyudi, Koko Denik (2015). Perputaran Piutang Dan Pengaruhnya Terhadap Modal Kerja. *Majalah Ilmiah Dian Ilmu*, 14(2): 71-90
- Wajo, Abd. Rauf (2021). Effect of Cash Turnover, Receivable Turnover, Inventory Turnover and Growth Opportunity on Profitability. *Jurnal Ilmiah Akuntansi*, 4(1): 61-69
- Yakubu, I. N., Kapusuzoglu, A. & Ceylan, N. B. (2020). Determinants of Working Capital Management of Manufacturing Firms in Ghana Under Innovative Work Behaviour Perspective. *Strategic Outlook for Innovative Work Behaviours*: 235-252
- Zimon, Grzegorz & Tarighi, Hossein. (2021). Effects of the COVID-19 Global Crisis on the Working Capital Management Policy: Evidence from Poland. *Journal of Risk and Financial Management* 14(1): 1-17. <https://doi.org/10.3390/jrfm14040169>
- <https://tirto.id/pukulan-berat-industri-otomotif-akibat-pandemi-COVID-19-fAU7>, diakses 30 November 2022
- <https://kemenperin.go.id/artikel/22929/Pandemi-Menghadang,-Kinerja-Industri-Otomotif-Melaju-Kencang>, diakses 30 November 2022