

Effect of Changes in Working Capital and Current Ratio on Return on Equity at PT. Kalbe Farma Tbk. Period 2010 – 2020

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Abstrak

Penelitian ini bertujuan untuk mengetahui adanya Pengaruh Perubahan Modal Kerja dan Current Ratio terhadap Return On Equity pada PT. Kalbe Farma Tbk periode 2010 – 2020 baik secara parsial maupun simultan. Metode penelitian ini menggunakan metode deskriptif kuantitatif yaitu melakukan penelitian yang menggambarkan keadaan keuangan perusahaan yang dinyatakan dalam bentuk angka. Jenis data yang digunakan dalam penelitian berupa data sekunder. Jenis data sekunder yang digunakan adalah laporan keuangan PT. Kalbe Farma Tbk periode 2010 – 2020 dalam kurun waktu 11 tahun. Yang diperoleh dari BEI (Bursa Efek Indonesia) dan website PT. Kalbe Farma Tbk. Metode analisis yang digunakan dalam penelitian ini adalah uji statistik deskriptif, uji asumsi klasik, uji regresi linier sederhana, regresi linear berganda, uji koefisien korelasi, uji koefisien determinasi, dan uji hipotesis. Hasil penelitian menunjukkan bahwa secara parsial perubahan modal kerja (X1) tidak berpengaruh signifikan terhadap return on equity (Y) dengan t hitung sebesar $1,536 < t \text{ tabel } 2,306$. Dengan tingkat signifikan $0,163 > 0,05$. Secara parsial current ratio (X2) berpengaruh signifikan terhadap return on equity (Y) dengan t hitung sebesar $2,372 > t \text{ tabel } 2,306$. Dengan tingkat signifikan $0,026 < 0,05$. secara simultan terdapat pengaruh positif signifikan perubahan modal kerja (X1) dan current ratio (X2) terhadap return on equity (Y) dengan nilai f hitung $4,560 > f \text{ tabel } 4,46$ dengan taraf signifikan $0,048 < 0,05$.

Kata Kunci : Perubahan Modal Kerja, Current Ratio, Return On Equity.

Abstract

This research aims to determine the influence of changes in working capital and current ratio on return on equity at PT. Kalbe Farma Tbk for the 2010 – 2020 period, both partially and simultaneously. This research method uses a quantitative descriptive method, namely conducting research that describes the company's financial condition expressed in numerical form. The type of data used in research is secondary data. The type of secondary data used is the financial report of PT. Kalbe Farma Tbk for the period 2010 – 2020 within a period of 11 years. Obtained from BEI (Indonesian Stock Exchange) and PT website. Kalbe Farma Tbk. The analytical methods used in this research are descriptive statistical tests, classical assumption tests, simple linear regression tests, multiple linear regression, correlation coefficient tests, coefficient of determination tests, and hypothesis tests. The research results show that partial changes in working capital (X1) do not have a significant effect on return on equity (Y) with t calculated at $1.536 < t \text{ table } 2.306$. With a significant level of $0.163 > 0.05$. Partially the current ratio (X2) has a significant effect on return on equity (Y) with a calculated t of $2.372 > t \text{ table } 2.306$. With a significant level of $0.026 < 0.05$. Simultaneously there is a significant positive influence of changes in working capital (X1) and current ratio (X2) on return on equity (Y) with a calculated f value of $4.560 > f \text{ table } 4.46$ with a significance level of $0.048 < 0.05$.

Keywords: Changes in Working Capital, Current Ratio, Return on Equity

INTRODUCTION

Every company is required to be able to develop its company so that it can compete with other companies, both domestic and foreign companies. One indicator that can be used to assess whether a company is well managed is how the company manages its working capital. Working capital is capital that is needed to finance all activities so that the business runs according to a plan that has been made. Working capital is also defined as the excess of current assets over short-term liabilities (debts). That excess is net working capital.

Working capital is the amount of current assets on a company's balance sheet. The concept of net working capital is the reduction between current assets or current assets and current liabilities/current liabilities. So it is known that there is net working capital and gross working capital. Kasmir (2012) working capital is the sum of current assets. These current assets are gross working capital. This definition is quantitative because the amount of funds used for short-term operational purposes. The availability of working capital is highly dependent on the level valuables, inventory, and receivables). Working capital is important because this is where all company activities will start, both from own capital and loans. Errors in making funding decisions, both disbursement and use of funds, can endanger the company's operational activities. Sources of funding from external parties have a tendency to provide a certain return for their contribution to the company, for example when a company obtains a loan from an external party, this requires company paying a certain amount of interest (in addition to the principal installments) to outside parties which of course will increase the burden so that it will reduce the company's profits as well.

The availability of sufficient working capital that can be immediately used in operations depends on the type or nature of current assets owned by the company. Such as cash (securities), receivables, and inventory. The faster the level of each element of working capital, the working capital can be said to be efficient, but if the turnover is slower, the less efficient the use of working capital in the company."

METHOD

The research methodology section of the article describes the quantitative descriptive approach, focusing on systematic data collection to study the facts and characteristics of the subject, PT Kalbe Farma Tbk. The research was conducted over seven months, from January to July 2021, using data from the Indonesian stock exchange and the company's website. The population studied was the financial report data of PT Kalbe Farma Tbk from 2010 to 2020, with the sample being the company's balance sheet and profit and loss reports. The data analysis involved grouping, tabulating, and calculating data to address the research problem and test hypotheses, turning data into informative and easily understandable insights.

RESULT

PT. Kalbe Farma, Tbk is an international company that produces pharmaceuticals, supplements, nutrition and health services headquartered in Jakarta, Indonesia. This produces various kinds of pharmaceutical ingredients. PT. Kalbe Farma, Tbk has the motto Innovation for a Better Life.

PT. Kalbe Farma, Tbk was founded on September 10 1996, by 6 brothers, namely Khouw Lip Tjoen, Khouw Lip Hiang, Khouw Lip Swan, Boenjamin Setiawan, Maria Karmila.F Bing Aryanto. PT. Kalbe Farma, Tbk has come a long way from its beginnings as a pharmaceutical business managed in a house garage in the North Jakarta area.

Kalbe Farma (Kalbe) has grown from humble beginnings in a garage to become a leading pharmaceutical company in Indonesia, which continues to grow its presence in the international market. Through targeted portfolio management: prescription drug division, health products division, nutrition division, and distribution & logistics division. These four business divisions manage a comprehensive product portfolio of prescription and OTC drugs, energy drinks, nutritional products and equipment. health, with the support of a distribution network that reaches more than one million outlets throughout the Indonesian archipelago.

Table 1 Changes in Working Capital PT. Kalbe Farma, Tbk for the period 2010 - 2020

Year	Current asset	Current liabilities	Working capital	Working capital Previous Year	PMK%
2010	5,037,270	1,146,149	3,891,121	3,127,756	24.41
2011	5,956,123	1,630,589	4,325,534	3,891,121	11.16
2012	6,441,711	1,891,618	4,550,093	4,325,534	5.19
2013	7,497,319	2,640,590	4,856,729	4,550,093	6.74
2014	8,120,805	2,385,920	5,734,885	4,856,729	18.08
2015	8,748,492	2,365,880	6,382,612	5,734,885	11.29
2016	9,572,530	2,317,162	7,255,368	6,382,612	13.67
2017	10,042,739	2,227,336	7,815,403	7,255,368	7.72
2018	10,642,288	2,286,167	8,356,121	7,815,403	6.92
2019	11,222,491	2,557,109	8,665,382	8,356,121	3.7
2020	13,075,331	3,176,726	9,898,605	8,665,382	14.23

Source: processed data results

Table 2. Current Ratio PT. Kalbe Farma, Tbk for the period 2010 - 2020

Year	Current asset	Current liabilities	Current Ratio%
2010	5,037,270	1,146,489	439.36
2011	5,956,123	1,630,589	365.27
2012	6,441,711	1,891,618	340.54
2013	7,497,319	2,640,590	283.93
2014	8,120,805	2,385,920	340.36
2015	8,748,492	2,365,880	369.78
2016	9,572,530	2,317,162	413.11
2017	10,042,739	2,227,336	450.89
2018	10,642,288	2,286,167	465.51
2019	11,222,491	2,577,109	435.47
2020	13,075,331	3,176,726	411.6

Table 3. Return On Equity PT. Kalbe Farma, Tbk for the period 2010 - 2020

Year	Net profit	Equity	ROE %
2010	1,286,330	5,373,784	23.94
2011	1,522,956	6,515,935	23.37
2012	1,775,098	7,371,643	24.08
2013	1,970,452	8,499,957	23.18
2014	2,121,090	9,817,475	21.61
2015	2,057,694	10,938,285	18.81
2016	2,350,884	12,463,847	18.86
2017	2,453,251	13,894,031	17.66

2018	2,497,261	15,294,594	16.33
2019	2,537,601	16,705,582	15.19
2020	2,799,622	18,276,082	15.32

Source: processed data results

Table 4. Descriptive Statistics

Year	Net profit	Equity	ROE %
2010	1,286,330	5,373,784	23.94
2011	1,522,956	6,515,935	23.37
2012	1,775,098	7,371,643	24.08
2013	1,970,452	8,499,957	23.18
2014	2,121,090	9,817,475	21.61
2015	2,057,694	10,938,285	18.81
2016	2,350,884	12,463,847	18.86
2017	2,453,251	13,894,031	17.66
2018	2,497,261	15,294,594	16.33
2019	2,537,601	16,705,582	15.19
2020	2,799,622	18,276,082	15.32

Source: Data obtained from SPSS 22 for Windows

- The change in working capital variable with a sample (N) of 11 has a minimum value of 3.70, a maximum value of 24.41, an average value of 11.1918 and a standard deviation of 6.16295.
- The current ratio variable with a sample (N) of 11 has a minimum value of 283.93, a maximum value of 465.51, an average value of 392.3473 and a standard deviation of 56.59947.
- The return on equity variable with a sample (N) of 11 has a minimum value of 15.19 with a maximum value of 24.08

The average value is 19.8500 and the standard deviation is 3.50261.

Classic assumption test

Multicollinearity Test

Table 5. Multicollinearity Test Coefficients^a

Model	Collinearity Statistics		
	Tolerance	VIF	
1	PMK	,991	1,009
	CR	,991	1,009

a. Dependent Variable: ROE

Source: Processed Data from SPSS 22 for Windows, 7

Based on the VIF and Tolerance values in table 4.6, it can be seen that the independent variables are changes in working capital and current *ratio* has a Tolerance value of more than 0.10 and a VIF of less than 10.00, it can be concluded that there is no multicollinearity in the data tested. It can be concluded that our data fulfills the classical assumption test of multicollinearity, or in other words, there is no multicollinearity between the independent variables in the research so that the model is reliable as a basis for analysis.

Table 6. Autocorrelation Test

Model Summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.730 ^a	.533	.416	2.67699	.593

a. Predictors: (Constant), CR, PMK

b. Dependent Variable: ROE

Source: Processed Data from SPSS 22 for Windows, 7

With the table value at a significance level of 5%, the number of samples is 11 (n) and the number of independent variables is 2 (k=2), the Durbin Watson Value (DW Statistics) from the results of the regression analysis is 0.593 which can be seen in table 4.7 above. Thus, the Durbin Watson value is in the interval 1.6413. So $(0.717 < 1.6044 \text{ and } 0.717 < 2.3956)$, so it can be ascertained that the multiple linear regression model is happen autocorrelation symptoms.

Table 7. Test Runs Test

	PMK	CR	ROE
Test Valuea	11.16	411.6	18.86
Cases < Test Value	5	5	5
Cases >= Test Value	6	6	6
Total Cases	11	11	11
Number of Runs	5	3	4
Z	-0.612	-1.895	-1.254
Asymp. Sig. (2-tailed)	,540	,058	,210

a. Median

Source: Processed Data from SPSS 22 for Windows, 7

From the results of the statistical run test above, a significant value of $0.210 > 0.05$ was obtained. Because the significant value above is greater than 0.05, it can be concluded that the data does not have problems/symptoms of autocorrelation in the research model so the research may continue.

Simple Linear Regression Test

Table 8. Simple Linear Regression Test for Changes in Working Capital Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	17,873	2,276		7,853	,000
PMK	,177	,180	0.311	,981	,352

a. Dependent Variable: ROE

Source: Processed Data from SPSS 22 for Windows, 7

Based on the table above, you can see the results of simple linear regression calculations so that they can be arranged with the following equation:

$$Y = 17.873 + 0.177PMK$$

From the equation above, it is known that the constant value is 17.873, meaning that if the variable change in working capital is equal to zero, then the return on equity will be 17.873. After that, the coefficient of change in working capital is 0.177, meaning that for every additional unit change in working capital, return on equity will increase by 0.177.

Table 9. Simple Linear Regression Test Current ratio Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	35,107	6,355		5,524	,000
CR	-0.039	0.016	-0.628	-2,423	,038

a. Dependent Variable: ROE

Source: Processed Data from SPSS 22 for Windows, 7

Based on the table above, you can see the results of simple linear regression calculations so that they can be arranged with the following equation:

$$Y = 35.107 - 0.039CR$$

From the equation above, it is known that the constant value is 35.107, meaning that if the current ratio variable is equal to zero, then the return on equity will be 35.107. After that, the current ratio coefficient is -0.039, meaning that for every additional unit of the current ratio, return on equity will decrease by 0.177.

Multiple Linear Regression Test

Table 10. Multiple linear regression Coefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	33,582	6,006			5,592	,001
	PMK	,212	0.138			,373	,163
	CR	-0.041	,015			-0.663	0.03

a. Dependent Variable: ROE

Source: Processed Data from SPSS 22 for Windows, 7

Based on the results of the coefficient above, it can be developed using a multiple linear regression equation model as follows:

X value1 = 0.212 X2 = 0.041, so the regression equation is $Y = 33.582 + 0.212 X1 + 0.041 X2$.

The regression equation has the following meaning

- The relationship between changes in working capital and return on equity. The regression coefficient value of changes in working capital of 0.212 has a unidirectional (positive) relationship, which means that if there is an increase in changes in working capital, return on equity will also increase.
- The relationship between the current ratio and return on equity. The current ratio regression coefficient value is -0.041 has a (negative) relationship, which means that if there is an increase in the current ratio, the return on equity will decrease by 0.038.

Correlation coefficient test

Table 11. Correlation coefficient Correlations

		PMK	CR	ROE
PMK	PearsonCorrelation	1	,094	0.311
	Sig. (2-tailed)		,784	,352
	N	11	11	11
CR	PearsonCorrelation	,094	1	-.628*
	Sig. (2-tailed)	,784		,038
	N	11	11	11
ROE	PearsonCorrelation	0.31	-.628*	1
	Sig. (2-tailed)	,352	,038	
	N	11	11	11

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Processed Data from SPSS 22 for Windows, 7

Based on table 4.12 above, it can be seen that the correlation between changes in working capital and return on equity is that the sig value is 0.352 > 0.05, meaning there is no significant relationship. The Pearson r value is 0.311, so the correlation is low.

between the current ratio and return on equity above, the sig value is 0.038 < 0.05. A significance value that is smaller than 0.05 means that it has connection

Which significant. The Pearson r value is 0.628, so the correlation is strong.

Coefficient of Determination Test

Table 12. Coefficient of Determination Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,730a	,533	,416	2.67699

a. Predictors: (Constant), CR, PMK

b. Dependent Variable: ROE

Source: Processed Data from SPSS 22 for Windows, 7

From the data results above, an R-Squer value of 0.533 or 53.3% was obtained. The results show that the variations are independent variables proposed is able to explain 53.3% of the variation in the dependent variable return on equity and the remaining 46.7% by other factors not included in the model.

Hypothesis testing

Partial Testing (T Test)

Table 13. t test (partial)
Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	33.582	6,006			5,592	,001
1 PMK	,212	0.138	,373		1,536	,163
CR	-0.041	,015	-0.663		-2,732	0.026

a. Dependent Variable: ROE

Source: Processed Data from SPSS 22 for Windows, 7

From the output results, the following conclusions can be drawn:

The Effect of Changes in Working Capital on Return on Equity

Based on the test results in table 4.14, the change in working capital variable has a calculated t of 1.536 < t table 2.306, so the change in working capital variable does not have a significant effect on the return on equity variable. With a significant value of the working capital change variable of 0.163 > 0.05 or 5%, it can be concluded that H01 is accepted and Ha1 is rejected, which means that the working capital change variable has no significant effect on return on equity. at PT. Kalbe Farma Tbk.

Influence Current Ratio Regarding Return On Equity.

Based on the test results of table 4.14, the current ratio variable has a calculated t of 2.372 > t table 2.306, so the variable *current ratio* effect on the return on equity variable. With significant value variable *current ratio* equal to 0.026 < 0.05 or 5%, it can be concluded that H02 rejected and Ha2 accepted, Which means variable *current ratio* influential significant on return on equity. at PT. Kalbe Farma, Tbk.

Simultaneous Testing (F Test)

Table 13. F test (simultaneous)
ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	65,352	2	32,676		
Residual	57,330	8	7,166	4,560	,048b
Total	122,683	10			

a. Dependent Variable: ROE

b. Predictors: (Constant), CR, PMK

Source: Processed Data from SPSS 22 for Windows, 7

Find the F value table by determining df1 (N1) and df2 (N2) $df1 = k - 1$, $df2 = nk$, where k is the number of variables (independent + dependent) and n is the number of observations/samples forming the regression. In this study it is known that $n = 11$, $k = 3$, then $df1 = 2$ and $df2 = 8$, thus obtaining an Ftable value of 4.46.

From the SPSS calculation results, the calculated f value is 4.560 > f table 4.46 with a significance level of 0.048 < 0.05. Thus it can be concluded that Ha3 is accepted,

This means that simultaneously there is a significant influence between the variable changes in working capital and the current ratio on return on equity at PT. Kalbe Farma, Tbk.

CONCLUSION

The research on PT Kalbe Farma, Tbk over 2010-2020 concluded that working capital changes don't significantly affect return on equity, while the current ratio does. Simultaneously, both factors significantly influence return on equity. Suggestions include for companies to use this research for funding decisions to optimize return on equity, focusing on working capital and current ratio. Future researchers are advised to consider additional variables and extend the observation period for more comprehensive results. Pamulang University academics are encouraged to use these findings to enhance student motivation and provide relevant educational resources.

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