



Contents lists available at [Journal IICET](https://journal.iicet.org)
JPPI (Jurnal Penelitian Pendidikan Indonesia)
ISSN: 2502-8103 (Print) ISSN: 2477-8524 (Electronic)
Journal homepage: <https://jurnal.iicet.org/index.php/jppi>



Effect of liquidity, leverage, and activity on profitability

Irawati Irawati^{*}, Dinda Cantika
STIE Indragiri, Indonesia

Article Info

Article history:

Received Apr 11th, 2022
Revised May 15th, 2022
Accepted Sep 25th, 2022

Keyword:

Effect of liquidity,
Effect of leverage,
Effect of activity

ABSTRACT

This research was carried out at the Karya Bersama Village Unit Cooperative in Kerubung Jaya Village for approximately six months. The purpose of this study is to analyze the effect of liquidity, leverage and activity on profitability. This research was conducted using a quantitative method where the researcher had obtained financial reports from the research site. Then the author conducted a feasibility test of the model and tested the hypothesis using the help of the twenty-first version of SPSS. The results of this study aim to obtain explanatory findings that are tested on (1) liquidity, leverage, and activity are not significant to profitability simultaneously in KUD. Joint Work in Kerubung Jaya. (2) Liquidity is partially insignificant to the profitability of KUD. Karya Bersama in Kerubung Jaya., (3) Leverage is partially insignificant to the profitability of KUD. Karya Bersama in Kerubung Jaya, (4) Activities are partially insignificant to the profitability of the KUD. Joint Work in Kerubung Jaya.



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Corresponding Author:

Irawati Irawati,
STIE Indragiri
Email: irawati@stieindragiri.ac.id

Introduction

In a company, the company's financial activities are usually integrated with each other to achieve the level of profitability that is the target of the company concerned. Where these activities are related to the use of funds (investment decisions), then obtaining funds (policies from funding), as well as profit sharing (dividend policies). Profitability is a measure of the success of a cooperative by looking at the efficiency of the use of its capital. So profitability provides a measure of the level of effectiveness in the management of a cooperative, this measurement can be carried out in the management of a cooperative, and can also be done in several periods in order to see the development of the cooperative over time (Hani, 2015).

The concept of profitability in financial theory is often used as an indicator of the company's fundamental performance representing management performance. In accordance with the development of research models in the field of financial management, generally the profitability dimension has a causal relationship to firm value. Ratio analysis is a tool used to help analyze the company's financial statements so that the strengths and weaknesses of a company can be known. In this study, the ratios used are the current ratio (CR), debt to asset ratio (DAR), and total asset turn over (TATO) and Net profit margin (NPM) (Rinati, 2012).

The current ratio is used to measure a company's ability to pay short-term obligations as they fall due. Meanwhile, to measure leverage represented by debt to asset ratio (DAR). Where leverage is a tool to measure how much the company is financed by debt (Munawir, 1983). KUD. Karya Bersama is one of the cooperatives located in Batang Cenaku District, precisely in Kerubung Jaya, Indragiri Hulu Rengat Regency. In the

following, the profitability data from KUD will be presented. The Joint Work of Kerubung Jaya in 2014 – 2020.

Table 1. Profitability Data KUD. Karya Bersama 2014-2020

Year	Net Profit	Net Sales	NPM (%)	Criteria
2014	349.336.002	5.576.346.608	6,26	Pretty good
2015	420.469.098	9.736.016.478	4,32	Not good
2016	453.128.845	8.644.838.630	5,24	Pretty good
2017	434.876.483	9.123.032.544	4,77	Not good
2018	563.156.296	7.604.201.795	7,41	Pretty good
2019	637.343.508	5.584.447.155	11,41	Well
2020	592.341.733	6.496.826.834	9,12	Pretty good

Source: KUD. Joint work in 2021

From the table, it can be seen that the profitability of KUD cooperatives. Karya Bersama Kerubung Jaya in 2015 decreased to 4.32% so that the criteria were not good, then increased in 2016 to 5.24% with the criteria of Good Enough, then decreased again in 2017 to 4.77% with the criteria of Less Good, then increased for 2018 and 2019 to 7.41% with Good Enough criteria and 11.41% with Good criteria. Furthermore, there was another decline for 2020 to 9.12% with the criteria of Good Enough. Profitability in KUD. The Joint Work in Kerubung Jaya seems to fluctuate.

According to Wiagustini in the journal (Sanjaya et al., 2015), profitability is a company's ability to realize a profit for the company or is a measurement of the effectiveness of company management in managing the company. Profitability is influenced by several factors, including liquidity ratios, leverage ratios, and activity ratios. Liquidity has a close relationship with the company's ability to earn profits, because liquidity shows the level of availability of working capital needed in the company's operational activities (Adjie & Fuadati, 2019). In each period, the rise and fall of the level of profitability is also influenced by the solvency ratio (leverage ratio). Leverage is a financial ratio that shows the extent to which the company's assets have been financed by debt. Another factor that affects the level of company profitability is the activity ratio. The use of leverage ratios is adjusted to company goals. This means that the company can use the overall leverage ratio or some of each type of leverage ratio that there is (Purnamasari, 2017). The activity ratio is generally used to determine the effectiveness of the assets used by the company.

The activity ratio is also referred to as the company's financial ratio, and it reflects asset turnover starting from cash purchased by inventory. This research was carried out in the hope of being able to find a way out in increasing the profitability of the KUD. Joint Work in Kerubung Jaya, Indragiri Hulu Regency. The controversy of this study claims the truth of the existing theoretical belief that liquidity, leverage and activity affect profitability.

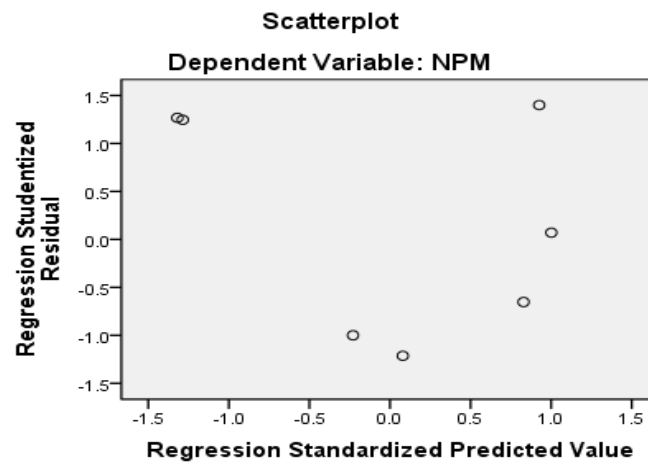
Method

The research method used in this study is a quantitative method. In this study, the authors conducted direct research on the Karya Bersama Village Unit Cooperative in Kerubung Jaya, Indragiri Hulu Regency. Which the authors conducted research for approximately six months. The data collection techniques that the author uses in this research are interviews and literature study.

Results and Discussions

Heteroscedasticity Test

From the scatterplot graph, it can be seen that the points spread randomly and are spread both above and below zero on the Y axis. It can be concluded that there is no heteroscedasticity in this research model so that the model of this study is feasible to use.

**Figure 2.** Heteroscedasticity**Multicollinearity Test**

Multicollinearity test is needed to determine whether or not there are independent variables that have similarities between independent variables in a regression model. In the table above, it can be seen that the VIF is $3.455 < 10$ with a tolerance value of $0.210 > 0.10$. So it can be concluded that the regression model in this study does not occur symptoms of correlation between variables.

Table 2. Multicollinearity Test

	Model	Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	LIQUIDITY	.210	4.606
	LEVERAGE	.289	3.455
	ACTIVITY	.210	4.606

Autocorrelation Test

From the table above shows that the results of data processing obtained Durbin - Watson (DW) of 2.287. If seen from the Durbin-Watson test table at a significant 0.05 for the number of independent variables as much as 3 obtained the number of data as much as 7 obtained the lower limit of the table value (dl) = 0.4672 and du = 1.8964 while $du < d < 4 - du$ means that there is no autocorrelation. According to the calculation $1.8964 < 2.087 < 2.1036$.

Table 3. Autocorrelation Test

Model	R	R Square	Model Summary ^b		Durbin-Watson
			Adjusted R Square	Std. Error of the Estimate	
1	.798 ^a	.636	.572	2.19913	2.087
a. Predictors: (Constant), activity, leverage, liquidity					
b. Dependent Variable: NPM					

Normality test

From the figure, the graph is normal probability plots, the points spread around the normal line and follow the direction of the diagonal line and this shows that the data is normally distributed, then the regression model meets the assumption of normality.

Normal P-P Plot of Regression Standardized Residual

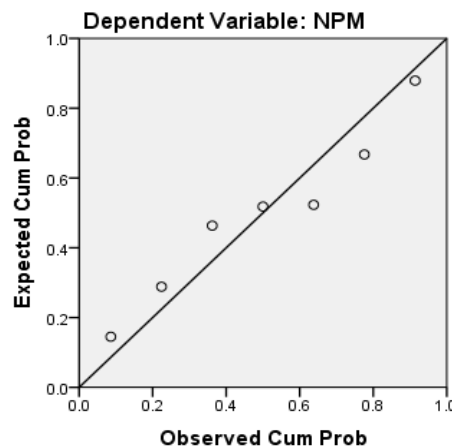


Figure 3. Normality test

Multiple Linear Regression Analysis

Table 4. Multiple Linear Regression

	Model	Unstandardized		Coefficients ^a		T	Sig.	Collinearity Statistics	
		Coefficients		Standardized				Tolerance	VIF
		B	Std. Error	Coefficients					
1	(Constant)	13.001	5.449	Beta		2.386	.097		
	LIQUIDITY	.080	.056			4.594	1.434	.247	.210
	LEVERAGE	-.017	.011			-1.052	-1.625	.203	.289
	ACTIVITY	-.079	.048			-5.759	-1.650	.197	.210
a. Dependent Variable: NPM									

a. Dependent Variable: NPM

Multiple linear regression equation is obtained as follows:

$$Y = 13.001 + 0.08 X_1 - 0.017 X_2 - 0.079 X_3$$

From these equations it is obtained that:

- If X_1 , X_2 and X_3 are equal to zero, it means that the profitability is 13.001.
- If X_1 increases by one unit while X_2 and X_3 remain, it will affect the profitability to increase by 0.08.
- If X_1 , and X_3 are fixed and X_2 increases by one unit then the profitability will decrease by 0.017
- If X_1 and X_2 remain constant while X_3 increases by one unit then the profitability will decrease by 0.079.

Multiple Correlation Coefficient

Table 5. Multiple Correlation Coefficient

Model	R	R Square	Model Summary ^b			Durbin-Watson
			Adjusted R Square	Std. Error of the Estimate		
1	.798 ^a	.636	.572	2.19913		2.287

a. Predictors: (Constant), ACTIVITY, LEVERAGE, LIQUIDITY

b. Dependent Variable: NPM

The purpose of this method is to find out how strong the relationship between the independent variable and the dependent variable is. From the table above, it can be seen that the R is 0.798, which means the correlation is quite strong.

Coefficient of Determination

Based on the table above, R^2 is 57.2%, indicating the percentage contribution of the influence of the independent variable to the dependent variable. Meanwhile, the remaining 42.8% is influenced by other variables.

Model Feasibility Test Results (F Test)

Based on the results of the F test above, it is known that the variables of liquidity, leverage and activity are not significant to profitability. Because the significance level is $0.329 > 0.05$.

Table 6. Model Feasibility Test Results

		ANOVA ^a			
	Model	Sum of Squares	Df	Mean Square	F
1	Regression	25.371	3	8.457	1.749
	Residual	14.509	3	4.836	
	Total	39.880	6		

a. Dependent Variable: NPM

b. Predictors: (Constant), ACTIVITY, LEVERAGE, LIQUIDITY

Hypothesis Test Results (t test)**Table 7.** Hypothesis Test Results

		Coefficients ^a			t	Sig.	Collinearity Statistics	
	Model	Unstandardized Coefficients	Standardized Coefficients				Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	13.001	5.449		2.386	.097		
	LIQUIDITY	.080	.056	4.594	1.434	.247	.210	4.606
	LEVERAGE	-.017	.011	-1.052	-1.625	.203	.289	3.455
	ACTIVITY	-.079	.048	-5.759	-1.650	.197	.210	4.606

a. Dependent Variable: NPM

Based on the results of the t test above, it can be seen that the Liquidity variable is not significant to the Profitability variable, and the Leverage variable is not significant to the Profitability variable and so is the Activity variable not significant to the Profitability variable.

Conclusions

From the discussion above, it can be concluded that the results of multiple regression tests show that liquidity has a positive effect on profitability, leverage has a negative effect on profitability, and activity also has a negative effect on profitability. The results of the feasibility test (F test) show that the independent variable is not significant to the dependent variable. This is in line with Yeni Ariyah's research, which says that the variables of liquidity, leverage, and activity have no effect on profitability. Furthermore, based on the t-test that liquidity is not significant to profitability, this study is in line with (Widiastuti et al., 2016), which in the study stated that liquidity had no significant effect on profitability, but not in line with (Suprihhadi, 2019) research, which stated that liquidity had a positive and significant effect on the profitability of pharmaceutical companies. While leverage is not significant to profitability, this is in line with (Adjie & Fuadati, 2019) research that leverage has no significant effect on profitability in automotive companies and is not in line with (Widiastuti et al., 2016) research because in his research there is a significant effect of leverage on profitability. Activity is also not significant to profitability, but this is not in line with research conducted by (Rahmah et al., 2019), which states that activity has a significant effect on profitability in automotive companies.

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