

Analysis of the Effect of Asset Growth and Total Asset Turnover (Tattoo) on Return On Asset (Roa) with Capital Structure as an Intervening Variable (Case Study on Kpri Dwija Karya Bantarbolang 2017-2021)

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ABSTRACT

The study entitled "Analysis of the Effect of Current Ratio and Total Asset Turnover (TATO) on Return on Asset (ROA) with Capital Structure as an Intervening Variable (Case study at KPRI Dwija Karya)". The purpose of this study was to determine and analyze the effect of Asset Growth and Total Asset Turnover on Return on Asset mediated by Capital Structure, either directly or indirectly.

The population used in this study is the Financial Statements at KPRI Dwija Karya Period 2017-2021. The sample used in this study was purposive sampling techniques in the Annual Financial Report. This study uses Multiple Linier Regression Ananlysis with SPSS V.25 Application.

The result of the study partially show that the Asset Growth (X1) variable has no significant effect on Return on Asset (Y) with a value ($t_{count} 3,612 < t_{table} 1,984$). the Total Asset Turnover variable (X2) shows a significant effect on Return on Asset (Y) with value ($t_{count} 11,236 > t_{table} 1,67155$), there is no significant effect between Current Ratio (X1) on Return on Asset (y) with Capital Structure (Z) as an intervening variable with a value ($t_{count} -1,8486 < t_{table} 1,96$) there is no significant effect between Total Asset Turnover (X2) on Return on Asset (Y) with Capital Structure (Z) as an intervening variable with a value ($t_{count} 2,3472 > t_{table} 1,96$), Capital Structure (Z) has a significant effect on Return on Asset (Y) with a value ($t_{count} -2,702 > t_{table} 1,67155$)

KEYWORDS

Asset Growth, Total Asset Turnover, Return on Asset and Capital Structure

INTRODUCTION

Cooperatives that are expected to play an active role in realizing the welfare and prosperity of the people. The role and benefits of cooperatives in Indonesia can be said to be very important because cooperatives open the gates of small and medium enterprises (SMEs), create independent communities, drive the economy to create new jobs (Wirasari and Sari 2016). The maximum and optimal utilization of cooperatives will be able to create a national economy that is in line with the growth of cooperatives (Kumara and Suputra 2014). The definition of a cooperative according to Law No. 25 of 1992 is a business entity consisting of people or legal entities of cooperatives based on the principle of cooperatives, as well as a people's economic movement based on the principle of Family (Anugrah 2013). Financial ratios are used to measure the size of the profitability ratio. Return On Asset (ROA) is a tool to determine the company's ability to generate profit by using the company's total assets (Wijaya 2019). Cooperatives require measuring their financial performance to measure the success of cooperatives in improving the welfare of their members (Okfitasari and Suyatno 2018). One of the indicators of successful cooperative performance is profitability, and profitability measurement indicators include using Return On Asset (ROA).

Based on the Ministerial Regulation and KUKM No. 06/Per/M.KUKM/V/2006 on the guidelines for the assessment of outstanding cooperatives/cooperative awards, the assessment standards are as follows:

Table 1.1
ROA Assessment Standards

$\geq 10\%$	<i>Excellent</i>
$7\% \text{ s.d } < 10\%$	<i>Good</i>
$3\% \text{ s.d } < 7\%$	<i>Good Enough</i>
$1\% \text{ s.d } < 3\%$	<i>Less Good</i>
$< 1\%$	<i>Bad</i>

Source : Permen KUKM No.06/Per/M/KUKM/V/2006

Table 1.2
Average ROA of KPRI in Pemalang Regency for the 2016-2020 Period

<i>Year</i>	<i>ROA (%)</i>
2017	1,13%
2018	1,25%
2019	1,22%
2020	1,32%
2021	1,41%

Source : RAT Report (processed), 2022

Based on the Report of the Annual Member Meeting (RAT), in the 2017-2021 period the Dwija Karya Bantarbolang Cooperative has fluctuated in the Return on Asset (ROA) rate and if viewed using ROA assessment standards, the ROA level at KPRI Dwija Karya Bantarbolang is still in the poor category.

Every business sector, including cooperatives, certainly wants to minimize the financial risks faced so as to achieve targeted profits or profits. But even so, in achieving the targeted profit, none other than the element of capital owned by the cooperative plays a very important role in it. An optimum capital structure can be achieved by minimizing the use of capital costs and long-term debt costs (Kuncoro et al, 2016). The composition of the amount of long-term debt and the amount of own capital should be set appropriately and adjusted to the needs of the long-term funding capital required. Cooperatives that use long-term funding, resulting in debt obtained by the company must be able to provide sufficient cashflow to pay interest on debt and principal loans (Hendra 2017).

The results of previous studies have a variety of different findings regarding Asset Growth in influencing Return on Asset (ROA). Previous research that states that Asset Growth does not affect profitability as measured by Return on Asset (ROA) is the result of research from (untari (2019) and is supported by research conducted from (Nuriyanto 2019) which also states that the asset structure has a positive effect on Return on Asset (ROA). Meanwhile, the results of the study (Wardhana and Mawardi 2016) stated that asset growth has no effect on Return on Assets (ROA).

In addition to asset growth, as previously mentioned, total asset turnover can determine the achievement of profitability through Return on Assets (ROA). According to (Brigham and Houston 2018:139), is a ratio that measures the turnover of all company assets, and is calculated by dividing sales by total assets. Meanwhile, according to (Kasmir 2016) TATO is a ratio used to measure the turnover of all assets owned by the company and measure how much sales are

obtained from each rupiah of assets. The bigger the TATO, the better because it shows the efficiency of all assets used to support sales activities (Ang 1997).

The results of the study that stated that Total Asset Turnover affects Return on Asset (ROA) is a study conducted by (Supardi, Suratno, and Suyanto 2018), and research by (Innawati, 2018) also states that Return on Asset (ROA) is positively influenced by Total Asset Turnover (TATO) and is supported by research conducted by (Alfiyah, 2019) where Total Asset Turnover (TATO) has a positive effect on Return on Asset (ROA).

Capital Structure in this study as an intervening variable affects Asset Growth and Total Asset Turnover (TATO) on Return on Asset (ROA). This is because the capital structure is important in a cooperative and has a relationship that cannot be ignored where the two have a relationship that affects each other, and is a problem that is often highlighted, because the good and bad will have a direct effect on the financial position of the cooperative (Alfiyah, 2019). Good capital structure management in cooperatives will have a direct impact on the cooperative's finances, this means that the financial position will affect the profitability of the cooperative.

Return On Asset (ROA) shows the company's ability to generate profit from assets used or invested in a period. The greater the ROA, the better the company's financial performance. A negative ROA is caused by the company's profit in a negative condition or loss (Kamal 2018). This shows that the ability of the invested capital as a whole has not been able to make a profit.

ROA is used to measure the company's ability to make a profit by using all assets owned by the company. ROA is a comparison between net profit and asset value in the accounting period (Tandelilin 2010). Here is the formula used to calculate Return On Asset:

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}} \times 100\%$$

Asset growth shows a change (increase or decrease) in the total assets owned by the company. Asset growth is calculated as the percentage change in total assets in a given year against the previous year. The Asset Growth Formula is as follows:

$$\text{Asset Growth} = \frac{\text{total assets year } t - \text{total assets year } t - 1}{\text{total assets year } t - 1} \times 100\%$$

Total Asset Turnover (TATO) is one of the activity ratios used to determine the effectiveness of the company in managing its business. The company's operating activities require investment, both for short and long-term assets (Property, Plan, and Equipment). This ratio describes the relationship between the company's level of operations (sales) and the assets needed to support the company's operating activities. Total Asset Turnover (TATO) can also be used to predict the capital needed by the company. According to Hanafi and Halim (2009) Total Asset Turnover (TATO) is "The ratio for calculating the effectiveness of the use of total assets. A high ratio usually indicates management evaluating its strategy, marketing, and capital expenditures (investments)". From the description above, it can be concluded that Total Asset Turnover is the difference between net sales and total assets, namely the accumulation of fixed assets and current assets. Fixed assets consist of land, buildings, machinery, and others that have an economic life of more than one year while current assets consist of cash, receivables, and others that have an economic life of less than one year. According to (Kasmir 2016) the calculation of Total Asset Turnover (TATO) is formulated as follows:

$$\text{Total Asset Turnover (TATO)} = \frac{\text{Penjualan (Sales)}}{\text{Total Aktiva (Total Asset)}} \times 100\%$$

According to Sugiyono in (Hartati 2019) The intervening variable (Z) is a tuning variable or between that located between a free variable and a bound variable, so that the free variable does not directly affect the change or emergence of the bound variable. The variable used in this study is the Capital Structure. The capital structure in this study is measured from the Debt to Equity Ratio (DER) because DER reflects the size of the population between Total Debt (total debt) and Total Equity (total equity). Here is the formula that will be used to calculate the capital structure:

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}} \times 100\%$$

METHOD

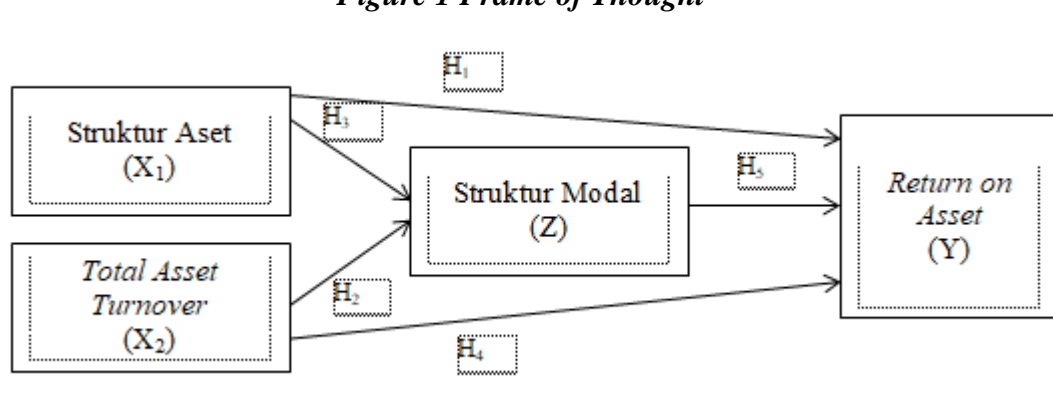
Population and sample

The data used in this study is in the form of secondary data, namely in the form of the KPRI RAT Report which meets the criteria for research samples in the 2017-2021 period obtained from the KPRI Dwija Karya Bantarbolang archive report. The population used in this study was KPRI Dwija Karya Bantarbolang for the 2017-2021 period, the sample used in this study was a purposive sampling technique, which was 60 samples. The data collection method uses documentation techniques on the Financial Statements.

The data analysis technique in this study is to use the t Test, Multiple Linear Regression Test, Hypothesis Test using the SPSS v.25 application and Mediation Test using the Sobel Test.

Research Design

Figure 1 Frame of Thought



Equation Model

- 1) Z = a₁ + b₁ PA + b₂ TATO + ε
- 2) Y = a₂ + b₃ PA + b₄ TATO + b₅ SM + ε

Information :

- PA = Asset Growth
- TATO = Total Asset Turnover
- SM = Struktur Modal
- ROA = Capital Structure
- α₁, α₂ = Constant
- b₁ b₂ b₃ b₄ b₅ = Regression Coefficient
- ε = Error

RESULTS AND DISCUSSION

Results of Descriptive Statistical Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PA	60	-3,52	4,81	1,0638	1,97578
TATO	60	,01	,19	,0828	,05660
SM	60	75,09	160,45	114,6473	22,14651
ROA	60	,39	9,15	3,9258	3,06876
Valid N (listwise)	60				

Based on table 1 can be explained as follows :

- a. The average Asset Growth (PA) sampled in this study was 1.0638 meaning that the Asset Growth measured by the way of total assets in year t minus total assets $t-1$ divided by total assets $t-1$ in cooperatives was 1.0638. The minimum value of PA is -3.52 the maximum value of PA is 4.81 and the average value of PA is 1.0638 with its standard deviation value being 1.97578.
- b. The average Total Asset Turnover (TATO) sampled in this study was 0.0828, meaning that the TATO measured by the distribution of sales to total assets in the cooperative was 0.0828. The minimum value of TATO is 0.01 the maximum value of TATO is 0.19 and the average value of TATO is 0.0828 with the standard deviation value being 0.05660.
- c. The average Capital Structure (SM) sampled in this study is 114.6473 meaning that the DER measured by dividing total debt against total equity in cooperatives is 114.6473. The minimum value of SM is 75.9 the maximum value of SM is 160.45 and the average value of Capital Structure is 114.6473 with the standard deviation being 22.14651.
- d. The average Return on Assets (ROA) sampled in this study was 3.9258, meaning that the ROA measured by dividing net profit against total assets in the cooperative was 3.9258. The minimum value of ROA is 0.39 the maximum value of ROA is 9.15 and the average value of ROA is 3.9258 with the standard deviation is 3.06876.

Hypothesis TEST Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,060	1,214		2,521	,015
	PA	,129	,096	,083	1,346	,184
	TATO	42,641	3,795	,786	11,236	,000
	SM	-,024	,009	-,176	-2,701	,009

a. Dependent Variable: ROA

Based on table 15, the calculation for the Asset Growth variable (X1) is 1,346 TATO variables (X2) of 11,236, and the Capital Structure variable is -2,701 while the ttabel with degrees of freedom (n-2) is 1.67155 which is used to answer H1, H2, and H5 as follows:

Asset Growth has a significant effect on Return on Asset (ROA) at KPRI Dwija Karya Bantarbolang (H₁)

Based on the calculated value for the Asset Growth variable (X1) of 1.346 and the ttabel of 1.67155, it is stated that the calculation of the $<$ ttabel ($1.346 < 1.67155$) is declared so that H₀ is received, which means that there is no partially significant effect of the Asset Growth variable (X1) on the Return on Asset (Y). Thus, H₁, which stated that Asset Growth (X1) had a significant effect on Return on Asset (Y) at KPRI Dwija Karya Bantarbolang was rejected.

Total Asset Turnover (TATO) has a significant effect on Return on Asset (ROA) at KPRI Dwija Karya Bantarbolang (H₂)

Based on the calculated value for the variable Total Asset Turnover (X1) of 11.236 and the ttabel of 1.67155, it is stated that the calculation of $>$ ttabel ($11.236 > 1.67155$) so that H₀ is rejected, which means that there is a partial significant influence of the variable Total Asset Turnover (X1) on Return on Asset (Y). Thus, H₂ which states the variable Total Asset Turnover

(X1) has a significant effect on the Return on Asset (Y) on KPRI Dwija Karya Bantarbolang is accepted.

Capital Structure has a significant impact on Return on Asset (ROA) at KPRI Dwija Karya Bantarbolang (H₅)

Based on the calculated value for the Capital Structure variable (Z) of -2.701 and the *t* tabel of 1.67155, it is stated that $-t_{hitung} > -t_{tabel}$ ($-2.701 > -1.67155$) so that *H*₀ is rejected, which means that there is a partially significant influence of the Capital Structure variable (Z) on the Return on Asset (Y). Thus, *H*₅ which states the Capital Structure (Z) has a significant effect on the Return on Asset (Y) at KPRI Dwija Karya Bantarbolang is accepted.

Mediation Test Results (Sobel Test)

So to find out the mediating effect of the Capital Structure variable, namely using a sobel test with a look at table 16 and table 18 at once to answer *H*₃ and *H*₄ as follows:

a. Third Hypothesis (H₃) there is a significant influence between Asset Growth on Return on Asset (ROA) and Capital Structure as an intervening variable.

It is known that the calculated $t_{value} -1.7874$

smaller than the *t* tabel value = 1.96 so *H*₀ is accepted, which means the Capital Structure cannot mediate the effect of Asset Growth on Return on Asset. Thus, the third hypothesis (*H*₃) which states the Effect of Asset Growth on Return on Asset (ROA) with Capital Structure as an intervening variable in KPRI Dwija Karya Bantarbolang is **rejected**.

b. Fourth Hypothesis (H₄) there is a significant influence between Total Asset Turnover (TATO) on Return on Asset (ROA) and Capital Structure as an intervening variable.

From the calculation above, it is known that the calculated value of 2.3108 is greater than the *t* tabel value = 1.96 so that *H*₀ is rejected, which means that the Capital Structure can mediate the effect of Total Asset Turnover (TATO) on Return on Asset. Thus the fourth hypothesis (*H*₄) which states Total Asset Turnover (TATO) to Return on Asset (ROA) with Capital Structure as an intervening variable in KPRI Dwija Karya Bantarbolang is **accepted**.

CONCLUSION

From the results of the *t* test test, it shows that there is no significant influence of the Asset Growth variable (X1) on the Return on Asset (Y) on KPRI Dwija Karya Bantarbolang because the calculated value of the *t* tabel $< (1.346 < 1.67155)$, so *H*₁ is rejected. From the results of the *t* test test, it shows that there is a significant influence of the variable Total Asset Turnover (X2) on Return on Asset (Y) in KPRI Dwija Karya Bantarbolang because the calculated value $< t_{tabel}$ ($11.236 > 1.67155$), so that *H*₂ is accepted. From the results of the sobel test test, it shows that the Capital Structure cannot mediate the effect of Asset Growth (X1) on Return on Asset (Y) on KPRI Djiwa Karya Bantarbolang because the calculated value $< t_{tabel}$ ($-1.7874 > 1.96$) so that *H*₃ is rejected. From the results of the sobel test test, it shows that the Capital Structure does not mediate the effect of Total Asset Turnover (X2) on Return on Asset (Y) on KPRI Djiwa Karya Bantarbolang because the calculated value of $< t_{tabel}$ ($2.3108 > 1.96$) so that *H*₄ is accepted. From the results of the *t* test, it shows that there is a significant influence of the Capital Structure variable (Z) on the Return on Asset (Y) on KPRI Dwija Karya Bantarbolang because the calculated value $< t_{tabel}$ ($11.236 > 1.67155$), so that *H*₅ is accepted.

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