



## THE EFFECT OF WORKING CAPITAL EFFICIENCY ON BPRS PROFITABILITY IN ACEH

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### Abstract

The purpose of this study was to examine the effect of the use of working capital on profitability (ROA) at Islamic People's Financing Banks (BPRS) in Aceh by using secondary data in the form of panel data. The results of the analysis show that simultaneously, cash turnover, accounts receivable turnover, and working capital turnover have a significant effect on ROA. Partially, cash turnover and accounts receivable turnover do not have a significant negative effect on ROA, while working capital turnover has a significant positive effect on ROA. The effect of the three variables on ROA is 44.78%, while the remaining 55.22% is explained by other factors not included in this study. All classical assumptions have been fulfilled and the analytical method used is panel data regression with the Common Effects model.

Keywords: *Cash Turnover, Receivable Turnover, Working Capital Turnover, ROA*

### 1. INTRODUCTION

In facing increasing business competition in various service and financial sectors, companies are required to operate better and more efficiently for the sake of company survival (going concern). This of course requires optimal management of the company's resources. High profitability is an indicator of the company's success in achieving its goals. However, the low level of profitability can be influenced by various factors, both internal and external. One of the internal factors that can affect profitability is working capital management. Working capital is one of the important resources in carrying out company operational activities such as cash, receivables and inventories, as well as fixed capital such as fixed assets. Therefore,

Working capital is current assets consisting of all current assets owned by the company and reduced by current liabilities. In this case, working capital can be considered as a resource or funds available to be invested in current assets such as cash, accounts receivable, and inventories. Efficient and effective use of working capital will greatly affect the smooth running of the company's business activities to achieve the expected goals. In this case, companies need to ensure that their working capital is used appropriately and optimally in order to generate optimal profits as well. Thus, good working capital management will assist the company in optimizing its resources and increasing the efficiency and effectiveness of the company's operations.

In this study, panel data analysis will be carried out on three working capital usage variables, namely cash turnover, accounts receivable turnover, and working capital turnover. The results of the analysis show that cash turnover, accounts receivable turnover, and working capital turnover simultaneously affect ROA. Partially, cash turnover and accounts receivable turnover do not have a significant negative effect on ROA, while working capital turnover has a significant positive effect on ROA. The effect of the three variables on ROA is 44.78%, while the remaining 55.22% is explained by other factors not included in this study.

Through this research, it is hoped that solutions can be found to increase the use of working capital effectively and efficiently so that BPRS profitability can increase and business continuity is guaranteed. Therefore, it is very important for BPRS in Aceh Province to pay attention to good working capital management, especially in terms of cash turnover, accounts receivable turnover, and working capital turnover, in order to achieve company goals and maximize profits.

## 2. RESEARCH METHOD

### 2.1. Scope of Research

This research has a limited scope, namely quantitative descriptive research. This is because the purpose of this research is to analyze the relationship between several variables, such as Cash Turnover, Accounts Receivable Turnover, and Working Capital Turnover, with the dependent variable namely Profitability. In this study, the author will examine a specific object, namely the Islamic People's Financing Bank (BPRS) in Aceh Province. This study aims to describe the conditions of the past and show the direction of the relationship between the independent and dependent variables.

#### A. Data Types and Sources

##### 1. Data Type

In this study, secondary data were used which were obtained from published annual financial reports. The data used is related to cash turnover, accounts receivable turnover, and working capital turnover as independent variables.

##### 2. Data source

This research utilizes secondary data obtained from the publication of written documents that have been compiled, namely the Annual Financial Report from 2015 to 2021. The data is obtained from the official website of the Financial Services Authority (OJK) at [www.ojk.go.id](http://www.ojk.go.id). This secondary data consists of financial information related to independent variables, namely Cash Turnover, Accounts Receivable Turnover, and Working Capital Turnover.

### 2.2. Population and Research Sample

#### 3. Research Population

The population is the entire object of research or the total number of a sample, which is an important source of data [5]. In this study, the population used was all BPRS registered with the Financial Services Authority (OJK) in the 2015-2022 period in Aceh Province. This population consists of 11 BPRS registered with OJK and operating in Aceh Province.

#### 4. Research Sample

The sample is part of the number and characteristics possessed by the population [6]. The sampling method used in this study was purposive sampling. The sample selected in this study is an Islamic People's Financing Bank (BPRS) registered with the Financial Services Authority (OJK) and fulfilling the following criteria:

- a. Located in Aceh Province and has been registered with the OJK for 2015-2021.
- b. Have a complete Annual Financial Report for 2015-2021.
- c. Have complete financial data information related to the calculation of the variables used in this study, namely Return On Assets (ROA), Cash Turnover, Accounts Receivable Turnover, and Working Capital Turnover.

Based on these three criteria, only 8 BPRS met the requirements and became the sample in this study



### 2.3.Data Collection Techniques

Data collection techniques are the most important step in research, because the main goal of research is to get data [7]. The data collection method used in this study is the secondary data method, in which the data used comes from official financial reports issued by Islamic People's Financing Banks (BPRS) operating in Aceh Province. The author uses two types of methods in data collection, namely the method of documentation and methods of literature.

#### Documentation method

In the documentation method, the data used in this study comes from the Quarterly Financial Statements from March 2015 to March 2022, which totals 29 quarters. The data was obtained from the publication of BPRS Financial Reports in Aceh Province.

#### library method

In the library method, the writer downloads data, journals, and library research, and studies and examines written materials such as journals, articles, books, and other sources.

### 2.4.Data analysis method

This study aims to analyze the relationship between cash turnover, accounts receivable turnover, and working capital turnover on profitability (ROA) at Islamic People's Financing Banks (BPRS) in Aceh Province. Analysis will be carried out using quantitative statistical methods, with the help of the Eviews 9 statistical data processing program. The analytical methods used include descriptive statistical analysis, panel data regression analysis test, classical assumption test, simultaneous significance test (F test), individual parameter significance test (T test), and the coefficient of determination ( $R^2$ ).

### 2.5.Hypothesis Testing

The hypothesis is a temporary answer to the formulation of the research problem which must be proven through the data collected. The research hypothesis is divided into two, namely the research hypothesis and the statistical hypothesis. Statistical hypotheses are used in studies with samples, whereas in studies without samples statistical hypotheses are not used. To test the hypothesis in this study, Partial Test (t test) and Simultaneous Test (F Test) were used.

## 3. RESULTS AND DISCUSSION

### 3.1.Descriptive Analysis

To provide an overview of the variables in this study, descriptive statistical analysis was carried out on cash turnover, receivable turnover, working capital turnover, and Return On Assets (ROA). The results of this analysis include information regarding the amount of data, average value, maximum value, minimum value, and standard deviation, which are presented in the following table:

TABLE II  
RESULTS OF DESCRIPTIVE ANALYSIS

	ROA	CTO	RTO	WTO
Means	0.005440	0.033686	-0.002690	0.002079
Median	0.009250	0.216950	0.003150	0.003900
Maximum	0.222100	1.200000	0.012500	0.046700
Minimum	-0.175900	-5.655900	-0.174000	-0.063500
std. Dev.	0.046439	0.858201	0.025174	0.016938

Source: Research Results (Processed), 2022

In this study, there are 56 observations which are annual data from 8 PT. BPRS in Aceh Province for a period of 7 years from 2015 to 2021. It should be emphasized that the data used is annual data. Based on the results of descriptive statistics, it was found that the mean or average value of the Y variable (ROA) at PT. BPRS in Aceh Province is 0.005440 with a standard deviation value of 0.046439. The maximum value of ROA is 0.222100, while the minimum value of ROA is -0.175900.

Furthermore, the results of descriptive statistics show that the mean of variable X1 (cash turnover) at PT.BPRS in Aceh Province is 0.033686 with a standard deviation value of 0.858201. In addition, the maximum cash turnover value is 1.200000, while the minimum cash turnover value is -5.655900. The results of the descriptive statistics also show that the mean of variable X2 (receivable turnover) at PT. BPRS in Aceh Province is -0.002690 with a standard deviation value of 0.025174. The maximum value of receivable turnover is 0.012500, while the minimum value of receivable turnover is -0.174000. Lastly, the results of descriptive statistics show that the mean of variable X3 (working capital turnover) at PT. BPRS in Aceh Province is 0.002079 with a standard deviation value of 0.016973. In addition, the maximum value of working capital turnover is 0.046700, while the minimum value of working capital turnover is -0.06350.

### 3.2.Selection of Panel Data Model Testing

To determine the most appropriate panel data regression approach model, a model determination test is required. There are three panel data regression models to be tested, namely the Chow/Likelihood Ratio Test, the Hausman Test, and the Lagrange Multiplier Test. The aim is to determine which model is the best to use in research, namely common effect models (CEM), fixed effect models (FEM), or random effect models (REM). By carrying out these tests, it can be ascertained that the panel data regression model used in the study is the right and accurate model.

#### a. Chow/likelihood ratio test

The Chow test is used to determine the appropriate approach model in panel data regression, namely common effect models (CEM) or fixed effect models (FEM), by testing their probability values. If the probability value > significance value ( $\alpha = 0.05$ ), then H0 is accepted, and the model used is CEM. However, if the probability value < the significance value ( $\alpha = 0.05$ ), then H0 is rejected, and the model used is FEM.

TABLE III CHOW TEST RESULTS

Effect Test	Statistics	df	Prob.
Cross-section F	0.835402	(9.57)	0.5868
Chi-square cross-sections	8.673179	9	0.4680

Source: Research Results (Processed), 2022

Based on the results of the Chow Test above, the Chi-Square Cross-Section probability value is 0.4680. This indicates that the value is greater than the alpha significance level ( $\alpha$ ) which is set at 0.05. Therefore, it can be concluded that the level of confidence in choosing the common effect model is better than the fixed effect model is 58%.

#### b. Hausman test

To determine a more appropriate model to use between the fixed effect and the random effect, the Hausman test was carried out. At the decision-making stage, if the probability value > significance value ( $\alpha = 0.05$ ), then H0 is accepted and the model used is the random effect



approach. Meanwhile, if the probability value  $<$  significance value ( $\alpha = 0.05$ ), then  $H_0$  is rejected and the model used is the fixed effect approach.

Based on the results of the previous Chow test, the common effect model is better used in this study. Therefore, the Hausman test was carried out to compare the common effect model with the fixed effect model. Hausman test results can be seen in the following table:

TABLE IV RESULTS OF THE HAUSMAN TEST

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-sections	2.602060	3	0.4571

Source: Research Results (Processed), 2022

From the results of the Hausman Test above, it can be seen that the probability value for Cross-Section Random is 0.4571. This value is greater than the significance level ( $\alpha$ ) of 0.05. Therefore, the conclusion that can be drawn is that the best model is random effect. However, because the two tests gave different results, it is necessary to test the model again to get a more accurate conclusion.

#### c. Lagrange multiplier test (LM) test

The results of the Hausman test show that the probability value for Cross-Section Random is 0.4571, which is greater than the significance level ( $\alpha$ ) of 0.05. Therefore, it can be concluded that the best model for this study is the random effect. However, because there are differences in the results of the two tests, it is necessary to test the model again to get more accurate conclusions.

TABLE V RESULTS OF THE LM TEST

	Test Hypothesis Cross-section	time	Both
Breusch-Pagan	0.441952 (0.5062)	2.995594 (0.0835)	3.437546 (0.0637)

Source: Research Results (Processed), 2022

Based on the results of the LM Test above, a BP value of 0.441952 is obtained for Cross-Section. This value is smaller than the significance level ( $\alpha$ ) of 0.05. Therefore, it can be concluded that the most suitable model used in this study is the common effect."

### 3.3. Panel Data Regression Analysis

In this analysis, the aim is to test whether there is a positive or negative relationship between the three independent variables, namely cash turnover, receivable turnover, and working capital turnover, with the dependent variable Return On Assets. (ROA) at BPRS in Aceh Province. Thus, the results of this analysis will discuss the effect of these three factors on profitability (ROA) of BPRS in Aceh Province.:

TABLE VI  
RESULTS OF PANEL DATA REGRESSION TEST

Variables	coefficient	std. Error	t-Statistics	Prob.
C	0.003834	0.004649	0.824587	0.4126
C <sup>1</sup> O	-0.007921	0.014861	-0.533015	0.5958
R <sup>1</sup> O	0.526678	0.528609	0.996347	0.3227
W <sup>1</sup> O	1.582854	0.332252	4.764014	0.0000

Source: Research Results (Processed), 2022

The coefficients that have been shown in the panel data regression equation above can be explained as follows:

- d. The constants in the panel data regression equation model in this study have a value of 0.003834. This value indicates that if the values of the three independent variables namely cash turnover, receivable turnover, and working capital turnover are assumed to be zero (0), then the Profitability value (ROA) will be 0.003834 .
- e. The panel data regression coefficient for the cash turnover variable is negative, which is -0.007921. These results indicate that cash turnover has a negative effect on Profitability (ROA). That is, the lower the Cash Turnover (cash turnover) of a bank, the lower its Profitability (ROA).
- f. The panel data regression coefficient value for the receivable turnover variable is positive at 0.526678. This shows that Receivable Turnover (receivable turnover) has a positive effect on Profitability (ROA). In other words, the higher the receivable turnover of a bank, the higher the Profitability (ROA) that will be generated.

In this analysis, the panel data regression coefficient value for the working capital turnover variable is 1.582854, which indicates a positive influence on profitability (ROA). That is, the higher the value of Working Capital Turnover (working capital turnover) in a bank, the Profitability (ROA) will also be higher.

### 3.4.Discussion

2. The effect of cash turnover, receivable turnover, and working capital turnover on profitability (ROA).  
The results of this study tested the effect of three variables, namely cash turnover, receivable turnover, and working capital turnover on profitability (ROA) at Islamic People's Financing Banks (BPRS) in Aceh Province. during the period 2015 to 2021. The test results show that simultaneously, these three variables have a significant effect on profitability (ROA) in BPRS in Aceh Province.
3. The effect of cash turnover on profitability (ROA) Partial test results show that the cash turnover variable does not have a significant effect on Profitability (ROA) in Islamic People's Financing Banks (BPRS) in Aceh Province for the period 2015 to 2021. Thus, if there is an increase in the bank's cash turnover ratio, it will not have a positive impact on the bank's profitability ratio (ROA). Conversely, if there is a decrease in the bank's cash turnover ratio, it will not have a negative impact on the bank's profitability ratio (ROA).
4. Effect of receivable turnover (receivable turnover) on profitability (ROA). The results of the partial test show that the variable Receivable Turnover (receivable turnover) has no significant effect on Profitability (ROA) at Islamic People's Financing Banks (BPRS) in Aceh Province from 2015 to 2021. Therefore, it can be concluded that if there is an increase

or a decrease in the bank's receivable turnover ratio, this will not have a significant effect on the bank's profitability ratio (ROA).

Effect of working capital turnover on profitability (ROA). The test results show that the working capital turnover variable has a positive and significant effect on Profitability (ROA) at Islamic People's Financing Banks (BPRS) in Aceh Province from 2015 to 2021. It can be interpreted that the higher the Turnover ratio Working capital (working capital turnover) at the bank, the higher the Profitability ratio (ROA) at the bank. Conversely, the lower the working capital turnover ratio at a bank, the lower the profitability ratio (ROA) at the bank. Thus, banks need to pay attention to and improve working capital management to increase their profitability

#### 4. CONCLUSION

Based on the results of research on the effect of cash turnover, accounts receivable turnover, and working capital turnover on profitability at Islamic People's Financing Banks in Aceh Province during the period 2015 to 2021, it can be concluded that simultaneously these three variables have a significant effect on profitability. However, partially the cash turnover and accounts receivable turnover variables have no significant effect on profitability, while the working capital turnover variable has a positive and significant influence on profitability. Therefore, banks need to pay attention to and improve working capital management to increase their profitability.

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