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## **THE INFLUENCE OF INTEREST RATE ON DEMAND DEPOSIT SAVING IN BRI SOUTH TOMOHON AT TOHOHON CITY PERIODE 2013-2014**

*PENGARUH TINGKAT SUKU BUNGA TERHADAP PERMINTAAN DEPOSITO  
BERJANGKA DI BRI TOMOHON SELATAN  
DI KOTA TOMOHON PERIODE 2013 – 2014*

**Keyzia Sierra Kembuan**

*International Business Administration (IBA) Program, Management Department,  
Economics and Business Faculty, Sam Ratulangi University, Manado 95115, Indonesia  
Email: keyziasierra@yahoo.com*

### **ABSTRAK**

*Tingkat suku bunga sangat penting untuk institusi perbankan yang menentukan bunga deposito dan deposito kredit. Khususnya untuk tingkat suku bunga deposito biasanya bergantung pada ketentuan bank pusat negara tersebut. Deposito sangatlah penting bagi sebuah bank untuk menaikkan jumlah dari deposito atau menempatkan deposito bank tersebut. Berdasarkan hasil test statistik yang koefisien dapat di jelaskan bahwa pengaruh jumlah tingkat suku bunga atau permintaan deposito di nasabah BRI Tomohon Selatan adalah positif dan pengaruh yang signifikan. hubungan koefisien menyatakan bahwa pengaruh tingkat suku bunga deposito untuk nilai simpanan deposito di BRI Tomohon Selatan memiliki pengaruh positif sebesar 48,4%.*

*Kata kunci: Tingkat suku bunga dan deposito*

### **ABSTRACT**

*The interest rate is important for banking institutions in determining both deposit rates and lending rates, especially for deposit interest rates usually depend on the central bank's policy of a country. Deposits is important for the bank to increase the amount of deposits or deposits placed in the bank. Based on the test that the coefficients statistics can be explained the effect of interest rate on Amount or Demand of Deposits in BRI South Tomohon at Tomohon city. Customer has positive and significant effect. The correlation coefficient suggests that the influence of deposits interest rate to amount of deposits savings in BRI South Tomohon, have a positive effect for 48.4 %.*

*Keywords: interest rate and deposit*

## **1. INTRODUCTION**

### **Research Background**

At the beginning of the 21st century, the biggest banks in the industrial world have become complex financial organizations that offer a wide variety of services to international markets and control billions of dollars in cash and assets. Furthermore, the modern banking industry has brought greater business diversification. Some banks in the industrialized world are entering into investments, underwriting of securities, portfolio management and the insurance businesses. Taken together, these changes have made banks an even more important entity in the global business community.

BRI Tomohon facing opportunity and threat to raise deposit from market or people in Tomohon. That's because of bank competitor who offers competitive offering such as higher interest rate, option time retrieval of deposit, gift for customer and so on. Financial manager in BRI must have make strategy to rising deposit and have knowledge about impact of interest rate on deposits to demand deposits.

Taking by consideration the description above, this study has come up with the title "The Influence of Interest Rate on Deposits to Demand Deposits in BRI South Tomohon at Tomohon city Periode 2013-2014".

### **Research Objective**

Regarding the problem which have been formulated and identified that is mentioned in previous section, the research objective is:

"To determine the influence of interest rate on deposits to demand deposits in Southern Tomohon BRI"

### **Theoretical Review**

#### **Financial Management**

Riley (2012) explain that Financial Management can be defined as the management of the finances of a business/organization in order to achieve financial objectives. Bovee, (2008), stated that financial management is effective acquisition and use of money.

#### **Bank**

Bank is an important institution in a country or region. This institution serves to collect public funds, manage public funds, and funds in banks in the form of loans.

#### **Interest Rate**

Interest rate is the price that lenders receive and borrowers pay for debt capital (Brigham and Houston, 2010).

#### **Deposits**

Deposits or bank deposits is one of the products and services offered by banks. These deposits for banks to raise funds that will be used for fresh funds for those who want a loan.

## Previous Research

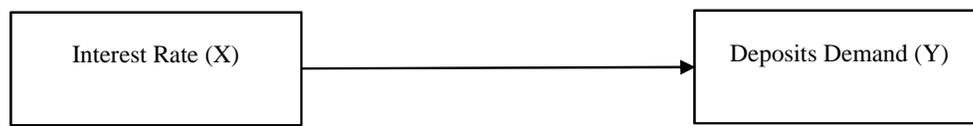
Based on Kasri and Kassim (2009), Empirical Determinants of Saving in the Islamic Banks Evidence from Indonesia: The results highlight the influential role of conventional interest rate in determining the level of saving in the Islamic banks. Haron and Ahmad (2014), the effects of conventional interest rates and rate of Profit on funds deposited with Islamic banking system in Malaysia: The effects of conventional interest rates and rate of Profit on funds deposited with Islamic banking system in Malaysia. Natalia *et al.*, (2014), Effect of results for Islamic bank deposits and parts Commercial bank interest on deposits total savings deposits Mudharabah (study at PT. Bank Syariah Mandiri period 2009-2012): The purpose of this study is to identify and explain the influence level of Deposit Revenue Sharing of Islamic Bank and Deposit Interest Rates of Commercial Banks together and partially to the Mudharabah Total Deposits in Islamic banks

## Research Hypothesis

The hypothesis of this research is:

- $H_0$  There is no significant influence of interest rate on deposits to demand deposits in BRI South Tomohon.
- $H_1$  There is significant influence of interest rate on deposits to demand deposits in BRI South Tomohon.

## Conceptual Framework



**Figure 1. Conceptual Framework**  
(Source: Data Processed, 2015)

Figure 1 shows the conceptual framework model that forming this research. This research is to understand the level of interest rates as a variable X or independent variables that would affect the level of demand savings deposits as a variable Y or independent variables.

## 2. RESEARCH METHOD

### Type of Research

This research type is causal uses quantitative type of research. Quantitative research or quantitative method based on Sugiyono (2013) defined as research method based on positivism paradigm that used to investigate specific population or samples. This research in field of marketing finance will investigate the influence of interest rate on deposits to demand deposits in BRI South Tomohon.

### Place and Time of Research

This study is conducted in the BRI South Tomohon at Tomohon city. This research will be held at June 2015 to July 2015.

## Population and Sample

The population is the entire group of people, events or things of interest that the researcher wishes to investigate (Sekaran and Bougie, 2009). The population in this research is financial data especially secondary data, which are: interest rate data and saving deposit in BRI SouthTomohon. In Tomohon there are several units namely BRI: BRI North, BRI East, BRI KCP, and BRI Teras. The sample in this research is financial data which are: interest rate and saving deposit between 2013-2014.

## Data Collection Method

Data collection is important in research, especially in financial management. Financial management usually using secondary data it's because financial data source came from secondary source.

## Operational Definition and Measurement of Research Variables

This research consists of 1 independent and 1 depend end the explanation of operational definition of research variables which are:

1. Interest rate which is a rate of interest that must be paid on the face amount for the term of the note. Indicators which are: interest rate from 2013-2014.
2. Deposits which are a saving deposit from bank customer minimum 1 month period. Indicators which are: amount of deposit in South BRI 2013-2014.

## Data Analysis Method

### Normality Test

Normality test aims to test whether the regression model or residual confounding variable has a normal distribution (Ghozali, 2009). The easiest way to see residuals normality is to look at the histogram graph that compares the distribution of observation data with near-normal distribution. The normal distribution will form a straight diagonal line, and plotting the data will be compared with the residual diagonal lines. If the residual data distribution is normal, then the line that describes the actual data will follow a diagonal line (Ghozali, 2009).

### Regression Analysis Method

The method of analysis that used in this study is multiple regression analysis that using computer programming with the latest programs which is IBM SPSS 22 version. Hypothetical testing model with multiple regression analysis which are:

$$Y = b_0 + X + \epsilon$$

Description:

$b_0$	=	Constanta
$\beta$	=	X regression coefficient
$\epsilon$	=	Standard of error
Y	=	Customer retention

### 3. RESULT AND DISCUSSION

#### Descriptive Analysis Results

Table 1 describe about Deposit Interest Rate Frequencies.

**Table 1. Deposit Interest Rate Frequencies**

Deposit Interest Rate		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6.25	2	7.1	7.1	7.1
	6.50	2	7.1	7.1	14.3
	6.75	1	3.6	3.6	17.9
	7.00	4	14.3	14.3	32.1
	7.25	11	39.3	39.3	71.4
	7.50	6	21.4	21.4	92.9
	7.75	2	7.1	7.1	100.0
	Total	28	100.0	100.0	

Source: Data Processed, 2015

According to table 1 about deposit interest rate in BRI South Tomohon reveals that frequencies of deposit interest rate which are: interest rate 7.25 % (11x, 39.3%), 7.50 % (6x, 21.4 %), 7.00 % (4x, 14.3%), 7.75 % (2x, 7.1%), 6.50 % (2x, 7.1%), 6.25 % (2x, 7.1%), and the last 6.75 % (1x, 3.6%). From table 1 indicates that interest rate from 2013-2015 most frequent rate in 7.25 % follow by 7.50 %, 7.00 %, 7.75 %, 6.50 %, 6.25 % and 6.75 %.

Table 2 describe about Deposit Amount Frequencies.

**Table 2. Deposit Amount Frequencies**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1006000000.00	1	3.6	3.6	3.6
1056000000.00	1	3.6	3.6	7.1
1106000000.00	1	3.6	3.6	10.7
1178000000.00	1	3.6	3.6	14.3
1181000000.00	1	3.6	3.6	17.9
1186000000.00	1	3.6	3.6	21.4
1196000000.00	1	3.6	3.6	25.0
1256000000.00	1	3.6	3.6	28.6
1266000000.00	2	7.1	7.1	35.7
1276000000.00	1	3.6	3.6	39.3
1434500000.00	1	3.6	3.6	42.9
1486000000.00	1	3.6	3.6	46.4
1506000000.00	2	7.1	7.1	53.6
1536000000.00	1	3.6	3.6	57.1
1616000000.00	2	7.1	7.1	64.3
1666000000.00	1	3.6	3.6	67.9
1796000000.00	1	3.6	3.6	71.4
1891000000.00	1	3.6	3.6	75.0
1962000000.00	1	3.6	3.6	78.6
1976000000.00	1	3.6	3.6	82.1
2026000000.00	1	3.6	3.6	85.7
2126000000.00	1	3.6	3.6	89.3

2176000000.00	1	3.6	3.6	92.9
2216000000.00	1	3.6	3.6	96.4
2308000000.00	1	3.6	3.6	100.0
Total	28	100.0	100.0	

Source: Data Processed, 2015

From table 2 deposit amount frequencies vary in 28 months in BRI South Tomohon.

Descriptive analysis results of this research in describe in table 3.

**Table 3. Descriptive Analysis Results**

	Deposit Interest Rate	Deposit Amount (Thousand IDR)
<b>Mean</b>	7.160	1,564,875
<b>Median</b>	7.250	1,506,000
<b>Mode</b>	7,25	1,266,000
<b>Minimum</b>	6,25	1,006,000
<b>Maximum</b>	7,75	2,308,000
<b>Standard Deviation</b>	0.397	390,921,551.877
<b>Sum</b>	200.50	43,816,500,000
n = 28		

Source: Data Processed, 2015

According to table 3 mean of deposit interest rate is 7.160 which mean that deposit interest rate value mean in BRI South Tomohon in 28 months from 2013-2015 is 7.16%. Mean of deposit amount in BRI South Tomohon is Rp. 1,564.875 billion in 28 months from 2013-2015.

**Regression Data Analysis**

The following table 4 is a summary of the table models, coefficients, and ANOVA.

**Table 4. Simple Regression Result**

	Regression Coefficient (b)	Std. Error	Beta	t <sub>count</sub>	Sig.	Description
Constanta	4967619519.833	1209001131.428		4.109	0.000	
X <sub>1</sub> (Deposit Interest Rate)	-475196242.171	168587153.117	-.484	-2.819	0.009	Significant (Look in Sig.)
R (Multiple R)	=				0.484	
R Square	=				0.234	
Adjusted R Square	=				0.205	
F <sub>count</sub>	=				7.945	
t <sub>table</sub> (1 per cent: 0.001)	=				2.472	
α	=				0.05 (5%)	
n	=				28	

Source: Data Processed, 2015

Based on table 4 can be written in the form of regression equation Coefficients Standardized forms obtained by the following equation:

$$Y = 4967619519.833 - 475196242.171X$$

Explanations:

X1 = Deposit Interest Rate

Y = Amount of Deposits

**Hypothesis Testing**

**Table 4. F-test**

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	965747262917536900.000	1	965747262917536900.000	7.945	.009 <sup>b</sup>
	Residual	3160383549582462500.000	26	121553213445479296.000		
	Total	4126130812499999200.000	27			

a. Dependent Variable: Jumlah Deposito

b. Predictors: (Constant), Suku Bunga Deposito

Source: Data Processed, 2015

F-test was conducted to determine the effect of jointly variable deposit interest rate on amount deposits, to test the hypothesis. Hypotesis test the effect of jointly using an F. The test is done by comparing the calculation results with a significant level of significance level of 0.05 (5 %) or level 0.01 (1 per cent) with the following criteria:

1. If  $F_{count} (sig) \geq \alpha$  0.05 or 0.001 then  $H_0$  accept and  $H_a$  refuse
2. If  $F_{count} (sig) < \alpha$  0.05 or 0.001 then  $H_0$  refuse and  $H_a$  accept

The test results for the overall regression model variables indicate the value of F count = 7.945 with 0.009 significance. By using the 0.05 limit (5%) or 0.01 limit (1%. The results found that the significance value less than 0.05 (<5%) or less than 0.01 (<1%. With the direction of the positive coefficients, thus found that the hypothesis that the variable interest rate model has a significant effect on amount deposits is accepted or proven.

**Table 5. T-test**

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4967619519.833	1209001131.428		4.109	.000	
	Deposit Interest Rate	-475196242.171	168587153.117	-.484	-2.819	.009	1.000

a. Dependent Variable: Jumlah Deposito

Source: Data Processed, 2015

T test is done to see presence / absence of the influence of interest rate on amount or demand deposit. T test can be performed by using the criteria of hypothesis testing:

1. If Probability Value  $\leq$  Probability Sig Value ( $\alpha = 0,05$  or  $\alpha = 0,01$ ), than  $H_0$  accept and  $H_a$  reject, means not significant.
2. If Probability Value  $>$  Probability Sig Value ( $\alpha = 0,05$  or  $\alpha = 0,01$ ), than  $H_0$  reject and  $H_a$  accept, means significant.

Based on table 5:

1. Deposit interest rate, probability value  $0.05 >$  probability sig. value  $0.009$ , thereby  $H_a$  accepted, and rejected  $H_0$  who claim there is influence of interest rate to amount or

demand deposit. Thus the first hypothesis which states there is the influence of interest rate to amount or demand deposits is accepted or proved.

2. Perceived risk variable,  $T_{\text{count}} 3.013 > T_{\text{table}} 1.662$ , thereby  $H_a$  accepted, and reject  $H_o$  who claim there is no influence of brand trust to customer retention. Thus the third hypothesis which states there is the influence of brand trust to customer retention is accepted or proven.

## Discussion

Based on the test that the coefficients statistics can be explained that the effect of interest rate on Amount or Demand of Deposits in BRI South Tomohon Customer has positive and significant effect.

Based on Anova, table significant test showed that interest rate on Amount or Demand of Deposits in BRI South Tomohon Customer has positive and significant effect.

The influence of deposits interest rate can be seen from the correlation coefficient is mainly used to amount of deposits to consumers in BRI South Tomohon. The correlation coefficient suggests that the influence of deposits interest rate to amount of deposits savings in BRI South Tomohon, have a positive effect for 48.4%. Impact of amount of deposits savings in BRI South Tomohon, influenced by interest rate is 23.4 % while the rest 76.6 % influenced by other causes are not examined in this study.

Demand for deposits to be stored or deposited in the bank, especially in this research is in Bank Rakyat Indonesia (BRI) South Tomohon branch in this study was found affected by the prevailing interest rates at the bank. This means that the higher the interest rate will increase the amount of depositors or savers in bank branches BRI South Tomohon.

This is consistent with previous research on the number of requests for bank deposits is affected by the interest rate a bank. The higher the interest rate a bank deposit, the demand will be higher as well.

This study indicates that the interest rate is one of the important factors that determine the demand deposits of a bank. However, it should researched again other variables taken from previous studies that other states affect the level of demand deposits in a bank outside the benchmark interest rate. So the variables examined in this study still needs to be added and adapted to the state of the object of research, also the limited funding and time that caused this study is limited only to the variables that exist in this study.

Bank Rakyat Indonesia South Tomohon must improve the finance strategy faced banking competition in Tomohon City. Bank Rakyat Indonesia South Tomohon in Tomohon city must focus on financial strategy to improve customer demand for savings deposits through the increase of savings deposit interest Strategy to increase demand deposits among others, by providing more services to potential customers or old customers. Like come directly to the customer's home or to the office / place of business customer if the customer wants to do deposits. In addition another strategy that could include the provision of a special prize is only given directly by the Bank Rakyat Indonesia South Tomohon, so that the customers will be happy even with the provision of a portion of the banks.rate.Other similar banks must improve financial strategy by duplicate this strategy in order to increase amount or demand savings deposits. Other researchers are focusing on the research field of management science and the science of finance management needs to pay attention to these findings by replicating the results of this research on the object of other research in other companies.

## 4. CONCLUSION AND RECOMMENDATION

### Conclusion

Conclusion of this research is:

Based on the results of found that interest rate has significant and negative impact on demand or amount of customer savings depositing Bank Rakyat Indonesia South Tomohon. This indicates that the rise in interest rates for customers in Bank Rakyat Indonesia effect of reducing the level of demand savings deposits in Bank Rakyat Indonesia South Tomohon

### Recommendation

Recommendations of this research are:

1. Bank Rakyat Indonesia South Tomohon must improve the financial strategy faced banking competition in Tomohon City. Bank Rakyat Indonesia South Tomohon in Tomohon City must focus on financial strategy to improve customer demand for savings deposits through the increase of savings deposit interest Strategy to increase demand deposits among others, by providing more services to potential customers or old customers. Like come directly to the customer's home or to the office / place of business customer if the customer wants to do deposits. In addition another strategy that could include the provision of a special prize is only given directly by the Bank Rakyat Indonesia South Tomohon, so that the customers will be happy even with the provision of a portion of the banks. Rate.
2. Other similar banks must improve financial strategy by duplicate this strategy in order to increase amount or demand savings deposits.
3. Other researchers are focusing on the research field of management science and the science of finance management needs to pay attention to these findings by replicating the results of this research on the object of other research in other companies.

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