The Effect Of Saving And Deposit Of Sharia Banks To Gross Domestic Product

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Abstrak. *Topik ini dipilih karena penulis ingin mengetahui pengaruh tabungan dan deposito bank syariah terhadap Produk Domestik Bruto sehingga dapat menjadi masukan bagi bank syariah di Indonesia. Metode penelitian yang digunakan dalam penelitian ini yaitu diagram alir penelitian, pengumpulan data, studi pustaka, identifikasi masalah, praproses, analisis data (analisis data yang digunakan yaitu regresi linier berganda, uji normalitas, uji asumsi klasik (uji multikolinearitas dan uji autokorelasi), uji statistik (koefisien determinasi (R^2), uji F statistik, dan uji t statistik), hasil analisis data, evaluasi akhir, pendekatan penelitian, dan hipotesis penelitian. Hasil penelitian ini yaitu variabel tabungan bank syariah tidak berpengaruh dan tidak signifikan terhadap variabel Produk Domestik Bruto sedangkan variabel deposito bank syariah berpengaruh dan signifikan terhadap variabel Produk Domestik Bruto. Kemudian variabel tabungan bank syariah dan variabel deposito bank syariah secara simultan signifikan mempengaruhi variabel Produk Domestik Bruto. Topik ini penting karena tabungan dan deposito bank syariah merupakan sarana investasi bagi masyarakat yang tentunya akan mempengaruhi bagi pertumbuhan ekonomi dan Produk Domestik Bruto Indonesia.*

Kata kunci: *Tabungan, Deposito, Produk Domestik Bruto, Bank Syariah.*

Abstract*. This topic was chosen because the author wants to know the effect of Islamic bank savings and deposits on Gross Domestic Products so that they can be input for Islamic banks in Indonesia. The research methods used in this research are research flow diagrams, data collection, literature study, problem identification, preprocessing, data analysis (data analysis used is multiple linear regression, normality test, classic assumption test (multicollinearity test and autocorrelation test), statistics (coefficient of determination (R^2), statistical F test, and statistical t test), results of data analysis, final evaluation, research approaches, and research hypotheses.The results of this study are sharia bank savings variables have no effect and are not significant on the Gross Domestic Product variable while sharia bank deposit variables influence and significantly influence the Gross Domestic Product variables, then sharia bank savings variables and sharia bank deposit variables simultaneously significantly influence the Gross Domestic Product variables.This topic is important because sharia bank deposits and deposits are investment vehicles for the people who will certainly influence for economic growth and Indonesia's Gross Domestic Product.*

Keywords: *Savings, Deposits, Gross Domestic Product, Islamic Banks.*

INTRODUCTION

In the last 10 years starting in 2009 until 2018, Indonesia's economic conditions experienced ups and downs. Economic growth is one of the most important factors in Indonesian economic activities. To measure economic growth the indicator seen is the development of gross domestic product (GDP) at regular intervals. There are several factors affecting the development of gross domestic product (GDP) in Indonesia, namely consumption, investment, government spending, exports, and imports. There are many types of investments that can be done in Indonesia such as savings, deposits, mutual funds, property, gold, bonds, stocks, land, buildings, forex trading, and other types of investments.

Savings and deposits are bank activities in terms of raising funds. Savings are usually used by the community for investment activities and transactions in banks, while deposits are investment activities that are commonly used by the public in banking. The development of savings and Islamic bank deposits has increased every year. This happens because more and more people are aware of the importance of saving at Islamic banks and can avoid ribawi transactions. From the data the author obtained from the Financial Services Authority website in the past 10 years the savings of Islamic banks continue to increase every year as well as the development of Islamic bank deposits which also has increased every year. This is certainly an encouraging thing for the development of Islamic banks in Indonesia.

The development of Islamic bank savings in 2009 amounted to Rp. 16.475 billion, in 2010 Rp. 22.908 billion, in 2011 amounting to Rp. 32.602 billion, in 2012 amounting to Rp. 45.072 billion, in 2013 amounting to Rp. 57.200 billion, in 2014 Rp. 63.581 billion, in 2015 Rp. 68.594 billion, in 2016 amounting to Rp. 85.188 billion, in 2017 amounting to Rp. 98.448 billion, and in 2018 Rp. 114.438 billion. There has been a positive and significant growth in savings on Islamic banks in the past 10 years.

The same with the development of Islamic bank deposits in 2009 amounting to Rp. 29.595 billion, in 2010 Rp. 44.072 billion, in 2011 amounting to Rp. 70.806 billion, in 2012 amounting to Rp. 84.732 billion, in 2013 amounting to Rp. 107.812 billion, in 2014 amounting to Rp. 135.629 billion, in 2015 Rp. 140.228 billion, in 2016 amounting to Rp. 166.174 billion, in 2017 amounting to Rp. 196.226 billion, and in 2018 Rp. 213.794 billion. There has also been positive and significant growth over the past 10 years.

From the data I have obtained, Indonesia's economic growth has also experienced fluctuating movements and has tended to decline over the past 10 years. The author obtained data on Indonesia's economic growth in 2009 amounted to 4.5%, in 2010 amounted to 6,1%, in 2011 amounted to 6,5%, in 2012 amounted to 6,03%, in 2013 amounted to 5,56%, in 2014 amounted to 5,01%, in 2015 it was 4,88%, in 2016 it was 5,03%, in 2017 it was 5,07%, and in 2018 it was 5,17%.

The development of savings and deposits of Islamic banks is inversely proportional to the development of economic growth in Indonesia which tends to stagnate and decline in recent years. Indonesia's economic growth is usually calculated by the development of the Gross Domestic Product (GDP) each period. The purpose of this study is to determine the effect of savings and deposits of Islamic banks on Gross Domestic Products so that they can be input for Islamic banks in Indonesia.

From a number of journal articles that the author has read, there are several writings that also discuss sharia banking. Research conducted by Gudarzi Farahani, Yazdan and Sadr, and Seyed Mohammad Hossein (2012), in his research entitled "Analysis of Islamic Bank's Financing and Economic Growth: Case Study of Iran and Indonesia". In his research it is said that in the long run, positive and significant development of Islamic finance is correlated with economic growth and capital accumulation. Within consideration, domestic financing provided by the Islamic banking sector has been found to contribute to the economic growth of Iran and Indonesia (Guzardi Farahani, Yazdan and Sadr, 2012).

So that with research conducted by Badri Rabaa (2016), in his research entitled "The Impact of the Islamic Banks' Performance on Economic Growth: Using Panel Data". His research concluded that the first positive result was a significant relationship between return on equity, return on Islamic bank assets, profitability and economic growth. As expected, inflation is negatively related to bank third party funds. Variable trends have positive coefficients. The second result is in line with our findings in the regression of

ethical variables that are positively related to the mobilization of funding at the financial system level (Badri Rabaa, 2016).

The research conducted by Evi Maulida Yanti, Muhammad Arfan, and Hasan Basri (2018) entitled "The Effect of Third Party Funds, Financing to Deposit Ratio and Non-Performing Financing towards Financing and its Impact on Profitability of Indonesian Sharia Banking (Studies at Sharia Commercial Banks Period 2011-2015) states that depositor funds, financing for paid up ratios, and problematic financing partially affect BUS financing in Indonesia and financing becomes the intermediary effect of third party funds, financing to deposit ratios and problematic financing to BUS profitability in Indonesia Indonesia (Evi Maulida Yanti, Muhammad Arfan, 2018).

Based on the above explanations, the author is very interested in conducting a study entitled "The Effect of Saving and Deposit to Gross Domestic Product". The role of the government, Bank Indonesia, the Financial Services Authority, and the National Sharia Council of the Indonesian Ulema Council is indispensable for the development of sharia banks in the future so that it will have an impact on economic growth and Gross Domestic Product in Indonesia.

METHOD

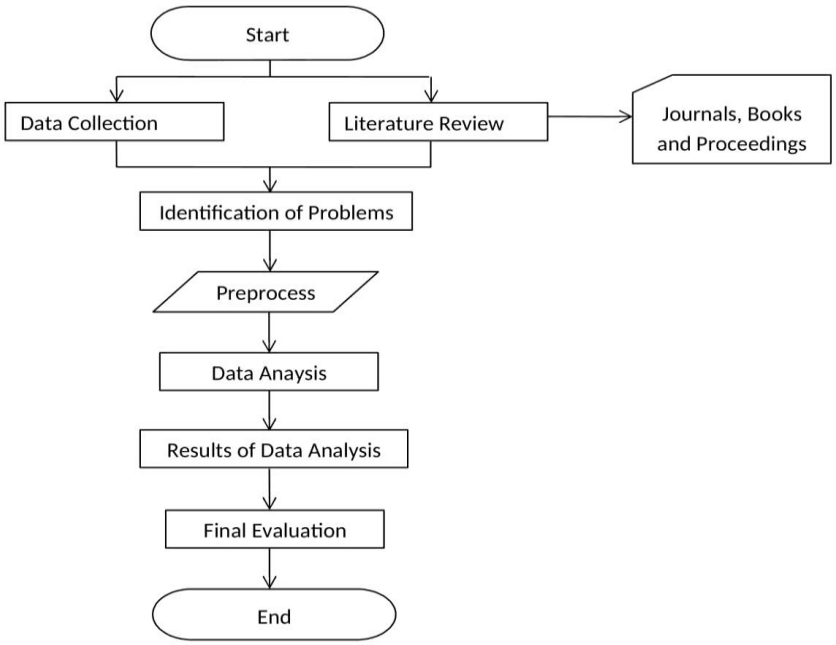

Figure 1: Research Flow Diagram

Information about research flow diagrams:

1. Data collection

Data collection is carried out to obtain the information needed in order to achieve research objectives. Data is collected from pre-determined samples. At this stage, the data collected is data on the development of savings and deposits of Islamic banks as well as data on the development of Gross Domestic Product (GDP) from 2009 to 2018.

2. Literature Review

To achieve the objectives to be determined, it is necessary to study some literature that will be used. Literature study is the first step in this research, this literature study is carried out to complement the theories used in this research. Literature study in this research is sourced from journals, books, proceedings or other sources relating to the title of the research with library sources in the last 10 (ten) years.

3. Identification of Problems

At this stage of identification of the problem, it is done after all the data is fulfilled and then the data is obtained according to the process to be carried out at the predetermined data conversion stage.

4. Preprocess

Preprocess phase is the data selection phase which aims to get the appropriate data and is ready to be used in this research.

5. Data Analysis

After getting enough data, the next process is analyzing the data that has been obtained. Analysis of the data used is multiple linear regression, normality test, classic assumption test (multicollinearity test and autocorrelation test), statistical tests (coefficient of determination (R^2), statistical t tests, and statistical F tests).

6. Result of Data Analysis

After the data analysis process is complete, the data analysis results stage will be carried out on the research topic.

7. Final Evaluation

Final evaluation is carried out to determine whether the results of the data analysis are in accordance with the expected results. After the entire data is processed, analyzed, tested and evaluated, a focus group discussion (FGD) will be conducted between the lead researcher and the research members about the results of the research obtained.

Research Approach

This type of research is research with quantitative methods to test hypotheses or in answering problem formulations.

Research Hypothesis

H_0: There is no effect of Islamic bank savings and Islamic bank deposits to Gross Domestic Product.

Ha: There is the effect of Islamic bank savings and Islamic bank deposits to Gross Domestic Product.

RESULTS AND DISCUSSION

1. Description of Research Data

a. Description of Dependent Variable

Indonesia's economic growth is the dependent variable in this study. Indonesia's economic growth always fluctuates in accordance with the development of Indonesia's Gross Domestic Product (GDP).

Table 1: Gross Domestic Product (GDP) from 2009 to 2018
(Billion Rupiahs)

Year	Quarterly 1	Quarterly 2	Quarterly 3	Quarterly 4
2009	528.454	540.784	561.138	547.365
2010	559.279	574.539	594.069	585.951
2011	595.227	611.625	632.430	623.960
2012	633.243	651.107	671.781	662.008
2013	671.593	688.864	709.985	699.903
2014	706.533	2.137.772	2.208.107	2.161.408
2015	2.157.848	2.238.762	2.312.640	2.237.262

2016	2.264.090	2.354.798	2.428.570	2.385.577
2017	2.378.097	2.473.433	2.552.302	2.508.872
2018	2.498.488	2.603.748	2.684.186	2.638.894

(Source: www.bi.go.id)

Based on the above data it can be seen that the development of Indonesia's Gross Domestic Product from the 1st quarter of 2009 to the 4th quarter of 2018 experienced positive and significant growth. This means that the level of the community's economy has experienced good development every year. The lowest Gross Domestic Product, which is the first quarter of 2009, was Rp. 528.454 billion and the highest is 3 rd in 2018 of Rp. 2.684.186 billion.

b. Description of Independent Variable
Islamic Bank Savings

Table 2: Sharia Bank Savings from 2009 to 2018 (Billion Rupiahs)

Year	Quarterly 1	Quarterly 2	Quarterly 3	Quarterly 4
2009	13.045	14.149	14.578	16.475
2010	16.688	18.351	19.461	22.908
2011	23.068	25.444	28.102	32.602
2012	34.694	37.676	40.396	45.072
2013	46.474	48.289	52.380	57.200
2014	55.448	55.174	57.697	63.581
2015	61.118	60.969	64.007	68.594
2016	68.055	70.243	78.354	85.188
2017	85.841	86.939	90.470	98.448
2018	98.739	101.413	105.811	114.438

(Source: www.ojk.go.id)

The development of Islamic bank savings in the last 10 years also experienced positive and significant growth. This can be seen from the data above that the data of Islamic bank savings in the first quarter of 2009 amounted to Rp. 13.045 billion which is the lowest achievement and savings of Islamic banks in the 4th quarter of 2018 amounting to Rp. 114.438 billion which is the highest achievement. This reflects that the bush community knows and saves in Islamic banks. Of course this can be further enhanced in the future.

Islamic Bank Deposits

Table 3: Sharia Bank Deposits in 2009 Until 2018 (Billion Rupiahs)

Year	Quarterly 1	Quarterly 2	Quarterly 3	Quarterly 4
2009	20.786	22.755	25.311	29.595
2010	30.243	29.689	37.044	44.072
2011	47.435	52.121	59.350	70.806
2012	72.081	68.888	73.505	84.732

2013	96.422	99.677	103.799	107.812
2014	111.643	119.043	122.105	135.629
2015	130.549	129.394	133.872	140.228
2016	144.790	147.254	156.100	166.174
2017	169.717	179.103	189.898	196.226
2018	201.089	195.325	205.377	213.794

(Source: www.ojk.go.id)

The development of Islamic bank deposits in the past 10 years also experienced positive and significant growth. This can be seen from the data above that the data of Islamic bank deposits in the first quarter of 2009 amounted to Rp. 20.786 billion which is the lowest achievement and deposits of Islamic banks in the 4th quarter of 2018 amounting to Rp. 213.794 billion which is the highest achievement. This reflects that many people in the bush know and invest their funds in the form of deposits in Islamic banks. Of course this can be further enhanced in the future.

Table 4: *Descriptive Statistics*

Descriptive Statistics

	Mean	Std. Deviation	N
PDB	1456867	898000,23574	40
TBS	54439,48	29303,54202	40
DBS	109085,8	59292,73080	40

Table 5: *Correlations*

Correlations

		PDB	TBS	DBS
Pearson Correlation	PDB	1,000	,892	,910
	TBS	,892	1,000	,995
	DBS	,910	,995	1,000
Sig. (1-tailed)	PDB	.	,000	,000
	TBS	,000	.	,000
	DBS	,000	,000	.
N	PDB	40	40	40
	TBS	40	40	40
	DBS	40	40	40

From table 4 above it is known that the amount of data is 40 quarters, so the average Gross Domestic Product (GDP) is Rp. 1.456.867, with a standard deviation of Rp. 898.000,23574. The average savings of an Islamic bank is Rp. 54.439,48 with a standard deviation of Rp. 29.303,54202 and the average Islamic bank deposit is Rp. 109.085.8 with a standard deviation of Rp. 59.292,73080.

From table 5 correlations above, it can be seen that the correlation between Islamic bank savings funds and Gross Domestic Product (GDP) is 0,892. So based on the correlation guidelines table, the relationship between these variables is strong. While the large correlation between Islamic bank deposits with respect to Gross Domestic Product (GDP) is equal to 0,910, the relationship between the two is strong.

c. Classical Assumption Test
Normality Test

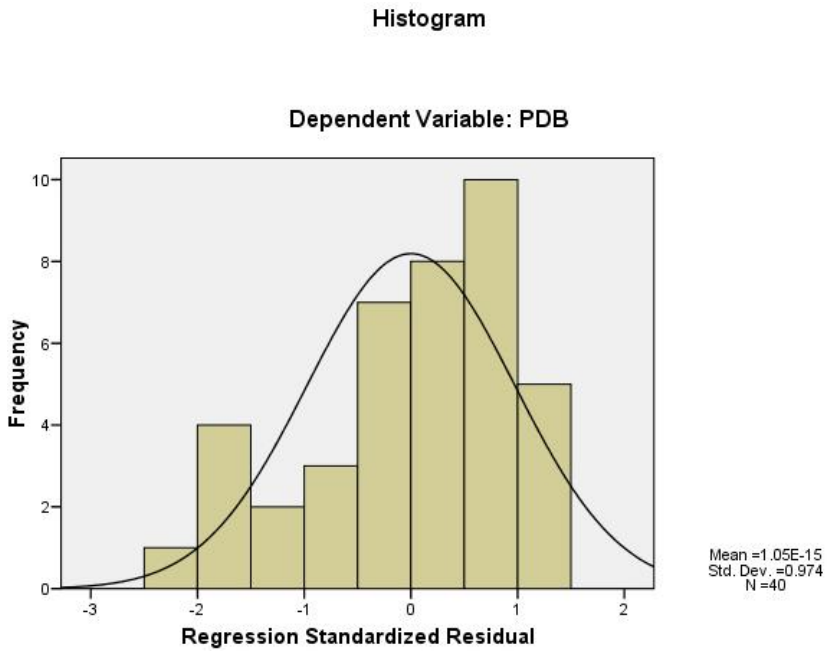

Figure 2: Histogram Normality Test

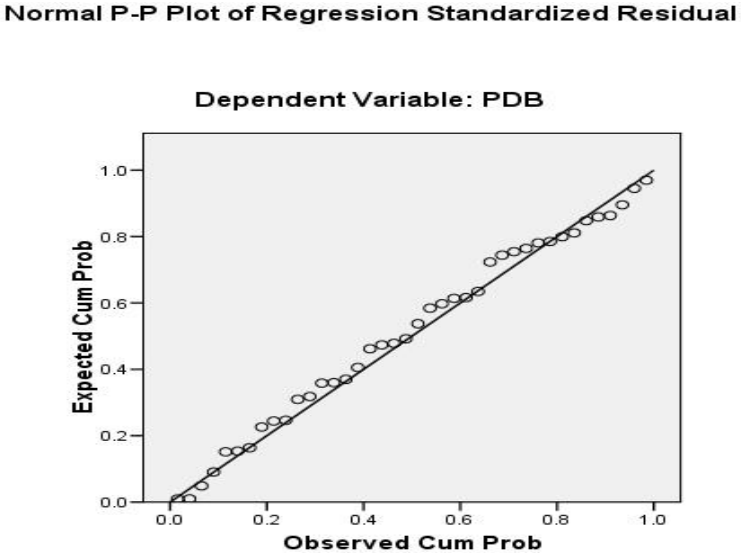

Figure 3: Normal P-Plot

From Figure 2 the histogram graph display and Figure 3 the normal p-plot graph can be concluded that the histogram graph gives a pattern of distribution that is near normal. Whereas in graph 3 the normal p-plot shows the points spread around the diagonal line, and the spread follows the direction of the diagonal line. Both of these graphs show that the regression model is feasible because it meets the assumption of normality.

Multicollinearity Test

Table 6: Multikolinearity *Coefficients*[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-12596,9	121342,2		-,104	,918		
	TBS	-43,244	19,947	-1,411	-2,168	,037	,020	1,028
	DBS	35,052	9,858	2,314	3,556	,001	,020	1,028

a. Dependent Variable: PDB

From table 6 above it can be seen that the results of the calculation of tolerance values indicate that there are no independent variables that have tolerance values smaller than 0.1. For Islamic bank savings variable the tolerance value is 0,20 or around 20% while for the Islamic bank deposit variable has a tolerance value of 0,20 or around 20% which means there is no correlation between the independent variables.

The results of the calculation of the value of the variance inflation factor (VIF) also showed the same thing, not one independent variable that has a VIF value of more than 10. For the Islamic bank savings variable has a VIF value of 1,028 while for the Islamic bank deposit variable has a VIF value of 1.028. So, it can be concluded that there is no multicollinearity between the independent variables in the regression model.

Autocorrelation Test

Table 7: Durbin Watson Summary[b] Model

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,921[a]	,848	,839	359847,447	1,639

a. Predictors: (Constant), DBS, TBS
b. Dependent Variable: PDB

Table 8: *Durbin Watson*

K = 3		
N	4-du	Du
40	2,401	1,599

From table 7 above it can be seen that the Durbin-Watson value is 1,639. The Durbin-Watson value based on the table with a degree of confidence of 5% is dl of 1,390 and du of 1,599, so the 4-du value is 2,401. A regression equation is said to be free from autocorrelation if the Durbin-Watson value is located between du and 4-du. The Durbin-Watson value in this study is 1,639 which means that the value lies between du and 4 du. Then this regression equation model shows the absence of autocorrelation.

Heteroskedasticity Test

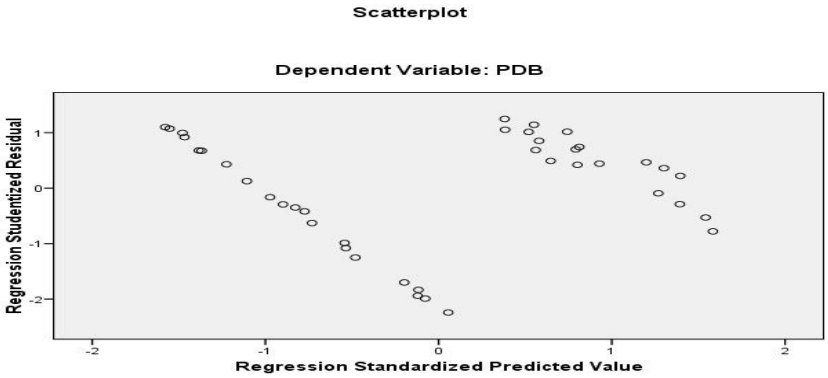

Figure 4: *Scatterplot* Heteroskedasticity Test

From the graphic image 4 of the Scatterplot Heteroscedasticity Test above it is seen that the points scatter randomly and are spread both above and below the number 0 on the Y axis. It can be concluded that there is no heteroscedasticity in the regression model, so that the regression model is feasible to predict Products Gross Domestic Product (GDP) based on input of sharia bank savings variable and sharia bank deposit variable.

d. Statistic Test

Coefficient of Determination (R^2)

The following is the coefficient of determination from the research obtained from the SPSS output:

Table 9: *Summary*[b] Model of the Coefficient of Determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,921[a]	,848	,839	359847,447	1,639

a. Predictors: (Constant), DBS, TBS
b. Dependent Variable: PDB

From the results of the above output has a coefficient of determination (R^2) shows that the value of R = 0,921 and R × R = R^2 of 0,848 or 84,8% means that the dependent variable on the Gross Domestic Product (GDP) can be explained by the independent variable namely savings Islamic banks and Islamic bank deposits by 84,8% and the rest are explained by other variables outside the variables used.

t Test Statistic

Table 10: t Test Statistic

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-12596,9	121342,2		-,104	,918		
	TBS	-43,244	19,947	-1,411	-2,168	,037	,020	1,028
	DBS	35,052	9,858	2,314	3,556	,001	,020	1,028

a. Dependent Variable: PDB

T test to test the significance of constants and dependent variables (Gross Domestic Product). The analysis and conclusions from table 10 are:

1. With a significance level of 0,05, N = 40 (number of samples), K = 2 (number of independent variables, N-K = 40-2 = 38, then the table will get a value of 2,024:
   a. From the data above it is known that, Islamic bank savings variable has a t_{count} of -2,168 smaller than ttable of 2,024, so H_0 is accepted and Ha is rejected. In conclusion, Islamic bank savings variable does not affect the Gross Domestic Product (GDP) variable. Based on the significance, the significance value of the Islamic bank savings variable (probability 0,37) is greater than the significance level of 0,05, so H_0 is accepted and Ha is rejected. In conclusion, Islamic bank savings variable has no effect and is not significant on the Gross Domestic Product (GDP) variable.
   b. While the Islamic bank deposit variable has a t_{count} of 3,556 greater than t_{table} of 2,024, so H_0 is rejected and Ha is accepted. In conclusion, Islamic bank deposit variables affect the Gross Domestic Product (GDP) variable. Based on significance, the significance value of Islamic bank deposit variables (probability 0,001) is smaller than the significance level of 0.05, so H_0 is rejected and Ha is accepted. The conclusion is that Islamic bank deposit variables have significant and significant influence on the Gross Domestic Product (GDP) variable.
2. Interpretation of the multiple linear regression equation:
   GDP = -12596,9 - 43,244 X_1 + 35,052 X_2
   a. A constant of -12596,9 states that if there is no ratio of Islamic bank savings (X_1) and Islamic bank deposits (X_2), then the GDP ratio is -12596,9%.
   b. The regression coefficient of sharia bank savings of -43,244 states that any reduction (due to -) the ratio of sharia bank savings of 1% will reduce the Gross Domestic Product (GDP) by -43,244% with other variables considered to be fixed.
   c. The regression coefficient of Islamic bank deposits of 35,052 states that each addition (because it is marked +) the ratio of the magnitude of Islamic bank deposits by 1% will add to the Gross Domestic Product (GDP) by 35,052% with other variables considered to be fixed.

F Test Statistic

Table 11: *Anova*[b] F-test Statistic

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2,7E+013	2	1,333E+012	102,937	,000[a]
	Residual	4,8E+012	37	1,295E+011		
	Total	3,1E+013	39			

a. Predictors: (Constant), DBS, TBS

b. Dependent Variable: PDB

From table 11 of the F test results or ANOVA test above, the analysis and conclusions are as follows:

1. Obtained F_{count} value of 102,937. From the F distribution table with a significance level of 0,05 with df 1 (number of variables –1) or 3-1 = 2, and df 2 (NK-1 = 40-2-1 = 37), the F_{table} value is 3,25, so H_0 is rejected and Ha is accepted (102,937> 3,25). The

conclusion is that Islamic bank savings variables and Islamic bank deposit variables simultaneously significantly influence the Gross Domestic Product (GDP) variable.

2. A significance value of 0,000 is obtained less than 0,05. This shows that the regression model of Islamic bank savings variable and Islamic bank deposit variable can be used to predict the Gross Domestic Product (GDP) variable.

CONCLUSION

The conclusions of this study are:

1. Islamic bank savings variable has a t_{count} of -2.168 smaller than t_{table} of 2.024, so H_0 is accepted and Ha is rejected. In conclusion, Islamic bank savings variable does not affect the Gross Domestic Product (GDP) variable. Based on the significance, the significance value of the Islamic bank savings variable (probability 0,37) is greater than the significance level of 0,05, so H_0 is accepted and Ha is rejected. In conclusion, Islamic bank savings variable has no effect and is not significant on the Gross Domestic Product (GDP) variable. The variable of Islamic bank deposits has a t_{count} of 3,556 greater than t_{table} of 2,024, so H_0 is rejected and Ha is accepted. In conclusion, Islamic bank deposit variables affect the Gross Domestic Product (GDP) variable. Based on significance, the significance value of Islamic bank deposit variables (probability 0,001) is smaller than the significance level of 0,05, so H_0 is rejected and Ha is accepted. The conclusion is that Islamic bank deposit variables have significant and significant influence on the Gross Domestic Product (GDP) variable.
2. Obtained F_{count} value of 102,937. From the F distribution table with a significance level of 0,05 with df 1 (number of variables –1) or 3-1 = 2, and df 2 (NK-1 = 40-2-1 = 37), the F_{table} value is 3,25, so H_0 is rejected and Ha is accepted (102,937> 3,25). The conclusion is that Islamic bank savings variables and Islamic bank deposit variables simultaneously significantly influence the Gross Domestic Product (GDP) variable.

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