

The Effect Of Sharia Bank Deposit And Conventional Bank Deposit To Gross Domestic Product

¹Syahrijal Hidayat, ²Rudy Irwansyah

^{1,2}Sekolah Tinggi Ilmu Ekonomi Muhammadiyah Asahan, Jalan Madong Lubis No. 999, Kisaran
E-mail: ¹syahrijalhidayat528@gmail.com, ²rudy.irwansyah@gmail.com

Abstrak. Tujuan dari penelitian ini yaitu untuk mengetahui pengaruh deposito bank syariah dan deposito bank konvensional terhadap Produk Domestik Bruto. 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 deposito bank syariah tidak berpengaruh dan tidak signifikan terhadap variabel Produk Domestik Bruto (PDB) sedangkan variabel deposito bank konvensional berpengaruh dan signifikan terhadap variabel Produk Domestik Bruto (PDB). Kemudian variabel deposito bank syariah dan variabel deposito bank konvensional secara simultan signifikan mempengaruhi variabel Produk Domestik Bruto (PDB).

Kata kunci: Deposito Bank Syariah, Deposito Bank Konvensional, Produk Domestik Bruto.

Abstract. The purpose of this study is to determine the effect of Islamic bank deposits and conventional bank deposits on Gross Domestic Product. 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 deposit variables have no effect and are not significant on the Gross Domestic Product (GDP) variable while the conventional bank deposit variable influences and significantly affects the Gross Domestic Product (GDP) variable, then the sharia bank variable variable and the conventional bank deposit variable simultaneously significantly influence the Gross Domestic Product (GDP) variable.

Keywords: Sharia Bank Deposit, Conventional Bank Deposit, Gross Domestic Product.

INTRODUCTION

Economic growth is a real picture of the impact of development policies implemented by the government, especially in the economic field. The economic growth is the growth rate that is formed from various sectors in Indonesia including investment, household consumption, government spending, exports and imports. The welfare of a country can be seen from the country's economic growth in one period. The higher the level of economic growth of a country, the higher the ability of a country to meet the needs of the community, so the higher the ability of a country to prosper the community. Economic growth in Indonesia is measured by the development of its Bruto Domestic Products in one period.

Growing the investment sector is one of the efforts made by the Indonesian government to encourage the pace of economic growth in Indonesia. One very important factor in determining economic growth and holding a very important role in the country's

economic activities is the investment sector. Investment is the purchase of capital goods and equipment and production equipment to increase the ability to produce the goods and services needed. One of the engines of economic growth in Indonesia is the investment sector.

Banks are intermediaries that act as intermediaries between customers who are overfunded and those who are underfunded. People who have excess funds will certainly invest in deposits and these investments are called third party funds. Then the invested deposits will be channeled back to the community both for consumptive activities and for productive activities to grow and develop their business activities. In Indonesia, the banking system used by the dual banking system is conventional banks that use the interest system and Islamic banks that use the Islamic system such as profit sharing, buying and selling, leasing, and others. Both in conventional banks and in Islamic banks, one of the business activities of raising funds and investments is investment in deposits.

The purpose of this study is to determine the effect of Islamic bank deposits and conventional bank deposits on Gross Domestic Product. Then the next goal can be to provide input and advice to the banks so that they are more active in carrying out their business activities so that they can have an impact on people's welfare and economic growth in Indonesia.

From the data of Islamic bank deposits that the author obtained that the development of deposits in Islamic banks in the period of 10 years from 2009 to 2018 last grew positively and significantly. Sharia bank deposits in 2009 of 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.

So that with the development of conventional bank deposits that the authors found that conventional bank deposits also experienced positive and significant growth in the period of 10 years starting in 2009 until the last 2018. Conventional bank deposits in 2009 of Rp. 758.280 billion, in 2010 Rp. 928.089 billion, in 2011 amounting to Rp. 1.072.665 billion, in 2012 amounting to Rp. 1.179.242 billion, in 2013 amounting to Rp. 1.331.527 billion, in 2014 amounting to Rp. 1.641.743 billion, in 2015 amounting to Rp. 1.723.319 billion, in 2016 amounting to Rp. 1.856.507 billion, in 2017 amounting to Rp. 1.573.353 billion, and in 2018 Rp. 2.138.035 billion.

From some of the literature that the authors read about deposits, banks, and Gross Domestic Products, including research conducted by Asma Salman and Huma Nawaz (2018), entitled "Islamic Financial System and Conventional Banking: A Comparison" states that in order to find out the differences between the two banking fields namely, Islamic and conventional banking in terms of profitability, efficiency and liquidity Secondary data from banks from each banking sector is taken for assessment. Ratio analysis and one sample t-test were applied to determine respondents research characteristics and regression analysis was applied to test differences in terms of significant factors affecting customer confidence in Islamic banks and commercial banks. The results of this study challenge many previous findings because the analysis shows that there are significant differences between the two types of banking for the variables studied. In addition, the effect of return (Salman & Nawaz, 2018).

The research conducted by Dodi, Dedi Supriyadi, and Meta Arief (2018) entitled "Islamic Bank Profitability: A Study of Islamic Banks in Indonesia" states that only bank size as a specific determinant has positive effects on both ROA and ROE while capital, risk credit and liquidity have a negative effect on the profitability of Islamic banking in Indonesia. Then, macroeconomic determinants find that only inflation has a positive

effect while GDP has no significant effect on the profitability of Islamic banks. The results show that Islamic banks in Indonesia need to develop well and are well supported by the government through independent regulations outside Indonesia, meaning that Islamic banks can develop Islamic regulations and products as practiced by Islamic law and the Sunnah (Dodi, Supriyadi, & Arief, 2018).

So that with research conducted by Laila Masruro Pimada, Imron Mawardi, and Sri Herianingrum (2017) entitled “Determinants of Islamic Bank Deposits in Indonesia” states that all independent variables (FDR, PSR, and GDP) are of 5% significance level. of mudharabah deposits in Indonesia. In other words all independent variables affect mudharabah deposits and this study accepts all alternative hypotheses. These findings contribute to the growth of the Islamic banking industry and provide evidence of factors that can increase the amount of mudharabah deposits. So, both Islamic banks and bank customers can feel high profits and increase their assets (wealth) (Pimada, Mawardi, & Herianingrum, 2017).

Based on the above explanations the authors are interested in conducting a study entitled “The Effect of Sharia Bank Deposit and Conventional Bank Deposit to Gross Domestic Product”. Then it is expected that the increasing public investment, especially investments in Islamic banks and conventional banks in the form of deposits can further improve the welfare of the community and increase economic growth of the Indonesian people.

METHOD

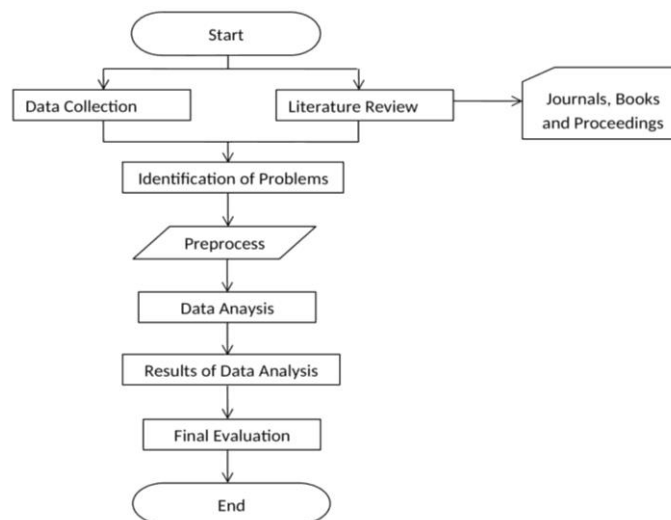


Figure 1: Research Flow Diagram

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 Islamic bank deposits and conventional bank deposits 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 study

sourced from journals, books, proceedings or other sources relating to the title of the study.

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

Preprocessing 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 deposits and conventional bank deposits on Gross Domestic Product.

H_a : There is an effect of Islamic bank deposits and conventional bank deposits on Gross Domestic Product.

RESULTS AND DISCUSSION

1. Description of Research Data

a. Description of Dependent Variable

The dependent variable in this study is the development of Gross Domestic Product in the last 10 years, starting from 2009 until 2018. Economic growth in Indonesia is measured by the development of Gross Domestic Product in a period.

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

(Sumber: www.bi.go.id)

Based on table 1 above it can be seen that the development of Gross Domestic Product in Indonesia from 2009 to 2018 continues to experience growth every year. In this study, the data used is the development of Gross Domestic Product per quarter (3 months). From the data above, quarter 1 of 2009 was the lowest Gross Domestic Product of Rp. 528.454 billion and the 3 rd quarter of 2018 was the highest Gross Domestic Product of Rp. 2.684.186. From the above data it can be seen that Gross Domestic Product is increasing every year.

b. Description of Independent Variable
Sharia Bank Deposit

Table 2: Sharia Bank Deposit from 2009 to 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

(Sumber: www.ojk.go.id)

From table 2 above it can be seen that Islamic bank deposits from 2009 to 2018 continue to experience good developments and positive and significant growth. From the data obtained by the author the lowest Islamic bank deposits occurred in the 1st quarter of 2009 amounting to Rp. 20.786 billion and the highest Islamic bank deposits in the 4th quarter of 2018 amounting to Rp. 213.794 billion. From this data it can be understood that more and more Indonesians are investing in deposits in Islamic banks.

Conventional Bank Deposit

Tabel 3: Deposito Bank Konvensional Tahun 2009 Sampai Dengan Tahun 2018 (Miliar Rupiah)

Year	Quarterly 1	Quarterly 2	Quarterly 3	Quarterly 4
2009	710.330	727.752	730.861	758.280
2010	795.475	829.798	841.815	928.089

2011	944.962	970.623	1.017.894	1.072.665
2012	1.109.396	1.111.080	1.134.473	1.179.242
2013	1.229.050	1.255.343	1.282.172	1.331.527
2014	1.402.701	1.475.053	1.578.958	1.641.743
2015	1.722.797	1.724.149	1.755.789	1.723.319
2016	1.824.364	1.823.315	1.840.574	1.856.507
2017	1.355.112	1.421.601	1.442.643	1.573.353
2018	2.097.813	2.046.286	2.102.128	2.138.035

(Sumber: www.ojk.go.id)

From table 3 above it can be seen that the development of conventional bank deposits from 2009 to 2018 also continues to experience positive and significant growth. From the data obtained by the author, the lowest conventional bank deposits in the first quarter of 2009 was Rp. 710.330 billion and the highest conventional bank deposits in the fourth quarter of 2018 amounting to Rp. 2.138.035 billion. From this data it can be understood that more and more Indonesians are investing in deposits in conventional banks.

Tabel 4: *Descriptive Statistics*
Descriptive Statistics

	Mean	Std. Deviation	N
PDB	1456867	898000,23574	40
DBS	109086	24405,4038	40
DBK	1362677	1277996,5	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 Islamic bank deposit is Rp. 109.086 with a standard deviation of Rp. 24.4405.4038 and the average conventional bank deposit is Rp. 1.362.677 with a standard deviation of Rp. 1.277.996,5.

Tabel 5: *Correlations*
Correlations

		PDB	DBS	DBK
Pearson Correlation	PDB	1,000	,833	,804
	DBS	,833	1,000	,888
	DBK	,804	,888	1,000
Sig. (1-tailed)	PDB	.	,000	,000
	DBS	,000	.	,000
	DBK	,000	,000	.
N	PDB	40	40	40
	DBS	40	40	40
	DBK	40	40	40

From table 5 correlations above it can be seen that the large correlation between Islamic bank deposits with Gross Domestic Product (GDP) is equal to 0,833. So based on the correlation guidelines table, the relationship between these variables is strong. While

the large correlation between conventional bank deposit financing with respect to Gross Domestic Product (GDP) is 0,804, the relationship between the two is strong.

c. Classical Assumption Test
Normality Test

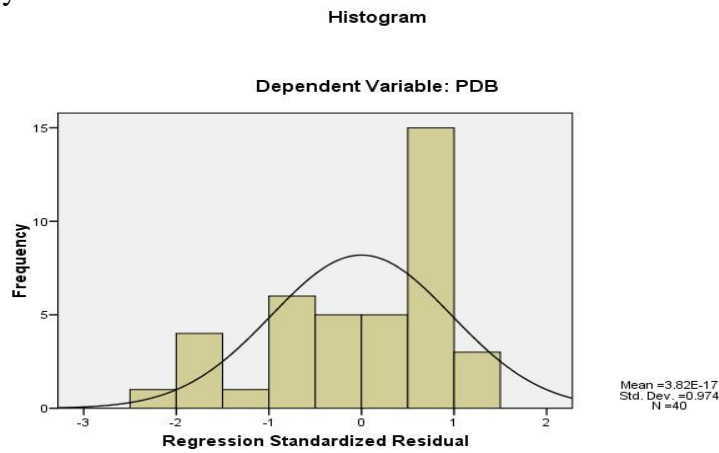


Figure 2: Histogram Normality Test

Normal P-P Plot of Regression Standardized Residual

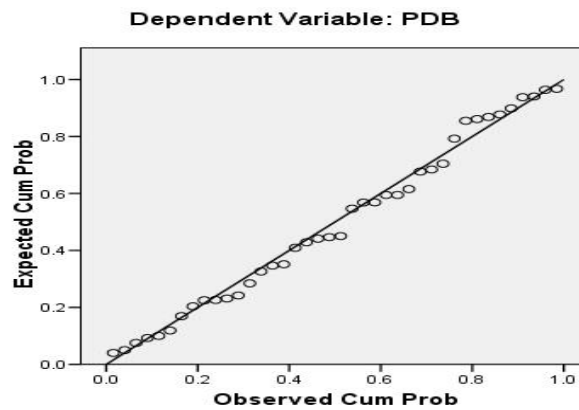


Figure 3: Normal P-Plot

From Figure 2 the histogram graph display and Figure 3 the normal p-plot graph can be concluded that the histogram graph gives a near normal distribution pattern. 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.

Multikolinerity Test

Table 6: Multikolinerity *Coefficients*^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-447678	253220,8		-1,768	,085		
DBS	,634	,350	,304	1,809	,079	,151	6,619
DBK	9,544	2,544	,630	3,751	,001	,151	6,619

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 syariah bank financing variable the tolerance value is 0,151 or around 15,1% while for conventional bank deposit variable has a tolerance value of 0,151 or around 15,1% 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 Islamic bank deposit variables having a VIF value of 6,619 while for conventional bank deposit variables having a VIF value of 6,619. 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	,918 ^a	,842	,834	366173,718	1,613

a. Predictors: (Constant), DBK, DBS

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 1,613. 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 1.613 which means that the value lies between du and 4 du. Then this regression equation model shows the absence of autocorrelation.

Heteroskedasticity Test

Scatterplot

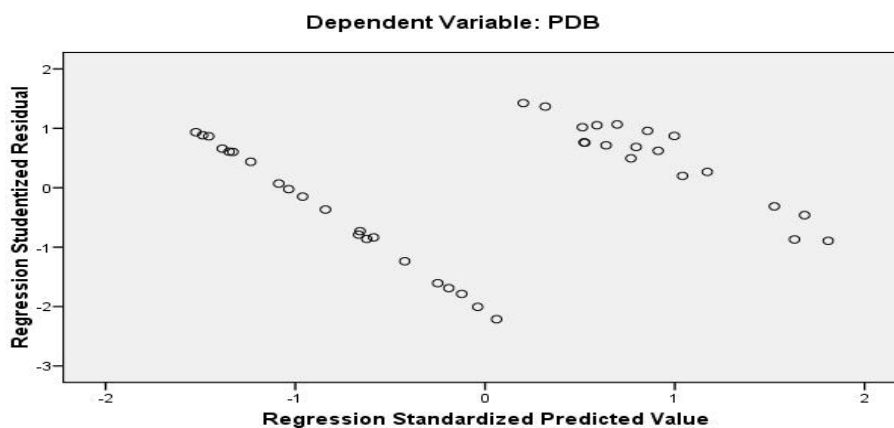


Figure 4: *Scatterplot* Heteroskedasticity Test

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. Gross Domestic Product (GDP) is based on input of sharia bank free variable variables and conventional bank deposit variables.

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	,918 ^a	,842	,834	366173,718	1,613

a. Predictors: (Constant), DBK, DBS

b. Dependent Variable: PDB

From the results of the above output has a coefficient of determination (R^2) shows that the value of $R = 0,918$ and $R \times R = R^2$ of 0,842 or 84,2% means that the dependent variable on the Gross Domestic Product (GDP) can be explained by the independent variable namely deposits Islamic banks and Islamic banks deposits by 84,2% 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)	-447678	253220,8		-1,768	,085		
	DBS	,634	,350	,304	1,809	,079	,151	6,619
	DBK	9,544	2,544	,630	3,751	,001	,151	6,619

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 a table of 2,024 will be obtained:

a) From the data above it is known that, the variable of Islamic bank deposits has a t_{count} of 1,809 smaller than the table of 2.024, so H_0 is accepted and H_a is rejected. In conclusion, Islamic bank deposit variables do not affect the Gross Domestic Product (GDP) variable. Based on significance, the significance value of Islamic bank deposit variables (probability 0.79) is greater than the significance level of 0,05, so H_0 is accepted and H_a is rejected. The conclusion is that Islamic bank deposit variables have no effect and are not significant on the Gross Domestic Product (GDP) variable.

b) While the conventional bank deposit variable has a t_{count} of 3,751 greater than t_{table} of 2,024, so H_0 is rejected and H_a is accepted. The conclusion is that conventional

bank deposit variables affect the Gross Domestic Product (GDP) variable. Based on significance, the significance value of conventional bank deposit variables (probability 0.001) is smaller than the significance level of 0,05, so H_0 is rejected and H_a is accepted. In conclusion, conventional bank deposit variables have significant and significant effects on the Gross Domestic Product (GDP) variable.

a) Interpretation of the multiple linear regression equation:

$$GDP = -447678 + 6.34 X_1 + 9.544 X_2$$

2. A constant of -447678 states that if there is no ratio of Islamic bank deposits (X_1) and conventional bank deposits (X_2), then the GDP ratio is -447678%.
3. The regression coefficient of sharia bank deposits of 6,34 states that each addition because of the + sign) ratio of the magnitude of sharia bank deposits of 1% will add to the Gross Domestic Product (GDP) of 6,34% provided that other variables are considered constant.
4. T conventional bank deposit regression coefficient of 9,544 states that each addition (because of the sign +) ratio of the magnitude of conventional bank deposits by 1% will add to the Gross Domestic Product (GDP) of 9,544% with the note other variables are considered constant.

Uji F Statistik

Table 11: *Anova*^b F-test Statistic
ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2,6E+013	2	1,324E+013	98,777	,000 ^a
Residual	5,0E+012	37	1,341E+011		
Total	3,1E+013	39			

a. Predictors: (Constant), DBK, DBS

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 98,777. 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 H_a is accepted (98,777 > 3,25). In conclusion, Islamic bank deposit variables and conventional 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 deposit variables and conventional bank deposit variables can be used to predict the Gross Domestic Product (GDP) variable.

CONCLUSION

The conclusions of this study are:

1. The variable of Islamic bank deposits has a t_{count} of 1,809 smaller than the table of 2.024, so H_0 is accepted and H_a is rejected. In conclusion, Islamic bank deposit variables do not affect the Gross Domestic Product (GDP) variable. Based on significance, the significance value of Islamic bank deposit variables (probability 0.79) is greater than the significance level of 0,05, so H_0 is accepted and H_a is rejected. The conclusion is that Islamic bank deposit variables have no effect and are

not significant on the Gross Domestic Product (GDP) variable. While the conventional bank deposit variable has a t_{count} of 3,751 greater than t_{table} of 2,024, so H_0 is rejected and H_a is accepted. The conclusion is that conventional bank deposit variables affect the Gross Domestic Product (GDP) variable. Based on significance, the significance value of conventional bank deposit variables (probability 0.001) is smaller than the significance level of 0,05, so H_0 is rejected and H_a is accepted. In conclusion, conventional bank deposit variables have significant and significant effects on the Gross Domestic Product (GDP) variable.

2. Obtained F_{count} value of 98,777. 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 H_a is accepted ($98,777 > 3,25$). In conclusion, Islamic bank deposit variables and conventional bank deposit variables simultaneously significantly influence the Gross Domestic Product (GDP) variable.

ACKNOWLEDGEMENT

Our gratitude goes to the Deputy for Strengthening Research and Development of the Ministry of Research and Technology / National Research and Innovation Agency for funding the Beginner Lecturer Research for the year 2020.

REFERENCES

- Dodi, Supriyadi, D., & Arief, M. (2018). Islamic Bank Profitability : A Study of Islamic Bank in Indonesia. *The International Journal of Business Review (The Jobs Review)*, 1(1), 51–61.
- Pimada, L. M., Mawardi, I., & Herianingrum, S. (2017). Determinants of Islamic Bank Deposit in Indonesia. *Academic Research International*, 8(2), 152–160.
- Salman, A., & Nawaz, H. (2018). Islamic Financial System and Conventional Banking: A Comparison. *Arab Economic and Business Journal*, 13(2), 155–167.