

# *Islamic Banking And Economic Growth In Indonesia*

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**Abstract** – This paper examines the influence of islamic banking on economic growth in Indonesia during the period 2015-2019. secondary data monthly time series of the year 2015-2019 is used in this study. The data obtained by the monthly statistics report banks from Bank Indonesia (BI) and monthly statistics reports Monthly Industrial Production Index of Large and Medium Central Bureau of Statistics (BPS) of Indonesia. Total financing, total saving, and total assets as a variable representing islamic banking. GDP (Gross Domestic Product) as the variable representing economic growth. Using Co-integration methods, the results show that in general the islamic banking effect on economic growth in Indonesia.

**Keywords** – Islamic Banking, Economic Growth.

## I. INTRODUCTION

Indonesian banking has a long history. Prior to the establishment of BI in 1953, there was no institution that performed the function of bank supervision. Until then based on government regulation no. 1/1955, stipulated by Bank Indonesia on behalf of the Monetary Board to carry out supervision over all commercial banks and savings banks operating in Indonesia.

The history of the development of Islamic banks in Indonesia itself began with the emergence of the concept of Islamic financial institutions in 1980, then the MUI workshop was held where the participants agreed to establish Islamic banks in Indonesia in 1990, so that on May 1, 1992 the first Islamic bank was named Bank Muamalah Indonesia. start operating.

So that in its current development the banking system in Indonesia adheres to a *dual banking system*, namely conventional banks and Islamic banks. This has been recognized and recognized since the enactment of Law no. 7 of 1992 concerning banking. Then strengthened by the Law no. 10 of 1998 in lieu of Law no. 7 of 1992. *Dual banking system* or dual banking system, namely the implementation of two banking systems (conventional and sharia) side by side.

The two banking systems synergistically and together fulfill the public's need for banking products and services, as well as support financing for sectors of the national economy. With the implementation of the *dual banking system* in Indonesia, there are two banking systems implemented in Indonesia. The implementation of the dual banking system is expected to provide a more complete alternative for financial transactions for the public. The implementation of multiple banking systems can increase financing for the real sector jointly between Islamic banks and conventional banks.

Meanwhile, Indonesia's Gross Domestic Product (GDP) in 2018 grew by 6.23% compared to 2017. Growth occurred in all economic sectors, with the highest growth in the Transportation and Communications sector of 9.98% and the lowest in the Mining and Quarrying sector of 1.49%. Meanwhile, GDP without oil and gas in 2017 grew by 6.81%.<sup>1</sup>

<sup>1</sup>Official news BPS Statistics, Indonesia GDP 2012 quarter iv.

The purpose of this research is to determine and analyze the influence of banking Sharia on economic growth in Indonesia. As it is known that the purpose of establishing banking is not only to seek profit, but also to create public welfare and ultimately to increase the country's economic growth. Especially Islamic Banks which have a more significant role in improving the country's economic performance.

The importance of this study is to determine the influence of islamic banking on economic growth in Indonesia so that it will be beneficial for the Central Bank (BI) as the party that has the authority to make policy in banking. Therefore, the results of this study are expected to be used as a reference material or consideration in making further policies.

## II. THEORETICAL

### Economic growth

Economic growth theories look at the relationship between economic growth and the determinants of economic growth. The difference between one theory and another lies in the difference in the focus of the discussion and or the assumptions used.<sup>2</sup>

#### a. Optimal Population Theory

This theory has been developed by the Classics. According to this theory, the enactment of *the law of diminishing returns* causes not all residents to be involved in the production process. If forced, it will reduce the level of economic *output*.

#### b. Neo Classic Growth Theory

This theory was developed by Solow (1956) and is a refinement of previous classical theories. The focus of the discussion of Neo Classical growth theory is the accumulation of capital goods stocks and their relationship to people's decisions to save or invest.

#### c. Endogenous Growth Theory

The theory developed by Romer (1986) is the latest development of Classical – Neo Classical growth theory. The weakness of both classical and neoclassical models lies in the assumption that technology is exogenous. The consequence of this assumption is the occurrence of *the law of minishing return*, because technology is considered as a fixed factor of production (*fixed input*). A more serious consequence of treating technology as an exogenous and constant factor is that an economy that has advanced earlier, will in the long run overtake a more backward economy as long as the rate of population growth, saving rate, and access to technology are the same.

#### d. Schumpeter Theory

Schumpeter views that economic growth is largely determined by the ability of entrepreneurs (*entrepreneurship*). This is because it is the entrepreneurs who have the ability and courage to apply new discoveries in production activities. The steps for applying new inventions in the business world are innovation steps. Included in the innovation steps are the preparation of production stage techniques and management organizational problems, so that the resulting product can be accepted by the market.

#### e. Harrod-Domar Theory

Harrod-Domar theory was developed separately (separately) in the same period by ES Domar (1947, 1948) and RF Harrod (1939, 1948). Both see the importance of investment to economic growth, because investment will increase the stock of capital goods, which allows an increase in *output*. The source of domestic funds for investment purposes comes from the production section (national income in savings).

## III. PREVIOUS RESEARCH

### Banks and Economic Growth

Regarding the role of Islamic Banks in economic growth, Said Al-Halaq (2005) in his research on the practice of Jordan Islamic Bank (JIB) as a case study during the period 1980-2000. The *two stage ordinary least square* (2SLS) method is

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<sup>2</sup>Rahardja, P. and Manurung, M., *Macroeconomic Theory: An Introduction*, (Jakarta: Publishing Institute FE UI, 2008), Fourth edition. Thing. 139-143.

used to determine the direct and indirect effects of Jordan Islamic Bank (JIB) on real per capita income as a proxy for economic growth. The result obtained is that the indirect effect of the total financing and investment of JIB as a percentage of total credit is relatively small (0.048) compared to conventional banks (0.50).

Furqani and Mulyany (2009) in a study conducted in Malaysia regarding Islamic banking and economic growth, the general results show that in the long term, Islamic bank financing is significantly and positively correlated with economic growth and capital accumulation from Malaysia. Abduh and Omar (2012) in their research on Islamic banking and economic growth in Indonesia found evidence that in the long term, the development of Islamic finance is positively and significantly correlated with economic growth and capital accumulation. In this case, domestic financing provided by the Islamic banking sector has been found to be contributing to Indonesia's economic growth. Abduh and Chowdhury (2012), Islamic bank financing was found to have a positive and significant relationship with economic growth both in the long term and in the short term.

Murty, Sailaja, and Demissie (2012) examined the long-term impact of bank credit on economic growth in Ethiopia, the results showed a positive and significant balance relationship between bank credit and economic growth in Ethiopia. These results are generally in line with the findings of Sy-Ho and Odhiambo (2013), K. Dey and Flaherty.

David and Ikechukwu (2011) this study examines the contribution of the Bank of Nigeria to economic growth. With the cointegration method, the results showed that the bank intermediation variable had no significant impact on economic growth. This study concludes that the poor performance of these variables indicates that other variables such as human resources, infrastructure, political stability, and technology may play a stronger role in influencing economic growth in Nigeria than Banks. R. Krishnankutty (2011). This study tries to look at the relationship between bank credit and economic growth in North East India, using panel data for North East India from 1999-2007 this study finds that bank credit does not have much impact on economic growth, the reason is mainly due to defaults in payments and lack of oversight by authorities.

### **Financial Development and Economic Growth**

Perera, N. and Paudel, R. (2009) examined the causal relationship between financial development and economic growth in Sri Lanka during the period 1955-2005, the main findings of this study strongly do not support the view that financial development enhances economic growth. In general, these results are in line with the findings of Sinha and Macri (2001).

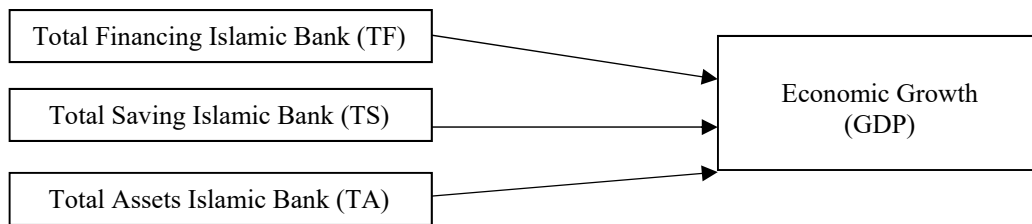
Burzynska (2009) examines the long-term relationship between economic growth and financial development in China for the period 1978-2005, the results show a long-term balance relationship between economic growth and financial development, the causal relationship is influenced by the type of bank and the type of loan. Kar and Pentecost (2000) examine the causal relationship between financial development and economic growth in Turkey during the period 1963-1995, empirical results show that there is a causal relationship between financial development and economic growth. Shan (2003) examines the impact of financial development on economic growth in China, the results show that financial development is the second leading force (after the contribution of labor input) in China's economic growth.

Lee (2005) discusses the relationship between financial intermediation and economic performance in Canada for the period 1870-1926 and 1948-2002, Granger causality test provides evidence that the financial sector triggers economic growth for the sample 1948-2002 and no evidence to the contrary, in 1870-1926 only the monetary base variable is significant for economic growth.

## **IV. METHOD**

### **Data**

The type of data used in this study is secondary data in the form of monthly *time series data from 2015–2019*. The data is obtained from Bank Indonesia (BI) and the Central Statistics Agency (BPS) Indonesia, the selection of the period is determined by the availability of data. Total financing, total saving, and total assets as variables that represent Islamic banking . GDP ( *Gross Domestic Product* ) as a variable that represents economic growth.



Conceptual framework

$$GDP = f(TF, TS, TA)$$

$$GDP = + 1 (TF) + 2 (TS) + 2 (TA) + e_i$$

Where:

GDP = *Gross Domestic Product*

TF = Total Financing Islamic Bank

TS = Total Saving Islamic Bank

TA = Total Assets Islamic Bank

### Stationary Test

A *unit root* was tested with Augmented Dickey Fuller (ADF) and Phillip-Perron (PP). This test is the most frequently used test in testing the stationarity of the data, namely by seeing whether there is a *unit root* in the model or not.

All series must be stationary at the same level, the ADF test can be determined as in the following equation:

$$\Delta Y_t = \alpha_0 + \gamma Y_{t-1} + \beta_i \sum_{i=1}^p \Delta Y_{t-i} + \varepsilon_t \quad (1)$$

Hypothesis testing:

H0:  $\delta = 0$  (there is a *unit root* , the data is not stationary)

H1:  $\delta < 0$  (no *unit root* , data is stationary)

Meanwhile, the PP test can be determined as in the following equation:

$$\Delta Y_t = \eta_0 + \eta_1 t + \delta Y_{t-1} + v_t \quad (2)$$

Hypothesis testing:

H0:  $\delta = 0$  (there is a *unit root* , the data is not stationary)

H1:  $\delta < 0$  (no *unit root* , data is stationary)

Furthermore, to determine the optimal amount of lag used in the stationarity test, the following criteria are used.

$$Akaike\ Information\ Criterion\ (AIC): -2 \left( \frac{1}{T} \right) + (k + T) \quad (3)$$

$$Schwarz\ Information\ Criterion\ (SIC): -2 \left( \frac{1}{T} \right) + k \frac{\log(T)}{T} \quad (4)$$

$$Hannan - Quinn\ Information\ Criterion\ (HQ): -2 \left( \frac{1}{T} \right) + 2k \log \frac{\log(T)}{T} \quad (5)$$

### Cointegration Test

One approach that can be used in the cointegration test is the Johansen method. In the *reduce rank test*, Johansen uses two different statistical tests, namely the *trace test* ( $\lambda$  trace) and the *Maximum Eigenvalue Test* ( $\lambda$  max). The *trace test* tests  $H_0$  on the cointegration equation as an alternative cointegration of the cointegration equation  $K$ ,  $K$  is an endogenous variable number for  $r = 0, 1, \dots, K-1$ . Testing  $H_0$  through a *trace test* can be shown through the following equation:

$$LR_{\text{trace}}(\tau/\kappa) = -T \sum_{i=r+1}^{\kappa} \log(I - \lambda_i) \quad (6)$$

Where  $\lambda_i$  is the largest *eigenvalue* of the matrix. Maximum *eigenvalue* the test tests  $H_0$  on the cointegration equation as an alternative cointegration of the cointegration equation  $K + 1$ . Testing  $H_0$  through the *maximum eigenvalue test* can be shown in the following equation:

$$LR_{\text{max}}(\tau/\kappa + 1) = -T \log(\log(1 - \lambda_{r+1})) \quad (7)$$

$$LR_{\text{max}}(\tau/\kappa + 1) = LR_{\text{trace}}(\tau/\kappa) - LR_{\text{trace}}(\tau + 1/\kappa) \quad (8)$$

Where:  $r = 0, 1, \dots, K-1$ .

## V. RESULTS AND DISCUSSION

### Results

#### Stationary Test

This paper uses Augmented Dickey-Fuller (ADF) and Phillip-Perron (PP) tests to identify the order of integration variables. Based on table 1 below, it can be seen that based on the ADF and PP *unit root tests*; GDP, TF, TS, TA, contains a *unit root*. Therefore, a second test (degree of integration test) was carried out so that it can be concluded that all variables were stationary at 1<sup>st</sup> Defference.

Table 3 . Stationary Test

Variable	Augmented Dickey-Fuller		Phillip-Perron	
	Trends and Intercept		Trends and Intercept	
	Level	1st Difference -	Level	1st Difference -
GDP	-2,195	-8,516***	-2,154	-8.813***
TF	-0.115	-5.024***	-1,249	-9.103***
TS	1.312	-3.991**	0.842	-7.188***
TA	0.337	-4,400***	-0.463	-8.078***

Note: \* Significant at 10% alpha; \*\* Significant at 5% alpha; \*\*\* Significant at 1% alpha

### Cointegration Test

Table 4 Johansen Cointegration Test

Model	null	Trace	0.05 Critical	Max-Eigen	0.05 Critical	Results
	Hypothesis	Statistics	Value	Statistics	Value	
r0	0.640	153.565	111,780	59,297	42.772	There are 3 cointegration equations at the level of = 5%
r1	0.397	94,267	83.937	29,340	36,630	
r2	0.383	64,927	60.061	28.046	30,439	
r3	0.312	36,880	40,174	21,704	24,159	

From the results of the cointegration test, it can be seen that the long-term equation of the model is:

$$\text{GDP} = 4.015\text{TF} + 99,936\text{TS} + 9,406\text{TA}$$

$$t - \text{std error} = (1.221) (19775) (14,670)$$

$$t - \text{statistic} = (-3,069) (4,644) (-3530)$$

From the value of t-statistics above, it is known that TF, TS, and TA have a significant effect on GDP.

From the results of the cointegration test, we get a long-term equation where TF has an influence of 4.015 on GDP, with a t-statistic value of -3.069 greater than the t-table value of 5% significance level. Then the variable TF can explain the long-term equation. The sign of the coefficient of the variable TF (+), this means that TF has a positive effect on the long-run equation. This means that every 1% increase in TF will increase GDP by 4.01 %.

From the results of the cointegration test, we get a long-term equation in which TS has an effect of 99,936 on GDP, with a t-statistic value of 4,644 greater than the t-table value with a significance level of 1%. Then the variable TS can explain the long-term equation. The sign of the coefficient of the variable TS (+), this means that TS has a positive influence in the long-term equation. So it means that every 1% increase in TS will increase GDP by 99.93 %.

From the results of the cointegration test, we get a long-term equation in which TA has an effect of 9.406 on GDP, with a t-statistic value of -3.530 greater than the t-table value of 5% significance level. Then the TA variable can explain the long-term equation. The sign of the coefficient of the variable TA (+), this means that TA has a positive effect on the long-term equation. So it means that every 1% increase in TA will increase GDP by 9.40%.

## **Discussion**

One way that can be done to see the economic growth of a country is to look at the GDP of that country. GDP (*Gross Domestic Product*) is the sum of all the total goods and services produced by a country in a certain period of time. GDP (Y) is made up of four major components, namely consumption (C), investment (I), government spending (G), and net exports (XM). Technically it can be written briefly as follows:  $Y = C + I + G + (XM)$ .

GDP in a country can change (increase or decrease), while the cause of these changes can be caused by changes in prices, the effect of the real increase in the GDP component or occurs because of both. Changes in GDP caused by changes in prices can occur if there is an increase or decrease in prices, the number of goods that can be purchased by the public will undoubtedly experience changes as well. If prices rise, most people will be poorer than they were before, even if their income remains the same.

Furthermore, changes in GDP can also be caused by real changes in GDP, as explained above that GDP is made up of four major components, namely, consumption (C), investment (I), government spending (G), and net exports (XM). Changes in just one of the four elements will certainly cause changes in GDP.

### **1. Consumption**

In economics, consumption can be defined as the use of goods and services to satisfy human needs. If someone has earned income from the results of his work/business, the income will be issued first for consumption purposes, while if there is still some left over, it will be saved. Technically the statement can be written briefly as follows:

$$(a) \quad Y = C + S$$

In Indonesia, the consumption component has a very large portion of its influence on Indonesia's GDP, from data from the Indonesian Central Statistics Agency (BPS) in the fourth quarter of 2012 seen from the distribution pattern of GDP usage (current prices), the household consumption expenditure component is still the largest contributor in the use of Indonesia's GDP with a proportion of 54.61% in 2011 and 54.56% in 2012.

This increase in the consumption sector is possible due to an increase in people's *income*, or in other words it can be said that in general the Indonesian people are getting richer. So, with the increase in people's income, it will also be followed by an increase in consumption activities and in the end it will have an impact on increasing Indonesia's GDP, with the increase in GDP, it can also be said that the Indonesian people are generally more prosperous than in previous years.

The moment of economic growth driven by household consumption expenditure needs to be maintained by the government. This is because consumption is the largest contributor to Indonesia's GDP. one way that can be done is to maintain the inflation rate, by suppressing the inflation rate as low as possible so as to increase people's purchasing power.

Bank Indonesia (BI) as an institution that has duties in the monetary sector is expected to be able to carry out its duties in maintaining the inflation rate. Because inflation is one of the economic problems experienced by all countries and its impact is very large in influencing the rate of economic growth of a country.

### **2. Investment**

Investment or also known as investment, together with consumption, basically investment has formed a two-sector economy in which neither government intervention nor foreign relations exist. Obviously, consumption plus investment equals GDP. In addition, it has been mentioned above that *income* equals consumption plus savings or GDP (in a two-sector economy) spent for two purposes, namely consumption and savings. If these two things are written in the form of an equation, as follows:

$$(a) \quad Y = C + S$$

$$(b) \quad Y = C + I$$



So from the two equations above, it can be concluded as follows:

(c)  $S = I$

Equation (c) above means that the amount of saving must be equal to investment. Investment is a very important component of GDP in a country's economy, especially the type of investment in the real sector. Because, by increasing investment in the real sector, it will increase the number of goods and services produced/offered to the public. Thus, with the large number of goods and services offered, it will affect the decline in the prices of goods followed by an increase in the number of requests so as to increase people's purchasing power.

To encourage investment growth in a country, financial institutions have a very important role, such as banking. Bank, as a financial institution that has a role as an intermediary between parties who have excess income and those who lack income. The way to do this is by collecting funds from people who have excess income which will then be channeled through the provision of financing/credit given to people who need funds.

With the provision of financing/credit by banks in the real sector, it is hoped that new businesses will emerge which will later encourage the pace of economic growth and also which is no less important, namely the creation of new jobs, so that in the future it will reduce the unemployment rate in Indonesia.

### **3. Government Expenditure**

The entry of the government causes now that there are three active parties in the economy who are the perpetrators, namely consumers, businesses and the government. In economic theory, the form of government intervention in the economic field is formulated as government action in the field of government expenditure ( *government expenditure* or G) and tax collection ( *Taxation policy* or T). Government spending (G) is a variable or variable that is more determined by social and political considerations than economic considerations. Therefore, the amount does not depend on GDP. Judging from the distribution pattern of GDP usage (current prices), the component of government consumption expenditure has decreased, from 9.01% to 8.89%.

### **4. Net exports**

The last component is about trade relations with foreign countries. In the theory of economic balance, this issue includes two activities, namely exports (X) and imports (M) of goods and services. A country's exports to other countries are greatly influenced by things such as world demand, political relations between countries, and so on. In other words, a country's exports do not depend on that country's GDP, and it's not GDP that determines the size of exports, but on the contrary, it is exports that determine the size of GDP.

Judging from the distribution pattern of GDP usage (current prices), the export component decreased from 26.35% to 24.26%, while the import component increased from 24.94% to 25.81%. The decline in the value of the number of exports in Indonesia is possible due to the impact of the crisis that hit the European countries where these countries are the destinations of Indonesian exports, while the increase in the number of imports in Indonesia is possible because the Indonesian government pays less attention to production problems, namely the lack of investment in the real sector, causing the government to be unable to meet the very large demand for goods and services in the country, so to meet the large demand for goods, the government imports from other countries.

## **VI. CONCLUSIONS**

### **Conclusion**

This paper examines the influence of Islamic banking on economic growth in Indonesia during the period 2015 – 2019. Secondary data in the form of monthly *time series data from the years 2015-2019* were used in this study, the selection of the period was determined based on the availability of data. The data is obtained based on monthly banking statistics reports from Bank Indonesia (BI) and monthly statistical reports on the Large and Medium Industrial Production Index from the Central Statistics Agency (BPS) Indonesia. Total financing, total savings, and total assets as variables representing Islamic banking, GDP ( *Gross Domestic Product* ) as variables representing economic growth. Using the Cointegration method, the results show that TF, TS, TA have a significant effect on Indonesia's GDP.



## Suggestion

Thus, the general results of this paper support that conventional and Islamic banking have an effect on economic growth in Indonesia. So, from these findings the author can provide the following suggestions:

1. Increasing the number of human resources to support the growth of Islamic banks, because without the support of human resources, it will hamper the growth of Islamic banking in Indonesia.
2. The government is expected to continue to promote Islamic banks, because the results show that total financing, total deposits and total assets of Islamic banks affect Indonesia's economic growth.
3. Islamic banking is expected to expand by opening more branch offices in every region in Indonesia
4. Islamic banking is expected to provide more financing in the real sector in order to increase the amount of investment so as to create employment opportunities and be able to reduce the number of unemployed and increase Indonesia's economic growth.
5. The Central Bank (BI) is expected to be able to maintain people's purchasing power by suppressing the inflation rate as low as possible to maintain the momentum of Indonesia's economic growth rate.

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