Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-050

Volume 07 Issue 06 June 2024

Article DOI: 10.47191/jefms/v7-i6-53, Impact Factor: 8.044

Page No: 3620-3631

Growth of Islamic Fintech in Indonesia

Kharisya Ayu Effendi¹, Vincentia Wahju Widajatun²

^{1,2}Faculty of Economic and Business, Universitas Widyatama, Bandung, Indonesia



ABSTRACT: Islamic fintech is the latest breakthrough in finance that combines finance and technology using Islamic principles. Opportunities in developing Islamic fintech in Indonesia are also very wide open considering the large population of Indonesia who are Muslims. This research has two main objectives. The first objective of this study is to determine whether there is a difference between Islamic fintech and conventional fintech. The second and third objective is to determine whether Islamic fintech and conventional fintech affect economic growth in Indonesia. Independent T-test analysis is used to test the first objective, while regression analysis is used in this research method to test the second and third objectives. This research is a type of quantitative research. The data used is monthly time series data from January 2019 to December 2022. This research concludes that there are substantial differences between sharia and conventional fintech. This difference is caused by the large difference in the number and scale of sharia and conventional fintech businesses, namely 2%:98%. The impact of sharia fintech on Indonesia's economic growth is very small. The reason is that Sharia fintech in Indonesia is not yet operating optimally due to several obstacles. Apart from that, Indonesia's economic growth is greatly influenced by conventional fintech. This is due to the large number of assets and businesses which contribute 98% of total fintech assets.

KEYWORDS: Islamic Fintech, Conventional Fintech, Economic Growth

INTRODUCTION

Along with the times, technological change is a change that cannot be avoided. One of these technologies is information technology (IT). Ali and Anwar (2021) state that information technology (IT) has given firms relating to infrastructure to financial solutions—financial solutions known as Financial Technology (Fintech). Fintech facilitates some advantages, including fair business dealings, reduced transaction costs, direct client interactions, and quick access to financial data (Zavolokina et al., 2016) Fintech's primary goal is to provide technologically driven solutions that, when compared to traditional service delivery models, make financial services more easily accessible, affordable, quick, and efficient. (Alam et al., 2019).

Fintech describes technology advancements in the financial services industry. Fintech is an innovative financial service delivered through technology (Chuen & Teo, 2015). It can also be defined as technology-based businesses that work in competition or partnership with financial institutions (Pollari, 2016). Fintech companies fall into two categories: Two types of businesses exist in the financial sector: a) information technology and software companies, also referred to as bank technology service providers, that support and facilitate businesses; and b) tech-startups, which are small innovative businesses that replace traditional financial intermediaries and can cause disruption to the banking system and commercial banks (Rusydiana, 2018).

Micro and macroeconomic development are both boosted by business innovation. There is a lot of room for creativity when it comes to the use of IT in the financial sector. As a result, businesses and investors are highly drawn to it (Harrison et al., 2014). Because information technology is always evolving, there is a fair amount of annual rivalry between fintech and traditional banking services (Webster & Pizalla, 2015). Fintech is also attracting increased interest from forward-thinking financial institutions seeking to maintain and grow their leading positions in the market in modern financial services. Fintech may also provide its clients with top-notch contemporary services at any time or place practically and efficiently. As both sides perceive attractive prospects for further development, cooperation between fintechs and traditional financial institutions has been reasonably thriving in recent decades.

A technology-driven company that offers creative financial services utilizing Sharia principles, promotes ethical and responsible finance, and offers chances to impact all kinds of finance worldwide is known as an Islamic fintech. (Rusydiana, 2018). Financial services and goods that use technology in compliance with Islamic law are referred to as Islamic Fintech. (Hasan

et al., 2020). So it can be said that in addition to transforming from traditional finance to digital finance, Islamic fintech also prioritizes adab and responsibility according to the principles of Islamic teachings in practice. There has been some research on the financial technology industry in Islamic finance and banking. Previous research explains that Islamic finance is currently relatively lagging in the total number of customers and the level of sophistication of the products available in its portfolio (Todorof, 2018).

Muslims also follow Sharia law when it comes to business matters, according to Sahabuddin et al (2019). The Qur'an and Sunnah are the sources of these laws. Through the application of Sharia principles, Islamic fintech leverages technological innovation to offer ethical and responsible financial services that have the potential to impact all types of finance worldwide. It's always possible that fintech will have a big impact on how Islamic finance develops (Banna & Alam, 2021). Islamic transactions are based on the fundamental principle that the lender and the client should share the risk and that there should be no interest attached to the transaction. "Islamic fintech" refers to fintech created and operated in line with sharia law. Islamic finance shies away from chance/gambling (maysir), interest (riba), and uncertainty (gharar). To differentiate Islamic fintech from traditional fintech, the word "Islamic" is employed (Alshater et al., 2022). The application of financial technology in Islamic financial systems has proven beneficial in recent years (Ahmad & Al Mamun, 2020).

Islamic Fintech has evolved in Indonesia as a response to the expansion of traditional Fintech companies that use interest instruments in their business operations (Muhammad & Lanaula, 2019). The fatwa number 117/DSN-MUI/II/2018, which regulates Islamic fintech services in Indonesia, was issued by the National Sharia Council-Majelis Ulama Indonesia (DSN-MUI) and addresses information technology-based financing services based on Sharia principles. Islamic finance technology encourages morally upright investing and offers a chance to spearhead and impact all global financial industries (Rusydiana, 2018). Its growth also shows positive numbers from time to time. Referring to the (Global Islamic Finance Report, 2017), Islamic fintech services in Indonesia ranked fifth, and in 2022 rose to third in the world. Nonetheless, Indonesia continues to have a smaller Islamic fintech sector than Malaysia, Saudi Arabia, Iran, and United Arab Emirates (UAE). (Muryanto et al., 2022). Indonesia is the nation with the biggest Muslim population worldwide. The global Islamic fintech industry in Saudi Arabia is expected to reach a transaction value of \$17.9 billion in 2020, surpassing that of Iran (\$9.2 billion), the UAE (\$3.7 billion), Malaysia \$3.0 billion, and Indonesia \$2.9 billion.

According to Yudaruddin (2023) reports that the relationship between Fintech and Islamic banks is characterized by the observation that an increase in Fintech startups improves the performance of Islamic banks, especially in the peer-to-peer lending space. Furthermore, this study discovered that Islamic banks function better during regular and emergencies thanks to Fintech businesses.

There are currently two main issues in the development of the global Islamic finance industry and more specifically in Southeast Asia. The two issues are related to uncertainty in the global economy and the rise of fintech and related to the development of human resources in the Islamic finance industry (CIBAFI, 2018). According to (Muryanto et al., 2022), state that the state of Islamic fintech in Indonesia is not ideal due to a number of issues, such as insufficient regulations, difficult licensing processes, the use of fintech to finance terrorism, the growth of illicit fintech enterprises, and customer complaints in the fintech industry. A Law on Fintech must be established to build a complete legal framework to address these issues. Other problems that have hindered the growth of the Islamic fintech sector include the absence of regulatory tools to safeguard the fintech workflow from upstream to downstream (Pollari, 2016), the accessibility of human capital for fintech, elevated security hazards due to malware assaults (Saksonova & Kuzmina-Merlino, 2017), the legal certainty of lending based on the internet, a lack of outreach to lower-class consumers, a lack of knowledge of sharia, and the need for advancements in the fields of sharia governance, accounting, and auditing. The following are some of the tactics necessary for the growth of Islamic fintech, especially in Indonesia: enhancing technological infrastructure; developing an easy-to-use transaction system; collaborating and investing with relevant stakeholders; managing and analyzing data in the big data era; content-based digital marketing; and developing innovative fintech products (Saksonova & Kuzmina-Merlino, 2017). Meanwhile, according to (Rusydiana, 2018), Islamic Fintech is facing some obstacles and challenges as it develops, in addition to significant opportunities. These include the absence of regulatory frameworks that govern the industry, significant security threats, human resource availability for fintech, and a failure to cater to lower-class consumers.

Amid the many challenges and problems of Islamic fintech, conventional fintech in Indonesia provides more options than Islamic fintech. The number of registered and licensed conventional fintech companies totaling 95 while Islamic fintech in Indonesia is only 7 companies. With total assets that control the fintech market in Indonesia by 98% and Islamic fintech only the remaining 2% of total fintech assets in Indonesia.

In terms of size and number of companies, conventional fintech in Indonesia dominates over Islamic fintech. However, the presence of Islamic fintech still steals the spotlight because its growth is also relatively fast. Even though Islamic fintech is still in

its infancy, it has the potential to significantly increase financial inclusion, particularly Islamic financial inclusion, which is presently very low (Narastri, 2020). Furthermore, when it comes to internal and external shocks to the financial industry, Islamic financing is comparatively more stable than conventional finance (Nurfalah et al., 2018). And according to Kelana, (2018), Sharia compliance, openness, and mutual benefit distinguish fintech from Islamic fintech. According to earlier research on fintech and Islamic fintech (Mansur et al., 2022), Southeast Asia is more likely than South Asia to have quick growth in fintech due to the distinct demands of the two regions. Nonetheless, Islamic fintech is acceptable everywhere, even in religiously conservative nations. So it can be said that Islamic fintech is more acceptable in Southeast Asia and South Asia than fintech.

The level of development in the financial sector is one of the major factors influencing economic growth. Economic growth is a process that continuously changes the economic situation of a country for the better over a long period (Marcel, 2019). Economic growth theory describes the long-term variables that affect or determine economic growth and its processes. It also describes how these variables interact with one another to fuel the growth process. Information technology, financial services, and economic growth are closely intertwined, as previous studies on the topic of fintech and economic growth have shown. In our modern day, information technology is one of the key variables influencing economic growth. (Marcel, 2019; Khan et al., 2018; Nguedie, 2018; Sadigov et al., 2020).

The financial system is undergoing a tremendous transition, driven mostly by fintech. Numerous technical advancements in the fintech space, including digital trading platforms, mobile payment systems, artificial intelligence, and cryptocurrencies, cause rapid changes in the financial system and profoundly impact how the sector operates. New possibilities for investors are provided by technological breakthroughs, which are closely associated with the financial sector's performance, profitability, and growth. (Fidan and Tuğba, 2023). According to (Fidan and Tuğba, 2023), economic growth rates and fintech are positively interconnected, both in short-term and long-term relationships. By automating processes, streamlining marketing and manufacturing, accelerating the flow of documents and information, and increasing transparency, the advancement of information technology will boost productivity across the board and spur economic growth. (Berzin et al., 2018; Karaoulanis, 2018; Kendiukhov & Tvaronaviciene, 2017; Logan & Esmanov, 2017; Vasylieva et al., 2017). Undoubtedly, the expansion of the nation's economy is also impacted by the development of fintech. (Narayan & Phan, 2019; Fisabilillah et al, 2021).

According to Romdhane et al., (2023), the increase in Fintech affects the decline in inflation and unemployment rates in Asia. In Islamic fintech also influences economic growth. According to (Rabbani et al., 2021) Fintech provides significant implications for governments and policymakers in efficiently implementing Fintech and innovative Islamic financial services to counter the economic impact of the COVID-19 pandemic. Meanwhile, Iqbal et al., (2021) found that GDP and interest rates have a significant effect on fintech, while inflation has no significant effect on fintech.

Based on the above problems, the problem formulations in this study are

- 1. Does Islamic fintech and conventional fintech in Indonesia differ?
- 2. Can Islamic fintech affect economic growth in Indonesia?
- 3. Can conventional fintech affect economic growth in Indonesia?

From these research questions, the objectives of this study are,

- 1. To see if there is a difference between Islamic fintech and conventional fintech in Indonesia.
- 2. To see whether Islamic fintech can affect economic growth in Indonesia.
- 3. To see whether conventional fintech can affect economic growth in Indonesia.

METHOD

Research Methods

This research methodology employs a quantitative approach to study. Information gathered by downloading information from the websites of the Central Statistics Agency (BPS) and Financial Services Authority (OJK). The data collected are total asset data, total companies in Islamic fintech and conventional fintech, and consumer price index data.

Data

The use of data in this study is secondary data taken from the statistical report of the Financial Services Authority (OJK) from 2018 - 2023. This study uses monthly time series datafrom December 2018 to March 2023. (OJK, 2023)

Population and Sample

A population is a category for generalization made up of items or persons with certain attributes chosen by researchers for analysis before conclusions are made. The sample accurately reflects the size and composition of the population. If the population is vast, sampling is done since it is doubtful that researchers would be able to investigate every member of the

population. This analysis uses a population sample, meaning that all fintech companies - both conventional and Islamic - from 2018 to 2023 are included in the sample.

Variable Definition and Operationalization

Researchers use research variables, which are characteristics or values of individuals, things, or activities, with specific variations chosen for analysis and conclusion-making. Operational definitions are instructions on how the variables in the study are measured. The following is an operational definition of the variables to be studied, namely:

1. Independent Variable (X)

Any variable that has an impact on the dependent variable is called an independent variable (X). In this study, the following are the independent variables:

- a. Islamic Fintech
- b. Conventional Fintech
- 2. Dependent Variable (Y)

What changes as a result of the independent variable is known as the dependent variable (Y). Economic growth serves as the study's dependent variable.

Table 1. Variable Operationalization

No.	Research Variables	Operational Variables	Measurement Unit
1	Islamic Fintech	Total Assets	Ratio
2	ConventionalFintech	Total Assets	Ratio
3	Economic Growth	СРІ	Ratio

Classical Assumption Test

Normality Test

The purpose of the normalcy test is to ascertain whether or not the data derived from the study findings are regularly distributed. If the significance level is < 0.05, the data is considered to be not normally distributed; if it is \geq 0.05, the data is considered to be regularly distributed. One may do normality testing in some methods. If the data in the data normalcy test are normally distributed, parametric statistical tests will be used to assess the data. Non-parametric statistical tests will be used to assess the data if it is not regularly distributed. With the aid of SPSS 26.0 for Windows and the Kolmogorov Smirnov-Z method, this normalcy test is conducted. (Ghozali, 2018).

Multicollinearity Test

A regression model with multiple independent variables is known as multiple linear regression. Multiple linear regression analysis is used to determine the direction and magnitude of the influence of the independent variable on the dependent variable. (Ghozali, 2018).

Heteroscedasticity Test

The heteroscedasticity test determines whether in the regression model there is an inequality of variance from the residuals of one observation to another. The Glejser test is used to determine whether there are symptoms of heteroscedasticity. By regressing the independent variable on the absolute value of the residuals, it will produce a Glejser test. (Ghozali, 2018).

Autocorrelation Test

This study employs time series data, hence this test is necessary. The correlation between observations as determined by the time series in the regression model is known as autocorrelation; otherwise put, the error of one observation is affected by the error of the preceding observation (Ghozali, 2018).

Difference Test and Regression Test

Independent Test Research Model

Independent sample T test or mean difference test is used to test two averages of two independent data groups (Prayitno, 2014). To compare the averages of the two unrelated groups, the independent sample t test is utilized (Ghozali, 2015). Parametric and regularly distributed data serve as the foundation for the independent t test.

Regression Research Model

The goal of this study model is to determine how much Islamic and conventional fintech contribute to economic growth. The study's research model is as follows:

 $Y = \alpha + b1 X1 + b2 X2 + e$

Where:

Y : Economic GrowthX1 : Islamic FintechX2 : conventionalFintech

α : Constant

b1 : Coefficient of Islamic Fintechb2 : Coefficient of Fintech conventional

e : Errors Terms

Hypothesis

H1: There is a significant difference between Islamic fintech and conventional fintech in Indonesia.

H2: Islamic fintech has a significant effect on economic growth in Indonesia.

H3: Conventional fintech has a significant effect on economic growth in Indonesia.

RESULT AND DISCUSSION

Difference Test

This study's data analysis employs an alternative test, the Independent Sample T-test. To find out if the data can be analyzed using an independent sample t-test or not, a precondition test is conducted before the data is evaluated. The normalcy test is the precondition test.

Normality Test

The goal of the normality test is to determine the regularity of the data obtained from the study findings. It is believed that the data are not normally distributed if the significance level is < 0.05, and that the data are regularly distributed if it is > 0.05

Table 2. Normality test table

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Category	Statistic	df	Sig.	Statistic	df	Sig.
Fintech	Islamic Finance	.116	52	.077	.963	52	.101
	Conventional Finance	.067	52	.200*	.971	52	.223

Source: data is processed

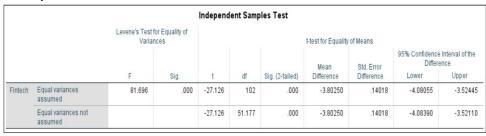
From the results of the normality test calculations that have been carried out in table 2 above, for Islamic fintech, the Z value is 0.116 and Sign is 0.077. Because the Z value and Sign of 0.077 \geq 0.05, it is possible to deduce that the mean information on Islamic fintech is normally distributed. While the normality test on conventional fintech obtained a Z value of 0.067 and Sign of 0.200. Because the Z value is 0.067 and Sign 0.200 \geq 0.05, it is possible to deduce that the mean information on conventional fintech is also normally distributed. Thus, it can be inferred from the results of the normality test computation that the data on Islamic and traditional fintech is distributed regularly.

Independent Sample T-Test

This Independent Sample T-test test is to decide whether the research hypothesis is accepted or rejected, while the hypotheses tested are:

- H0 = population variances are identical/equal
- Ha = population variants are not identical/unequalThe test criteria are as follows:
- If the probability value (p) \geq 0.05 then H0 is accepted.
- If the probability value (p) <0.05 then H0 is rejected

Table 3. Independent Samples Test Table



Based on the results of the Independent Sample T-test test of post-test values in table 3 above, the Leavenes' test analysis can be seen that the significance value is 0.000, indicating that 0.000 <0.05, so H1 is accepted, meaning that the population variants are not identical / notthe same. This indicates that Islamic fintech and conventional fintech are significantly different.

Regression Test

The second test is regression testing or influence testing between Islamic fintech variables, conventional fintech and economic growth. In this regression test, two stages are carried out, namely the classic assumption test and hypothesis testing. *Classical Assumption Test*

According to the goals of the study, which are to determine how Islamic and conventional fintech affect economic growth, regression analysis's classical assumption testing, which consists of the following tests: (1) multicollinearity; (2) heteroscedasticity; and (3) autocorrelation, will be conducted prior to data analysis and hypothesis testing.

1. Multicollinearity Test

The Multicolonierity test states that there is perfect linearity between some or all of the variables that explain the regression model. The presence or absence of multicolonierity can be seen from the coefficient of each independent variable. The guidelines used in the multicollinearity test are:

- If Centered VIF> 10.00 then there is multicollinearity between independent variables.
- If Centered VIF < 10.00 then there is no multicollinearity between independent variables.

Table 4. Multicollinearity test

Sample: 2018M12 2023M03						
Included observations: 52						
	Coefficient	Uncentered	Centered			
Variable	Variance	VIF	VIF			
C	2.36E-05	10.81571	NA			
IF	0.321044	17.58470	5.118266			
CF	0.060737	39.73688	5.118266			

According to table 4 above's findings of the multicollinearity test, the independent variables in this study avoid multicollinearity since the VIF value for both the traditional and Islamic fintech variables was 5.1182666.

2. Heteroscedasticity Test

Evaluating heteroscedasticity involves determining if the residuals of various data in the regression model exhibit variance inequality. The term homoscedasticity refers to the situation when the variance between two observations is equal. Furthermore, it is referred to as heteroscedasticity if the variance differs. According to Ghozali (2013), a regression model that exhibits homoscedasticity or lacks heteroscedasticity is considered excellent.

The hypothesis used is as follows:

- H0: β1 = 0 (no issue with heteroscedasticity)
- H1 : β1 ≠ 0 (a heteroscedasticity issue exists)

Rules applied to the Glejser test conclusion:

- a. H1 is rejected if the probability value is > 0.05, indicating that there is no heteroscedasticity issue..
- b. If the probability value <0.05 then H1 is accepted, meaning there is aheteroscedasticity problem.

Table 5. Heteroscedasticity Test

Heteroskedasticity Test: Gleiser					
Null hypothesis: Homoskedasticity					
F-statistic	0.642905	Prob. <u>F(</u> 2,48)	0.5302		
Obs*R-squared	1.330531	Prob. Chi-Square(2)	0.5141		
Scaled explained SS	1.557253	Prob. Chi-Square(2)	0.4590		

The results of the heteroscedasticity test using the Glejser test in table 5 above the Probability F value is 0.5302> 0.05. Heteroskedasticity test results indicate that the datadoes not occur heteroscedasticity.

3. Autocorrelation Test

This study employs time series data, hence this test is necessary. The correlation between observations as determined by the time series in the regression model is known as autocorrelation; otherwise put, the error of one observation is affected by the error of the preceding observation.

Guidelines used in concluding the autocorrelation test:

- a. A probability value < 0,05 indicates an issue with autocorrelation.
- b. A probability value > 0,05 indicates an issue with autocorrelation.

Table 6. Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:						
Null hypothesis: No serial correlation at up to 2 lags						
F-statistic	1.807050	Prob. <u>F(</u> 2,46)	0.1756			
Obs*R-squared	3.715055	Prob. Chi-Square(2)	0.1561			

The results of the autocorrelation test in Table 6 above are Probability F value 0.1756> 0.05 which means that the data used in this study does not occur autocorrelation.

Multiple Linear Regression Test

Table 7. Multiple Linear Regression Tests

Dependent Variable: EG						
Method: Least Squares						
Date: 05/23/23 Time: 13:19						
Sample: 2018M12 2023M03						
Included observations: 52						
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	0.004066	0.004858	0.836920	0.4067		
IF	-0.745377	0.566607	-1.315509	0.1945		
CF	0.885603	0.246448	3.593460	0.0008		
R-squared	0.391628	Mean dependent var		0.028437		
Adjusted R-						
squared	0.366797	97 S.D. dependent var		0.013386		
				-		
S.E. of regression	0.010652	Akaike info criterion		6.190171		
				-		
Sum squared resid	0.005560	Schwarz criterion		6.077599		
				-		
Log likelihood	163.9444	Hannan-Q	uinn <u>criter</u> .	6.147014		
F-statistic	15.77144	Durbin-Watson stat		0.168182		
Prob(F-statistic)	0.000005					

From table 7 above, the regression equation model can be made as follows:

EG = 0.004066 - 0.745377*IF + 0.885603 CF

Based on the regression equation above, it can be explained as follows:

- a. The constant coefficient of 0.004066 states that the dependent variable EG (Economic Growth) will be worth 0.004066 one unit, if islamic fintech and conventional fintech are each worth 0.
- b. The regression coefficient value for the Islamic fintech variable (IF) is -0.745377. This indicates that for every unit increase in Islamic fintech growth, economic growth will be reduced by 0.745377 units, assuming other variables remain constant.

Conversely, for every unit decrease in Islamic fintech growth, economic growth will be increased by 0.745377 units, provided that variables other than money supply remain fixed or constant.

c. The conventional fintech variable (CF) has a coefficient value of 0.885603. This states that any increase in conventional fintech growth by one unit assuming other variables are considered constant, it will increase economic growth by 0.8885603 one unit and vice versa, if every one unit decrease in conventional fintech growth, it will increase economic growth by 0.8885603 assuming variables other than money supply are considered fixed or constant.

Hypothesis Test

The hypotheses in this study are:

H2: Islamic fintech has a significant effect on economic growth in Indonesia.

H3: conventional fintech has a significant effect on economic growth in Indonesia.

a. Partial Test (t Test)

The impact of Islamic Fintech and conventional Fintech on economic development, either separately or in combination, is examined using the t test. Will each independent variable's impact on the dependent variable be examined separately at a significance threshold of 5% or 0.05. The hypothesis is tested and the regression coefficient is deemed significant if the probability value is < 0.05. In the meanwhile, the regression coefficient is not significant and the hypothesis is not tested if the probability value is > 5% or 0.05. Table 8 following shows the impact of traditional and Islamic fintech on economic development in part:

Table 8. Statistical T Test

Dependent Variable: EG Method: Least Squares Date: 05/23/23 Time: 13:19 Sample: 2018M12 2023M03 Included observations: 52 Variable Coefficient Std. Error t-Statistic Prob. 0.004066 0.4067 0.004858 | 0.836920 IF -0.745377 0.566607 -1.315509 0.19450.885603 0.246448 3.593460 0.0008

As can be seen in Table 8 above, the probability significance level of 0.0008 is less than the significance threshold of 0.05, indicating that the independent variable traditional fintech has a significant impact. However, because to its probability significance threshold being higher than 0.05, Islamic fintech, the independent variable, has no discernible impact on economic development.

The following will explain further the findings in table 8 above:

- 1. Islamic Fintech Variable (X1) From the results of regression analysis testing, the significance level for the money supply variable is 0.1945. Compared to the significance level (α = 0.05), 0.1945> 0.05. Thus, it can be said that there is no relationship between the Islamic fintech variable and Indonesia's economic development, indicating the rejection of H1.
- 2. The conventional fintech variable (X2) from the results of regression analysis testing obtained a significance level of 0.0008. Compared to the significance level (α = 0.05), 0.0008 <0.05. The traditional fintech variable is shown to have a favorable impact on Indonesia's economic growth, indicating that H2 is acceptable. This indicates that traditional fintech significantly and favorably influences Indonesia's economic development. This implies that Indonesia's economic development will rise in proportion to the assets and transactions of conventional fintech, and vice versa.
- b. Simultaneous Test (F Test)

The impact of each independent variable included in the regression model collectively on the dependent variable assessed at a significance level of 0.05 is ascertained using the F statistical test. This research examines the impact of both conventional and Islamic fintech on Indonesia's economic growth. If F count> F table and the significance level <0.05 then simultaneously the independent variable affects the dependent variable.

Table 9. Simultaneous Test

Dependent Variable: EG Method: Least Squares Date: 05/23/23 Time: 13:19 Sample: 2018M12 2023M03 Included observations: 52 0.391628 R-squared Mean dependent var 0.028437 Adjusted R-0.366797 S.D. dependent var 0.013386 squared S.E. of regression 0.010652 Akaike info criterion 6.190171 0.005560 Schwarz criterion Sum squared resid 6.077599 Log likelihood 163.9444 Hannan-Quinn criter. 6.147014 F-statistic 15.77144 Durbin-Watson stat 0.168182Prob(F-statistic) 0.000005

Based on the analysis of data in table 9 above using the F-test, the computed F value is 15.77, more than the 3.18 F table and with a significance level of 0.000005 < 0.05. This test shows that Indonesia's economic progress may be predicted using the regression model in conjunction with other techniques. Thus, conventional and Islamic fintech have an equal influence on Indonesia's economic growth. Therefore, H3 can be considered authorized.

c. Test Coefficient of Determination (R2)

Determining the degree to which the model can account for the change in the dependent variable is the aim of the coefficient of determination (R2). There is a significant limit to both the independent factors' and the dependent variables' ability to explain variance in each other. The value of the coefficient of determination (R) ranges from 0 to 1.

Table 10. Test Coefficient of Determination

Dependent Variable: EG
Method: Least Squares
Date: 05/23/23 Time: 13:19
Sample: 2018M12 2023M03
Included observations: 52
R-squared 0.391628 Mean dependent var 0.028437
Adjusted R-squared 0.366797 S.D. dependent var 0.013386

Table 10 above shows that the amount of Adjusted R-Squared is 0.366797 or 36.79%. This means that 36.79% of the dependent variable can be explained significantly by variations in the independent variable. The independent variables are Islamic fintech and conventional fintech, while the remaining 63.21% (100% - 36.79%) is explained by other variables outside the regression model in this study.

DISCUSSION

The first hypothesis test's findings indicate that Islamic and conventional fintech differ significantly from one another. This is because there are substantial differences in the amount of assets, capital owners, borrowers, and systems. Both positive and negative messages can be derived from this notable disparity. The good news is that Sharia compliance, openness, and mutual benefit are what set Islamic fintech apart from mainstream fintech. (Kelana, 2018). This means that Islamic fintech implements the Sharia system with high commitment and seriousness. By using contracts that are in accordance with Islamic law, are transparent and uphold justice. This research is in line with previous research that examines conventional fintech and Islamic fintech more broadly. According to Mansur et al.,(2022) state that because each area has distinct demands, Southeast Asia is more likely than South Asia to see a quick development of traditional fintech. Nonetheless, Islamic fintech is acceptable

everywhere, even in nations that are religiously conservative. So it can be said that Islamic fintech is more acceptable in Southeast Asia and South Asia than conventional fintech. This is a positive sign for financiers to choose to make Islamic fintech. The negative is that the very significant capital difference between Islamic fintech and conventional fintech makes Islamic fintech have limitations to expand its business compared to conventional fintech whose capital is 98%: 2% compared to Islamic fintech.

The findings of the second hypothesis test indicate that Islamic fintech has no appreciable impact on Indonesia's economic development. This is due to the fact that Islamic fintech is not operating in the best of conditions in Indonesia due to a number of issues, such as insufficient regulations, difficult licensing requirements, the use of fintech to finance terrorism, the growth of illicit fintech companies, and customer complaints in the fintech industry (Muryanto et al., 2022). A Law on Islamic Fintech must be established in order to provide a complete legal framework to address these issues. The Islamic fintech industry's growth has been hindered by a number of problems, such as the lack of legal frameworks that safeguard the fintech process from upstream to downstream. Pollari, (2016), the presence of human resources in the Islamic finance sector and the significant danger of malware attacks (Saksonova & Kuzmina-Merlino, 2017), the need for greater governance, accounting, and sharia auditing; the legal certainty of online-based financing; the absence of outreach to lower-class clients; and ignorance about Islamic fintech. Furthermore, the fact that Islamic Fintech accounts for barely 2% of all fintech assets in Indonesia may be another factor contributing to the industry's lack of impact on economic growth in the country. So it is still very dominant in conventional fintech than Islamic Fintech. The number of conventional fintech companies registered and licensed totaling 95 while Islamic fintech in Indonesia is only 7 companies. With total assets that control the fintech market in Indonesia by 98% and Islamic fintech only the remaining 2% of total fintech assets in Indonesia. Thus, the size and number of conventional fintech companies in Indonesia have more influence on economic growth than Islamic fintech.

It is proven by the results of the third hypothesis test that conventional fintech has a significant effect on economic growth in Indonesia. In accordance with previous research that found conventional Fintech provides significant implications for governments and policymakers in efficiently implementing Fintech and innovative Islamic financial services to counter the economic impact of the COVID-19 pandemic (Rabbani et al., 2021). Information technology in the present day is one of the key variables impacting economic growth, according to prior study on the topic of fintech and economic growth. This research deftly illustrates the link between financial services, information technology, and economic growth. (Marcel, 2019; Khan et al., 2018; Nguedie, 2018; Sadigov et al., 2020). By automating processes, streamlining marketing and manufacturing, accelerating the flow of documents and information, and increasing transparency, the advancement of information technology will boost productivity across the board and spur economic growth. (Berzin et al., 2018; Karaoulanis, 2018; Kendiukhov & Tvaronaviciene, 2017; Logan & Esmanov, 2017; Vasylieva et al., 2017). The development of fintech undeniably also affects the country's economic growth (Narayan & Phan, 2019; Fisabilillah et al, 2021). According to (Fidan, and Tuğba, 2023), economic growth rates and fintech are positively related to each other, both in short-term and long-term relationships. According to Romdhane et al., (2023) the increase in Fintech affects the decline in inflation and unemployment rates in Asia. While according to Igbal et al., (2021) In contrast, fintech is significantly impacted by GDP and interest rates, but not much by inflation, according to Iqbal et al., (2021) Fintech has a major beneficial impact on economic growth both now and in the future, claim So, it can be said that the existence of conventional fintech today has affected economic growth in Indonesia. The higher number of conventional fintech assets will further increase economic growth in Indonesia.

CONCLUSION

The conclusion obtained from the results of this study is that the findings of this study are 3, namely:

- 1. There is a significant difference between Islamic fintech and conventional fintech, this is because the difference in size and number of Islamic fintech and conventional fintechcompanies is very far, namely 2%: 98%. This is also because the basic rules that exist in Islamic fintech are very different from conventional fintech. And Islamic fintech hasmany Sharia restrictions in running its business compared to conventional fintech.
- 2. Islamic fintech has no significant effect on economic growth in Indonesia. This is because Islamic fintech is not operating in the best possible way in Indonesia due to some issues, such as insufficient regulations, difficult licensing processes, the use of fintech to finance terrorism, the growth of illicit fintech companies, consumer disputes in the fintech industry, a lack of human resources for Islamic fintech, uncertainty surrounding the legality of online lending, a lack of outreach to lower-class consumers, a lack of knowledge about Islamic fintech, and the need for improvements in the areas of governance, accounting, and sharia auditing. In addition, the reason Islamic Fintech has not yet influenced economic growth in Indonesia could be due to the lack of proportion of assets which is only 2% of the total assets of all fintechs in Indonesia.

3. Conventional fintech has a significant effect on economic growth in Indonesia. This is because the number of assets and the number of companies is very dominant, namely 98% of total assets and 95 companies out of a total of 102 fintech companies in Indonesia.

REFERENCES

- 1) Ahmad, S. M., & Al Mamun, A. (2020). Opportunities of Islamic fintech: The case of Bangladesh and Turkey. *CenRaPS Journal of Social Sciences*, 2(3), 412–426.
- 2) Alam, N., Gupta, L., Zameni, A., & others. (2019). Fintech and Islamic finance. Springer.
- 3) Ali, B. J., & Anwar, G. (2021). An empirical study of employees' motivation and its influence job satisfaction. *Ali, BJ,* \& Anwar, G.(2021). An Empirical Study of Employees' Motivation and Its Influence Job Satisfaction. International Journal of Engineering, Business and Management, 5(2), 21–30.
- 4) Alshater, M. M., Saba, I., Supriani, I., & Rabbani, M. R. (2022). Fintech in islamic finance literature: A review. Heliyon.
- 5) Banna, H., & Alam, M. R. (2021). Impact of digital financial inclusion on ASEAN banking stability: implications for the post-Covid-19 era. *Studies in Economics and Finance*, *38*(2), 504–523.
- 6) Ben Romdhane, Y., Kammoun, S., & Loukil, S. (2023). The impact of Fintech on inflation and unemployment: the case of Asia. *Arab Gulf Journal of Scientific Research*.
- 7) Berzin, P., Shyshkina, O., Kuzmenko, O., & Yarovenko, H. (2018). Innovations in the risk management of the business activity of economic agents. *Маркетинг і Менеджмент Інновацій*, *4*, 221–233.
- 8) Chuen, D. L. K., & Teo, E. G. S. (2015). Emergence of FinTech and the LASIC principles. *The Journal of Financial Perspectives: Fintech*, *3*(3), 24–37.
- 9) CIBAFI. (2018). Evaluating Future Impacts: Strategic Thinking, Branding and Financial Technologies. GLOBAL ISLAMIC BANKERS' SURVEY.
- 10) FİDAN, İlayda İSABETLİ; TUĞBA, G. Ü. Z. (2023). FinTech Investment and GDP Relationship: An Empirical Study for High Income Countries. *İzmir İktisat Dergisi*, *38*(1), 215–232.
- 11) Global Islamic Finance Report. (2017). Islamic finance in the digital age: Fintech revolution. *Global Islamic Finance Report*, 282–290.
- 12) Harrison, R., Jaumandreu, J., Mairesse, J., & Peters, B. (2014). Does innovation stimulate employment? A firm-level analysis using comparable micro-data from four European countries. *International Journal of Industrial Organization*, 35, 29–43.
- 13) Hasan, R., Hassan, M. K., & Aliyu, S. (2020). Fintech and Islamic finance: Literature review and research agenda. *International Journal of Islamic Economics and Finance (IJIEF)*, 3(1), 75–94.
- 14) Iqbal, M., NADYA, P., & Saripudin, S. (2021). Islamic Fintech Growth Prospects in Accelerating MSMEs Growth during the Covid-19 Pandemic: Evidence in Indonesia. *International Journal of Islamic Economics and Finance Studies*, 7(2), 126–140.
- 15) Karaoulanis, A. (2018). Strategic transformation and innovation towards Blue Ocean creation in a changing corporate reality.
- 16) Kelana, I. (2018). *Here Are Some Advantages of Using Fintech Syariah*. Republika Online https://republika.co.id/berita/ekonomi/syariah-ekonomi/18/08/28/pe58om374-ini-beberapa-keuntungan-gunakan-fintech-syariah
- 17) Kendiukhov, I., & Tvaronaviciene, M. (2017). Managing innovations in sustainable economic growth.
- 18) Khan, S., Haleem, A., Khan, M. I., Abidi, M. H., & Al-Ahmari, A. (2018). Implementing traceability systems in specific supply chain management (SCM) through critical success factors (CSFs). *Sustainability (Switzerland)*, 10(1). https://doi.org/10.3390/su10010204
- 19) Logan, W., & Esmanov, O. (2017). Public financial services transparency.
- 20) Mansur, M., Samsuri, A., Nurhayati, N., & Khoyyilah, K. (2022). A Slanted View on the Future of Islamic Fintech and Conventional Fintech in South and Southeast Asian Countries. *El Barka: Journal of Islamic Economics and Business*, *5*(2), 207–234
- 21) Marcel, D. T. A (2019). The determinant of economic growth evidence from Benin: Time series analysis from 1970 to 2017
- 22) Muhammad, R., & Lanaula, R. (2019). Challenges of Islamic Supervisory in The Islamic Financial Technology Industry. *Economica: Jurnal Ekonomi Islam*, 10(2), 311–338.

- 23) Muryanto, Y. T., Kharisma, D. B., & Ciptorukmi Nugraheni, A. S. (2022). Prospects and challenges of Islamic fintech in Indonesia: a legal viewpoint. *International Journal of Law and Management*, *64*(2), 239–252.
- 24) Narastri, M. (2020). Financial technology (Fintech) di Indonesia ditinjau dari perspektif Islam. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 2(2), 155–170.
- 25) Narayan, P. K., & Phan, D. H. B. (2019). A survey of Islamic banking and finance literature: Issues, challenges and future directions. *Pacific-Basin Finance Journal*, *53*, 484–496.
- 26) Nguedie, Y. H. N. (2018). Corruption, investment and economic growth in developing countries: A Panel Smooth Transition Regression Approach.
- 27) Nurfalah, I., Rusydiana, A. S., Laila, N., & Cahyono, E. F. (2018). Early warning to banking crises in the dual financial system in Indonesia: The markov switching approach. *Journal of King Abdulaziz University: Islamic Econ.*, 31(2), 133–156.
- 28) OJK. (2023). *STATISTIK FINTECH*. Financial Services Authority. https://www.ojk.go.id/id/kanal/iknb/data-dan-statistik/fintech/default.aspx
- 29) Pollari, I. (2016). The rise of Fintech opportunities and challenges. Jassa, 3, 15–21.
- 30) Rabbani, M. R., Bashar, A., Nawaz, N., Karim, S., Ali, M. A. M., Rahiman, H. U., & Alam, M. S. (2021). Exploring the role of islamic fintech in combating the aftershocks of covid-19: The open social innovation of the islamic financial system. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), 136.
- 31) Rusydiana, A. S. (2018). Bagaimana mengembangkan industri fintech syariah di Indonesia? pendekatan interpretive structural model (ISM). *Al-Muzara'ah*, *6*(2), 117–128.
- 32) Sadigov, S., Vasylieva, T. A., & Rubanov, P. M. (2020). *Fintech in economic growth: cross-country analysis*. Varazdin Development and Entrepreneurship Agency; University North~....
- 33) Saksonova, S., & Kuzmina-Merlino, I. (2017). Fintech as financial innovation--The possibilities and problems of implementation.
- 34) Todorof, M. (2018). Shariah-compliant FinTech in the banking industry. Era Forum, 19(1), 1–17.
- 35) Vasylieva, T. A., Leonov, S. V, Kryvych, Y. N., & Buriak, A. V. (2017). Bank 3.0 concept: global trends and implications. Фінансово-Кредитна Діяльність: Проблеми Теорії Та Практики, 1, 4–10.
- 36) Webster, I., & Pizalla, J. (2015). Fintech: Are banks responding appropriately? EY Publication.
- 37) Zavolokina, L., Dolata, M., & Schwabe, G. (2016). The FinTech phenomenon: antecedents of financial innovation perceived by the popular press. *Financial Innovation*, *2*(1), 1–16.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0)

(https://creativecommons.org/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.