

DETERMINANTS OF SHARIA FINTECH GROWTH IN INDONESIA: AN INTEGRATIVE ANALYSIS OF MACROECONOMIC INDICATORS AND MONETARY POLICY

Muhammad Zaki As Shafi MT

Universitas Terbuka Palembang

E-mail: zakiasshafi14@gmail.com

Abstract

The purpose of this study is to determine the influence of macroeconomic factors (inflation and exchange rates) and monetary policy (interest rates and money supply) on the growth of Islamic fintech in Indonesia. The study utilizes data on macroeconomic factors, monetary policy, and the growth of Islamic fintech (specifically Sharia P2P Lending) in Indonesia. The sample consists of 50 monthly observations from May 2021 to June 2025. The analysis technique employed is multiple linear regression, utilizing t-tests and F-tests for hypothesis testing. The results demonstrate that inflation negatively affects the growth of Islamic fintech, whereas the money supply and Bank Indonesia (BI) interest rates have a significant positive impact. In contrast, the exchange rate showed no significant direct influence. Simultaneously, macroeconomic factors and monetary policy significantly affect the growth of Islamic fintech in Indonesia. The study concludes that the primary drivers of Islamic fintech growth are inflation, BI interest rates, and the money supply, while the exchange rate does not play a significant role.

Keywords: *Growth of Sharia Fintech, Macroeconomics, Inflation, Exchange Rate, Monetary Policy, Interest Rate, Money Supply*

INTRODUCTION

The Islamic fintech industry in Indonesia has experienced significant growth in recent years, establishing itself as a vital component of the national digital economy. According to data from the Financial Services Authority (OJK), total Islamic fintech assets in Indonesia reached IDR 13.4 trillion in 2022, a 33.6% increase compared to the previous year. This growth is predicted to continue; according to The Global Islamic Fintech Report 2023/24, the Islamic fintech market in Indonesia is projected to reach US\$11.8 billion in 2027 with a Compound Annual Growth Rate (CAGR) of 14.1% (Bank Indonesia, 2024)

In the context of this rapid expansion, this study specifically utilizes the Total Assets of Sharia Peer-to-Peer (P2P) Lending as the primary proxy for Islamic Fintech growth. This selection is driven by two critical factors regarding data validity and market representation. First, Sharia P2P Lending represents the most dominant and rapidly expanding segment within the Indonesian Islamic fintech ecosystem, playing a pivotal role in channeling financing to MSMEs. Second, compared to other fintech models such as crowdfunding or payment gateways, P2P lending provides the most consistent, transparent, and accessible monthly time-series data reported by the Financial Services Authority (OJK). This consistency is essential for ensuring statistical robustness when measuring the sector's sensitivity to macroeconomic variables.

While internal challenges such as literacy rates, compliance costs for Sharia Supervisory Boards (DPS), and technical issues like non-performing financing (TWP90) exist (Supriadi, 2024), the trajectory of Islamic fintech is increasingly determined by external macroeconomic conditions and monetary policy. Theoretically, macroeconomic factors fundamentally alter the supply and demand dynamics of digital financing. Inflation impacts

the real value of money; high inflation erodes people's purchasing power and increases operational costs for fintech firms (Pervin et al., 2020). Empirical evidence supports this theoretical view, where previous research confirms that inflation has a negative impact on the growth of Islamic fintech (Aulia et al., 2020);(Muhammad & Arif, 2024). Similarly, the Exchange Rate theory suggests that currency fluctuations affect cross-border transaction values and the cost of imported technology infrastructure (Madura, 2020). However, empirical findings on this are mixed; while theory suggests a negative cost impact, some studies like Saripudin et al. (2021) found that the exchange rate has a positive impact on the growth of Islamic fintech, possibly due to asset revaluation or export-oriented borrower resilience.

Furthermore, monetary policy instruments play a crucial transmission role. Interest Rates affect the cost of capital and the opportunity cost for investors. Although Islamic fintech operates on interest-free principles, changes in conventional rates influence market behavior. High interest rates can increase borrowing costs for the public, dampening demand, or conversely, trigger a substitution effect where borrowers shift from banks to fintech. Previous research generally shows that interest rates have a negative impact on the growth of Islamic fintech (Muhammad & Arif, 2024a; Setiani et al., 2020). Meanwhile, the Money Supply influences overall market liquidity. An increase in money supply theoretically increases the capital available for investment and consumption, providing opportunities for Islamic fintech to grow (Chairunnas et al., 2024). This is supported by Rangkyut & Hidayat (2019), who found that the amount of money in circulation has a positive impact on the growth of Islamic fintech.

The interplay of these variables was particularly volatile during the 2021–2025 period. In the early stages of the pandemic (2020–2021), Bank Indonesia implemented aggressive monetary easing (low interest rates, high liquidity) to stimulate the economy. However, this reversed in 2022–2024 as global inflation surged and the Rupiah weakened due to geopolitical tensions and Fed policies. Bank Indonesia responded with tight monetary policy, raising benchmark interest rates significantly (Bank Indonesia, 2024). These fluctuations created a unique stress test for Islamic fintech: high inflation and exchange rate volatility threatened borrower repayment capacity (NPF risk) and increased technology costs, while monetary tightening altered liquidity conditions in the market (Financial Services Authority & KNEKS, 2025).

To understand how these macroeconomic fluctuations affect the fintech sector, it is necessary to refer to the global empirical landscape. (Haddad & Hornuf, 2019), in their seminal study on the economic determinants of the global fintech market, provide a crucial foundation. By analyzing data from various countries, they found that fintech markets tend to develop more rapidly in economies that are already well-developed. However, their study also highlighted a paradox that is highly relevant to this research: fintech startups often emerge and grow significantly in response to the fragility or inefficiency of the traditional banking sector. This suggests that fintech does not merely act as a complement to existing financial institutions but can also thrive when the traditional financial system is under pressure from macroeconomic instability.

In the specific context of the Islamic financial ecosystem, the dynamics are even more unique. (Rabbani et al., 2020) conducted an extensive review of Islamic Fintech (IslamiFintech) and found that this sector possesses a distinct resilience mechanism compared to conventional fintech. They argue that because Islamic Fintech operates on risk-sharing principles (such as *Mudharabah* and *Musyarakah*) and is detached from interest-based

speculation (*Riba*), it theoretically possesses a higher shock absorption capacity against monetary volatility. Rabbani et al. emphasized that during periods of economic uncertainty, Islamic Fintech has the potential to drive financial inclusion by filling the liquidity gap left by risk-averse banking institutions. This perspective reinforces the urgency of examining whether the growth of Sharia P2P Lending in Indonesia reflects this theoretical resilience specifically during the post-pandemic inflationary period.

Furthermore, the interaction between monetary policy—specifically interest rates—and fintech growth is complex and often counter-intuitive. While conventional wisdom suggests that high interest rates dampen business expansion due to the high cost of capital, (Tang, 2019) offers a compelling counter-argument through the "Substitution Effect" theory. In his investigation of the P2P lending market versus traditional banks, Tang provided empirical evidence that these two entities often function as substitutes. When the central bank tightens monetary policy (raising interest rates), banks typically restrict credit supply to mitigate default risk. Consequently, borrower demand shifts to fintech platforms. This finding is critical for this study as it provides a theoretical justification for hypothesizing a positive relationship between the BI Rate and fintech growth; indicating that monetary tightening might inadvertently fuel the expansion of the fintech sector as an alternative funding channel.

Despite these significant economic shifts, academic attention remains disproportionately focused on the traditional Islamic banking sector. This study addresses a critical gap in the literature by arguing that Islamic Fintech (specifically Sharia P2P Lending) possesses distinct characteristics—such as a heavy reliance on digital infrastructure and a different risk profile—that differentiate its response to macroeconomic shocks compared to established Islamic banks. Unlike previous studies that utilized data from stable economic periods, this research offers a unique contribution by focusing on the May 2021 – June 2025 timeframe. This specific period captures a distinct "volatility phase," characterized by the transition from pandemic-induced monetary easing to aggressive tightening and high inflation, providing new insights into how digital-based Sharia financial assets demonstrate resilience or vulnerability against extreme monetary and macroeconomic fluctuations.

Based on this background, the central research question is whether macroeconomic factors (inflation and exchange rates) and monetary policy (BI rate and money supply) significantly influence the growth of Islamic fintech in Indonesia during this volatile period. Consequently, the objective of this study is to identify and analyze the specific influence of these macroeconomic and monetary variables on the growth of Islamic fintech assets in Indonesia.

METHODOLOGY

Types of research

This study uses a quantitative approach with a descriptive-associative method and an econometric approach. This research is descriptive because it aims to describe macroeconomic and monetary factors during the observation period, and associative because it focuses on testing the causal relationship (influence) between the independent and dependent variables.

Population and Sample

The population of this study comprises data on macroeconomic factors and monetary policies applicable in Indonesia, as well as performance data on all Sharia fintech

companies (Sharia P2P Lending) registered and licensed with the Financial Services Authority (OJK). The sample used in this study will be secondary time series data for the last five years (2021–2025) on a monthly basis.

Data collection technique

The data collection technique used is documentation study or secondary data from official sources collected from:

1. Secondary data regarding the BI-Rate, Exchange Rate, and Money Supply were obtained from Bank Indonesia, while Inflation data were sourced from the Central Statistics Agency (BPS).
2. Sharia Fintech Growth Data is obtained from the Financial Services Authority's (OJK) regular publication reports, specifically the Indonesian Sharia Financial Development Report (LPKSI), as well as monthly statistical reports related to fintech published.

Definition and Operationalization of Variables

This study uses two main variables, namely the dependent variable (Y) and the independent variable (X), each of which is defined as follows.

1. The Growth of Sharia Fintech

The growth of Sharia fintech is conceptually defined as the increase or development of operational and financial activities in Sharia-based financial technology services in Indonesia (Financial Services Authority & KNEKS, 2025). However, due to data availability and consistency, Sharia P2P Lending assets are utilized as the primary proxy for the overall growth of the Sharia Fintech sector in this study.

2. Inflation

Inflation is a general and continuous increase in the prices of goods and services over a certain period in Indonesia.(Bank Indonesia, 2024).

3. Exchange rate

The exchange rate is the exchange rate of the Indonesian Rupiah against major foreign currencies, especially the United States Dollar.(Bank Indonesia, 2024).

4. Interest Rate (BI Rate)

The BI rate is a benchmark interest rate set by Bank Indonesia which is used as the main instrument of monetary policy to control inflation.(Bank Indonesia, 2024).

5. Money Supply

The amount of money in circulation is the total amount of money (liquidity) in the hands of the public at a certain time.(Bank Indonesia, 2024).

The operational definition of each variable is as follows.

Table 1

Definition and Operationalization of Research Variables

Variables	Measurement	Measuring Scale
The Growth of Sharia Fintech (GSF)	Total Assets of Sharia Peer-to-Peer (P2P) Lending registered with OJK	Ln total assets
Inflation (INF)	Inflation rate	Percent
Exchange Rate (ER)	Rupiah per Dollar (Rp/USD)	Ln Exchange Rate
Interest Rate (BI Rate)	Benchmark Interest Rate (BI-Rate)	Percent
Money Supply (MS)	Widespread Money Supply (M2)	Ln money supply

Data Analysis Techniques

The most appropriate data analysis technique is multiple linear regression analysis with the steps outlined as follows.(Acock, 2018):

1. Descriptive Statistical Analysis

Describes the basic statistics of the variable (mean, maximum, and minimum values).

2. Classical Assumption Test

The classical assumption tests in this study include normality, multicollinearity, and heteroscedasticity tests, to ensure that the regression model used is valid with the following assessment criteria:

Table 2

Classical Assumption Test

No	Testing	Criteria	Interpretation
1	Normality Test	$\text{Prob} > \chi^2 > \alpha = 0.05$	Normally distributed residuals
		$\text{Prob} > \chi^2 < \alpha = 0.05$	Residuals are not normally distributed
2	Multicollinearity Test	$VIF < 10$	There is no multicollinearity
		$\text{Tolerance } (1/VIF) > 0.10$	
		$VIF > 10$ $\text{Tolerance } (1/VIF) < 0.10$	There is multicollinearity
3	Heteroscedasticity Test	$\text{Prob} > \chi^2 > \alpha = 0.05$	Homoscedasticity
		$\text{Prob} > \chi^2 < \alpha = 0.05$	Heteroscedasticity

3. Hypothesis Testing

Hypothesis testing in this study includes:

Table 3

Hypothesis Testing

No	Testing	Criteria	Interpretation
1	t-test	$t \text{ count} < t \text{ table}$ $p > (t) > \alpha = 0.05$	The hypothesis is rejected, meaning that the independent variable (X) has no effect on the dependent variable (Y).
		$t \text{ count} > t \text{ table}$ $p > (t) < \alpha = 0.05$	The hypothesis is accepted, meaning that the independent variable (X) has an effect on the dependent variable (Y).
2	F test	$F \text{ count} < F \text{ table}$ $\text{prob } F > \alpha = 0.05$	The hypothesis is rejected, meaning that the independent variables (X_1, X_2, X_3, X_4) do not influence the dependent variable (Y).
		$F \text{ count} > F \text{ table}$ $\text{prob } F < \alpha = 0.05$	The hypothesis is accepted, meaning that the independent variables (X_1, X_2, X_3, X_4) have an effect on the dependent variable (Y).
3	R test	Approaching 0	There is a weak relationship between the independent variable (X) and the dependent variable (Y)
		Approaching 1	There is a close relationship between the independent variable (X) and the dependent variable (Y)
4	R ² Test	Approaching 0	The smaller the proportion of variation in Y explained by the model (X_1, X_2, X_3, X_4)
		Approaching 1	The greater the proportion of variation in Y explained by the model (X_1, X_2, X_3, X_4)

RESULTS AND DISCUSSION

Research result

Descriptive statistics for each variable in this study are presented in Table 4 below.

Table 4
Descriptive Statistics of Research Variables

Variables	Obs	Mean	Min	Max
Sharia Fintech Growth (GSF)	50	6,508.03	4,060.35	9,870.50
Inflation (INF)	50	2,8492	-0.09	5.95
Exchange rate (EA)	50	15,300.56	14,165	16,600
BI Interest Rate (SBI)	50	5.06	3.5	6.25
Money Supply (MS)	50	8,386,706.64	7,004,093.08	9,595,253.60

Source: Financial Services Authority, 2025 processed data

The minimum value of the Sharia fintech asset growth variable was 4,060.35 (million) and the maximum value was 9,870.50 (million) with an average value of 6,508.03 (million), which means that on average, the growth of Sharia fintech assets during the observation period was IDR 6,508,030,000, based on the target set by the Financial Services Authority, this growth is between 5 – 8 billion, including the medium category.

The inflation variable obtained a minimum value of -0.09% and a maximum value of 5.95% with an average value of 2.8492% indicating relatively stable macroeconomic conditions in terms of price stability, as the average value is within the tolerance limit of the central bank's inflation target. This inflation rate is considered ideal because it provides certainty for business actors to invest, while also maintaining people's purchasing power so that it does not erode too quickly.

The exchange rate variable obtained a minimum value of 14,165 and a maximum value of 16,600 with an average value of 15,300.56, which means that on average, the exchange rate during the observation period was Rp15,300.56. The value of Rp15,300.56 is a level that is often associated with periods of rupiah weakening that occur due to strong global sentiment (for example, an increase in the US Central Bank/The Fed interest rate, or geopolitical tensions). This average value can be categorized as an "Exchange Level Under Pressure" or "Average Moderate Depreciation" when compared to BI's historical target of around Rp14,000 to Rp14,500.

The Bank Indonesia interest rate (SBI) variable obtained a minimum value of 3.5% and a maximum value of 6.25% with an average value of 5.06%, meaning that on average, the BI Reference Interest Rate during the observation period was 5.06%. During the study period of May 2021 - June 2025, Bank Indonesia's (BI) monetary policy tended to be neutral to slightly tight (contractionary), as this value was above the lowest point (3.5%) and approaching the midpoint. This average reflects BI's need to balance between encouraging economic growth (with low interest rates) and maintaining price/exchange rate stability (with high interest rates) during that period.

The variable of the amount in circulation obtained a minimum value of 7,004,093.08 (million) and a maximum value of 9,595,253.60 (million) with an average value of 8,386,706.64 which means the amount of money in circulation during the observation period was Rp8,386,706,640,000 (approximately Rp8.386 trillion). The average value of Rp8.386 trillion indicates that during the observation period, the average liquidity of the economy (the ability of the community to transact) was at this level. The significant difference between the minimum (Rp7.004 trillion) and maximum (Rp9.595 trillion) reflects the existence of periods

in which Bank Indonesia (BI) tightened (reduced money supply) and relaxed periods (increased money supply) in response to inflationary conditions or economic growth.

Before conducting regression analysis and hypothesis testing, the regression requirements must first be met through classical assumption tests. The first classical assumption test is the normality test, as presented in Table 5.

Table 5
Normality Test Results

Skewness and kurtosis tests for normality

Variables	obs	pr (skewness)	pr (kurtosis)	-----Joint test -----	
				Adj chi2 (2)	Prob>chi2
e	50	0.1292	0.4951	2.93	0.2315

Source: Financial Services Authority, 2025 processed data

Based on Table 5, the Prob value > chi2 of 0.2315 > alpha (α) = 5% is obtained, which means that the residuals are normally distributed. The test is continued with a multicollinearity test with the results presented in Table 6 below.

Table 6
Multicollinearity Test Results

Variables	VIF	1/VIF
Inflation (INF)	1.09	0.918516
Exchange rate (EA)	4.89	0.204337
BI Interest Rate (SBI)	3.98	0.251286
Money Supply (MS)	6.67	0.150005

Source: Financial Services Authority, 2025 processed data

Based on Table 6, the VIF values for the variables inflation, exchange rate, BI interest rate and money supply are all <10 and the Tolerance value (1/VIF) for the variables inflation, exchange rate, BI interest rate and money supply are all >0.10, so there is no multicollinearity.

The next classical assumption test is the heteroscedasticity test with the results as presented in table 7 below.

Table 7
Heteroscedasticity Test Results

Information	Mark
Chi2 (1)	0.36
Prob > chi2	0.5465

Source: Financial Services Authority, 2025 processed data

Based on Table 7, the Prob value > chi2 is 0.5465 > alpha (α) = 0.05, so there is no heteroscedasticity (constant residual variance / homoscedasticity).

After the classical assumptions are met, the analysis is continued with multiple linear regression with the results as presented in Table 8 below.

Table 8
Multiple Linear Regression Test Results

Source	ss	df	MS	Number of obs	=	50
				F (4, 45)	=	176.98
Model	3.58915607	4	.897289018	Prob > F	=	0.0000
Residual	.228155822	45	.005070129	R – Squared	=	0.9402
				Adj R – Squared	=	0.9349
Total	3.81731189	49	.077904324	Root MSE	=	.0712

GSF	Coefficient	Std. err.	t	P>[t]	[95% conf. Interval]	
INF	-.0306402	.0072785	-4.21	0.000	-.0452999	-.0159805
ER	.7317234	.4584971	1.60	0.118	-.1917371	1.655184
BI Rate	.0894559	.0180843	4.95	0.000	.0530324	.1258795
MS	1.679128	.3175099	5.29	0.000	1.03963	2.318626
_cons	-25.43527	3.990903	-6.37	0.000	-33.47336	-17.39718

Source: Financial Services Authority, 2025 processed data

Based on Table 8, the regression line equation can be drawn up as follows:

$$GSF = -25.43527 - 0.0306402 \text{ INF} + 0.7317234 \text{ EA} + 0.0894559 \text{ BI Rate} + 1.679128 \text{ MS}$$

The explanation of the regression line equation above is as follows.

1. The constant value is -25.43527, which means that if Inflation (X1), Exchange Rate (X2), BI Interest Rate (X3), and Money Supply (X4) are all zero (0), then the predicted growth of Sharia Fintech is -25.43527 million Rupiah. This indicates a shrinkage or loss (negative growth) of IDR 25.435 million.
2. The regression coefficient value of the inflation variable is -0.0306402, which means that if inflation increases by 1%, the growth of Islamic fintech will experience a decrease of -0.0306402, assuming that other variables are considered constant.
3. The regression coefficient value of the exchange rate variable is 0.7317234, which means that if there is a 1% increase in the exchange rate, the growth of Islamic fintech will also increase by 0.7317234, assuming that other variables are considered constant.
4. The regression coefficient value of the BI interest rate variable is 0.0894559, which means that if there is a 1% increase in the BI interest rate, the growth of Islamic fintech will also increase by 0.0894559, assuming that other variables are considered constant.
5. The regression coefficient value of the variable amount of money in circulation is 1.679128, which means that if there is an increase in the amount of money in circulation of 1%, the growth of Islamic fintech will also experience an increase of 1.679128, assuming that other variables are considered constant.

Based on Table 8, the following hypothesis testing can be carried out:

The Impact of Inflation on the Growth of Sharia Fintech

The inflation variable has a calculated t value of 4.21 > t table 2.014 and a probability value of 0.000 < $\alpha = 0.05$ with a negative regression coefficient which means the hypothesis is accepted so that it can be explained that inflation has a negative and significant influence on the growth of Islamic fintech in Indonesia, where the higher the inflation, the growth of fintech in Indonesia will decrease and vice versa.

The Influence of Exchange Rates on the Growth of Sharia Fintech

The exchange rate variable has a calculated t value of 1.60 < t table 2.014 and a probability value of 0.118 > $\alpha = 0.05$, which means the hypothesis is rejected so that it can be explained that the exchange rate does not have a significant influence on the growth of Islamic fintech in Indonesia.

The Influence of Bank Indonesia Interest Rates on the Growth of Sharia Fintech

The Bank Indonesia interest rate variable has a calculated t value of 4.95 > t table 2.014 and a probability value of 0.000 < $\alpha = 0.05$ with a positive regression coefficient. This means the hypothesis is accepted, indicating that the Bank Indonesia interest rate has a

positive and significant influence on the growth of Islamic fintech in Indonesia. Consequently, the higher the Bank Indonesia interest rate, the higher the growth of Islamic fintech in Indonesia, and vice versa.

The Influence of Money Supply on the Growth of Sharia Fintech

The variable of the amount of money in circulation has a calculated t value of $5.29 > t$ table 2.014 and a probability value of $0.000 < \alpha = 0.05$ with a positive regression coefficient which means the hypothesis is accepted so that it can be explained that the amount of money in circulation has a positive and significant influence on the growth of Islamic fintech in Indonesia, where the more money in circulation, the growth of fintech in Indonesia will decrease and vice versa.

The Influence of Inflation, Exchange Rates, Bank Indonesia Interest Rates, and Money Supply on the Growth of Sharia Fintech

The calculated F value is $176.98 > F$ table 2.61 and the probability F value is $0.000 < \alpha = 0.05$ which means the hypothesis is accepted so that it can be explained that inflation, exchange rates, Bank Indonesia interest rates and the amount of money in circulation together have a significant influence on the growth of Islamic fintech in Indonesia. The R square value is 0.9402 which explains that 94.02% of the total variation (fluctuation) in Islamic Fintech Growth (Y) can be explained simultaneously by variations in the four independent variables, namely Inflation (X1), Exchange Rate (X2), Bank Indonesia Interest Rate (X3), and Money Supply (X4). The remaining 5.98% ($100\% - 94.02\%$) is explained by other factors outside the regression model such as dummy variables of regulatory policies, fintech technology innovation, the level of Islamic financial literacy of the community, or other error variables.

Discussion

The Impact of Inflation on the Growth of Sharia Fintech

The inflation variable has a negative and significant influence on the growth of Islamic fintech in Indonesia, where the higher the inflation, the lower the growth of fintech in Indonesia and vice versa. The regression coefficient value of the inflation variable is -0.0306402 , which means that if inflation increases by 1%, the growth of Islamic fintech will experience a decline of -0.0306402 , assuming other variables are held constant. The inflation variable obtained a minimum value of -0.09% and a maximum value of 5.95% with an average value of 2.8492% , indicating a relatively stable macroeconomic condition in terms of price stability, because the average value is within the tolerance limit of the central bank's inflation target. This inflation rate is considered ideal because it provides certainty for business actors to invest, while maintaining people's purchasing power from being eroded too quickly.

According to Neoclassical Theory in a macroeconomic context, high inflation rates will reduce the real value (purchasing power) of money and income. This has an indirect impact on Sharia fintech, including: 1) High inflation causes prices of goods and services to rise, thereby reducing people's disposable income. Consumers will tend to reduce consumption and savings, and be more cautious in taking on new debt or financing (including from fintech). This decrease in financing demand directly hampers fintech growth. 2) Unstable inflation increases economic uncertainty. Investors (funders/lenders) in fintech platforms become reluctant to invest due to concerns that the real rate of return (net profit

after deducting inflation) they obtain will decrease, or even become negative. 3) Bank Indonesia (BI) tends to raise the benchmark interest rate (BI-Rate) to curb inflation. Although Sharia fintech does not use interest, an increase in the benchmark interest rate affects the cost of funds in the overall market and can increase the risk of default for borrowers in fintech due to greater economic pressure. In the context of Sharia, the primary principles are justice and the avoidance of gharar (uncertainty) and maysir (speculation). High inflation creates excessive uncertainty about the real value of funds lent and repaid. When inflation is high, the cost of living and production costs rise. This can reduce the ability of borrowers (especially MSMEs) to repay their loans on time, thereby increasing the ratio of non-performing financing. This increased risk will force fintech platforms and their lenders to be more selective and limit the distribution of funds, ultimately restraining growth (Muhammad & Arif, 2024).

A number of previous studies have found empirical evidence that supports this hypothesis, both in the Islamic financial sector in general and in the fintech industry in Indonesia, namely (Assegaf et al., 2024) And (Andini, 2024) results research the ianshow that inflation has a negative effect on the economic growth of Islamic fintech.

The Influence of Exchange Rates on the Growth of Sharia Fintech

The exchange rate variable has no significant impact on the growth of Islamic fintech in Indonesia. This is because the majority of operational and financing activities (Islamic Peer-to-Peer Lending or Islamic Equity Crowdfunding) in Islamic fintech in Indonesia are dominated by the Rupiah (IDR). The primary target market for Islamic fintech is Micro, Small, and Medium Enterprises (MSMEs) and domestic individuals whose capital needs or transactions largely do not involve direct imports or exports. Fluctuations in the Rupiah exchange rate against foreign currencies (such as the USD) have only an indirect or minimal impact on cash flow and short-term financing decisions of Islamic fintech, making its influence statistically insignificant.

The exchange rate variable obtained a minimum value of 14,165 and a maximum value of 16,600 with an average value of 15,300.56, which means that on average, the exchange rate during the observation period was Rp15,300.56. The value of Rp15,300.56 is a level that is often associated with periods of rupiah weakening that occur due to strong global sentiment (for example, an increase in the US Central Bank/The Fed interest rate, or geopolitical tensions). This average value can be categorized as an "Exchange Level Under Pressure" or "Average Moderate Depreciation" when compared to BI's historical target of around Rp14,000 to Rp14,500.

Fintech Sharia fintech operates on the principle of profit-sharing (mudharabah, musyarakah) or buying and selling (murabahah), rather than interest (riba). This fundamental nature can make it less sensitive to external monetary variables than conventional financial institutions, which rely heavily on loans and foreign exchange hedging. Investor/funder decisions in Sharia fintech may be driven more by the yield offered, the risk of default (NPF), and Sharia compliance aspects, rather than by the Rupiah exchange rate sentiment that tends to influence cross-border investment. Exchange rate insignificance often occurs because other variables have a much stronger influence. In this case, inflation, the BI Interest Rate, and the Money Supply were shown to have significant influences. This suggests that people's economic decisions regarding Sharia fintech are more sensitive to purchasing power (inflation) and domestic liquidity/monetary policy conditions (BI Interest Rate and JUB) than exchange rate stability.

A study on the growth of Islamic banking shows that the exchange rate has a positive and insignificant influence on the growth of Islamic banking in Indonesia.(Faudilah et al., 2025; Rifai et al., 2017)

The Influence of Bank Indonesia Interest Rates on the Growth of Sharia Fintech

The Bank Indonesia interest rate variable has a positive and significant influence on the growth of Islamic fintech in Indonesia, where the higher the Bank Indonesia interest rate, the higher the growth of fintech in Indonesia will be. The regression coefficient value of the BI interest rate variable is 0.0894559, which means that if there is a 1% increase in the BI interest rate, the growth of Islamic fintech will also experience an increase of 0.0894559, assuming other variables are held constant. The Bank Indonesia interest rate (SBI) variable obtained a minimum value of 3.5% and a maximum value of 6.25% with an average value of 5.06%, meaning that on average, the BI Reference Interest Rate during the observation period was 5.06%. During the study period of May 2021 – June 2025, Bank Indonesia's (BI) monetary policy tended to be in a neutral to slightly tight (contractionary) position.

This positive relationship indicates a substitution effect in the financial market. This finding aligns with (Tang, 2019), who suggests that fintech lenders often function as substitutes for traditional banks, particularly when the credit supply from the banking sector is constrained. When the BI Interest Rate increases, conventional and Islamic banking institutions typically respond by raising their lending rates (margin) and tightening credit approval requirements to mitigate risk. This situation creates a barrier for MSMEs and individuals to access bank capital. Consequently, these borrowers shift to Islamic Fintech (P2P Lending) as an alternative funding source. Islamic Fintech becomes more attractive because it offers greater accessibility and agility compared to banks during tight monetary periods. Therefore, instead of hindering growth, the tightening of monetary policy by Bank Indonesia actually drives the demand for alternative financing, thereby increasing the total assets and growth of Islamic fintech. Thus, Islamic Fintech serves as a counter-cyclical funding alternative when the conventional monetary environment tightens.

Furthermore, this phenomenon can be explained through the mechanism of credit rationing. In periods of high interest rates, banking institutions tend to become more risk-averse to maintain the quality of their assets. They prioritize prime debtors and reduce exposure to the MSME segment which is considered to have a higher risk profile. This gap provides a significant niche for Sharia Fintech platforms to expand. Utilizing alternative credit scoring technology that is more inclusive than traditional bank assessments, Sharia Fintech is able to absorb the "excess demand" for financing rejected by the banking sector. This confirms that in the Indonesian financial ecosystem, Sharia Fintech does not compete directly with banks for the same market segment during high interest periods, but rather complements the system by serving the underserved market segments.

In addition, the specific nature of Sharia contracts also contributes to this preference. When the benchmark interest rate rises, floating interest rates on conventional bank loans typically increase, creating uncertainty for borrowers regarding their monthly installments. In contrast, Sharia Fintech products—dominated by Murabahah (sale and purchase) akad—offer fixed margins determined at the beginning of the contract. This provides financial certainty for borrowers, particularly MSMEs, who need to manage their cash flow strictly amidst economic volatility. This stability makes Sharia Fintech financing a more rational and attractive option compared to conventional bank loans during periods of monetary tightening, thereby driving the accumulation of assets in this sector.

The Influence of Money Supply on the Growth of Sharia Fintech

The variable of money supply has a positive and significant influence on the growth of Islamic fintech in Indonesia, where the more money in circulation, the growth of fintech in Indonesia will decrease and vice versa. The regression coefficient value of the variable of money supply is 1.679128, which means that if there is an increase in the amount of money in circulation by 1%, the growth of Islamic fintech will also increase by 1.679128, assuming other variables are held constant. The variable of amount in circulation obtained a minimum value of 7,004,093.08 (million) and a maximum value of 9,595,253.60 (million) with an average value of 8,386,706.64, which means the amount of money in circulation during the observation period was Rp8,386,706,640,000 (approximately Rp8.386 trillion). The average value of Rp8.386 trillion indicates that during the observation period, the average liquidity of the economy (the ability of the community to transact) was at this level. The significant difference between the minimum (Rp7,004 trillion) and maximum (Rp9,595 trillion) reflects the periods in which Bank Indonesia (BI) tightened (reduced money supply) and periods of easing (increased money supply) in response to inflationary conditions or economic growth.

When Bank Indonesia (BI) increases the minimum reserve requirement (JUB) through open market operations or loosening the minimum reserve requirement (GWM), the goal is to flood the market with liquidity. Excess liquidity in the market tends to be absorbed first by more traditional and larger financial institutions (Sharia/Conventional Commercial Banks), which then offer more attractive interest rates or profit sharing on deposits to attract these funds. BI and OJK data often show that an increase in JUB is strongly correlated with an increase in third-party funds (DPK) in banks. This increase in DPK is then allocated by conventional Islamic banks (BUS) to large and secure money market instruments or financing. Large investors (institutional lenders), who typically fund Sharia-compliant P2P fintech, view offerings in the formal banking sector as more attractive and secure when the JUB is high. This results in a slowdown in the flow of funds to fintech platforms, statistically reflected in a slowdown in growth. (Bank Indonesia, 2024).

A higher JUB will stimulate aggregate demand and increase total financing (credit creation), which should be positive for the entire financial sector, including fintech. This study's results indicate a positive relationship between the amount of money in circulation and the growth of Islamic fintech. This suggests that the liquidity transmission mechanism in Indonesia is uneven or has unintended consequences for the Islamic fintech sector, which is still vulnerable to competition. When formal banks easily obtain liquidity from a high JUB, they can offer better pricing (profit sharing/interest) on deposit products, substituting the appeal of Islamic fintech as a high-risk, high-return investment channel. (Financial Services Authority & KNEKS, 2025).

The results of this study support research conducted by (Rangkuty & Hidayat, 2019) where the research results show that the amount of money in circulation has a positive impact on the growth of Islamic fintech. (Ariefudin et al., 2024) stated that the amount of money in circulation has a significant influence on the profitability of Islamic banking.

The Influence of Inflation, Exchange Rates, Bank Indonesia Interest Rates, and Money Supply on the Growth of Sharia Fintech

The variables of inflation, exchange rate, Bank Indonesia interest rate, and money supply together have a significant influence on the growth of Islamic fintech in Indonesia. The R square value of 0.9402 explains that 94.02% of the total variation (fluctuation) in Islamic Fintech Growth (Y) can be explained simultaneously by variations in the four

independent variables, namely Inflation (X1), Exchange Rate (X2), Bank Indonesia Interest Rate (X3), and Money Supply (X4). The remaining 5.98% is explained by other factors outside the regression model such as regulatory policies, fintech technological innovation, the level of Islamic financial literacy of the community, or other error variables.

This finding is crucial because it confirms that the growth of Islamic fintech does not stand alone but is highly integrated and influenced by macroeconomic conditions and national monetary policy. When inflation, exchange rates, and interest rates are well-managed (stable), this creates a conducive investment climate. Investors (both institutional and retail) will have greater confidence in investing their funds, including in relatively risky sectors like Islamic fintech. Extreme fluctuations in one or more of these macro variables will increase uncertainty and encourage investors to withdraw funds from risky markets (including fintech) to safer assets, thereby hampering fintech growth collectively.

The BI Interest Rate and the Money Supply (JUB) influence the level of liquidity and cost of capital across the financial system (both conventional and Islamic). If interest rates are high (attracting funds from the market) and the JUB is low (liquidity is tight), the availability of funds for Islamic fintech financing will be drastically reduced. Conversely, when monetary conditions are relaxed, funds in the market (as reflected in the JUB) are more easily allocated to various instruments, including Islamic fintech, which collectively drives its growth.

Research in Indonesia on the growth of Islamic banking (Mustaghfiroh et al., 2025) This study demonstrates that macro-monetary factors (inflation, exchange rate, BI rate, GDP) simultaneously and significantly influence total assets or financing in Islamic banking. This principle can be extrapolated to Islamic fintech within the same Islamic financial ecosystem.

CONCLUSION

Overall, the growth of Islamic fintech in Indonesia is highly vulnerable and sensitive to national macro-monetary conditions. Although the exchange rate is not a primary determinant when examined alone, the combination of inflation, BI interest rates, and the money supply are dominant factors that strongly and decisively influence the development of the Islamic fintech sector.

The main limitations are the relatively short research period and the use of only Sharia-compliant P2P lending as a proxy for Sharia fintech growth, which limits the generalizability of the findings to the entire sector. Future research is recommended to use a longer timeframe, from the start of Sharia fintech operations in Indonesia to the most recent year, and to not only use Sharia-compliant P2P lending as a proxy, but also include growth variables from other Sharia fintech sectors, such as Total Funds Raised by Sharia Equity Crowdfunding or Sharia Payment Gateway Transaction Volume.

REFERENCES

- Acock, A. C. (2018). *A Gentle Introduction to Stata* (6th ed). Stata Press.
- Andini, F. (2024). Pengaruh Tingkat Inflasi, Ukuran Perusahaan, Dan Price Earning Ratio Terhadap Pertumbuhan Laba Pada Indeks IDX Growth 30. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi (Jebma)*, 4(1), 438–452.
- Ariefudin, Salim. M. Agus, & Khoirul. (2024). Pengaruh Suku Bunga, Nilai Tukar Valas, dan Jumlah Uang Beredar Terhadap Profitabilitas Pada Perbankan Syariah. *E – Jurnal Riset Manajemen*, 8(2), 61–75.

- Assegaf, Z., Putri, A. M. R., & Syarief, A. (2024). Analisis Pengaruh Variabel Makro Ekonomi Terhadap Kinerja Keuangan Bank Syariah di Indonesia. *Media Ekonomi*, 22(2), 1–18.
- Aulia, M., Permatasari, R. O., & Yustiardi, A. F. (2020). An overview of Indonesian regulatory framework on Islamic financial technology (fintech). *Jurnal Ekonomi Dan Keuangan Islam*, 6(1), 64–75. <https://doi.org/https://doi.org/10.20885/JEKI.vol6.iss1.art7>
- Bank Indonesia. (2024). *Laporan Kajian Stabilitas Keuangan (LKSK) dan/atau Laporan Kebijakan Moneter*.
- Chairunnas, A. S., Sugianto, E., Pratiwi, R., Sitorus, M., & Cahyono, B. (2024). Integrasi Fintech dalam Kebijakan Moneter: Peluang Baru atau Ancaman bagi Stabilitas Ekonomi? *Jurnal Pendidikan Dan Ekonomi*, 4(1), 41–50.
- Faudilah, L., Wiharno, H., & Djuniardi, D. (2025). Pengaruh Good Corporate Governance dan Kurs Terhadap Pertumbuhan Laba dengan Efisiensi Operasional Sebagai Variabel Moderating. *JURNAL LOCUS: Penelitian & Pengabdian*, 4(9), 8550–8562.
- Haddad, C., & Hornuf, L. (2019). The Emergence of The Global Fintech Market: Economic and Technological Determinants. *Small Business Economics*, 53(1), 81–105. <https://doi.org/https://doi.org/10.1007/s11187-018-9991-x>
- Madura, J. (2020). *International Financial Management*. Cengage Learning Asia Pte Ltd.
- Muhammad, S., & Arif, M. (2024). Pengaruh BI Rate dan Inflasi Terhadap Profitabilitas Pada Perusahaan Fintech yang Terdaftar di Otoritas Jasa Keuangan. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, 9(4), 2538–2556. <https://doi.org/DOI:https://doi.org/10.30651/jms.v9i4.23546>
- Mustaghfiroh, F. L., Marsella, P., Ardana, D. A., & Ardana, Y. (2025). Dampak Kebijakan Makroekonomi Terhadap Kinerja Keuangan Bank Syariah. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(2), 1105–1109. <https://doi.org/10.31004/riggs.v4i2.621>
- Otoritas Jasa Keuangan, & KNEKS. (2025). *Laporan Perkembangan Keuangan Syariah Indonesia (LPKSI)*.
- Pervin, S., Ismail, N., & Noman, A. H. M. (2020). *Islamic Microfinance: A Tool of Alleviating Poverty and Ensuring Economic Peace*. Springer, Cham. https://doi.org/https://doi.org/10.1007/978-3-319-95867-5_72
- Rabbani, M. R., Khan, S., & Thalassinis, E. I. (2020). FinTech, Blockchain and Islamic Finance: An Extensive Literature Review. *International Journal of Economics and Business Administration*, 8(2), 65–86. <https://doi.org/https://doi.org/10.35808/ijeba/444>
- Rangkuty, M., & Hidayat, R. (2019). Analisis Pengaruh Pembiayaan Bank Syariah, Suku Bunga Dan GDP Terhadap Uang Beredar Di Indonesia. *Al-Sharf: Jurnal Ekonomi Islam*, 1(1), 64–86.
- Rifai, S. A., Susanti, H., & Setyaningrum, A. (2017). Analisis Pengaruh Kurs Rupiah, Laju Inflasi, Jumlah Uang Beredar dan Pertumbuhan Ekspor terhadap Total Pembiayaan Perbankan Syariah dengan Dana Pihak Ketiga sebagai Variabel Moderating. *Muqtasid: Jurnal Ekonomi Dan Perbankan Syariah*, 8(1), 13. <https://doi.org/10.18326/muqtasid.v8i1.13-27>
- Saripudin, S., Nadya, P. S., & Iqbal, M. (2021). Upaya Fintech Syariah Mendorong Akselerasi Pertumbuhan UMKM di Indonesia. *Urnal Ilmiah Ekonomi Islam*, 7(1), 41–50.
- Setiani, D. D., Nivanty, H., Lutfiah, W., & Rahmawati, L. (2020). Fintech Syariah: Manfaat Dan Problematika Penerapan Pada UMKM. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, 5(1), 75–90.

- Supriadi, E. (2024). Peran Financial Technology (Fintech) Syariah dalam Meningkatkan Inklusi Keuangan di Indonesia: Analisis Perspektif Ekonomi Islam. *Ekonomi Syariah Dan Bisnis Perbankan*, 8(2), 255–263.
- Tang, H. (2019). Peer-to-Peer Lenders: Substitutes or Complements? *The Review of Financial Studies*, 32(5), 1900–1938. <https://doi.org/DOI>: <https://doi.org/10.1093/rfs/hhy137>