



The Effect of Macroeconomic and Internal Bank Factors on Distribution of Sharia Banking Mortgage in Indonesia

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Abstract

Sharia mortgage financing growth in Indonesia is shaped by both macroeconomic conditions and internal banking performance. This study aims to examine the influence of macroeconomic variables, Industrial Production Index, inflation, BI rate and internal bank factors, Third-Party Funds, Non-Performing Financing of Sharia mortgages, and total assets on the distribution of Sharia mortgage financing in Indonesia. The research employs the Autoregressive Distributed Lag method. The results indicate that in the short term, all variables have a significant effect on Sharia mortgage financing. Industrial Production Index, inflation, Third-Party Funds, mortgage Non-Performing Financing, and total assets have a significant positive impact, while the BI rate has a significant negative effect. In the long term, only IPI and mortgage Non-Performing Financing show a significant positive influence on the distribution of Sharia mortgage financing. Inflation, the BI rate, and total assets have a positive but insignificant effect, while Third-Party Funds has a negative and insignificant effect. This study suggests that the government should implement appropriate macroeconomic policies, and Islamic banks should consistently maintain internal banking factors to optimize the distribution of Sharia mortgage financing. This will facilitate home ownership through Sharia mortgages and contribute to strengthening Indonesia's economy, as the housing sector plays a strategic role with its capital and labour-intensive industries.

Keywords: Macroeconomics, Internal Bank Factors, Sharia Mortgage, ARDL

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I. Introduction

Banks, as outlined in Article 3 of Law Number 10 of 1998, have the primary function of collecting and distributing funds from the public. In practice, Islamic banks derive their main source of income from financing provided to fund managers (mudharib), which, when managed properly, can generate optimal profits and improve the bank's business quality (Ahmad, 2015). Furthermore, this financing also aims to support national economic growth and maintain monetary stability (Utami, 2012). In line with this role, Islamic banks play a significant role in Indonesia's financial system through the provision of financing based on sharia principles, one of which is through sharia mortgage financing products. This product aims to facilitate homeownership in a fair and halal manner. Unsurprisingly, sharia mortgage financing has become one of the most popular products as it offers affordable housing solutions in accordance with Islamic values.

The distribution of sharia mortgage financing has shown a growth trend year by year. Data from the Financial Services Authority (OJK) recorded that the total value of sharia mortgage financing increased from IDR 77.83 trillion in 2018 to IDR 132.02 trillion in 2023, accounting for approximately 25.1% of total Islamic bank financing (Table 1.). This increase reflects the strategic contribution of sharia mortgage financing in supporting the housing sector, which directly impacts national economic growth, as the sector is labor and capital-intensive and absorbs a large workforce (Perkim, 2021). The growth of this sector is also driven by rising demand for housing, while housing availability remains insufficient. The government noted a housing ownership backlog of 12.75 million units (Mulyani, 2022), and it is projected that housing demand will exceed 30 million units by 2025 (Kompas, 2016). Another contributing factor is the demographic bonus, namely the increase in the productive-age population (16–65 years) until 2045. On the other hand, rising house prices that are not matched by people's purchasing power have caused many potential buyers to be unable to purchase homes outright. Therefore, sharia mortgage financing becomes an important solution, particularly through Islamic banking, which serves as a financial intermediary institution.

Table 1. Total Financing and Sharia Mortgages of Islamic Banks in Indonesia 2018-2023

Year	Total Financing of Islamic Banks	Total Sharia Mortgages of Islamic Banks
2018	320.193	77.829
2019	355.182	87.808
2020	383.942	97.669
2021	409.877	108.075
2022	491.489	125.060
2023*	525 145	132.018

Source: World Bank (2025)

From the perspective of Maqashid Sharia, housing is a basic necessity classified under *hifzh al-nafs* (preservation of life). According to Ahmad (1995), this includes the fulfillment of basic needs such as food, shelter, and clothing. A house is considered part of *hifzh al-nafs* because it plays an essential role in protecting humans from extreme weather, wild animals, and providing a sense of safety and comfort. With the increasing demand for housing, especially approaching the peak

of the demographic bonus, access to sharia mortgage financing becomes even more crucial. However, limited public financial capacity and continuously rising property prices make it difficult for many people to afford homes with cash. In this context, sharia mortgage financing emerges as a primary solution that aligns with the principle of justice in Islam.

Despite its great potential, sharia mortgage financing also carries certain risks due to its long-term nature. The 2008 global financial crisis, triggered by the subprime mortgage crisis in the United States, demonstrated how unchecked expansion of mortgage financing can lead to systemic financial instability. The impact of the subprime mortgage crisis also reached Indonesia. The most visible consequence in Indonesia was economic slowdown and widespread layoffs. It was reported that approximately 57,000 employees were laid off due to the global crisis of 2008–2009 (Republika, 2009). This situation contributed to rising unemployment and actual poverty levels in society. The impact on the Indonesian economy included the withdrawal of foreign capital, especially US dollars, by creditors and investors in the US. This was done by selling securities and equity purchased in rupiah, converting them into dollars, and withdrawing funds placed in Bank Indonesia into dollar form (Sudarsono, 2009). In light of this, it is crucial to ensure that sharia mortgage financing expansion aligns with macroeconomic conditions including GDP, inflation, and the BI Rate and is managed with prudential principles.

Several previous studies have examined macroeconomic factors such as GDP, inflation, interest rates, and the Industrial Production Index (IPI) that influence housing finance distribution, with varying results. For example, a study by Dianty et al. (2022) showed that GDP contributed the most among macroeconomic variables affecting various types of sharia mortgage financing in Indonesia. Rombe et al. (2021) and Mogaka (2015) also indicated that GDP positively affects mortgage distribution. However, this contrasts with findings from Djati (2017) and Yusof (2018), who found that GDP had a negative and significant effect on mortgage credit in state-owned and Islamic banks. In this study, economic growth is measured using the Industrial Production Index (IPI) as a proxy. Pratama and Putri (2022) revealed that IPI significantly and positively influences credit distribution in both the short and long term. Similarly, Noveminanto (2009) found that an increase in IPI could stimulate the growth of mortgage credit distribution by banks. Halimah et al. (2018) also explained that IPI had the largest contribution to housing finance in Islamic banking.

Furthermore, Dianty et al. (2022) found that inflation negatively impacts sharia mortgage financing distribution. However, this differs from the studies by Mogaka and Pinto (2015), who argued that high inflation leads to increased bank credit distribution, implying that inflation can have a positive and significant influence. Rombe (2021) and Dianty (2022) also discovered that interest rates have a significant negative effect on mortgage financing. Conversely, Yusof (2018) in his research indicated that interest rates positively affect home financing.

Apart from macroeconomic factors, Islamic bank mortgage distribution is also influenced by internal bank factors. Studies on third-party funds by Olokoyo (2011), Riadi (2018), and Pratiwi and Hindasah (2014) found that DPK (third-party funds) have a positive and significant relationship with financing distribution. Pratiwi and Hindasah (2014) also found that NPL (non-performing loans) had a significant negative effect on credit distribution. Additionally, Nurdiansyah et al. (2020) explained that NPF (non-performing financing) had a negative impact

on murabaha financing. However, Martin (2014) stated that problematic financing had a significantly positive impact on credit provision. Mogboyin (2012) showed that total assets had a positive and significant effect on bank credit distribution in Nigeria. Similar findings were reported by Sylviah (2022) and Tanjung (2020), who also found that total assets significantly influence financing.

The inconsistency in previous research findings indicates an empirical gap in the literature, particularly regarding the combined influence of macroeconomic and internal bank factors on sharia mortgage financing in Indonesia. Moreover, many studies only examine short-term or long-term relationships separately, while comprehensive studies covering both are still limited. This research aims to fill that gap by analyzing the influence of macroeconomic variables (IPI, inflation, and the benchmark interest rate/BI Rate) and internal bank factors (DPK, NPF of sharia mortgage financing, and total assets) on sharia mortgage financing in Indonesia, both in the short and long term, using the Autoregressive Distributed Lag (ARDL) method. Thus, the results of this study are expected to contribute to the formulation of more effective and sustainable macroeconomic policies and Islamic banking strategies to promote growth in the housing sector in Indonesia.

II. Literature Review

Previous Research and Hypotheses Development

The Relationship between IPI and Islamic Home Loan Distribution

Zulhidia (2015) in his research shows that increasing financing distribution is related to good economic growth, which in turn boosts industrial growth. Therefore, the Industrial Production Index (IPI) affects financing distribution. This is because if IPI increases, the demand for raw materials and output will also rise, leading to an increase in financing distribution. This occurs because companies require funds, often sourced through financing from banks, for production. According to the findings of Halimah et al. (2018), IPI makes the largest contribution to Islamic home financing. Gunes and Apaydin (2017) also found that mortgage financing volume is positively correlated with the Industrial Production Index. Furthermore, Pratama and Putri (2022) found that IPI has a significant and positive effect on the distributed credit in both the short and long term.

H1: The Industrial Production Index (IPI) positively and significantly influences Sharia mortgage financing in both the short and long term.

The Relationship between Inflation and Islamic Home Loan Distribution

According to the theory explained by Karim (2007), inflation reduces public interest in saving, meaning that the funds collected by banks decrease, which in turn reduces the allocation of financing by Islamic banks. Rising prices due to inflation lead the public to prioritize their short-term needs, such as daily necessities, while postponing long-term needs, such as housing, resulting in a decrease in the demand for long-term financing like Islamic home loans. Dianty (2022) explains that inflation has a negative impact on Islamic KPR distribution. Boamah (2009) also found that inflation significantly affects the mortgage market. However, Mogaka (2015) and

Pinto (2020) argue that increasing inflation leads to higher credit distribution, indicating that inflation has a positive and significant relationship with home financing and credit.

H2: Inflation negatively and significantly influences Islamic mortgage financing, particularly in the short term.

The Relationship between the BI Rate and Islamic Home Loan Distribution

This Changes in the BI Rate influence home purchases because when interest rates rise, they are followed by an increase in credit interest rates. Higher interest rates discourage the public from seeking KPR financing, thus having a negative impact. This is in line with Rombe (2021) and Dianty (2022), who found that interest rates have a negative and significant effect on KPR financing. However, Yusof (2018) explained that interest rates have a positive impact on home financing.

H3: The BI Rate negatively and significantly influences Islamic mortgage financing in the short term but is not significant in the long term.

The Relationship between Third-Party Funds and Islamic Home Loan Distribution

According to Dendawijaya (2009), third-party funds (DPK) are the largest and most reliable source of funds for banks. These funds are obtained from the public. Banks collect funds from the public in the form of savings, demand deposits, certificates of deposit, time deposits, or similar products. The funds obtained by the bank must be redistributed in the form of financing, which increases the bank's liquidity and enables more financing to be provided to those in need of Islamic home loans. This aligns with research by Olokoyo (2011), Riadi (2018), and Pratiwi and Hindasah (2014), who found that DPK has a significant and positive effect on financing distribution.

H4: Third-Party Funds (DPK) positively and significantly influence Islamic mortgage financing in both the short and long term.

The Relationship between Non-Performing Financing and Islamic Home Loan Distribution

In Islamic banks, non-performing loans are referred to as Non-Performing Finance (NPF), which indicates the quality of a bank's financing. The higher this ratio, the more bank capital is eroded due to the need to reserve larger funds. An increasing amount of non-performing financing can have negative effects on both debtors and creditors. Banks will become more cautious and implement stricter regulations when distributing financing, which can negatively impact the distribution of mortgage loans (KPR). This is consistent with the study by Pratiwi and Hindrasah (2014), which found that NPL has a negative and significant effect on credit distribution. Additionally, Nurdiansyah et al. (2020) explained that NPF has a negative impact on murabaha financing. However, this differs from Martin's (2014) study, which states that non-performing financing has a positive and significant impact on lending.

H5: NPF negatively and significantly influences Islamic home financing in both the short and long term.

The Relationship between Total Assets and the Distribution of Sharia Mortgage Loans

Banks with large assets will find it easier to diversify their assets, allowing them to generate additional income, which in turn results in a greater volume of credit distribution, thus indicating a positive relationship. This is consistent with research conducted by Mogboyin (2012), which shows that total assets have a positive and significant influence on banking credit distribution in Nigeria. This means that the higher the total assets owned by a bank, the greater the financing

that can be distributed by Islamic banks. Furthermore, Sylvia (2022) and Tanjung (2020) also found that total assets have a significant effect on financing.

H6: Total assets positively and significantly influence Islamic home financing in both the short and long term.

III. Methodology

Data

This study adopts a quantitative research approach to empirically analyze the determinants of Islamic home financing in Indonesia. Quantitative research is a method that is concrete/empirical, objective, measurable, rational, and systematic, thus adhering to scientific principles (Sugiyono, 2013). The choice of a quantitative framework is based on the objective of measuring causal relationships between macroeconomic variables and mortgage financing using replicable and statistically verifiable methods.

The researcher used secondary data for this study. These data were obtained from reports published by the Financial Services Authority (OJK), including Islamic banking statistics, as well as from Bank Indonesia and the Central Bureau of Statistics. The time series data used in this study consists of data on the Industrial Production Index (IPI), inflation, BI Rate, Third-Party Funds (DPK), NPF KPR, total assets, and the distribution of mortgage loans by Islamic banks. The study period covers January 2018 to June 2023, with the population comprising all Islamic banks during this timeframe sample taken includes the monthly aggregate data of Islamic banks, namely Islamic Commercial Banks and Sharia Business Units found in the Islamic banking statistics for the period of January 2018 until June 2023, resulting in 66 samples for this study.

Model Development

Pesaran et al. (2001) explain the ARDL analysis model, which includes both short-run and long-run equations. The short-run equation is as follows:

$$KPRSt = c - (1 - \alpha_1) + \alpha_1 IPI_{t-i} + \alpha_2 INF_{t-i} + \alpha_3 BIR_{t-i} + \alpha_4 DPK_{t-i} + \alpha_5 NPF_{t-i} + \alpha_6 TA_{t-i} + \epsilon_t \quad (1)$$

Description: ϵ_t : Adjustment rate; KPRS: Distribution of Islamic mortgage financing; IPI: Industrial Production Index; INF: Inflation; BIR: BI Rate; DPK: Third-Party Funds; NPF: Non-Performing Financing of Islamic mortgages; TA: Total Assets; $\alpha_1 \dots \alpha_6$: Short-run parameters; ϵ_t : Error term

The long-run equation in this study is:

$$KPRSt = c + \beta_1 IPI_t + \beta_2 INF_t + \beta_3 BIR_t + \beta_4 DPK_t + \beta_5 NPF_t + \beta_6 TA_t + v_t \quad (2)$$

Description: c : Constant; KPRS: Distribution of Islamic mortgage financing; IPI: Industrial Production Index; INF: Inflation; BIR: BI Rate; DPK: Third-Party Funds; NPF: Non-Performing Financing of Islamic mortgages; TA: Total Assets; $\beta_1 \dots \beta_6$: Long-run estimation components; v_t : Error term of the long-run model.

Method

The Autoregressive Distributed Lag (ARDL) method is used to observe the influence of independent variables on the dependent variable over time. This method also allows for an analysis of the impact of past values of variable Y on its current value (Gujarati & Porter, 2013). According to the Gujarati (2013) guidelines, ARDL is a regression method for dependent and independent variables, incorporating lags.

The Autoregressive Distributed Lag (ARDL) model was selected based on both statistical considerations and the research context. From a statistical perspective, stationarity test results indicated that the variables were a mix of $I(0)$ and $I(1)$, making the Vector Error Correction Model (VECM) unsuitable, as it requires all variables to have the same order of integration. Alternative methods such as Fully Modified OLS (FMOLS) and Dynamic OLS (DOLS) were not employed because they focus solely on long-run estimation and cannot simultaneously capture short-run dynamics. Meanwhile, the Nonlinear ARDL (NARDL) approach was also considered but ultimately not chosen, as this study does not examine the presence of asymmetric effects.

From the standpoint of the research problem, ARDL allows for the simultaneous estimation of both short-run and long-run relationships between macroeconomic factors and Islamic home financing, which is crucial for understanding both the immediate impact of policies and structural adjustments over time. Moreover, ARDL is effective for relatively small sample sizes, as in this study (66 observations), and is capable of producing unbiased long-run estimates even in the presence of potential endogeneity, provided that the residuals are free from autocorrelation.

The ARDL selected for this study because it offers several advantages over other econometric methods. According to Gujarati and Porter (2012), one key benefit of the ARDL approach is its flexibility in handling variables with different levels of stationarity, whether at level form or first difference. This makes the model less dependent on the stationarity and integration order of the variables. Additionally, the ARDL model does not require all variables to have the same order of integration, allowing its application even when the variables are a mix of $I(0)$ and $I(1)$. Another advantage is that the ARDL model remains effective even with a relatively small sample size, unlike other models that generally require large datasets. Moreover, the ARDL approach enables the estimation and testing of both long-run and short-run relationships simultaneously among the time series variables involved.

IV. Results and Discussions

Result of The Autoregressive Distributed Lag (ARDL)

Stationarity Test (Unit Root Test)

In the ARDL model, the initial stage required is the stationarity test. The stationarity test is conducted using a unit root test as proposed by Dickey and Fuller, specifically the Augmented Dickey-Fuller (ADF) test. Table 2 shows the results of the ADF stationarity test in this study. The stationarity test in Table 2 indicates that not all research variables are stationary at the level stage. A variable is considered to pass the ADF test and be stationary if the probability value is less than

1%, 5%, and/or 10%. Variables that are stationary at the level stage include the industrial production index, which is stationary at the 1% level, and inflation and NPF (Non-Performing Financing) for mortgages, which are stationary at the 10% level. Meanwhile, at the first difference level, all research variables are stationary at that level. KPRS, IPI, BI Rate, DPK, NPF KPR, and TA are stationary at the 1% level, while inflation is stationary at the 10% level. Therefore, it can be concluded that the values of all variables do not contain a unit root at the first difference level, indicating that they can be used for the next testing stage.

Table 2. Lag Length Criteria

No.	Variable	Augmented Dickey Fuller (ADF)			
		At Level	Description	First Difference	Description
1.	KPRS	0.4608	Not stationary	0.0000	Stationary***
2.	IPI	0.0001***	Stationary***	0.0000	Stationary***
3.	Inflation	0.0992*	Stationary*	0.0954	Stationary*
4.	BI Rate	0.5345	Not stationary	0.0057	Stationary***
5.	DPK	0.9316	Not stationary	0.0000	Stationary***
6.	NPF KPR	0.0928	Stationary*	0.0000	Stationary***
7.	TA	0.9934	Not stationary	0.0000	Stationary***

***p-value < 0.01. Stationary at 1% level, **p-value < 0.05. Stationary at 5% level, *p-value < 0.1. Stationary at 10% level.

Lag Optimum Test

The selection of this lag is used as a reference to obtain the best results in the ARDL model. The optimum lag chosen in this study is determined based on the VAR lag length criteria, where the best lag selection results can be identified through the most frequent star marks. The results of the lag length criteria in Table 3 show that the optimum lag is at lag 7 (Table 3).

Table 3. Lag Length Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	1140.359	NA	4.87e-26	-38.41896	-38.17248	-38.32274
1	1604.924	803.1448	3.76e-32	-52.50588	-50.53398*	-51.73613
2	1651.821	69.94813	4.32e-32	-52.43460	-48.73728	-50.99131
3	1705.052	66.76446	4.50e-32	-52.57802	-47.15530	-50.46121
4	1772.782	68.87847*	3.51e-32	-53.21296	-46.06482	-50.42261
5	1848.424	58.97477	2.97e-32	-54.11606	-45.24251	-50.65218
6	1965.610	63.55884	1.17e-32	-56.42747	-45.82851	-52.29006
7	2160.646	59.50239	1.40e-33*	-61.37783*	-49.05346	-56.56689*

Cointegration Bound-Test

Bound-Test Cointegration Test To gain a clearer understanding of the most appropriate and best ARDL model, a diagnostic test through the Bound Test for cointegration is required. The purpose of this test is to determine the existence of a long-term relationship between variables. The results of the Bound-Test Cointegration Test in Table 4 show that the F-statistic value (5.878725) is greater than I (0) and I (1). Thus, it can be concluded that the ARDL model estimation results

can be used as a reference for a significance level of up to $\alpha = 1\%$, indicating a long-term relationship between the variables.

Table 4. Results of the Bound-Test Cointegration Test

Test Statistic	Value	K
F-Statistic	5.878725	6
Significant	I (0) Bound	I (1) Bound
10%	1.99	2.94
5%	2.27	3.28
2,5%	2.55	3.61
1%	2.88	3.99

Assumption Test

This study tests the robustness of regression models by adding the Human Development Index variable. This addition is highly relevant because HDI is strongly correlated with economic growth, as it measures quality of life, education, and health (Singh et al., 2025). By including HDI, we can test whether the relationship between the other main independent variables and economic growth remains consistent and significant. If the results are stable, this will increase confidence that the research findings do not depend solely on the initial model specification. Robust testing confirms that the research findings are robust. The coefficients and significance of the main variables remain consistent. This finding persists when the Human Development Index (HDI) is employed as a control variable. This consistency suggests that the relationship between the primary independent variables and economic growth (GDPG) is stable. This approach precludes the possibility of omitted variable bias resulting from HDI.

Short-Term Analysis

To understand the short-term results of the ARDL model, the (ECM) model can be observed, which is obtained through the general-to-specific method, starting with the maximum lag and then using standard testing procedures. Non-significant ARDL variables are removed, resulting in the simplest outcome (parsimonious regression). This ECM result contains several lags (Table 5.), but this study takes only one example variable to illustrate the general short-term estimation.

Table 5. Short-Term ARDL Model Estimation Results

Variabel	Coefficient	Std. error	t-Statistic	Prob.
D(LN_IPI)	0.029536	0.004750	6.217524	0.0000***
D(INF)	0.784164	0.109711	7.147576	0.0000***
D(BIR)	-1.299978	0.347476	-3.741199	0.0018***
D(LN_DPK)	-0.137957	0.028544	-4.833077	0.0002***
D(NPF_KPR)	2.624549	0.437845	5.994241	0.0000***
D(LN_TA)	0.165645	0.035469	4.670203	0.0003***
CointEq(-1)	-1.056789	0.128528	-8.222246	0.0000***
R-Square	0.965459			

Significance levels are marked as follows: *** for 1%, ** for 5%, and * for 10%.

The short term ARDL estimation results based on the Error Correction Model (ECM) reveal several key findings. The Industrial Production Index (IPI) has a positive and significant impact on the

disbursement of Sharia mortgage financing in the short term, where a 1% increase in IPI leads to a 0.029536% rise in financing. Similarly, inflation also shows a positive and significant effect, with a 1% increase in inflation resulting in a 0.784164% increase in Sharia mortgage financing. Conversely, the BI Rate negatively and significantly influences financing disbursement, indicating that a 1% rise in the BI Rate reduces Sharia mortgage financing by 1.299978%. The variable of Third-Party Funds (DPK) also exerts a significant negative effect, where a 1% increase in DPK decreases the financing by 0.137957%. On the other hand, the Non-Performing Financing (NPF) for mortgages shows a significant positive relationship, with a 1% increase in NPF raising Sharia mortgage financing by 2.624549%. Lastly, Total Assets significantly and positively affect Sharia mortgage financing, as a 1% increase in assets contributes to a 0.165645% increase in financing in the short term.

Long-Term Analysis

The Long term ARDL estimation results reveal varying impacts of the independent variables on the disbursement of Sharia mortgage financing. The Industrial Production Index (IPI) exhibits a significantly positive effect, indicating that a 1% increase in IPI leads to a 0.157590% increase in Sharia mortgage financing in the long term. Inflation also shows a positive effect, although it is not statistically significant, meaning a 1% increase in inflation is associated with an increase of 0.400639% in Sharia mortgage financing, but the effect is not conclusive. Similarly, the BI Rate demonstrates a positive yet insignificant relationship, where a 1% rise in the BI Rate results in a 0.263933% increase in Sharia mortgage financing in the long run. On the other hand, Third-Party Funds (DPK) have a negative but insignificant effect, with a 1% increase in DPK leading to a 0.206138% decrease in Sharia mortgage financing, though the impact is not statistically supported. In contrast, the NPF KPR variable shows a significantly positive relationship, suggesting that a 1% increase in NPF KPR boosts Sharia mortgage financing by 6.175422% in the long term. Lastly, Total Assets show a positive but statistically insignificant influence, with a 1% rise in total assets associated with a 0.181575% increase in Sharia mortgage financing.

Table 6. Long-Term ARDL Model Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_IPI	0.157590	0.038903	4.050846	0.0009***
INF	0.400639	0.269989	1.483907	0.1573
BIR	0.263933	0.400933	0.658296	0.5197
LN_DPK	-0.206138	0.135938	-1.516412	0.1489
NPF_KPR	6.175422	1.491667	4.139947	0.0008***
LN_TA	0.181575	0.202691	0.895824	0.3836
C	0.010076	0.001326	7.599610	0.0000

Significance levels are marked as follows: *** for 1%, ** for 5%, and * for 10%.

Correlation Test

The correlation analysis reveals varying degrees of relationship between the studied variables and Sharia mortgage financing distribution. It can be concluded that IPI has a very low level of relationship, inflation has a low level of relationship, BI Rate has a low level of relationship, DPK has a very strong level of relationship, NPF KPR has a low level of relationship, and total assets have a very strong level of relationship.

Table 7. Correlation Between Variable in Model Estimation

	LN IPI	INF	BIR	LN DPK	NPF KPR	LN TA	LN KPRS
LN IPI	1.00	0.36	0.13	0.14	-0.47	0.14	0.13
INF	0.36	1.00	0.46	0.31	-0.30	0.32	0.29
BIR	0.13	0.46	1.00	-0.29	-0.09	-0.27	-0.27
LN DPK	0.14	0.31	-0.29	1.00	-0.34	0.99	0.99
NPF KPR	-0.47	-0.30	-0.098	-0.34	1.00	-0.35	-0.31
LN TA	0.14	0.32	-0.27	0.99	-0.35	1.00	0.99
LN KPRS	0.13	0.29	-0.27	0.99	-0.31	0.99	1.00

These test results indicate that DPK and Total Assets are correlated with the KPRS variable. Nevertheless, this study still examines the effect of total assets on the disbursement of Sharia mortgage financing because it is known that total assets are an indicator determining the contribution of national banking and as a quantitative indication of the size of a bank (Haryono et al., 2003). Banking assets are a measure of how much market share a bank holds in the economy. Banks with larger assets have a greater chance of generating high profits if followed by their operational activities, such as disbursing credit. According to Kasmir (2008), DPK can influence credit disbursement because it provides the largest contribution to funds collected by financial units. Thus, redistributing these funds to the public is a banking activity after collecting funds from the public. Based on this theory, the author seeks to understand the specific relationship between third-party funds and the disbursement of Sharia mortgage financing.

Additionally, total assets and third-party funds are components that allow a bank to operate or run its business activities. Financing is a component that generates a bank's profit; without these components, a bank cannot operate properly, which affects its business activities (Tanjung, 2020). Therefore, the researcher is keen to investigate the influence of DPK and total assets on Sharia mortgage financing. It is also known from previous studies, such as the research conducted by Mogboyin (2012), that total assets have a positive and significant effect on the disbursement of bank credit in Nigeria. This means that the higher the total assets owned by a bank, the greater the financing that can be provided by Islamic banks. Additionally, Sylviah and Maika (2022), Tanjung (2020), as well as Indupurnahayu and Prasetyowati (2018), also found that total assets have a significant impact on Islamic bank financing. This indicates that many researchers have focused on studying the influence of total assets on financing in general or credit in conventional banks. Therefore, the researcher aims to understand the influence of total assets and third-party funds (DPK) on the disbursement of financing, specifically for Sharia mortgage financing, to contribute to the existing literature and knowledge.

Discussion

Industrial Production Index on Sharia Mortgage Financing Distribution

The ARDL test results show that the IPI, in both the short and long run, has a significant positive effect on the distribution of Sharia mortgage financing, consistent with Anggraini and Nugroho (2021). As a proxy for GDP, the IPI reflects real sector output; thus, its increase indicates rising productivity and financing demand (Kusumawati, 2013; Qoyum & Fauziyah, 2018). This condition makes Islamic banks more optimistic in channeling financing, including mortgages, which

constitute the largest segment (Halimah et al., 2018). These findings are reinforced by Gunes and Apaydin (2017) and Pratama and Putri (2022), who also demonstrated a positive relationship between IPI and construction financing or credit. Theoretically, increased industrial activity drives capital demand, aligning with the intermediation role of Islamic banks in channeling both productive and consumptive financing.

Inflation on Sharia Mortgage Financing Distribution

Inflation has a significant positive effect in the short run but an insignificant effect in the long run. In the short term, rising inflation can stimulate investment in the real sector, particularly in property, thereby increasing the demand for Sharia mortgage financing (Nahar & Sarker, 2016; Adebola et al., 2011). Mild inflation (<10%) in Indonesia, according to Boediono (2008), provides economic certainty, encouraging consumption, savings, and investment (Mankiw in Meita & Widoyo, 2016; Hariyanto, 2012), which in turn drives mortgage financing growth (Mogaka, 2015; Pinto, 2020; Prasetyo, 2018; Rifa'i et al., 2017). From an Islamic finance perspective, excessive consumerism can potentially trigger inflation; therefore, the principle of moderation, as explained in QS. Al-A'raaf: 31, is relevant in maintaining demand balance. In the long run, inflation's influence becomes insignificant due to price control measures and economic stabilization policies (Sari & Abundanti, 2016; Hasanuddin & Prihatiningsih, 2010; Tomak, 2013; Al-Kilani & Kaddumi, 2015; Dewi, 2016).

BI Rate on the Distribution of Sharia Mortgage Financing

The ARDL estimation results indicate that the BI Rate has a significantly negative effect on Sharia mortgage financing in the short run, but a positive and insignificant effect in the long run. In the short term, an increase in the BI Rate reduces mortgage demand due to higher margins in murabahah contracts, which are often benchmarked against conventional interest rates despite the prohibition of *riba* in Islamic finance (QS Ali 'Imran: 130; QS Ar-Rum: 39), thus raising financing costs. This aligns with the loanable funds theory (Mankiw, 2013), which posits that higher interest rates reduce borrowing and increase savings, and is supported by the findings of Irakawati (2017), Rombe (2021), Dianty (2022), and Cahya and Mubarakah (2023). The dominance of murabahah contracts in Sharia mortgage financing (Hardjono, 2008) makes it sensitive to benchmark rate movements under Indonesia's dual banking system.

In the long run, the positive but insignificant effect of the BI Rate reflects policy adjustments, such as Bank Indonesia's relaxation of the financing-to-value ratio (Yusof, 2016) and internal bank strategies (e.g., adjusting profit-sharing ratios) that help sustain financing despite higher benchmark rates. However, funds may be reallocated to lower-risk sectors, reducing the impact on mortgage financing. Religious loyalty among customers also dampens the sensitivity to BI Rate changes, consistent with the findings of Ardiansyah et al. (2019), Pratama (2010), and Merung (2013).

Third-Party Funds on the Distribution of Sharia Mortgage Financing

Third-Party Funds (DPK) have a significantly negative effect in the short run and an insignificant effect in the long run. The short-term negative effect is due to maturity mismatch, as DPK, predominantly short-term deposits, are less suited for long-term mortgage financing, prompting banks to limit allocations in order to avoid liquidity risks (BPKP, 2016; Indonesian Bankers

Association, 2015). This finding is consistent with Lintang and Rizal (2015), Anisa and Triuspitorini (2019), Putri and Setyowati (2023), and Puspita et al. (2022). In the long run, banks may channel DPK into safer instruments such as SWBI or PUAS or apply prudential principles to murabahah-based financing (OJK), resulting in an insignificant effect. Similar results are reported by Silviah & Maika (2022), Pujiana (2015), Setiawan et al. (2023), and Satria & Subegti (2010).

NPF on the Distribution of Sharia Mortgage Financing

The ARDL test results show that the Non-Performing Financing (NPF) ratio for mortgages has a significantly positive effect in both the short and long run, supporting the research hypothesis. This positive direction indicates that an increase in mortgage NPF does not necessarily hinder the distribution of Sharia mortgages, as the NPF ratio for Islamic banks during 2018–2023 remained relatively low (2–3%), well below Bank Indonesia's healthy threshold of 5%. This condition allows the capital adequacy ratio to sufficiently cover potential losses, enabling Islamic banks to continue financing activities.

Another contributing factor is the relatively young nature of the Islamic banking industry, which tends to be expansionary, including through partnerships with property developers and government-backed housing subsidies. In 2023, the government increased its mortgage subsidy quota (PUPR) by financing 12,072 Tapera units worth IDR 1.5 trillion and 229,000 Tapera FLPP units worth IDR 25.18 trillion, up from 220,000 units in 2022. These programs have encouraged mortgage distribution despite rising NPF levels, including to low-income groups in the post-COVID-19 period.

Additionally, mortgage asset securitization (BI, 2017) has become a new source of liquidity, addressing maturity mismatch and enabling financing expansion. Collateral rights under Law No. 5/1960 and the Mortgage Law (UUHT) give banks the legal right to execute collateral in the event of default, thus managing risk. These findings are consistent with Martin et al. (2014), Widarjono and Minasam (2023), and Arnan (2019), all of whom found a significantly positive effect of NPF on Islamic bank financing, including murabahah contracts.

Total Assets on the Distribution of Sharia Mortgage Financing

The ARDL results indicate that total assets have a significantly positive effect in the short run but a positive and insignificant effect in the long run, leading to the rejection of the initial hypothesis. In the short term, total assets reflect the resource capacity and confidence of banks to distribute Sharia mortgages. Banks with larger assets have higher liquidity and greater flexibility in fund allocation, consistent with the findings of Mogboyin (2012), Sylviah and Maika (2022), Tanjung (2020), and Indupurnahayu and Prasetyowati (2018).

However, in the long term, larger assets do not automatically increase Sharia mortgage financing because portfolio diversification, such as into working capital financing, can divert funds away from the housing sector. This finding aligns with Haas et al. (2010) and Shen et al. (2009), who found that total assets have no significant effect on housing finance or credit distribution in general.

V. Conclusion and Recommendation

This study employed a quantitative approach using the Autoregressive Distributed Lag (ARDL) method to examine the short- and long-term determinants of Islamic mortgage financing in Indonesia. The findings reveal that the Industrial Production Index (IPI) and non-performing financing (NPF) of Islamic mortgages significantly and positively affect the disbursement of Islamic mortgage financing in both the short and long term. Inflation has a significant positive influence only in the short term, while the BI Rate shows a significant negative effect in the short term but becomes statistically insignificant in the long run. Third-party funds (DPK) exhibit a significant negative impact in the short term and an insignificant negative impact in the long term. Total assets positively influence Islamic mortgage financing in the short term but show no significant effect in the long run. These findings contribute to the literature by integrating macroeconomic and bank-specific factors in analyzing Islamic mortgage financing dynamics.

However, this study has limitations, including the exclusive use of secondary aggregate data, which may not capture variations across individual banks. Future research may consider panel data analysis across individual Islamic banks or regions to provide more granular insights. Based on the findings, it is recommended that policymakers closely monitor macroeconomic indicators such as inflation and interest rates, as they significantly affect the demand for Islamic home financing. For Islamic banks, maintaining asset quality and managing non-performing financing (NPF) are essential to sustain financing growth. Moreover, optimizing the use of third-party funds (DPK) and improving asset efficiency are crucial to strengthening financing capacity. In the future, embracing digitalization initiatives and enhancing financial inclusion should also be considered as strategic efforts to expand access to Sharia-compliant home financing products.

Author Contributions

Conceptualization, A.D.R. and L.N.R.; Methodology, A.D.R.; Investigation, A.D.R. and L.N.R.; Analysis, A.D.R. and L.N.R.; Original draft preparation, A.D.R. and L.N.R.; Review and editing, L.N.R.; Visualization, L.N.R.; Supervision, L.N.R.; Project administration, A.D.R. and L.N.R.

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Conflicts of Interest

The authors declare no conflict of interest.

References

Adebola et. al. (2011). The Impact of Macroeconomic Variables On Islamic Banks Financing In Malaysia. *Research Journal of Finance and Accounting*, 2(4)

- Amalia, R. Y., Fauziah, S., & Wahyuningsih, I. (2019). Pengaruh keuangan syariah terhadap pertumbuhan ekonomi dan indeks pembangunan manusia di Indonesia. *AL-MUZARA'AH*, 7(1), 33-46.
- Anggraini, A., and R. Y. Y. Nugroho. (2021). Faktor Internal Dan Eksternal Yang Mempengaruhi Pembiayaan Bank Pembiayaan Rakyat Syariah (Periode 2011 – 2019). *Jurnal Iqtisaduna*, 7(1), pp. 27-39, doi:10.24252/iqtisaduna.v7i1.20420.
- Annisa, L. N., & Yaya, R. (2015). Pengaruh dana pihak ketiga, tingkat bagi hasil dan non performing financing terhadap volume dan porsi pembiayaan berbasis bagi hasil pada perbankan Syariah di Indonesia. *Share: Jurnal Ekonomi dan Keuangan Islam*, 4(1), 79-104.
- Anisa, L. S., & Tripuspitorini, F. A. (2019). Analisis Pengaruh Dana Pihak Ketiga, Non Performing Finance Murabahah, dan Inflasi terhadap Pembiayaan Murabahah pada Bank Umum Syariah di Indonesia. *Jurnal Maps (Manajemen Perbankan Syariah)*, 3(1), 52-64.
- Apridar (2018). *Ekonomi Internasional : Sejarah, Teori, Konsep dan Permasalahan dalam Aplikasinya*. Yogyakarta: Expert.
- Arafat (2009). Faktor penyebab krisis finansial global 2008 serta akses krisis terhadap tatanan ekonomi global. Tesis tidak diterbitkan. Jakarta: Universitas Indonesia.
- Arnan, S. G., & Kurniawasih, I. (2014). Pengaruh jumlah dana pihak ketiga dan tingkat non-performing financing terhadap pembiayaan mudharabah pada bank umum syariah di Indonesia. In *Seminar Nasional Ekonomi dan Bisnis* (pp. 1-6).
- Arnan, S. G., Setiawati, S., & Brata, I. O. D. (2019). THE THIRD PARTY FUND AND NON-PERFORMING FINANCING (NPF) EFFECT ON MURABAHAH FINANCING IN ISLAMIC COMMERCIAL BANKS IN INDONESIA 2015-2017.
- Auliya, N. H., Andriani, H., Fardani, R. A., Ustiawaty, J., Utami, E. F., Sukmana, D. J., & Istiqomah, R. R. (2020). *Metode penelitian kualitatif & kuantitatif*. CV. Pustaka Ilmu.
- Badan Pusat Statistik. Diakses di <https://www.bps.go.id/id/statistics-table/2/ODgjMg==/ibsbulan--2010-100-.html> Pada 29 November 2023.
- Bank Indonesia. Diakses di <https://www.bi.go.id/id/moneter/bi-7day-RR/data/Contents/Default.aspx> Pada 29 November 2023.
- Bank Indonesia. Diakses di <https://www.bi.go.id/id/statistik/indikator/data-inflasi.aspx>. Pada 29 November 2023.
- Boediono (2001). *Ekonomi Makro (Seri Sinopsis Pengantar Ilmu Ekonomi No.2)*. Edisi 4. Yogyakarta: BPFE UGM.
- Cahya, N., & Mubarakah, I. (2023). Effect of BI-7 Day Reverse Repo Rate and Inflation on Financing of Murabahah Contracts at Islamic Commercial Banks (2018-2021 Period). *Jurnal Ilmiah Wahana Pendidikan*, 9(1), 299-309. <https://doi.org/10.5281/zenodo.7527583>
- De Haas, R., Ferreira, D., & Taci, A. (2010). What determines the composition of banks' loan portfolios? Evidence from transition countries. *Journal of Banking & Finance*, 34(2), 388-398.

- Dendawijaya, L. (2005). *Manajemen Perbankan Edisi 2*. Bogor: Penerbit Ghalia Indonesia.
- Dendawijaya, L. (2009). *Manajemen Perbankan*. Jakarta: Ghalia Indonesia.
- Dianty, H. N., Nursyamsiah, T., & Hasanah, Q. (n.d.). (2022). Pengaruh Guncangan Makroekonomi dan Kebijakan Pelonggaran Financing to Value terhadap Penyaluran KPR Syariah di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 8(03), 2725–2732. <https://doi.org/10.29040/jiei.v8i3.6360>
- Darma, E. S., & Rita, R. (2011). Faktor-Faktor Yang Berpengaruh Terhadap Tingkat Pengguliran Dana Bank Syariah. *Journal of Accounting and Investment*, 12(1), 72-87.
- Erick S Yahya, & Supandi Rahman. (2021). Determinant Inflation on Murabahah Financing in Sharia Banks in Indonesia 2015-2019. *Mutanaqishah: Journal of Islamic Banking*, 1(1), 39–49. <https://doi.org/10.54045/mutanaqishah.v1i1.5>
- Fadhilah, N., & Sukmana, R. (2017). Pengaruh sertifikat bank indonesia syariah (SBIS), jakarta islamic index (JII), Tingkat inflasi, dan index harga saham gabungan (IHSG) terhadap nilai tukar: pendekatan autoregressive distributed lag (ARDL). *Jurnal ekonomi syariah teori dan terapan*, 4(10), 315203.
- Firmansyah, M. A. (2019). *Manajemen Bank Syariah*. <https://www.researchgate.net/publication/333194576>
- Gujarati, Damodar N, & Dawn C. Porter. (2012). *Dasar-dasar Ekonometrika*. Edisi 5. Jakarta: Salemba Empat
- Gujarati, Damodar N, (2004). *Basic Econometrics*, Fourth edition, Singapore. McGraw-Hill Inc.
- Gujarati, Damodar N. dan Dawn C. Porter. (2013). *Dasar-Dasar Ekonometrika*; Edisi 5, Buku 1. Jakarta: Salemba Empat.
- Gujarati, Damodar. (2009). *Dasar-Dasar Ekonometrika Edisi 5*. Jakarta: Salemba empat
- Güneş, T., and Apaydin, A. (2021). Mortgage volume and macroeconomic factors: Evidence from Turkey. *Business & Management Studies: An International Journal*, 9(4), 1504-1520.
- Hardani, et al. (2020). *Metode Penelitian Kualitatif & Kuantitatif*. Yogyakarta: CV.Pustaka Ilmu Grup
- Hardjono (2008). *Mudah Memiliki Rumah Lewat KPR*. Jakarta: PT. Pustaka Grahatama
- Herianingrum, S.; Ratnasari, R. T.; Widiastuti, T.; Mawardi, I.; Rachmi, R. C.; Fadhilillah, H. (2019). The impact of Islamic bank financing on business, Entrepreneurship and Sustainability Issues 7(1): 133-145. [http://doi.org/10.9770/jesi.2019.7.1\(11\)](http://doi.org/10.9770/jesi.2019.7.1(11))
- Hidayat, M. R., & Herianingrum, S. (2018). Kebijakan Financing To Value, Financing To Deposit Ratio Dan Pengaruhnya Terhadap Pembiayaan Rumah Di Jawa Timur Tahun 2013-2015. *Jurnal Ekonomi Syariah Teori dan Terapan*, 5(4), 280-290.
- Hubbard r.G. (1997). *Money, The Financial System and The Economi*. 2nd Ed. Hal. 141-142
- Ikramina, C., & Sukmaningrum, P. S. (2021). Macroeconomic Factors on NonPerforming Financing In Indonesian Islamic Bank: Error Correction Model Approach. *Jurnal Ekonomi dan Bisnis*

- Islam (Journal of Islamic Economics and Business), 7(1), 34.
<https://doi.org/10.20473/jebis.v7i1.23647>
- Indupurnahayu., & Prasetyowati, R. A. (2018). Lending Growth As A Fiqh Implication Toward Product Development Of Islamic Bank In Indonesia. *Archives of Business Research*, 6(9), 122-133.
- Irakawati (2017). Analisis Pengaruh Loan To Value dan Financing To Value Terhadap Permintaan Kredit Pemilikan Rumah di Indonesia [skripsi]. Yogyakarta (ID). Universitas Muhammadiyah Yogyakarta
- Karim, Adiwarman. (2007). *Ekonomi Makro Islam*. Edisi kedua. Jakarta:PT Raja Grafindo persada.
- Karim, Adiwarman. (2016). *Bank Islam: Analisis Fiqh dan Keuangan*. Rajawali Prs. Jakarta.
- Kasmir. (2002). *Dasar-Dasar Perbankan*. PT Raja Grafindo Persada. Jakarta
- Kasmir. (2012). *Bank dan Lembaga Kuangan Lainnya*. Jakarta: PT. Raja Grafindo Persada
- Kasmir. (2014). *Bank dan Lembaga Keuangan Lainnya*. Jakarta: Raja GrafindoPersada
- Kementrian Agama RI. (2022). Al-quran dan terjemahannya (online). (<https://quran.kemenag.go.id>, diakses pada 19 Desember 2023).
- Kementrian Keuangan RI. Publikasi, (Online). (<https://fiskal.kemenkeu.go.id/publikasi/siaran-pers-detil/456>, diakses pada 22 Desember 2023)
- Kong, Q., Peng, D., Ni, Y., Jiang, X., & Wang, Z. (2021). Trade openness and economic growth quality of China: Empirical analysis using ARDL model. *Finance Research Letters*, 38, 101488.
- Kusumawati (2013). Analisis Pembiayaan Sektor Konstruksi Pada Perbankan Syariah di Indonesia. *Jurnal Al-Muzara'ah*, 1 (2).
- Latifa N. (2016). Analisis Penerapan Akad Murabahah dan Faktor-Faktor yang Memengaruhi Pendapatan Margin Murabahah pada KPR Syariah (Studi Kasus Bank BNI Syariah Cabang Bogor) [skripsi]. Bogor (ID). Institut Pertanian Bogor
- Latumaerissa, Julius R. (2011). *Bank Dan Lembaga Keuangan Lain*. (Jakarta: Salemba Empat.
- Maika, N. M. (2022). Pengaruh Total Aset dan DPK Terhadap Pembiayaan Bank Mega Syariah Periode Tahun. *Jurnal Ilmiah Ekonomi Islam*, 8(03), 3662–3669.
<https://doi.org/10.29040/jiei.v8i3.6819>
- Mankiw, N. G. (2013). *Pengantar Ekonomi Makro*,. Jakarta: Penerbit Salemba Empat
- Mankiw, N.Gregory. (2007). *Makroekonomi*, Edisi Keenam. Jakarta: Erlangga
- Martin, L. E., Saryadi, S., & Wijayanto, A. (2014). Pengaruh Capital Adequacy Ratio (Car), Loan To Deposit Ratio (Ldr), Non Performing Loan (Npl), Return On Asset (Roa), Net Interest Margin (Nim), dan Biaya Operasional Pendapatan Operasional (Bopo) terhadap Pemberian Kredit (Studi Kasus pada Pd. Bpr Bkk P. *Jurnal Ilmu Administrasi Bisnis*, 3(2), 234-245.

- Maruddani, D.A.I. (2004). Estimasi Parameter Model Regresi Non Stationer Dengan variabel Dependen Lag, Studi Kasus Pada Perkembangan Ekspor Indonesia ke Jepang Tahun 1980-2000. Skripsi Diterbitkan. Semarang: Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Diponegoro.
- Mogaka, A. J., Kiweu, J. M., & Kamau, R. G. (2015). The influence of macro economic factors on mortgage market growth in Kenya.
- Mohd Yusof, R., Usman, F. H., Mahfudz, A. A., & Arif, A. S. (2018). Macroeconomic shocks, fragility and home financing in Malaysia: can rental index be the answer?. *Journal of Islamic Accounting and Business Research*, 9(1), 17-44.
- Iryanto, M. (2018). *Analisis Kontribusi Pembiayaan Perbankan Syariah Terhadap Pertumbuhan Ekonomi Di Indonesia* (Master's thesis, Universitas Islam Indonesia).
- Muhammad, dkk (2006). Bank Syariah: Analisis Kekuatan, Kelemahan, Peluang, dan Ancaman. Yogyakarta: Ekonisia.
- Nahar S, Sarker N. (2016). Are Macroeconomic Factors Substantially Influential For Islamic Bank Financing? Cross-Country Evidence. *Journal of Business and Management*. 18(6):20-27.
- Nasution (2018). Manajemen Pembiayaan Bank Syariah. Sumatera : FEBI UIN-SU Press.
- Nurdiansyah, D. H., Harahap, M. N., & Hotimah, N. (2020). "The Third Party Funds and Non Performing Financing Rate on Murabahah". *MIMBAR : Jurnal Sosial Dan Pembangunan*, 36(1), 209–218. <https://doi.org/10.29313/mimbar.v36i1.5665>
- Nurjaya, Endang. (2011). Analisis Pengaruh Inflasi, SWBI, NPF, dan DPK terhadap Pembiayaan Murabah Pada Bank Syariah di Indonesia (Periode Januari 2007-Maret 2011). Jakarta : Skripsi UIN Syarif Hidayatullah.
- Nuryadi, et al. (2017). Dasar-Dasar Statistik Penelitian. Yogyakarta: Sibuku Media.
- Olokoyo, F. O. (2011). Determinants of Commercial Banks' Lending Behavior in Nigeria. *International Journal of Financial Research*, 2(2). <https://doi.org/10.5430/ijfr.v2n2p61>
- Otoritas Jasa Keuangan. 2018. Statistik Perbankan Syariah Indonesia - Desember 2018. Diakses di <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Pages/statistik-perbankan-syariah-Desember-2018.aspx>. Pada 29 November 2023.
- Otoritas Jasa Keuangan. 2019. Statistik Perbankan Syariah Indonesia. Diakses di <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Pages/statistik-perbankan-syariah-Desember-2019.aspx>. Pada 29 November 2023.
- Otoritas Jasa Keuangan. 2020. Statistik Perbankan Syariah Indonesia. Diakses di <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Pages/Statistik-Perbankan-Syariah---Desember-2020.aspx>. Pada 29 November 2023.
- Otoritas Jasa Keuangan. 2021. Statistik Perbankan Syariah Indonesia - Desember 2021.

- Diakses di <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Pages/Statistik-Perbankan-Syariah---Desember-2021.aspx>. Pada 29 November 2023.
- Otoritas Jasa Keuangan. 2022. Statistik Perbankan Syariah Indonesia - Desember 2022. Diakses di <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Pages/Statistik-Perbankan-Syariah---Desember-2022.aspx>. Pada 29 November 2023.
- Otoritas Jasa Keuangan. 2023. Statistik Perbankan Syariah Indonesia –Juni 2023. Diakses di <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Pages/Statistik-Perbankan-Syariah---Juni-2023.aspx>. Pada 29 November 2023.
- Otoritas Jasa Keuangan. Kajian Perlindungan Konsumen Sektor Jasa Keuangan: Kredit Pemilikan Rumah. Online. (www.ojk.go.id, diakses pada 23 Desember 2023)
- Otoritas Jasa Keuangan. Statistik Perbankan Indonesia 2014 - 2019.
- Peasaran, et al. (2001). Bound Test Approaches To The Analysis of Level Relationship. *Journal of Economics and Finance In Indonesia* 53(3), 289- 326.
- Pinto, N. G. D. C. G., Bagiada, K., & Parameswara, A. A. G. (2020). Pengaruh DPK, NPL dan Inflasi Terhadap Penyaluran Kredit Pada PT. Bank Mandiri Periode Tahun 2014 – 2018. *Warmadewa Economic Development Journal (WEDJ)*, 3(2), 73–79. <https://doi.org/10.22225/wedj.3.2.2319.73-79>
- Pratama, D., & Putri, P. (2022). Determinants of Bank Credit in Indonesia. *Efficient: Indonesian Journal of Development Economics*, 5(3), 254-266. <https://doi.org/10.15294/efficient.v5i3.54629>
- Pratiwi, S., & Hindasah, L. (2014). Pengaruh dana pihak ketiga, capital adequacy ratio, return on asset, net interest margin dan non performing loan terhadap penyaluran kredit bank umum di Indonesia. *Jurnal Manajemen Bisnis*, 5(2), 192-208.
- Pujiana, A. (2015). Pengaruh DPK, CAR, NPF, ROA terhadap pembiayaan perbankan syariah. 110(5), 2748–2755.
- Puspita, D., Barnas, B., & Purbayati, R. (2022). Pengaruh Dana Pihak Ketiga, Non Performing Financing, dan Inflasi terhadap Pembiayaan Mudharabah pada Bank Umum Syariah. *Journal of Applied Islamic Economics and Finance*, 2(3), 502-514. <https://doi.org/10.12928/jaief.v2i3.3051>
- Qoyum, Abdul & Fauziyah, N. (2018). In Search for Islamic Macroprudential Policy in Indonesia: The Case of Financing to Value (FTV) and Property Financing. *Journal of Islamic Economics, Finance, and Banking*, 1(1&2), 1-20. <https://doi.org/10.12928/ijief.v1i1.284>
- Rahadian, S., Djati, R., & Kamal, M. (2017). Analisis Pengaruh ROA, NPL, Suku Bunga Bank Indonesia (BI Rate), dan Pertumbuhan Ekonomi (GDP) Terhadap Penyaluran Kredit KPR (Studi Pada Bank Persero Periode 2011-2015). *DIPONEGORO JOURNAL OF MANAGEMENT*, 6(3), 1–7. <http://ejournal-s1.undip.ac.id/index.php/dbr>

- Rani, L. N. (2013). Analisis faktor – faktor yang mempengaruhi non performing financing (NPF) pada perbankan syariah di Indonesia (Periode Januari 2003 – Maret 2013). Tesis tidak diterbitkan. Surabaya: Universitas Airlangga
- Riadi, S. (2018). The Effect Of Third Parties Fund, Non Performing Loan, Capital Adequacy Ratio, Loan To Deposit Ratio, Return On Assets, Net Interest Margin And Operating Expenses Operating Income On Lending (Study In Regional Development Banks In Indonesia). Proceedings Of The International Conference On Industrial Engineering And Operations Management, 6(8), 1015–1026.
- Ridzuan, Abdul Rahim. (2019). Workshop On Time Series Econometrics. Surabaya: Universitas Airlangga.
- Rifa'i, Syukuri Ahmad, et al. (2017). Analisis Pengaruh Kurs Rupiah, Laju Inflasi, Jumlah Uang Beredar dan Pertumbuhan Ekspor terhadap Total Pembiayaan Perbankan Syariah dengan Dana Pihak Ketiga sebagai 11 Variabel Moderating. MUQTASID Jurnal Ekonomi dan Perbankan Syariah, 8(1).
- Rombe, J. B., Rotinsulu, T. O., & Maramis, M. T. B. (2021). Analisis Pengaruh Suku Bunga Kpr Dan Produk Domestik Bruto Terhadap Penyaluran Kpr Di Indonesia Tahun 2014: Q1 – 2020: Q4. *Jurnal Berkala Ilmiah Efisiensi*, 21(7).
- Santoso, B., & Adhito, A. (2013). *Jangan Ambil KPR Sekarang!*. Elex Media Komputindo.
- Sekretariat Kabinet RI. Publikasi Perkembangan Indeks Harga Konsumen/Inflasi. (Online). (<https://setkab.go.id/bps-inflasi-maret-2020-cukup-terkendali/>, diakses pada tanggal 1 Januari 2024).
- Shafiyah, M. Faridarus. S. (2013). Pengaruh Instrumen Moneter Syariah Terhadap Pembiayaan Investasi di PT Bank Muamalat Indonesia Tbk. Skripsi Diterbitkan. Bogor: Fakultas Ekonomi dan Manajemen Institut Pertanian Bogor.
- Shen, Y., Shen, M., Xu, Z., & Bai, Y. (2009). Bank Size and Small-and-Medium-Sized Enterprise (SME) Lending: Evidence from China. *World Development*, 37, 800-811. <https://doi.org/10.1016/j.worlddev.2008.07.014>
- Sholihin, A. I. (2015). *Ini Lho Bank Syariah*. Gramedia Pustaka Utama.
- Silviah, N. M., & Maika, M. R. (2022). Pengaruh Total Aset dan DPK Terhadap Pembiayaan Bank Mega Syariah Periode Tahun 2017-2021. *Jurnal Ilmiah Ekonomi Islam*, 8(03), 3662-3669. doi: <http://dx.doi.org/10.29040/jiei.v8i3.6819>
- Sudarsono, Heri. (2008). Bank dan Lembaga Keuangan Syariah. Yogyakarta: Ekonisia. Cetakan ke 2
- Sugiyono (2017). Metode. Metodologi Penelitian Kuantitatif, kualitatif, dan R&D. Bandung: Alfabeta, CV.
- Sugiyono (2013). Metodologi Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta
- Sukirno, Sadono. (2013). Makro Ekonomi, Teori Pengantar. Penerbit PT. Raja Grafindo Persada, Jakarta.

- Suparmono, Suparmono. (2018). Pengantar Ekonomi Makro (Teori, Soal Dan Penyelesaiannya). Yogyakarta: UPP STIM YKPN
- Tanjung, A. N. M. (2020). Pengaruh Total Aset Dan Dana Pihak Ketiga Terhadap Pembiayaan Pada Bank Muamalat Indonesia. *Al-Sharf: Jurnal Ekonomi Islam*, 1(2)., 1(2), 228–249. <https://doi.org/10.30596/al-sharf.v>
- Undang-Undang No.21 Tahun 2008 Tentang Perbankan Syariah. Bank Indonesia., 2008.
- Undang-Undang Nomor 10 Tahun 1998 Tentang Perbankan. Pemerintah RI., 1998.
- Widarjono, A., & Misanam, M. (2023). Bank Stability, Covid-19, and Islamic Bank Financing in Indonesia. *Jurnal ilmiah ekonomi islam*, 9(02), 2899-2906. doi: <http://dx.doi.org/10.29040/jiei.v9i2.8131>
- Wiroso (2011). Produk Perbankan Syariah. Jakarta:LPEE Usakti.
- Yudatama, D. S., & Fafurida, F. (2022). The Determinants of Carbon Dioxide Emissions in the five Asia Pacific Countries. *Efficient: Indonesian Journal of Development Economics*, 5(3), 242–253. <https://doi.org/10.15294/efficient.v5i3.54738>
- Zulhidia, G. (2015). Faktor-faktor yang mempengaruhi besaran pembiayaan sektor industri pengolahan pada Pembiayaan Rakyat Syariah di Indonesia. Dissertation.Bogor Agricultural University.