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The Impact of Exchange Rates and Net Operating Margin on Murabaha Financing in Islamic Commercial Banks in Indonesia Period 2019-2022

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A B S T R A C T

This study aims to investigate the impact of exchange rates and net operating margins on murabaha financing at Islamic Commercial Bank (BUS) companies in Indonesia during the 2019-2022 period. The research method used is descriptive quantitative with an associative approach. The research data were obtained from the financial statements of murabaha financing at BUS companies in Indonesia for the four years. The research sample consists of 48 monthly financial reports selected saturated from time series data. The data collection process was carried out through observation and documentation of available financial reports. The collected data were then analyzed using multiple linear regression analysis with the help of IBM SPSS 20 software. The results showed that partially, the exchange rate has a positive and significant influence on murabaha financing. This means that when the exchange rate strengthens, murabaha financing in BUS companies tends to increase. Conversely, the net operating margin has a negative and significant effect on murabaha financing, which means that the higher the net operating margin, the murabaha financing tends to decrease. Simultaneously, the exchange rate and net operating margin have a significant effect on murabaha financing.

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INTRODUCTION

In the current era of globalization, human life is increasingly diverse, covering a variety of needs ranging from basic daily needs to other levels of basic needs. Banking plays an important role in driving the economy (Purwadinata & Batilmurik, 2020). Strategically, banks function as *financial intermediaries*, which are places where public funds can be collected and distributed efficiently. Banking institutions are institutions that have strategic value in a country's economy. Banks also support economic growth by providing credit and financing services to businesses and individuals. (Amin Akbar et al., 2022).. Banks assist in financial stability by managing risk and providing liquidity to the market. Through various products and services, banks play a role in improving people's welfare and promoting sustainable economic development.

Banking institutions have a strategic value in a country's economy because of their role as intermediaries between those who need funds and those who have more funds. In Indonesia, the banking sector continues to develop and experience continuous progress. Many new Islamic banks are emerging and growing rapidly, along with increasingly clear market conditions and existence. (Supiah Ningsih, 2021). This shows that the banking sector in Indonesia does not only consist of conventional banks, but also Islamic banks which are increasingly developing and making a significant contribution to advancing people's lives. Islamic Commercial Banks need sufficient capital to encourage business growth. Capital stability and business scale must be maintained so that banks can expand their business. The capital adequacy of a bank is measured through a comparison between capital and bank performance factors that reflect the bank's ability to maintain adequate capital. This aspect of capital adequacy is very important for the sustainability of bank operations. (Anisma, 2012).

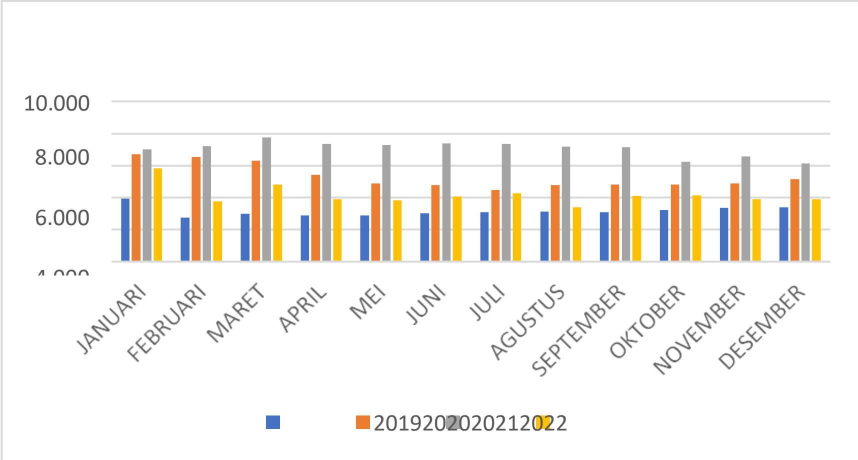
Murabahah financing is a form of financing based on sharia principles in Islam. This financing involves selling an asset to a customer at a pre-agreed profit margin. In Murabahah financing, the bank or financial institution purchases the asset desired by the customer, then sells it to the customer at a price that reflects the agreed profit margin. This system of determining the margin allows for transparency in Murabahah, as the cost and profit are agreed upon between both parties. *Bai'al Murabahah* is a contract for the sale and purchase of an item at an agreed price plus a profit that has been determined in the contract. In addition to the Murabahah contract, the bank is obliged to inform the selling price to the customer and determine the level of profit to be earned. The Murabahah agreement allows the bank to finance the purchase of goods or assets for customers. (Maruta, 2016).

The phenomenon that often occurs in Murabahah financing can be caused by changes in the market price of the asset or commodity bound in the contract. If the price of goods increases after the bank purchases them for the customer, the bank faces the risk of not being able to change the agreed selling price. (Andrianto & Firmansyah, 2019). Customers may also face risks, mainly due to fluctuations in the price of their portfolio in the money market or capital markets such as stocks and sukuk. For example, if the price of shares or sukuk held in the secondary market drops dramatically, customers may not be able to fulfill their obligations. According to the latest data from Indonesia's Financial Services Authority (OJK) in 2023, Islamic financing, including Murabahah, experienced a significant growth of 12% compared to the previous year. This indicates an increase in public interest and confidence in Islamic financial products. However, price volatility in the market remains a major challenge that banks and customers must face in maintaining the sustainability and stability of Murabahah financing. (Rivai & Ismail, 2013).

Murabahah financing is one of the main sources of income for Islamic financial institutions. Although Murabahah financing is widely accepted in the Islamic finance industry, there is some controversy regarding this financing practice. One of the criticisms of Murabahah financing is that it is similar in structure to conventional interest-based financing. Some Islamic finance scholars and experts argue that Murabahah financing should focus more on the ownership of real assets rather than just a financially regulated sale and purchase transaction. The Islamic finance industry continues to innovate to develop Murabahah financing products that are more flexible and in line with customer needs. For example, Murabahah financing in the microfinance sector aims to expand access to Islamic financing and encourage the growth of the Islamic finance industry as a whole. (Suwandini et al., 2024)..

The exchange rate refers to changes in the price of the Indonesian currency, the rupiah, against foreign currencies. Changes in exchange rates can have a significant impact on various sectors of the economy, including the Murabahah financing sector. When the exchange rate weakens against foreign currencies, the price of imported assets in Murabahah financing may increase. This could potentially affect profit margins and costs for banks or financial institutions providing Murabahah financing. Changes in exchange rates can have an impact on the demand and supply of Murabahah financing. (Soemitra, 2017).

In addition, Net Operating Margin (NOM) is an important factor affecting Murabahah financing. NOM measures the operating efficiency of a bank in generating profits from operating income after deducting operating expenses. Banks with higher NOM tend to be more efficient and able to offer financing with competitive profit margins. (Budianto, 2022). However, banks that have high NOM may also be more selective in providing Murabahah financing, which may affect the amount of financing disbursed. Behind the advantages of BUS there are also weaknesses, namely NOM on BUS from 2014 to 2018 with a value of 1.07% and the highest of 1.92% based on the condition of NOM on BUS included in the criteria for rank 3 (three). However, considering the services and products provided by BUS such as mudharabah, musyarakah and qardh continue to increase, the two profit sharing systems require complicated calculations; third, the risk of failure that may arise forces BUS to pay attention to the risk of financial problems. NOM variable data for 2019-2022 are:



Source: Financial Services Authority (OJK)
Figure 1.1
Net Operating Margin Diagram 2019-2022

In Figure 1.1 illustrates the diagram of the NOM value in 2019-2022, it appears that there is no significant growth in value but, shows a level of fluctuation in an amount that is not too large. The picture above if left unchecked will affect finance, especially in Islamic banking. An effective strategy is needed to optimize financial instruments in Islamic banking. This strategy must include various important aspects that can increase competitiveness, operational efficiency, and customer satisfaction. With the right strategy, Islamic banking can offer more diverse products and services, increase Islamic financial literacy in the community, make maximum use of digital technology, and strengthen cooperation with various economic sectors. This optimization will not only strengthen the position of Islamic banking in the market, but also contribute more to sustainable economic development. (Hafizd, 2022).

LITERATURE REVIEW

The main theory in this study is called signaling theory. Signaling theory according to Brigham and Houston, who argue that signaling is a way of holding shares regarding the company's opportunity to increase the value of a company in the future, which makes this information the company's management to shareholders. (Brigham & Houston, 2006).

The purpose of signaling is as a network to external parties to make decisions if companies that have good financial conditions are the right target for those who entrust their funds. The company can be said to be good if it has a financial report issuance, then the company has poor quality. (Fatricia & Wijaya, 2023). Every company always wants to imply that its company is the best company by claiming that the company's growth is dazzling but over time, all will show its quality based on the issuance of signals in the form of financial condition reports.

Focusing on the explanation above regarding the grand theory and the title of this research, there is an appropriate relationship, namely between signaling theory and the effect of the exchange rate and NOM on murabaha financing, which is the basis of research initiated by an American philosopher. Theory signaling explains the relationship between the research title of the rupiah exchange rate and NOM on murabaha financing through the NOM company signal issued in the form of a statement of financial position which can then influence the decision making of external parties. (Budiharjo & Rujito, 2023).

1. Exchange Rate Concept

Exchange rate is the exchange of goods with each other. The exchange rate in financial management is the price of currency in one country by another country. Exchange rates in institutions are derived from people's intelligence in managing finances and doing productive work activities. People can get high returns if they can save and manage the money they receive well. (Nugroho et al., 2023). Not only that, they also need to save for future consumption needs. People can also buy and sell goods or work in the service sector. The exchange rate illustrates that the rupiah is exchanged for foreign currencies such as dollars, then used as a transaction instrument in international trade. Usually, the exchange rate is considered as the value at which the value of one currency is equal to another currency. (Rahmawati, 2019). The exchange rate can be calculated using the formula, namely:

$$Q = S \frac{P}{P^*}$$

Description:

Q : Real exchange rate.
S : Nominal exchange rate
P : Domestic price level
P* : Price level abroad

An exchange rate can be defined as the price of a currency based on another currency. The exchange rate itself is a price a currency expresses against another currency. Simply put, the exchange rate can be referred to as a level of condition of the value of another currency. (Wahyuni et al., 2021). The floating exchange rate system allows free movement, meaning that it can be determined based on the supply and demand forces of the foreign exchange market, but with the advantage that the central bank can control the exchange rate. The weakness of this system is that many countries play a positive role in maintaining exchange rate stability. (Syarifuddin, 2015).

Based on the explanation related to the rupiah exchange rate variable, there is a verse that explains the importance of maintaining honesty and fairness in doing business and not harming others in financial management, which is in QS. An-Nisa: 29 below:

يٰٓاَيُّهَا الَّذِيْنَ اٰمَنُوْا لَا تَأْكُلُوْٓا اَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ اِلَّآ اَنْ تَكُوْنَ تِجَارَةً عَنْ تَرَاضٍ مِّنْكُمْ ۗ وَلَا تَقْتُلُوْٓا اَنْفُسَكُمْ ۗ اِنَّ اللّٰهَ كَانَ بِكُمْ رَحِيْمًا

Meaning: O you who believe, do not eat your neighbor's wealth by false means, except in the form of trade on a consensual basis between you. Do not kill yourselves. Indeed, Allah is Most Merciful to you (QS. An-Nisa: 29).

The hadiths in the exchange of money that need to fulfill the specified conditions and available hadiths or proof of exchange are as follows:

"*Sell Gold with money as much as possible, with (as long as) money*" (HR Imam at-Tirmidhi, by Ubadah bin Shamit).

From this postulate, the conditions of the exchange rate or exchange rate include:

a. Must be in cash, not on credit
b. The handover must take place in a contact assembly; and
c. When the same currency is exchanged, it must be in the same amount or quantity. But if the exchange is between two currencies, it only requires cash and the goods are both present.

2. *Concept of Net Operation Margin (NOM)*

Net Operating Margin (NOM) is a profitability measure that shows the percentage of net profit generated by a company from its operating income, after deducting all operating expenses but before deducting interest and taxes. NOM gives an idea of how efficient the company is in managing its operating costs to generate profits from sales. (Hakim et al., 2022). The NOM calculation formula is as follows:

$$\text{NOM}=\left(\frac{\text{Operating Profit}}{\text{Operating Income}}\right) \times 100\%$$

Operating Income is the net income generated by a company from its primary operating activities, net of all direct costs associated with the production and sale of products or services. These costs include the cost of raw materials, direct labor, as well as other operating expenses such as employee salaries, rent, utilities, and administrative costs. (Rosidah, 2018). Operating profit reflects the company's efficiency in managing these costs to generate profits from its operations. On the other hand, Operating Revenue is the total revenue earned by the company from its main activities, such as selling products or providing services. Operating income describes the company's ability to generate revenue from its core business activities, without taking into account revenue from other sources such as investment or asset sales. (Kang & Boediningsih, 2023).

A high NOM indicates that the company has managed its operating costs well, which means that the company has the potential to generate greater profits than its revenue. (Suharli et al., 2021). This reflects high operational efficiency and the company's ability to optimize existing resources. Conversely, a low NOM indicates that the company's operating costs are relatively high compared to its operating income. This situation can be a sign that the company needs to manage costs more efficiently to increase profitability. (Bahasoan et al., 2023).. In other words, the company should look for ways to reduce its operating costs or increase its operating income to achieve a better balance and improve profit margins.

NOM has several important uses in the management and evaluation of company performance. First, NOM is used to assess the company's operational efficiency, helping management and stakeholders in determining how efficiently the company generates profits from its operations. (Sapitri et al., 2024).. Second, NOM allows investors to compare profitability between companies in the same industry. Companies with higher NOM are usually considered more efficient and profitable, making them a more attractive investment option. Third, the information obtained from NOM analysis assists management in making strategic decisions, such as cost reduction, operational efficiency improvement, and resource allocation. (Dirmawati et al., 2023).

NOM in Islamic banking is a measure that shows the bank's efficiency in generating profits from its main operating activities, after deducting all operating costs. (Soumena et al., 2024).. In the context of Islamic banking, NOM also reflects the bank's compliance with sharia principles that prohibit usury (interest) and speculative transactions. NOM in Islamic banking consists of various components that reflect the bank's operating income and operating expenses. (Riady et al., 2024).. Operating income includes several main sources. First, income from financing which is obtained through profit-sharing-based schemes such as mudharabah and musyarakah, as well as sale and purchase-based financing such as murabahah, istisna, and salam. Second, income from services includes services such as wakalah (agency), kafalah (guarantee), and hawalah (transfer of debt). Third, income from investments which involves gains from investments in Islamic securities or other investment portfolios that comply with sharia principles. This income is an important indicator for Islamic banking to assess the efficiency and success of its main operations in complying with sharia rules. (Suharli et al., 2024)..

On the other hand, operating expenses in Islamic banking include various elements that affect operating profit. One of the main components is funding cost, which is the cost associated with raising funds, including profit sharing paid to depositors. In addition, other operating costs include employee salaries, rent, utilities, marketing costs, and administrative costs. (Soumena & Qayyum, 2022).. These costs must be carefully managed to ensure operational efficiency and maintain profitability. Impact of Net Operating Margin (NOM) on Islamic Banking:

1. Profitability: A high NOM indicates that an Islamic bank is able to generate significant operating profit from its operating income. This increases the attractiveness of the bank to investors and shareholders.

2. Operational Sustainability: By managing operating costs efficiently, Islamic banks can ensure long-term operational sustainability. This is important to maintain customer confidence and maintain its position in the market.
3. Competitiveness: Islamic banks with high NOM are more competitive in the market. They can offer better products and services at a lower cost, which attracts more customers.
4. Product Development: Healthy operating profits allow Islamic banks to invest in the development of new Shariah-compliant products and services. These include new financing products, digital services, and other innovations.
5. Balance between Social Obligation and Profitability: Islamic banks have a responsibility to strike a balance between achieving profitability and meeting social obligations. NOM assists banks in assessing how well they manage this aspect, so that they can continue to support communities and social projects in accordance with sharia principles.
6. Market Confidence: A stable and high NOM increases market confidence in Islamic banks. This can have a positive impact on share prices, access to capital, and overall public image.

3. Murabahah Financing

Murabahah financing is one of the most popular and frequently used Islamic financial products in Indonesia and several other countries. In Murabahah financing, Islamic banks sell goods needed by customers at a price agreed upon in advance. The resale price of the goods remains the same throughout the financing period. (Suharli et al., 2022)..

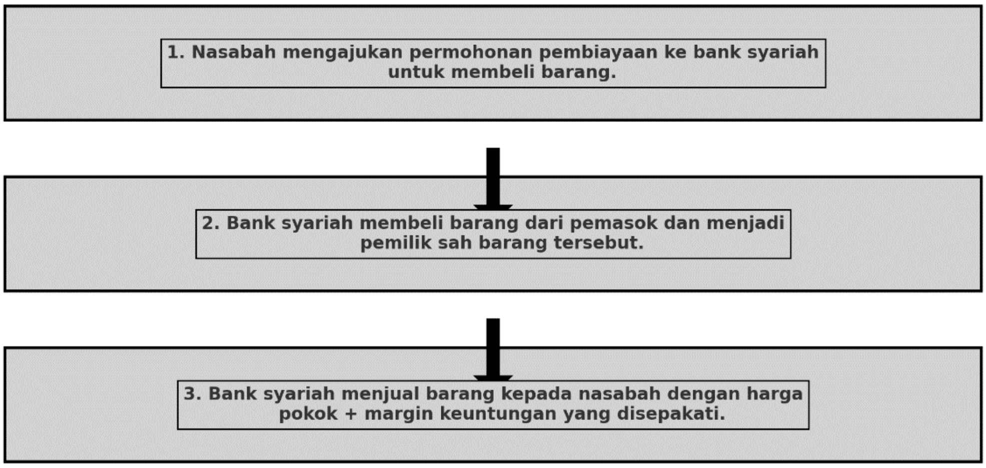
According to Akib (2022) murabahah is a type of financing service based on the principle of buying and selling goods. In this service, the seller will mention the acquisition price of the goods as well as the amount of profit (margin) that has been agreed upon. The bank will ensure that the receipt of profit, both in terms of amount and timing, will be clearly stipulated in the agreement. (Laming et al., 2023).

Islamic sharia and economic principles form the basis of Murabahah financing, with the principle of fairness being one of the main principles. The bank and the customer must agree on the price of the goods purchased and the resale price of the goods. The profit from Murabahah financing is the difference between the resale price of the goods and the purchase price of the goods. While the risks of Murabahah financing include the risk of default from the customer or the risk of changes in the price of the purchased goods (Lenas et al., 2023).

In this financing, Islamic banks buy an item needed by the customer from a supplier, then sell it back to the customer at a selling price which includes the purchase price plus a profit margin. The selling price and profit margin are agreed upon at the beginning, so that the customer knows transparently the amount to be paid. One important aspect of murabaha financing is the ownership of the goods by the bank before they are sold to the customer, ensuring that the bank takes the risk of ownership and condition of the goods before the transaction with the customer. This is different from the conventional system which usually involves loans with interest. (Ahmad, 2018).

The goods financed in a murabaha contract must be halal and tangible goods, not contrary to sharia principles, such as goods that are prohibited or do not have a clear physical form. (Handayani et al., 2023). This financing process involves a clear agreement between the bank and the customer regarding the purchase price, profit margin, and payment terms. Clarity and transparency in the murabaha contract is very important to avoid elements of usury and speculation which are prohibited in Islam. (Cahaya & Sugiyono, 2023).

Murabaha financing provides benefits for both parties. For banks, there is certainty of profit from the agreed margin, while for customers, there is certainty of the amount of payment without any changes during the financing period. The profit taken by the bank does not come from interest, but from the margin which is part of the agreed selling price. (Irfan Harmoko, SE.I., MM, 2018). This makes murabaha financing one of the financial products that are in great demand by Muslims who want to maintain sharia principles in their financial transactions. The following is a simulation of the murabaha financing scheme in Islamic banking:



First, the customer submits a financing application to the Islamic bank to purchase the required goods. This application includes details of the goods to be purchased and a preliminary agreement on the profit margin to be charged by the bank. Second, the Islamic bank then purchases the goods from the supplier, becomes the legal owner of the goods, and bears all the risks associated with ownership of the goods until they are received by the customer. (Aeda et al., 2022)..

In this step, the bank ensures that the transaction is carried out in accordance with sharia principles and that the goods purchased are halal and in accordance with the customer's request. Third, the Islamic bank sells the goods to the customer at the cost plus a pre-agreed profit margin. (Putritama, 2018). This selling price is determined transparently and the customer pays the price according to an agreed schedule, either in installments or all at once. This entire process ensures that financing transactions are conducted with fairness, transparency, and adherence to sharia principles, providing ethical and stable financial solutions for customers and banks. (Marlia, 2002).

Previous Research

The first study "Analysis of the Effect of BI Rate, Exchange Rate, Inflation and Capital Adequacy Ratio (CAR) on Murabahah financing in Islamic Commercial Banks". The subject of this research is Islamic commercial banks operating in Indonesia for 6 years (2011-2016). This study uses purposive sampling method. After selection, the target population is 9 banks. The method chosen is the general effect model. The results of the F test show that in this study the variables of BI Ratio, Exchange Rate, Inflation and Capital Adequacy Ratio (CAR) simultaneously affect the Murabahah financing margin at Islamic Commercial Banks. The partial t-test results show that the BI ratio, exchange rate, inflation and capital adequacy ratio (CAR) affect the level of murabahah financing margins. Adjusted R2 shows that in this study all independent variables contributed 82.17% to the dependent variable. The remaining 17.83% is influenced by other variables not included in this study such as BOPO, FDR, NPF, etc. (Sumarna, 2018).

The second study was on "The Effect of Rupiah to Dollar Exchange Rate on Murabahah Financing at Bank Syariah Indonesia in Parepare City (Doctoral dissertation, IAIN Parepare)". The population in this study, there were 60 frequencies of the movement of the rupiah exchange rate against the dollar during the period from May 2021 to May 2022. The research was conducted using a quantitative approach with an associative approach. This type of research is known as field research. Data for this study were obtained from observation instruments. The data analysis technique uses several statistical tests with the use of SPSS 22. The results showed that the rupiah exchange rate has a significant effect on murabaha financing at Islamic banks in Indonesia. When the rupiah exchange rate weakens against the dollar, the more likely the cause of murabahah financing in Islamic banks in Indonesia. (Guarango, 2022).

The next research with the title "The effect of Net Operating Margin (NOM), inflation and Bi rate on murabahah financing at Islamic commercial banks in Indonesia for the period 2016-2018. This study aims to analyze the influence and magnitude of nominal variables, inflation and the BI ratio on murabaha financing at Islamic commercial banks in Indonesia. The data used is secondary data using monthly data from 2016 to 2018 obtained from the official website of the Financial Services Authority (OJK). The method used is multiple regression using ordinary least squares (OLS). In addition to classical hypothesis testing, the results showed that all independent variables had a significant effect on murabaha financing at Islamic commercial banks in Indonesia. The effect of the NOM, Inflation and BI ratio variables on murabaha finance is 62.38%, while the remaining 37.62% is explained by the variables used in this study. (Gilar, 2021).

The last research by Farianti et al., (2020) with the title "The effect of NPF, NOM and FDR on murabahah financing with DPK as a moderating variable" while the purpose of this study is to examine the effect of NPF on murabahah financing at Islamic Commercial Banks, to examine the effect of NOM on murabahah financing The study by Fariani et al aims to determine the effect of several factors on murabahah financing at Islamic commercial banks.

Specifically, they examine the effect of FDR and DPK on the relationship between NPF and murabaha financing, as well as the relationship between NOM and murabaha financing. In addition, they explored the impact of deposits on the relationship between FDR and murabaha financing. Their research findings revealed that NOM has a positive influence on the amount of murabaha financing, as does FDR. (Pratiwi & Nabila, 2022)..

Based on the results of the study, it is known that FDR has a positive effect on murabaha financing rates, while NPF has no significant effect on murabaha financing. On the other hand, this study reveals that third party funds (DPK) have an effect on NOM and NPF of murabaha financing at Islamic Commercial Banks, but have no significant effect on NPF of muraba-hah financing. In this context, a positive effect implies that an increase or decrease in a particular factor will result in a corresponding increase or decrease in murabaha financing. Conversely, a negative effect indicates that an increase or decrease in a particular factor will result in an opposite change in murabaha financing rates. However, the term "no effect" indicates that any change in a particular factor will not have a significant impact on fluctuations in murabaha financing. It should be noted that the term "moderation" refers to the extent to which a factor strengthens or weakens the relationship between two other variables. A positive moderating effect will strengthen the relationship, while a negative moderating effect will weaken it. The similarities in the findings of this study and the previous research above are found in the dependent variable used, namely Murabahah Financing and the type of research conducted, namely quantitative and the analytical method used in the research, which distinguishes the six studies mentioned above from the study to be conducted by the author.

METHODOLOGY

This study uses a type of quantitative research, where quantitative is the process of uniting, processing and analyzing then presenting data based on the needs of the amount of data objectively. Research was conducted at Islamic Commercial Banks registered with the OJK through the official website of the Financial Services Authority (OJK) to obtain data needs according to research variables.

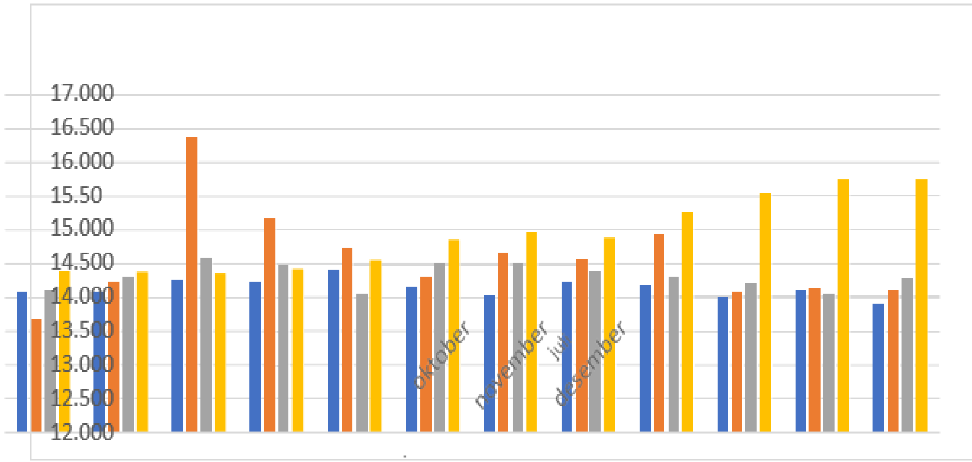
This research approach uses an associative approach that traces the relationship between variables related to this research and has a casual relationship. The associative research strategy is to identify the relationship between the independent variables (variable X) consisting of the rupiah exchange rate (X1) and NOM (X2) on variable Y, namely murabaha financing at Islamic Commercial Banks. The data processing technique in this study uses multiple regression analysis, which means testing the effect between the independent variables on the dependent variable through application assistance. Stages in the form of descriptive statistics, classical assumption tests, partial tests, simultaneous tests, and coefficient of determination tests.

RESEARCH RESULT

1. *Descriptive Analysis*

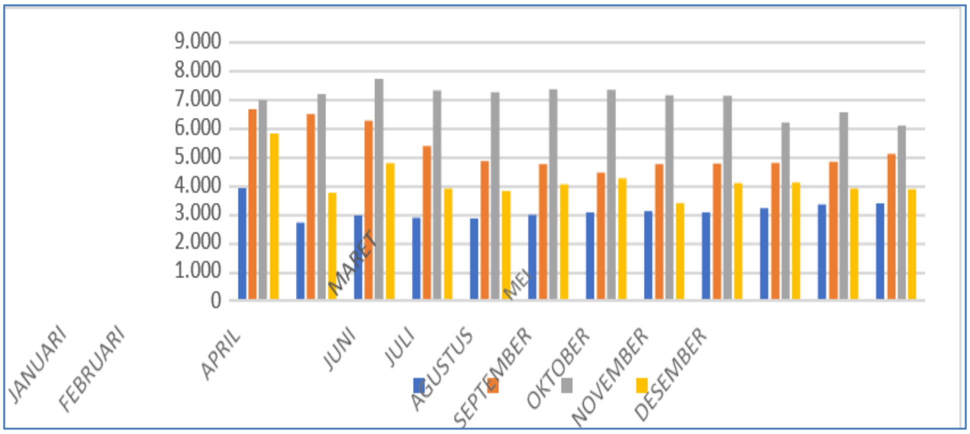
Data processing in this study uses two applications, namely microsof excel as an application used to unify the data that has been collected and the IBM SPSS version 20 application is used to process data and to provide results from the variables used as research, namely the Effect of Exchange Rate (KURS) and Net Operating Margin (NOM) on murabahah financing at Islamic commercial banks in Indonesia for the 2019-2022 period from each variable as follows:

a. *Exchange Rate*



Source: OJK Sharia INKB Statistical Data 2019-2022
Figure 4.1 Monthly Exchange Rate Financial Report 2019-2022
(In Billion Rupiah)

b. *Net Opening Margin*



Source: OJK Sharia INKB Statistical Data
Figure 4.2
Net Operating Margin financial statements per month period 2019-2022
(In Billion Rupiah)

Figure 4.2 illustrates the diagram of the NOM value in 2019-2022, it appears that there is no significant growth in value but, shows a level of fluctuation in an amount that is not too large. The picture above if left unchecked will affect finance, especially in Islamic banking. Therefore, a strategy is needed to optimize financial instruments in Islamic banking.

2. ***Classical Assumption Test***
a. ***Data Normality Test***

The data normality test is a test that aims to provide an overview or results related to the regression model of independent or dependent variables with normal distribution or not, through the Kolmogorov-Smirnov test, see the significance value, which is> 0.05, which means normal distribution, while the significance value <0.05 the data is not normally distributed. The normality test based on the histogram and normal P-Plot test is shown in the following figure:

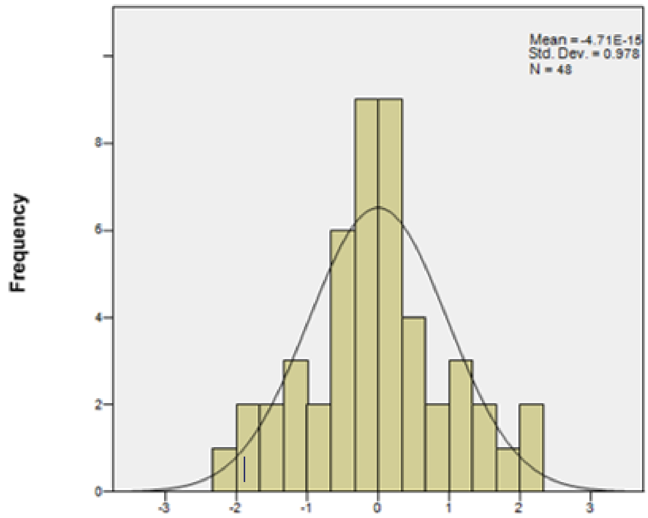


Figure 4.3 Histogram

Dependent Variable: Murabahah Financing

Based on the results of the histogram image 4.3, it can be seen that the pattern follows a normal curve and is hill-shaped so that it is stated that the regression model in this study is normally distributed. As for a little explanation if the horizontal axis usually describes the range of data values, while the vertical axis usually describes the frequency of occurrence of these values in the histogram. Data distribution that resembles a hill is called normal distribution in a symmetrical histogram. Meanwhile, in a skewed histogram, the delivery of information will look skewed to the left or right.

Multicollinearity Test

The multicollinearity test is carried out to test the regression model whether there is a correlation between the independent variables through the basis of decision making if the tolerance value> 0.1 and Variance Inflation Factor (VIF) < 10 then there is no multicollinearity, while if the tolerance value < 0.1 and VIF> 10 then there is multicollinearity.

Heteroskedasticity Test

The heteroscedasticity test serves to see the regression model of the inequality of the variance of the residuals. The results can be known that there is no heteroscedasticity if there is no clear pattern, meaning wavy, widening and narrowing in the scatterplot image as the points spread above 0 and the Y axis.

Autocorrelation Test

The autocorrelation test serves to see the multiple regression model there is a correlation between the residuals in period t and t-1 (previous). Good results are if the regression is free from autocorrelation, as for how to detect whether or not autocorrelation occurs through the DW (Durbin Watson) test.

b. Multiple Linear Regression Analysis

Hypothesis testing is carried out using multiple linear regression analysis in order to facilitate the data analysis process assisted through the SPSS version 20 application.

Table 4.5 Multiple Linear Regression Results

Coeffcients[a]						
Model		Unstandardized Coefficients	Standardized Coefficients	Unstandardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	-37.568	52.075		-0,721	0,474
	Exchange Rate	16.480	3.333	0.480	4.945	0,000
	Net Operating Margin	-13.373	2.526	-0.514	-5.293	0,000
a. Dependent Variable: Murabahah Financing						

Based on table 4.5, the multiple regression model equation is obtained as follows:

$Y = a + \beta 1X1 + \beta 2X2 + e$

$Y = -37.568 + 16.480\ X1 - 13.373\ X2 + \varepsilon$

Description:

Y = dependent variable bound (Murabahah Financing)
A = Constant of the regression equation
β1 = First regression coefficient
β2 = Second regression coefficient
X1 = Independent variable (Exchange Rate)
X2 = Net Operating Margin
ε = Standard error

c. Test Coefficient of Determination (R)

The Coefficient of Determination (R2) test is carried out to predict and see how much influence the independent variables give simultaneously to the dependent variable in this study the coefficient of determination uses the adjusted R square value, the coefficient of determination is calculated by the formula KD = R2x100%.

d. Hypothesis Test

Hypothesis testing is done to determine the effect of exchange rates and net operating margins on murabaha financing. Hypothesis testing is divided into 2, namely the t test (partial) meaning that the test is carried out on each variable and the F test (simultaneous) meaning that the test is carried out on the variables simultaneously.

Referring to the results of data processing in this study, it will be explained regarding the description of the influence between the variables in this study in accordance with the results of the analysis obtained. The dependent variables in this study are the exchange rate (X1) and net operating margin (X2) and the dependent variable is murabaha financing (Y). The results of the analysis used as a basis for answering the hypothesis in this study using multiple linear regression analysis and assisted through the IBM SPSS version 20 application.

DISCUSSION

a. The Effect of Exchange Rate (KURS) on Murabahah Financing

The results of the research obtained become the basis for the author's decision making if the exchange rate has a positive and significant effect on murabaha financing at Islamic commercial banks in Indonesia. This means that if the exchange rate increases, then murabaha financing at Islamic Public Banks in Indonesia will increase, this can be proven through the results of multiple linear regression analysis which shows that the B value of the exchange rate variable is positive, which means that if the exchange rate increases by one unit, murabaha financing will also increase.

This research is in accordance with Buspadi's research (2022) that the exchange rate variable has a significant effect on murabahah financing at Islamic banks in Indonesia. When the rupiah exchange rate weakens against the dollar, the more likely the cause. As for other studies to strengthen the exchange rate variable in research by Puspitaloka (2019), it has a positive and significant effect on the murabaha financing of PT Bank Syariah Mandiri.

b. The effect of Net Operating Margin (NOM) on Murabaha Financing

Net Operating Margin (NOM) is a measure that can show how effective a bank is in managing its productive assets to generate higher net income. The higher the margin income received by the bank, the greater the NOM or ratio of the bank. This shows that the bank has worked efficiently to generate higher income. By having a high ratio, the bank will find it easier to avoid various problems that may occur in the banking world.

This research is in line with previous research conducted by Farhanti, R. (2019). That Net Operating Margin has a negative and significant effect on murabaha financing. Net Operating Margin can be defined as a measure that can show how effective a bank is in managing its productive assets to generate higher net income. The higher the margin income received by the bank, the greater the bank's NOM or ratio. This shows that the bank has worked efficiently to generate higher income.

c. Exchange Rate, Net Operating Margin affect Murabahah Financing

This research is supported by the signaling theory coined by Brigham and Houston which explains that companies that provide good financial signals will increase the opportunity for potential investors to buy their shares, so that the company's stock price will increase. Conversely, if companies provide poor financial signals, it will be difficult for them to gain the trust of the market.
Financial signals issued by companies are usually in the form of financial statements and financial performance made in monthly, quarterly, or annual periods. This is done because the data framework will affect return speculation decisions for investors. The nature of report data can be assessed from various points of view, including accuracy, fulfillment, and ideality of data (Irawan and Sapitri, 2022).

The research that supports this research is research by Puspitaloka (2019) which has a positive and significant effect on the murabahah financing of PT Bank Syariah Mandiri. And supported by research conducted by R Gillar (2021) with the research title "The effect of Net Operating Margin (NOM), inflation and Bi rate on murabahah financing at Islamic commercial banks in Indonesia for the period 2016-2018" which shows NOM has a positive effect on the amount of murabahah financing.

CONCLUSIONS AND RECOMMENDATIONS

The results of the individual hypothesis test show that the exchange rate variable has a positive and significant effect on murabaha financing. It is concluded that the higher the exchange rate, the higher the murabaha financing, as well as when the exchange rate decreases, the murabaha financing decreases. This is because the exchange rate can affect murabaha financing. The results of the partial hypothesis that the net operating margin variable has a negative and significant effect on murabaha financing. Caused by the high and low net operating margin set so that it can affect murabaha financing. The results of the simultaneous hypothesis testing show that the exchange rate and net operating margin variables have a significant effect on murabaha financing. This means that changes that occur in the exchange rate and net operating margin will affect murabaha financing.

ADVANCED RESEARCH

This research aims to investigate the impact of exchange rates and net operating margin on Murabaha financing in Islamic commercial banks in Indonesia during the period of 2019-2022. Murabaha financing, as one of the prominent Islamic banking products, plays a crucial role in the growth and development of the Islamic finance industry in Indonesia. Understanding the factors that influence Murabaha financing is essential for Islamic banks to optimize their financing strategies and maintain financial stability.

The exchange rate, which reflects the value of a currency relative to another, can have a significant impact on Murabaha financing. Fluctuations in exchange rates can affect the cost of imported goods, which are often used as the underlying assets in Murabaha transactions. Additionally, the net operating margin, which represents the profitability of a bank's core operations, can also influence the bank's willingness and ability to provide Murabaha financing. By examining the relationship between exchange rates, net operating margin, and Murabaha financing, this research will provide valuable insights for Islamic commercial banks in Indonesia. The findings can help them to develop effective risk management strategies, optimize their financing portfolios, and enhance their overall financial performance in the dynamic economic environment.

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