THE EFFECT OF EXCHANGE, SBIS, AND PROFIT-BASED FINANCING ON THE
LEVEL OF RISK OF FINANCING PROBLEMS

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Information

Abstract:

This study aims to determine the effect of exchange rates, Bank Indonesia Sharia Certificates (SBIS), and profit-based financing on the level of risk of financing problems in Sharia Commercial Banks in Indonesia. The data used were secondary data from January 2015 to October 2021. The population was the Sharia Commercial Bank in Sharia Banking Statistics published by the Financial Services Authority (OJK), by using a non-probability sampling technique. The data analysis used was multiple linear regression using STATA software. The results of this study indicate that partially the independent variable namely the exchange rate has an insignificant negative effect on the risk level of problem financing. Moreover, SBIS has a significant negative effect on the level of risk of non-performing financing, and profit-based financing has a significant negative effect on the level of risk of financing problems.
A. INTRODUCTION

In recent decades the global Islamic economy has increased with 24% of the global population which can spend 2.1 T USD in the economic sector. One of the countries that is part of global economic growth is Indonesia at ranked tenth, which is driven by Islamic finance, halal food, modest fashion, halal travel, and others. Meanwhile, in the Top Islamic Finance Markets in Global Assets, Indonesia occupies the eighth position, which is US$ 82 billion from the total Islamic Finance Market in 2017 of US$ 2,438 billion and is predicted to increase by 7.7% or US$ 3,809 billion in 2017-2023 (Thomson Reuters and Dinar Standard, 2018).

In Indonesia, the first banking financial institution appeared in 1991 under the name Bank Muamalat Indonesia. In 2020, 14 Islamic commercial banks have been registered with the OJK (Financial Services Authority). As a financial institution that plays an important role in the nation's economy, the performance growth of Islamic banks is the main thing. This can be observed through several financial ratios including Return on Assets (ROA), Total Assets, and Non-Performing Finance (NPF). In recent years ROA and total assets have continued to increase. In 2020, the ROA of Islamic commercial banks in Indonesia were 1.40% and total assets were 397,073 billion Rupiah. In 2021, ROA and total assets increased by 1.59% and 423,170 billion Rupiah respectively. The growth in the performance of Islamic commercial banks continued in the following year, which described that the performance of Islamic banks in Indonesia was getting better (Rahman & Rochmanika, 2012).

The main function of Islamic banks is to become a financial intermediary institution, which carries out its operational activities by collecting funds from the public and then channeling them through financing to the community (Mawaddah, 2015). Therefore, Islamic banks are closely related to non-performing financing which can be measured using Non-Performing Finance because most of the business activities of Islamic banks are disbursing funds which of course can affect the performance of Islamic banks (Dyatama & Yuliadi, 2015). The high ratio of Non-Performing Finance explains the deteriorating quality of financing so it has an impact on the performance of Islamic banks (Wibowo & Syaichu, 2013). The occurrence of non-performing financing in Islamic banks can be caused by several factors.
The exchange rate is the price level of one currency for another and this is used in various transactions such as international trade. Furthermore, for customers whose business is in the import sector, fluctuations in the exchange rate of the rupiah against the dollar can increase import costs, which in turn will also increase production costs. And will result in a higher possibility of non-performing financing caused by customers having difficulty paying their obligations to Islamic banks (Rustika, 2016). According to Haryanto and Kurniawan (2018), if the Rupiah against the USD depreciates it will benefit exporters, and customers whose business is engaged in exports will find it easy to fulfill their obligations in terms of financing payments provided by Islamic banks so that the NPF of Islamic banks will decrease. In addition, the distribution of financing at Islamic banks is also more often related to foreign exchange so in its operations it is directly related to the risk of exchange rate fluctuations, namely treasury activities, meeting the liquidity needs of Islamic banks (Hernawati & Puspasari, 2018). Furthermore, the study conducted by Vanni and Rokhman (2018) states that the rupiah exchange rate against the dollar has a significant positive effect on Non-Performing Finance. Another study was conducted by Mutamimah and Chasanah (2012), the result revealed that the exchange rate had a positive but not significant effect on Non-Performing Finance in BUS. Other studies showed that the exchange rate does not have a significant effect on NPF (Indrajaya, 2019; Wijoyo, 2016).

Bank Indonesia Sharia Certificates (SBIS) are securities issued by Bank Indonesia based on sharia principles using a Ju’alah contract. Islamic banks that place their funds in SBIS can reduce the amount of money circulating in the community, this is because the funds that should be channeled back to the community in the form of financing are also reduced. The reduced financing disbursed will also reduce the level of risk of non-performing financing so that the NPF will decrease. However, if the available funds are channeled in the form of financing, the debtor will increase and can make the bank bear the risk of higher non-performing financing (Auliani & Syaichu, 2016). Research by Asnaini (2014) shows that SBIS has a significantly positive effect on Non-Performing Finance. This is in line with the study from Auliani and Syaichu (2016) which also mentioned the same results. However, the study that was conducted by Aryani, Anggraeni, and Wiliasih (2016) obtained different results,
which showed that SBIS has a negative and significant effect on Non-Performing Finance on BUS in Indonesia.

Profit-based financing is also one of the products provided by Islamic banks to customers, of course, Islamic banks will also benefit from the profit-based financing that they distribute. Profit-sharing-based financing distributed by Islamic banks to the public can potentially create a risk of non-performing financing as measured by the NPF, where the community or customer is unable to pay off their financing obligations to Islamic banks. One of these problematic financings will result in reduced income or profit from financing obtained by Islamic banks. If the NPF continues to increase, it will also have an impact on increasing the number of PPAP (Allowance for Earning Assets) made by Islamic banks in accordance with Bank Indonesia regulations. If things like this happen continuously, it will have an impact on decreasing the capital owned by Islamic banks, which can then affect the ability of Islamic banks to channel financing, including profit-sharing-based financing (Annisa & Yaya, 2015). Research that has been conducted by Gumilarty and Indriani (2016) obtained the results that NPF had a significant positive effect on profit-sharing financing. Meanwhile, according to the study by Riyanto (2016), Non-Performing Finance has a significant but negative effect on profit-sharing-based financing. Furthermore, Widiastuty (2017) stated that NPF does not have a negative effect on the volume of profit-sharing-based financing.

Based on this background, the aim of this study was to find out how the effect of the Exchange Rate, Bank Indonesia Sharia Certificates (SBIS), and Profit-Based Financing on the level of risk of non-performing financing in Sharia commercial banks in Indonesia. So that it would be known how much influence the Exchange Rate, Islamic Bank Certificates of Indonesia (SBIS), and Profit-Based Financing have on the level of risk of non-performing financing.

B. LITERATURE REVIEW

Sharia Commercial Bank

Islamic bank is an intermediary institution and financial service provider which in its operational activities is based on Islamic ethics, free from elements of usury, maysir, gharar, and has fair and halal principles. Islamic banks in their operational
activities always avoid interest, Islamic banks also participate in achieving the goals of Islamic economics which are oriented to social welfare. Islamic banks have several advantages such as having a strong relationship with religion, the application of a profit-sharing system that can make Islamic banks stronger than monetary conditions, and the availability of financing that will not burden customers with the obligation to pay regularly from the start (Marimin, Romdhoni, & Fitria, 2015).

According to Law no. 21 of 2008 concerning Sharia Banking, Article 1 states that Sharia Banks are banks that carry out their business activities based on sharia principles and by type consist of Sharia Commercial Banks (BUS), Sharia Business Units (UUS), and Sharia People’s Financing Banks (BPRS). Furthermore, Islamic Commercial Banks are Islamic banks whose activities are to provide services in financial transactions. Based on the regulation of Bank Indonesia No. 2/8/PBI/2004, Islamic banks are commercial banks that carry out their business activities in accordance with Islamic sharia principles, including sharia business units and foreign bank branch offices that conduct business activities based on Islamic sharia principles (Sitepu, 2015). In its development, Islamic banks certainly have risks in distributing financing. In this case, it is known as Non-Performing Financing (NPF). NPF is defined as the ratio of non-performing financing that occurs in Islamic banks, so this can cause a decrease in profits for Islamic banks. This NPF affects cost control and financing policies carried out by banks (Indrajaya, 2019). NPF is also included in a phenomenon that often occurs in the world of Islamic banking, where the main activity is channeling funds. NPF is the distribution of funds carried out by Islamic banks in the implementation process some obstacles cause the customer to inaccurately carry out his obligations to Islamic banks so this will have an impact on both parties (Hamzah, 2018).

**Exchange Rate**

The exchange rate is a price of a foreign currency in terms of the price of the domestic currency. The exchange rate of a currency can also be determined by the government or it can also be determined by market forces (Karim, 2016). Furthermore, the exchange rate shows the number of units of currency that can be purchased or exchanged for units of other currencies. The Rupiah exchange rate is the
number of Indonesian currency values needed to be able to get one unit of foreign currency (Nurismalatri, 2017). There are several theories related to this exchange rate, one of which is the Purchasing Parity Power (PPP) theory. The theory of absolute PPP explains that the purchasing power of two currencies against an item is the same, in other words, it is a comparison of the price levels in two countries. Meanwhile, the relative PPP theory is that the change in the exchange rate of two countries in a period will be equal to the difference in inflation in the two countries expressed in percentage terms. There are several weaknesses in this theory such as difficulty to fulfill the views that underlie this theory and there are other determining variables. Based on the study conducted by Haryanto and Kurniawan (2018), the results revealed that if the Rupiah against the USD depreciates, it will benefit exporters, and customers whose businesses are engaged in exports will find it easier to fulfill their obligations in terms of financing payments provided by Islamic banks so that the NPF of Islamic banks will decrease. This is in line with a study conducted by Kartika Marella Vanni and Wahibur Rokhman (2017), which concluded that the exchange rate has a positive and significant effect on NPF, which means that if the exchange rate appreciates, the risk of Islamic bank financing will also increase.

**Bank Indonesia Sharia Certificate (SBIS)**

Previously, Bank Indonesia Sharia Certificate (SBIS) was known as SWBI (Bank Indonesia Wadi’ah Certificates). The regulation of Bank Indonesia No. 10/11/PBI/2008 states that Bank Indonesia Sharia Certificate (SBIS) is short-term security based on sharia principles in the rupiah currency issued by Bank Indonesia. SBIS is usually used as an alternative for Islamic banks to secure their funds (Dahlan & Andriyanto, 2015). SBIS is different from SBI, as stated in the regulation of Bank Indonesia No. 10/11/PBI/2008. SBIS uses a *ju’alah* contract which is in accordance with the benefits obtained, while SBI based on the interest rate does not care about the possibility of loss or profit (Aryani et al., 2016).

Sharia Bank Indonesia Sharia certificate can help Islamic banks to save their funds due to excess liquidity. SBIS is also intended as an open market operating instrument (OPT) in monetary control that is carried out based on sharia principles. Bank Indonesia must determine and provide compensation to SBIS holders following
the contract used. Bank Indonesia is also required to return SBIS funds to their holders when they are due. SBIS holders will receive rewards from the APBN as well as monetary control profits. This is because the SBIS funds will be put into a special trustee wadiah account not used in the real sector (Gulo, 2013).

**Profit-Based Financing**

Profit-based financing is one of the cooperation contracts carried out by the bank as the owner of capital and the customer as the manager of capital to obtain profits that will be divided according to the profit-sharing ratio that has been agreed by both parties. If a loss occurs, the loss is borne by the owner of the capital as long as the loss is not caused by the negligence of the capital manager (Fajar, 2016). Profit-based financing is also one of the products provided by Islamic banks to customers, Islamic banks will also benefit from the distribution of profit-sharing financing. In addition to profits, Islamic banks must also be prepared for the risks obtained from the profit-based financing that they distribute in the event of non-performing financing.

**C. METHODOLOGY**

This study was conducted on Islamic Commercial Banks in Indonesia using time series data from Islamic Banking Statistics published on the official website of the Financial Services Authority (OJK) and Indonesian Economic and Financial Statistics from Bank Indonesia, all data in the form of monthly data for the period January 2015–October 2021 related to this study. This study used a causal relationship with a quantitative approach that examined the causal relationship between variables. This research is a research method that examines the causal relationship between variables regarding events that occur. The samples were taken using all the existing population, there were 82 data samples. Furthermore, the exchange rate variable was obtained from data on Indonesian Economic and Financial Statistics from Bank Indonesia for the 2015-2021 period. This study used the STATA (Statistics and Data) version 17.0 program for easy data processing. The model used in this study to test the effect of the independent variable on the dependent variable was Multiple Linear Regression.
Table 1. Variable Indicator

<table>
<thead>
<tr>
<th>Variable Elements</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Performing Financing (NPF) (Y)</td>
<td>NPF is the distribution of funds carried out by Islamic banks in the implementation process some obstacles cause the customer to inaccurately carry out his obligations to Islamic banks so this will have an impact on both parties.</td>
</tr>
<tr>
<td>Exchange Rate (X1)</td>
<td>The exchange rate is a price of a foreign currency in terms of the price of the domestic currency.</td>
</tr>
<tr>
<td>Bank Indonesia Sharia Certificate (SBIS) (X2)</td>
<td>SBIS is an open market operating instrument (OPT) in monetary control that is carried out based on sharia principles.</td>
</tr>
<tr>
<td>Profit-Based Financing (PBBH) (X3)</td>
<td>Profit-based financing is one of the products provided by Islamic banks to customers, Islamic banks will also benefit from the distribution of profit-sharing financing.</td>
</tr>
</tbody>
</table>

D. RESULT AND ANALYSIS

This study aims to determine the effect of exchange rates, Bank Indonesia Sharia Certificates (SBIS), and Profit-Based Financing on the level of risk of financing problems in Sharia Commercial Banks in Indonesia. Based on the data analysis, the researchers found the findings as follows:

Non-Performing Financing (NPF)

Non-Performing Financing (NPF) is the ratio used to measure the viability of Islamic banks in managing the level of non-performing financing. The higher the NPF, the worse the quality of Islamic bank financing which can cause the amount of non-performing financing risk to be greater so it can also cause losses to Islamic banks (Agustin & Darmawan, 2016). The NPF ratio can be determined by dividing the total non-performing financing by the total financing and then multiplying by 100%. The following is a graph of the development of NPF on BUS in Indonesia:
Based on Graph 1, shows that the NPF level at BUS in Indonesia fluctuated from 2015-2021. The highest NPF occurred in 2015 at 4.84% and in 2021 the NPF decreased to 3.04%.

**Exchange Rate**

The exchange rate or currency exchange rate is the price of a foreign currency in terms of the price of the domestic currency. The exchange rate of a currency can also be determined by the government or it can also be determined by market forces (Amin et al., 2017). The exchange rate or rupiah exchange rate is one of the important macroeconomic variables. The exchange rate is the price at which one currency is exchanged for another. This research variable looks at the movement of the rupiah exchange rate against the US dollar. The following is the movement of the rupiah exchange rate against the US dollar:
Based on Graph 2, which shows the rate of movement of the Rupiah exchange rate against the USD, it can be seen that the exchange rate from 2015-2021 fluctuated with an increasing trend, especially in 2018 Rp. 14,409.

**Bank Indonesia Sharia Certificate (SBIS)**

Bank Indonesia Sharia Certificates (SBIS) are short-term securities based on sharia principles in rupiah currency issued by Bank Indonesia. SBIS is usually used as an alternative for Islamic banks to secure their funds (Dahlan & Andriyanto, 2015). The following is the SBIS growth data on BUS in Indonesia:
Based on Graph 3, the most SBIS was in 2019 which amounted to 10.386 billion rupiahs, then the number continued to decline until 2021.

**Profit-Based Financing**

Profit-based financing is the financing or distribution of funds to the community using profit-sharing contracts (mudharabah and musyarakah) based on a profit-sharing ratio that has been mutually agreed upon by the *mudharib* and *shahibul maal*. The following is a graph of the development of profit-based financing for BUS in Indonesia:

![Graph 4. Development of Profit Sharing-Based Financing](image)

Based on Graph 4, it can be seen that from 2015-2021 profit-sharing-based financing distributed by Islamic banks fluctuates every year.

**Regression Test**

Multiple linear regression was used to determine the effect of the independent variable on the dependent variable with a significance level of 5%. The equation below shows the results of a multiple linear regression analysis of the effect of the Exchange, Indonesian Sharia Securities (SBIS), and Profit Sharing-Based Financing (PBBH) on Non-Performing Financing (NPF).
Non-Performing Financing (NPF) = 6.73213 – 0.00008 (EXCHANGE) – 0.00009 (SBIS) – 0.00001 (PBBH).

Table 2. Multiple Linear Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>St. Error</th>
<th>t-Statistics</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>6.73213</td>
<td>0.745</td>
<td>9.03</td>
<td>0.000</td>
</tr>
<tr>
<td>Exchange rate</td>
<td>-0.00008</td>
<td>0.000</td>
<td>-1.51</td>
<td>0.136</td>
</tr>
<tr>
<td>Indonesian Sharia Securities</td>
<td>-0.00009</td>
<td>0.000</td>
<td>-2.80</td>
<td>0.006</td>
</tr>
<tr>
<td>Profit Sharing-Based Financing</td>
<td>-0.00001</td>
<td>0.000</td>
<td>-3.80</td>
<td>0.000</td>
</tr>
<tr>
<td>F-Statistics</td>
<td>17.51</td>
<td></td>
<td></td>
<td>0.403</td>
</tr>
<tr>
<td>Prob</td>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Data Processed by Researchers with STATA (2022)

Effect of Exchange Rate on NPF

From the results of multiple linear regression testing, the coefficient of the exchange rate is 0.00008 with negative results, so if the exchange rate increases by 1 rupiah, the NPF will decrease by Rp. 0.00008. From Table 2, the probability value of the exchange rate coefficient is 0.136 which means the probability is < 0.05 so the exchange rate has no significant effect on the NPF. Therefore, it can be concluded that the exchange rate has an insignificant negative effect on the NPF.

This can be based on changes in exchange rates that occur in changes in relative values including short-term so that in these conditions it has not had much impact on customers in payment of financing installments. This can be described by the case at the time of occurrence changes in exchange rates, these changes only affect the number of product prices that will be purchased at the beginning of the transaction by the customer, caused by the determination of the price of the purchased goods based on the price of goods on the market (in line with inflation and the prevailing exchange rate at that time). Meanwhile, the monthly installments have been agreed upon by not considering the occurrence of changes in exchange rates in the future (Purwaningtyas & Hartono, 2020).

Besides that, changes in the rupiah exchange rate have a different effect on bank debtors. Assuming no hedging is carried out for debtors engaged in exporters, the strengthening of the rupiah against other foreign currencies will reduce its income,
however, for debtors engaged in importers, the opposite will happen, namely, the strengthening of the rupiah currency will increase its income. The differences caused by the effect of changes in the rupiah exchange rate on the performance of debtors will vary so that the effect on NPF will also be different. Thus, it can be concluded when it occurs an increase in the rupiah exchange rate against the US dollar, the exchange rate or rupiah exchange rate against the dollar decreases and this will cause banks to bear the risk of higher financing (Auliani & Syaichu, 2016).

**Effect of SBIS on NPF**

From the results of multiple linear regression testing, the SBIS coefficient is 0.00009 with negative results, so if the SBIS increases by 1 rupiah, it will reduce the NPF by Rp. 0.00009. From Table 2, the probability value of the SBIS coefficient is 0.006 which means the probability is < 0.05 so that SBIS has a significant effect on the NPF. So, it can be concluded that SBIS has a significant negative effect on NPF.

The results of the study support the research conducted by (Aryani et al., 2016) that SBIS has a significant negative effect on NPF. This is because Islamic banks that invest their funds in the form of SBIS will provide a very low level of risk, compared to investing through financing. Then the amount of financing and the NPF will go down. In addition, the research conducted by (Kusmayadi et al., 2018) also stated that SBIS has a significant negative effect on NPF, the higher the funds invested by Islamic banks in the form of SBIS, the Bank Indonesia through the SBIS policy will be able to withdraw funds from banks to stabilize the amount of money in circulation, stable circulation of the rupiah, customers will be able to pay their financing obligations to Islamic banks, so the NPF will decrease.

**Effect of profit-sharing-based financing on NPF**

From the results of multiple linear regression testing, the PBBH coefficient is 0.00001 with negative results, so if the PBBH increases by 1 rupiah, it will reduce the NPF by Rp. 0.00001. From Table 2, the probability value of the PBBH coefficient is 0.000 which means the probability is < 0.05 so that PBBH has a significant effect on the NPF. So, it can be concluded that PBBH has a significant negative effect on NPF.
The results of this study support the results of the research (Annisa & Yaya, 2015), which states that NPF has a significant negative effect on the volume of profit-based financing. This is because profit-sharing-based financing can pose a risk of non-performing financing. A high NPF will have a negative impact on Islamic banks, namely the reduced opportunity for Islamic banks to earn income so that it will reduce the profits from financing channeled by Islamic banks. The high level of NPF can affect the increase in PPAP (Product Allowance) made by Islamic banks based on regulations from Bank Indonesia. If this continues to happen, the capital owned by Islamic banks will certainly decrease which can then affect the decline in the ability of Islamic banks to provide profit-sharing-based financing as well as other financings. Another study was conducted by Prasasti and Prastiono (2014), the results revealed that Islamic banks will be more stringent in providing financing including profit-based financing in the sense that profit-based financing will decrease due to the high NPF of Islamic banks. This shows that Islamic banks are less able to control the financing channeled to the public.

E. CONCLUSION

Based on the results of regression testing that has been carried out on the effect of the Exchange Rate, Bank Indonesia Sharia Certificate (SBIS), and Profit-Based Financing on Non-Performing Financing (NPF) at Islamic Commercial Banks in Indonesia, the researchers formulated the following conclusions: The exchange rate has a negative and insignificant effect on the level of non-performing financing risk at Islamic Commercial Banks (BUS) in Indonesia; Bank Indonesia Sharia Certificates (SBIS) has a negative and significant impact on the level of non-performing financing risk in Islamic Commercial Banks (BUS) in Indonesia; Profit-Based Financing has a negative and significant impact on the level of non-performing financing risk at Islamic Commercial Banks (BUS) in Indonesia.

F. REFERENCES


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