

## Third Party Funds as Moderating Variables of Liquidity Level of Sharia Commercial Banks

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### ABSTRACT

This study aims to examine the effect of BI 7-days (reverse) repo rate, sukuk, Bank Indonesia sharia certificates on the level of liquidity with third party funds as a moderating variable. The population in this study is all Islamic Commercial Banks in Indonesia. The sample in this study is the financial statements of Islamic banking statistics registered by OJK with 55 samples from June 2016-December 2020. The analytical technique of this study uses moderated regression analysis (MRA). The results of this study indicate that TPF can moderate the effect of the BI 7-days (reverse) repo rate and sukuk on FDR, but cannot moderate the effect of Bank Indonesia sharia certificates on FDR. Other results show that the BI 7-days (reverse) repo rate has a negative and significant effect on FDR, sukuk has a positive and significant effect on FDR and Bank Indonesia sharia certificates have a positive and significant effect on FDR.

**Keywords:** BI 7-Days, Reverse Repo Rate, Sukuk, Bank Indonesia Sharia Certificates, Financing to Deposit Ratio

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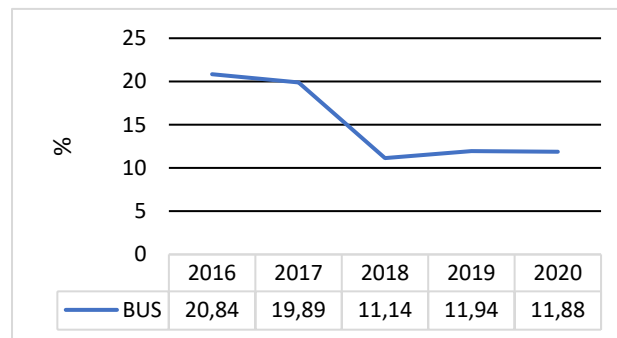
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### INTRODUCTION

The establishment of Islamic banks in Indonesia began with political demands by economists and Muslim organizations. This request was realized by Bank Indonesia with the recognition of a dual banking system which includes conventional banks and Islamic banks. Since then, legal policies that regulate banking operations based on sharia principles were born, accompanied by the development of Islamic banks which increasingly show their existence. Therefore, finally Islamic banking has a strong legal basis with the issuance of Law no. 21 of 2008 concerning Islamic Banking.

In Indonesia, there are three types of bank groups that operate based on sharia principles, one of which is Sharia Commercial Banks (BUS). Based on data from OJK, in 2020 there will be 14 BUS with a total of 500 operational head offices/branch offices, 1,346 sub-branches/sharia service units and 190 cash offices. The development of BUS can also be seen from the total third party funds which show the extent of public trust in placing funds in Islamic banking. DPK is a source of banking funds consisting of savings, current accounts and deposits

from the public. Deposits must be managed properly so that Islamic banks can survive (Farizi & Riduwan, 2016).



**Figure 1.** Third Party Fund Growth (yoy)

The Financial Services Authority (OJK) noted that the total collection of third-party funds (DPK) in 2020 was 397,073 billion. It grew by 11.88% year on year (yoy). However, lower than the previous year at 11.94% yoy. Figure 1 shows the growth of TPF from year to year. Where the highest TPF growth was shown in 2016 at 20.84% yoy and the lowest in 2018 at 11.14% yoy (OJK, 2020).

Slowing growth in deposits can be caused by various factors, one of which is macroeconomic conditions, namely the benchmark interest rate. This can affect people's interest in saving their funds in Islamic banks (Yaya & Sofiyana, 2018). disloyal customers sometimes compare conventional bank interest rates with Islamic bank profit sharing. Customers with profit-oriented principles will switch to conventional banks if the interest rate is higher, which is much more attractive than the profit sharing. Since 2016 Bank Indonesia has set a new policy by replacing the BI rate reference rate with the BI 7-days (reverse) repo rate. This policy is carried out so that this instrument can quickly affect the banking sector, the real sector and the money market (Bank Indonesia, 2016). Therefore, banks must immediately respond quickly to this policy in order to face the risks of interest rate movements in banking and interest rates on the money market.

Maximum liquidity management is needed to minimize the risks that will occur. The government and Bank Indonesia have prepared several instruments on the money market that financial institutions can use to regulate liquidity. Fitria's research states that as part of the Sharia-based financial industry, banks can take advantage of the issuance of sukuk or SBSN in regulating excess of liquidity. Banks can channel their funds through asset diversification through derivative activities, so that banks can carry out their functions as intermediary institutions effectively (Rahmah, 2017). With SBSN the risk is relatively lower because it has been guaranteed by the government.

Sukuk (SBSN) is one of the sharia financial innovation products that can be an alternative source of banking funds. Sukuk are financing instruments in the form of government-issued securities as proof of asset ownership in the form of foreign currency or rupiah. Sukuk can be traded through the secondary market at market prices and have the potential to earn capital gains and lower taxes. Of course, it is a safe investment and will have a positive impact on the banking sector because it is based on sharia principles (Rahmah, 2017).

Islamic banks that have not been able to channel their sources of funds optimally can also take advantage of the SBIS issued by Bank Indonesia. The instrument can be immediately liquidated (liquid). As a financial market facility, it is necessary to know how much influence it has on the level of liquidity. According to BI Regulation No. 10/11/2008, Bank Indonesia Syariah Certificates or SBIS are securities issued by Bank Indonesia based on Sharia principles with short tenor denominated in rupiah. The goal is to overcome excess liquidity difficulties but cannot be

traded like securities in general. To see whether the bank has excess liquidity or not, it can be seen from the FDR value (Suhartatik & Rohmawati, 2013).

A low FDR value indicates that the bank is unable to carry out its intermediation function properly, which results in an increase in liquidity funds. So, the bank must immediately take action so that the unallocated funds are not idle. One of them is by placing the funds in Bank Indonesia Syariah Certificates. However, the policy taken by the bank must take into account certain considerations which include good returns, low risk, liquid, simple and flexible (Supriono & Herianingrum, 2017). SBIS is considered a safe instrument and can be immediately liquidated (liquid). To find out more details, further research is needed to see how much influence the instrument has had a positive impact on Islamic banks.

Khoerulah's research results state that the BI 7 Day Repo Rate has a positive effect on the performance of Islamic Commercial Banks, namely profitability (Khoerulah et al., 2020). Muhamadinah's research shows that the BI Rate has a significant effect on DPK for Islamic Banking in Indonesia. It is stated that even though it does not use interest rates, either associations or financing, Islamic Banking cannot be separated from interest rate risk. (Muhamadinah, 2020). Fifi Afiyanti's research also shows that the BI Rate variable has a significant negative effect on TPF. His research states that the BI Rate and TPF are interrelated (Triuspitorini & Setiawan, 2020). In contrast to Rizal's research, the BI Rate has no significant effect on third party funds but has a significant negative effect on TPF (Yaya & Sofiyana, 2018). It is strengthened by Fitria's research that SBSN has a negative and significant influence on the performance of Islamic banks, namely profitability (Rahmah, 2017). For now, there is no previous research that specifically examines the performance of Islamic Banking based on the liquidity ratio.

Supriono's research shows that FDR has a significant effect on SBIS fund placement (Supriono & Herianingrum, 2017). However, it is not in line with Nur Suhartatik's research which shows that SBIS with FDR has no significant effect (Suhartatik & Rohmawati, 2013). The results of previous studies are inconsistent and indicate that there are other variables that interact with each other, namely the moderating variable. Rizki Farianti's research shows that the FDR moderated by DPK has an effect and is significant on financing (Farianti et al., 2019). This means that TPF can be used as a moderating variable. Therefore, this study also uses TPF as a moderator between the dependent and independent variables, assuming TPF has a close relationship with FDR based on previous research.

## LITERATURE REVIEW

### Third-party funds

Third party funds are funds sourced from the community, whether individuals, households, companies, governments, cooperatives or others in foreign currency or rupiah. The public can save their funds in banks in the form of demand deposits, deposits or savings with sharia principles. In order to obtain this source of funds, banks can offer various savings products according to the needs of the community because each individual has a different goal, whether to obtain profit, security or other expectations (Utami & Muslikhati, 2019).

Bank Indonesia defines third party funds as investment funds or deposits entrusted by the public or customers to Sharia Commercial Banks or Sharia Business Units using wadiah or mudharabah contracts in accordance with sharia principles. The components of DPK in BUS and UUS include wadiah demand deposits, wadiah savings, mudharabah savings and mudharabah deposits. Wadiah demand deposits are deposited funds that can be withdrawn at any time using government payment facilities such as checks or others (Muhamadinah, 2020).

Banks may not promise rewards for deposited funds. Wadiah current accounts have characteristics such as customers being provided with checks for operation, requiring other letters from bank officials or other customers when opening accounts and making initial

deposits, customers are not blacklisted at Bank Indonesia, and can withdraw their funds at any time (Arifin, 2009)

### **Liquidity**

The concept of liquidity in the business world is different from banking which has a more complex meaning. In the liquidity business, it means the company's ability to sell assets in the shortest possible time and with minimal losses (Muhamad, 2015). When viewed from the point of view of assets, liquidity is converting all assets into cash (cash). If from a liability point of view, it is the ability to meet funds through an increased liability portfolio (Arifin, 2009). It can be concluded that maintaining liquidity is very important for banks because if the bank cannot fulfill its obligations when the customer withdraws his funds, the customer will lose his trust.

A bank that is liquid if it has primary reserves or liquid assets with sufficient funds to meet immediate obligations and has secondary reserves or secondary reserves if the primary reserves are insufficient and can enter into new debts if all of the liquid assets, both primary and secondary, are not sufficient (Hayati, 2017). Either excess or lack of funds will have a negative impact on the bank. Banking institutions must know the daily needs of funds both in terms of assets and liabilities so that they can be arranged in such a way that there is no shortage.

*Secondary reserve* generally invested in financial instruments. The requirements that must be met are low default risk, (high quality), short term maturity, marketable, and can be done through PUAS and the Islamic capital market. Bank Indonesia issued three financial instruments supported by the National Sharia Board (DSN) including the Bank Indonesia Wadiah Certificate (SWBI) which is now an SBIS, State Sharia Securities (SBSN) and the last is the Short-Term Financing Facility for Sharia Banks (FPJPS) (Wardiah, 2013).

*Financing to Deposit Ratio* is a ratio measured from financing to TPF in order to see liquidity risk at the bank. Islamic Banking FDR must be maintained in a certain position. In conventional banking a good level of liquidity ranges from 50% -85%. The FDR value of Islamic banks ranges from 75-100%. If the ratio is below 75%, the bank is said to have excess liquidity. If the liquidity ratio is above 100%, the bank is said to be less liquid. One of the causes of the low FDR value is due to the limited number of Sharia-based financial market instruments, making it difficult for banks to place excess funds. In addition, third party funds in Islamic banking must first be placed in SBIS and SBSN before being channeled to financing (Setyawati, 2018).

### **BI 7-Days (Reverse) Repo Rate**

The interest rate according to Karl and Fair is defined as the annual interest payment of a loan in the form of a percentage of a loan obtained by someone with the total interest divided by the total loan (Hasoloan, 2014). The interest rate is also known as bank interest, which means money that must be paid to deposit customers (Cashmere, 2015). This payment is a form of remuneration to customers for buying or selling their products. Its application is often done in conventional banking in general.

The BI 7 Days Repo Rate is a new reference interest rate that is used as a framework to strengthen the transmission of monetary policy set by Bank Indonesia starting in 2016. This benchmark interest rate replaces the BI Rate with the intention that this policy can quickly affect the banking, money market and real sector. Bank Indonesia also aims for the BI 7 Days Repo Rate to strengthen policies in achieving the inflation target setting (Khoeruloh et al., 2020).

The characteristics of the BI 7 Days Repo Rate can be seen from the number of time tenors offered to banks in the repo market for withdrawing funds so that banks under the auspices of Bank Indonesia have the convenience of managing their liquidity. From the initial tenor of 12 months, it varies to the smallest with a tenor of 7 days. In the annual report of Bank Indonesia, the definition of the BI 7 Days Repo Rate is a new interest rate that reflects the monetary policy stance or stance of Bank Indonesia using the 7-day reverse repo rate

transaction as a reference. This interest rate is one of the macro factors that are external but will indirectly affect the company's performance (Aminulloh & Prasetyo, 2019).

### **Sukuk**

Sukuk comes from the plural word "sakk" from "sakaik or sukuk", which means "to hit or hit". This term originated when someone affixed a stamp on a document that became a contract for the formation of bonds, rights and money. This word is also used by Islamic economists who are intended for security products from an asset. Meanwhile, the definition of sukuk is a legal document as proof of debt or equity participation in the ownership of an asset whose ownership rights may be transferred long-term or eternal (Wahid, 2010).

The formation of a sukuk must have at least 3 parties involved, namely the heir owner or originator who acts as the legal owner of the asset. Special Purpose Vehicle (SPV), which is an agency whose task is to issue a trusted sukuk certificate, and investors or sukuk holders who participate in investing in sukuk products. This collection of assets will be selected by the originator and then sold to the SPV, meaning that the asset will be rented back by the originator (if it is an ijarah sukuk), with an agreed value and will be purchased again by the originator at a certain time with the same price (Wahid, 2010)

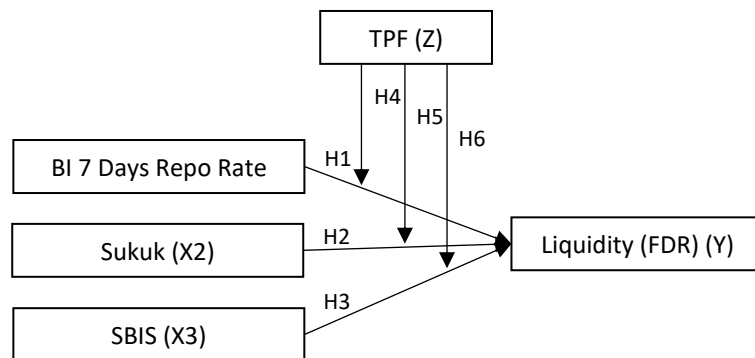
### **Bank Indonesia Sharia Certificate (SBIS)**

Bank Indonesia Sharia Certificates or SBIS are short-term securities issued by Bank Indonesia in rupiah currency. According to the fatwa of the National Sharia Council No. 63/DSN-MUI/II2007 Bank Indonesia Sharia certificates may be issued to fulfill open market operations as a monetary controlling instrument in which Bank Indonesia as the issuer will reward SBIS holders according to the contract used. When it is due, BI is obliged to return the funds to the holder. Islamic banks that have not been able to channel their funds to the real sector can have this SBIS instrument. Contracts that can be used on this instrument include mudharabah/qiradh, musyarakah, jualah, wadiah, qardh and wakalah (DSN-MUI, 2007).

SBIS provisions are also regulated in Bank Indonesia Regulation No. 10/11/PBI/2008 concerning Bank Indonesia Sharia Certificates. SBIS is one of the instruments used by BI which has the function and purpose of controlling the stability of the inflation rate and the value of the rupiah. The sale of SBIS can attract excess money or funds circulating in the community (BI, 2008). The sales mechanism of SBIS is sold through auction. The bank will later give a fee or reward to the bank as the buyer of SBIS. Parties who can participate in this case are BUS and UUS or brokers on behalf of BUS or UUS who already have conditions. The terms of participation in the auction are if the BUS or UUS has an FDR ratio of > 80%.

In Hilmy Baroroh's research, it is stated that SBIS is very effective in controlling liquidity in Islamic banking. As instruments used to absorb over-liquidity, BUS and UUS must have current accounts and balances as well as securities accounts as SBIS transaction facilities. If the bank has difficulty maintaining liquidity, the bank can resell it (Baroroh, 2019)

Based on the theoretical study above, the relationship between variables aimed at can be addressed as shown in Figure 2 regarding the research framework. The liquidity level of Islamic Commercial Banks is influenced by several factors, namely the BI 7-days (reverse) repo rate, sukuk and SBIS which are suspected to have moderating third party funds.



**Figure 2.** Research Thinking Framework

**METHOD**

This study uses a quantitative approach and the type of associative research. Quantitative method is a method used in research based on the philosophy of positivism to examine a particular population/sample. Data collection in this study can be with research instruments that are primary or secondary data, statistical data analysis that aims to test pre-determined hypotheses (Sugiyono, 2018). While associative analysis is a form of analysis to test whether there is a relationship between two or more data groups (Siregar, 2013).

The population in this study were all Islamic Commercial Banks registered with the OJK with a total of 14 BUS. Sampling in this study used non-probability sampling with purposive sampling technique. The sample of this research is the monthly BI 7 Day Repo Rate data on the official website of Bank Indonesia which started in June 2016 with the last 55 months. Sukuk monthly data by adjusting data from BI 7 Day Repo Rate on Sharia Sukuk Statistics. FDR, SBIS and DPK data on Islamic Banking Statistics. So that the total sample of each variable is 55 samples.

The data collection technique used the documentation method, namely published secondary data. The data analysis technique uses the MRA or Moderated Regression Analysis method. MRA analysis was used to analyze the effect of the moderator variable between the independent variable and the dependent variable. The moderator variable is a variable that will weaken or strengthen the influence between the independent variables on the dependent variable (Sharma et al., 1981).

**RESULTS AND DISCUSSION**

**Classic assumption test**

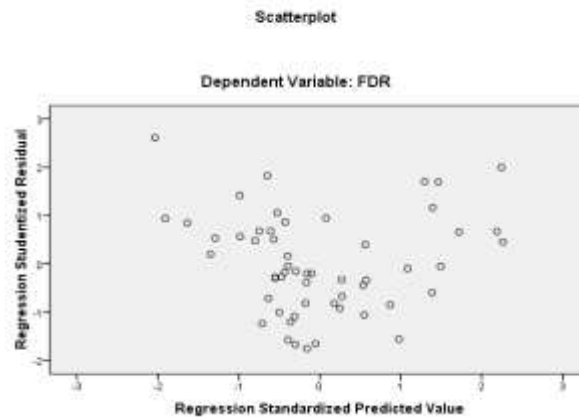
The normality test in this study used the Kolmogorov Smirnov test and the sig Asymp value was obtained. Sig. (2-tailed) is greater than alpha 0.05. So, it can be concluded that the data spread normally, which is shown as follows:

**Table 1.** Data Normality Test Results One-Sample Kolmogorov-Smirnov Test

	BI 7 Day	Sukuk	SBIS	TPF	FDR
asymp. Sig. (2-tailed)	.109	.080	.992	.976	.094

The multicollinearity test results can be seen from the tolerance and VIF values. It is known that the tolerance value of the BI 7 Day Repo Rate (X1) variable is 0.687 > 0.10 and VIF 1.455 < 10.00. The tolerance value for the sukuk variable (X2) is 0.114 > 0.10 and VIF 8.799 < 10.00. The tolerance value for the SBIS variable (X3) is 0.720 > 0.10 and VIF 1.389 < 10.00. The tolerance value of the TPF variable (Z) is 0.107 > 0.10 and VIF 9.388 < 10.00. This means that all

independent variables do not have multicollinearity. Heteroscedasticity test is seen from the pattern on the scatterplot image. The following are the results of the heteroscedasticity test on the scatterplot graph (See Figure 3).



**Figure 3.** Heteroscedasticity Test Results

From Figure 3, it can be concluded that the model does not have heteroscedasticity because the points that spread do not form a certain pattern such as wavy, narrowed or melted. While the autocorrelation test was carried out using the Durbin Watson (DW) test method. The results of the autocorrelation test show that the DW value is 1.080 which is located between -2 to 2 or  $-2 > 1.080 < 2$ ). This means that there is no autocorrelation problem in the regression model, so the research can be continued.

### Moderated Regression Analysis

The MRA test contains several classifications of moderating variables. For the types of moderating variables that can be identified through sig. coefficients b1, b2 and b3 can be seen in the Table 2 and the MRA analysis test in Table 3.

**Table 2.** Classification of Moderating Variables

No.	Moderate Variable Type	Coefficient
1.	<i>Absolute Moderation</i>	b1 and b2 are not significant b3 significant
2.	<i>Pure Moderation</i>	b2 is insignificant b3 significant
3.	<i>Quasi Moderation</i>	b2 significant b3 significant
4.	<i>Moderation Homologist</i>	b2 is insignificant b3 is insignificant
5.	<i>Predictors Moderation</i>	b2 significant b3 is insignificant

### Coefficient of Determination Test

Test the coefficient of determination ( $R^2$ ) was conducted to see the model's ability to explain the close relationship. R value<sup>2</sup> which is small indicates that the dependent variable is very limited in explaining its relationship with the independent variable. R value<sup>2</sup> that is, between zero (0) and one (1). Here are the results of the coefficient of determination test.

**Table 3.** Results of Moderated Regression Analysis

No	Variable	Regression Coefficient	t table	Sig.	Sig. 5%
1	BI 7-days RR (X1)	-0.192	-2.745	0.008	< 0.05
2	Sukuk (X2)	1.126	6.540	0.000	< 0.05
3	SBIS (X3)	0.215	3.139	0.003	< 0.05
4	TPF (Z)	-1.978	-11.124	0.000	< 0.05
5	Moderation_1 (X1Z)	-3.645	-3.945	0.000	< 0.05
6	Moderation_2 (X2Z)	4.216	7.728	0.000	< 0.05
7	Moderation_3 (X3Z)	1.179	1.862	0.068	> 0.05

**Table 4.** Results of the Coefficient of Determination Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.912a	.832	.818	1.31622

Based on table 4 model summary, it can be seen that the influence of the BI 7 Day Repo Rate, sukuk, SBIS and DPK on FDR shows a coefficient of determination of 0.818 or 81.8%, meaning that  $R^2$  shows great value. It can be concluded that the influence of the independent variables BI 7 Day Repo Rate, sukuk, SBIS and TPF on the level of liquidity (FDR) is 81.8% and the remaining 18.2% is influenced by other variables.

#### **Effect of BI 7 Day Repo Rate on Liquidity Level (Financing to Deposit Ratio)**

The results of data processing from multiple linear regression test, the BI 7-day repo rate variable shows a negative and significant effect on the financing to deposit ratio. BI 7-day repo rate is an external factor of Islamic banks that can affect the liquidity of Islamic banks. The higher the BI 7-day repo rate, the lower the FDR of banks. This is because if the BI 7-day repo rate is high, people tend to be reluctant to choose conventional banks. Finally, people choose to transact with Islamic banks because they use the principle of profit and loss sharing and are not burdened by high interest rates. On the other hand, if the BI 7-day repo rate decreases, people will tend to choose conventional banks because of the lower interest expense.

The results of this study are in accordance with Muhammad's theory which states that external factors greatly affect liquidity. Even though the majority of the people are Muslims, they still prioritize rationality in business matters. Even though the interest is haram, they still use the services of conventional banks while they are profitable (Muhamad, 2015), supported by Madhi (2017); Gumbo et al. (2015); Assfaw (2019) which shows that interest rates have an influence on liquidity. However, this research is not in line with Saputri and Hannase (2021); Omer (2019), which shows the results that interest rates do not have a significant effect on liquidity. It can be seen from the results of statistical tests where the significance value is greater than . and the value of t count is smaller than t table. This difference can be caused by different periods or objects.

#### **The Effect of Sukuk on Liquidity Levels (Financing to Deposit Ratio)**

The results of data processing from multiple linear regression test, the sukuk variable shows a positive and significant effect on the financing to deposit ratio. Sukuk are Islamic financial instruments that are used as an alternative to Islamic banks in liquidity management (secondary reserve). Islamic bank liquidity management is very important in order to maintain the existence of banks. Sukuk are one of the options for liquid assets that can be immediately liquidated. Sukuk run in line with the liquidity risk of Islamic banks. The issuance of sukuk will have an impact on high liquidity risk because when compared to conventional banks, it is stated that Islamic banks are still less liquid. Issuance of sukuk is able to effectively maintain FDR stability to avoid liquidity risk.



This research is in accordance with Irma's theory which reveals that the financing to deposit ratio is related to the financial instrument of State Sharia Securities, also known as sukuk. (Setyawati, 2018). Muhammad also emphasized that banks must have liquid assets and secondary reserves as the main requirement in liquidity planning (Muhamad, 2015). And supported by Bibi and Mazhar (2019); Braima (2017) which states that sukuk has a positive and significant effect on liquidity. However, this research is not in line with Alfarisi et al. (2019); Noviana and Solovida (2018) that sukuk has no significant effect on liquidity. This can be caused by differences in objects and research periods.

### **The Effect of Bank Indonesia Syariah Certificates on Liquidity Levels (Financing to Deposit Ratio)**

The results of data processing from multiple linear regression test, the variable of Bank Indonesia Syariah Certificates shows a positive and significant effect on the financing to deposit ratio. This result is obtained based on the t arithmetic value which is greater than t table and the significance value is smaller than, which means that sukuk have a significant and significant effect on the financing to deposit ratio and have a unidirectional relationship. If the SBIS value increases, the liquidity also increases.

Bank Indonesia Syariah certificates are one of the Islamic financial instruments other than sukuk that can be included in liquidity planning. A high FDR ratio will be followed by an increase in the value of SBIS. This can happen because when the FDR ratio is low, it means that there are a lot of idle funds. Then the funds will be placed by the Islamic bank in the Bank Indonesia Sharia Certificate and cause an increase in the value of the SBIS. The placement will be followed by an increase in the FDR ratio because the idle funds have decreased. Therefore, this has a positive impact on the level of liquidity (financing to deposit ratio) and has a unidirectional relationship.

This research is in accordance with the theory Huda and Heykal (2015) which revealed that as a means of monetary control in carrying out OMO (open market operations) it could be through SBIS for Islamic banks. This is so that Islamic banks can take advantage of this alternative as an effort to meet short-term needs through placement of funds when there is excess liquidity (Huda & Heykal, 2015). Supported by research Muwazir et al. (2018); Supriono and Herianingsrum (2017) which shows that Bank Indonesia Syariah Certificates have an effect on liquidity. In contrast to the research of Fathurrahman and Rusdi (2019); Baroroh (2019) which shows that there is no significant effect between Bank Indonesia Syariah Certificates and liquidity. This can happen because of the difference in the period and the object used.

### **Effect of BI 7 Day Repo Rate on Liquidity Level (Financing to Deposit Ratio) moderated by TPF**

Based on the results of the moderated regression analysis test, it is known that third party funds moderate the effect between the BI 7 Day Repo Rate and the level of liquidity (FDR). In the second equation the significance value of moderate1 is less than which means it is significant. The moderate1 variable is the interaction variable between the BI 7 Day Repo Rate and third-party funds. In addition, the equation at moderate1 shows that b1 is significant, b2 is significant and b3 is significant, which means that third party funds are quasi moderation because they have dual functions, namely as predictor variables and moderating variables.

In line with Zakki and Permatasari (2020); Muhammadiyah (2020); Tripuspitorini and Setiawan (2020) which shows that the BI rate has a significant effect on third party funds. Then supported by the research of Utami and Muslikhati (2019) which shows that third party funds affect the level of liquidity (financing to deposit ratio). This finding can be concluded that TPF is a moderating variable between the BI7 Day Repo Rate and the financing to deposit ratio.

### **Effect of Sukuk on Liquidity Level (Financing to Deposit Ratio) moderated by DPK**

Based on the results of the moderated regression analysis test, it is known that third party funds moderate the effect between sukuk and the level of liquidity (FDR). The equation in

moderate2 shows that b1 is significant, b2 is significant and b3 is significant, which means that third party funds are quasi-moderation because they have dual functions, namely as predictor variables and moderating variables.

In this study it was found that the interaction between sukuk and third-party funds can affect liquidity. Yaya and Sofiyana's research states that third party funds as a source of banking liquidity can falter when sukuk is issued. Sukuk can be an alternative for the community because it is a safe investment and high profit sharing (Yaya & Sofiyana, 2018). This phenomenon has the potential to reduce the total third party funds collected and can strengthen sukuk according to the results of hypothesis testing.

The results of this study are in accordance with Wahid's theory which states that sukuk are financial assets that have a high level of liquidity so that sukuk have a broad market and can be used for various purposes (Wahid, 2010). This implies that it can affect third party funds in Islamic banks. Supported by Yahya and Sofiyana (2018); Syakur (2020) which shows the results that sukuk have an effect on third party funds, then further supported by research by Ervina and Ardiansari (2016) which shows that third party funds have an effect on liquidity. this means that third party funds can moderate the effect of sukuk on the liquidity of Islamic banks.

### **The Effect of Bank Indonesia Syariah Certificates on Liquidity Levels (Financing to Deposit Ratio) moderated by DPK**

Based on the results of the moderated regression analysis test, it is known that third party funds cannot moderate the effect between Bank Indonesia Syariah Certificates and the level of liquidity (FDR). The equation at moderate three shows that b1 is not significant, b2 is significant and b3 is not significant, which means that third party funds are a moderating predictor, which means that the variable only acts as a predictor variable in the model formed.

In accordance with Bank Indonesia regulations concerning Bank Indonesia Sharia Certificates, people who are motivated to deposit their funds become demands for banks to maintain liquidity. In maintaining liquidity, banks need to pay attention to the distribution of funds to instruments that can be withdrawn at any time (BI, 2008). Both SBIS and third-party funds can stand alone to influence liquidity. Each has a role so that liquidity is well maintained. In accordance with Muhammad's theory in regulating Islamic bank funds, especially liquidity management, banks need funding sources from TPF in order to maintain liquidity and their existence, but DPK is high and cannot be channeled, banks are required to use Islamic financial instruments to place their excess liquidity (Muhamad, 2015). Supported by research by Thoin and Heliawan (2020) that TPF has no effect on FDR and Rusdi SBI research has no effect on FDR (Fathurrahman & Rusdi, 2019) and Baroroh (2019) research which shows the results that FDR has no effect on SBIS.

### **CONCLUSION**

Based on the results of the research above, it can be concluded that the BI 7-days (reverse) repo rate has a negative and significant effect on FDR, sukuk and SBIS have a positive and significant effect on FDR. Deposits can moderate the effect of the BI 7-days (reverse) repo rate on FDR and can also moderate the effect of sukuk on FDR. However, TPF cannot moderate the effect of SBIS on FDR. This research can be used as a reference in managing the liquidity of Islamic banks. This study has limited periodization which is only done in a period of 5 years. Suggestions for further researchers to add samples to be more representative.

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